TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT TEAM

ARCHITECT
MARK ODOM STUDIO, INC.
1009 WEST 6TH ST #50
AUSTIN, TX 78703
512-469-5950

MEP ENGINEER
MINT ENGINEERING
107 RANCH RD 620 S #350
AUSTIN, TX 78734
512.270.9960

STRUCTURAL ENGINEER
CPH STRUCTURAL ENGINEER, INC.
38027 FM 1774, SUITE A
MAGNOLIA, TX 77355
281.826.1848

LANDSCAPE ARCHITECT
MP STUDIO
210 GROVETON STREET
SAN ANTONIO, TX 78210
210.240.0622

CIVIL ENGINEER
UP ENGINEERING, LLC
1270 N LOOP 1604 E
SAN ANTONIO, TX 78232
210.774.5504

PROJECT INFORMATION

PROJECT NAME:	TRAIL STREET TOWNHOMES
ADDRESS:	335 Trail Street, San Antonio, TX 78212
PROJECT DESCRIPTION:	24 UNIT TOWNHOME PROJECT
ZONING:	MF-33 (H-RIO-1 OVERLAY)
OCCUPANCY:	R-3 TOWNHOUSE
APPLICABLE CODES:	2018 (IRC) INTERNATIONAL RESIDENTIAL CODE
	2015 (IBC) INTERNATIONAL BUILDING CODE
	2015 (IFC) INTERNATIONAL FIRE CODE
	2015 (IFGC) INTERNATIONAL FUEL GAS CODE
	2015 (UMC) UNIFORM MECHANICAL CODE
	2015 (UPC) UNIFORM PLUMBING CODE
	2015 (NEC) NATIONAL ELECTRIC CODE

CONSTRUCTION TYPE

BUILDING 1-5	TYPE V
	SLAB ON GRADE, NFPA 13D SPRINKLER SYSTEM
BUILDING 6	TYPE V
	SLAB ON GRADE, NFPA 13D SPRINKLER SYSTEM

BUILDING AREAS

AREA	S.F. AREA
NET RENTABLE	**47,698 SF**
GROSS BUILDING	**58,757 SF**
BALCONY	
GARAGE	
PERVIOUS	6,380 SF
IMPERVIOUS	24,518 SF

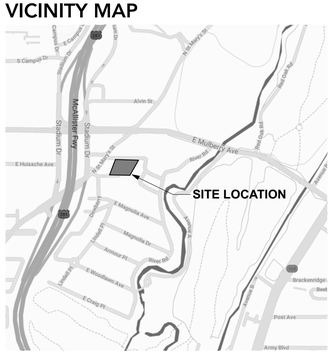
GROSS BLDG BREAKDOWN

AREA	S.F. AREA
BUILDING 1	11,635.05
BUILDING 2	11,844.95
BUILDING 3	10,291.72
BUILDING 4	7,192.49
BUILDING 5	13,086.06
BUILDING 6	4,706.70
	58,756.97 sq ft

UNIT BREAKDOWN

UNIT	BEDROOMS	BATHROOMS	BALCONY	GARAGE	NRSF	Quantity	Total NSRF
A1	3	3.5	53	355	1954	3	5862
A2	3	3.5	54	355	1866	2	3732
A3	3	3.5	126	355	1880	2	3760
B1	3	3.5	190	437	2262	2	4524
B2	3	3.5	67	437	2282	1	2282
C	3	3.5	104	433	2033	2	4066
C	3	3.5	54	433	2138	2	4276
D1	3	3	85	241	1740	1	1740
D2	3	3	73	244	1882	1	1882
E1	2	2.5	46	247	1360	2	2720
E2	2	2	0	243	1222	1	1222
F	3	3.5	273	451	2737	1	2737
G	3	3	61	434	2002	1	2002
T1	3	3.5	308	464	2307	2	4614
T2	3	3.5	207	465	2279	1	2279
					avg **1,996**	**24**	**47,698**

VICINITY MAP



SHEET INDEX

m(ødm)

Austin [tx] 469.5950
1009 West 6th Street #50 78703

San Antonio [tx] 469.5950
201 Groveton Street 78210

markodomstudio.com

DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

COVER SHEET

A0.01

CIVIL CONSTRUCTION DOCUMENTS FOR

TRAIL STREET TOWNHOMES

San Antonio, Texas

PLAT NO. 19-11800095

OWNER/DEVELOPER: MNO INVESTMENTS, LLC
4010 GREYSTONE DRIVE
AUSTIN, TX 78731

SURVEYOR: WESTWOOD PROFESSIONAL SERVICES, INC.
1718 DRY CREEK WAY, SUITE 110
SAN ANTONIO, TX 78259
PHONE (210) 265-8300

ENGINEER: UP ENGINEERING
1270 N. LOOP 1604 E., SUITE 1310
SAN ANTONIO, TEXAS 78232
(210) 774-5504
CONTACT: NATASHA F. UHLRICH, P.E.

GEOTECHNICAL ENGINEER: InTEC OF SAN ANTONIO, L.P.
12028 RADIUM
SAN ANTONIO, TX 78216
(210) 525-9033

ADDRESS:

335 TRAIL STREET, SAN ANTONIO, TEXAS 78212

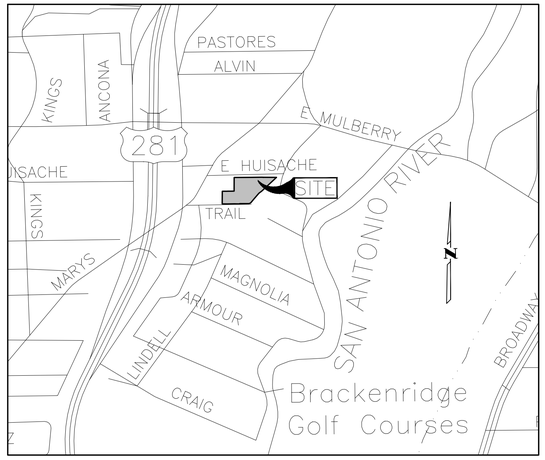
FLOODPLAIN INFORMATION:

FIRM #48029, PANEL 0405 G 09/29/2010.

WATERSHED:

THIS SITE IS LOCATED IN THE UPPER SAN ANTONIO RIVER WATERSHED.

BENCHMARKS:



VICINITY MAP
NOT TO SCALE

SUBMITTAL DATE:
August 1, 2019

CIVIL SHEET INDEX	
Sheet Number	Sheet Title
C1	COVER SHEET
C2	GENERAL NOTES
C3	SITE DIMENSION PLAN
C4	GRADING PLAN
C5	UTILITY AND FIRE PROTECTION PLAN
C6	STORM WATER POLLUTION PREVENTION PLAN
C7	STORM WATER POLLUTION PREVENTION PLAN DETAILS
C8	CONSTRUCTION DETAILS
C9	SAWS DETAILS
C10	SAWS DETAILS

ADMINISTRATIVE EXCEPTION/VARIANCES:

REFER TO PLAT NO. 19-11800095 (TRAIL STREET HOMES) FOR THE FOLLOWING APPROVED ADMINISTRATIVE EXCEPTIONS/VARIANCES:
1. CURB AND GUTTER STANDARD (UNIFIED DEVELOPMENT CODE SECTION 35-605(d)(1)
2. SIDEWALK REQUIREMENTS (UNIFIED DEVELOPMENT CODE SECTION 35-506(a)(2) AND (q)

SURVEY BASIS:

BEARINGS SHOWN HEREON ARE BASED ON ACTUAL GPS OBSERVATIONS, TEXAS STATE PLANE COORDINATES, SOUTH CENTRAL ZONE, GRID.

LEGAL DESCRIPTION:

LOT 21, BLOCK 2, N.C.B. 6078, RECORDED IN VOLUME , PAGE , DEED AND PLAT RECORDS OF BEXAR COUNTY, TEXAS.

UTILITY PROVIDERS:

GAS: CPS ENERGY
145 NAVARRO
SAN ANTONIO, TX 78205
(210) 353-2376

CABLE: TIME WARNER CABLE
1900 BLUE CREST LANE
SAN ANTONIO, TX 78247
(210) 244-0500

AT&T
1010 NORTH ST. MARY'S STREET
SAN ANTONIO, TX 78215
(972) 742-5892

ELECTRIC: CPS ENERGY
145 NAVARRO
SAN ANTONIO, TX 78205
(210) 353-2376

WATER & WASTEWATER: SAN ANTONIO WATER SYSTEM
2800 U.S HWY 281 NORTH
SAN ANTONIO, TX 78212
(210) 233-2010

LAND USE SUMMARY:

ZONING:	MF-33
PROPOSED SITE USE:	MULTI-FAMILY
LOT SIZE:	1.003 ACRES

NOTES:

1. RELEASE OF THIS APPLICATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY AND ADEQUACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY ENGINEERS.
2. BY THE ACT OF SUBMITTING A BID FOR THE PROPOSED CONTRACT, THE BIDDER WARRANTS THAT THE BIDDER, AND ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS HE INTENDS TO USE HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS AND SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE FROM ANY AMBIGUITIES AND SUFFICIENT FOR THE PURPOSE INTENDED. THE BIDDER FURTHER WARRANTS THAT TO THE BEST OF HIS OR HIS SUBCONTRACTORS AND MATERIAL SUPPLIERS KNOWLEDGE ALL MATERIALS AND PRODUCTS SPECIFIED OR INDICATED HEREIN ARE ACCEPTABLE FOR ALL APPLICABLE CODES AND AUTHORITIES.
3. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS HAS BEEN BASED UPON RECORD INFORMATION AND/OR A FIELD SURVEY, AND MAY NOT MATCH LOCATIONS AS CONSTRUCTED. THE CONTRACTOR SHALL CONTACT THE "ONE CALL" SYSTEM @ 811, OR THE OWNER OF EACH INDIVIDUAL UTILITY, FOR ASSISTANCE IN DETERMINING EXISTING UTILITY LOCATIONS PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF UTILITY CROSSING PRIOR TO BEGINNING CONSTRUCTION.
4. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION. (OSHA STANDARDS MAY BE PURCHASED FROM THE GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, WASHINGTON SQUARE BLVD, SUITE 203, 800 DOLOROSA ST, SAN ANTONIO, TEXAS 78207-4559).
5. CONTRACTOR SHALL RESTORE ALL SIGNS AND PAVEMENT MARKINGS TO EXISTING CONDITIONS FOLLOWING THE COMPLETION OF EACH PHASE OF CONSTRUCTION. CONTRACTORS SHALL REFER TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) FOR SIGN AND MARKING DIMENSIONS AND COLORS.

UP ENGINEERING
1270 N. LOOP 1604 E., SUITE 1310
SAN ANTONIO, TEXAS 78232
TEL. (210) 774-5504
WWW.UPENGINEERING.COM
TEXAS REG. NO. F-17992

PRELIMINARY
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

PREPARED UNDER THE SUPERVISION OF NATASHA F. UHLRICH, P.E. #89502 ON August 1, 2019

MNO INVESTMENTS, LLC
4010 GREYSTONE DRIVE
AUSTIN, TX 78731

80% SUBMITTAL

PLAT NO. 19-11800095
TRAIL STREET TOWNHOMES

COVER SHEET

REV	DATE	DESCRIPTION	BY

DESIGNED BY: WPF
DRAFTED BY: JWH
CHECKED BY: NFU

SHEET
C1
OF C10

GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION JUNE 2008, OR LATEST.
2. NO EXTRA PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS, BUT NOT INCLUDED IN THE BID PROPOSAL. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED IN THE PAY ITEM TO WHICH IT RELATES.
3. THE CONTRACTOR SHALL PROVIDE ACCESS FOR THE DELIVERY OF MAIL BY THE U.S. POSTAL SERVICE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION ANY DAMAGE DONE TO EXISTING FENCES, CONCRETE ISLANDS, STREET PAVING, CURBS, SHRUBS, BUSHES OR DRIVEWAYS. (NO SEPARATE PAY ITEM).
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL SIGNS AND BARRICADES ARE PROPERLY INSTALLED AND MAINTAINED. ALL LOCATIONS AND DISTANCES WILL BE DECIDED UPON IN THE FIELD BY THE CONTRACTOR, USING THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". THE CITY'S CONSTRUCTION INSPECTOR AND TRAFFIC ENGINEERING REPRESENTATIVE WILL ONLY BE RESPONSIBLE TO INSPECT BARRICADES AND SIGNS. IF, IN THE OPINION OF THE TRAFFIC ENGINEERING REPRESENTATIVE AND THE CONSTRUCTION INSPECTOR, THE BARRICADES AND SIGNS DO NOT CONFORM TO ESTABLISHED STANDARDS OR ARE INCORRECTLY PLACED OR ARE INSUFFICIENT IN QUANTITY TO PROTECT THE GENERAL PUBLIC, THE CONSTRUCTION INSPECTOR SHALL HAVE THE OPTION TO STOP OPERATIONS UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED.
6. IF THE NEED ARISES, ADDITIONAL BARRICADES AND DIRECTIONAL DEVICES MAY BE ORDERED BY THE TRAFFIC ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
7. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181 C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.
8. CONTRACTOR SHALL NOTIFY THE CITY INSPECTOR TWENTY FOUR (24) HOURS PRIOR TO BACKFILL OF ANY UTILITY TRENCHES TO SCHEDULE FOR DENSITY TEST AS REQUIRED.
9. CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES, MARKS, ETC. IF ANY ARE DESTROYED OR REMOVED BY THE CONTRACTOR OR HIS EMPLOYEES, THEY SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
10. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY THE FOLLOWING AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO EXCAVATION OPERATION:

SAN ANTONIO WATER SYSTEM (SAWS)	210-233-2009
WATER & SEWER EMERGENCIES	210-704-7297
STORM DRAINAGE (CITY OF SAN ANTONIO	210-207-8022
SIGNAL OPERATIONS (CITY OF SAN ANTONIO)	210-207-8022
TEXAS STATE WIDE ONE CALL LOCATOR	811
CPS ENERGY (GAS & ELECTRIC)	210-353-2000
CPS ELECTRIC/GAS ISSUES OR EMERGENCIES	210-353-4357
TIME WARNER	210-244-0500
AT&T (PLINEY LINDSAY)	972-742-5892

11. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATED AND VERIFIED BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO AND FOR THE MAINTENANCE AND PROTECTION OF THE EXISTING UTILITIES EVEN IF THEY ARE NOT SHOWN ON THE PLANS. LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND HE SHALL BE RESPONSIBLE FOR PROTECTION OF SAME DURING CONSTRUCTION.
12. ALL WASTE MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE HIS SOLE RESPONSIBILITY TO DISPOSE OF THIS MATERIAL OFF THE LIMITS OF THE PROJECT. NO WASTE MATERIAL SHALL BE PLACED IN EXISTING LOWS THAT WILL BLOCK OR ALTER FLOW LIMITS OF EXISTING ARTIFICIAL OR NATURAL DRAINAGE.
13. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIAL IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.
14. THE CONTRACTOR SHALL MAINTAIN ALL ADJOINING STREETS AND TRAVELED ROUTES FREE FROM SPILLED AND / OR TRACKED CONSTRUCTION MATERIALS AND / OR DEBRIS.
15. IF THE CONTRACTOR ENCOUNTERS ANY ARCHAEOLOGICAL DEPOSITS DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR MUST STOP EXCAVATION IMMEDIATELY, CONTACT THE CITY INSPECTOR, AND CALL THE CITY HISTORIC PRESERVATION OFFICE AT 210-215-9274 FOR AN ARCHAEOLOGICAL INVESTIGATION. THE CONTRACTOR CANNOT BEGIN EXCAVATION AGAIN WITHOUT WRITTEN PERMISSION FROM THE CITY.

    IF MORE THAN THREE (3) DAYS ARE REQUIRED FOR INVESTIGATION (NOT INCLUDING HOLIDAY AND WEEKENDS) AND IF THE CONTRACTOR IS UNABLE TO WORK IN OTHER AREAS, THEN THE CONTRACTOR WILL BE ALLOWED TO NEGOTIATE FOR ADDITIONAL CONSTRUCTION TIME UPON WRITTEN REQUEST WITHIN TEN (10) DAYS AFTER THE FIRST NOTICE TO THE CITY OF ARCHAEOLOGICAL INVESTIGATION FOR EACH EVENT.

    IF THE TIME REQUIRED FOR INVESTIGATION IS LESS THAN OR EQUAL TO THREE (3) DAYS FOR EACH EVENT, CONTRACT DURATION WILL NOT BE EXTENDED.
16. IF SUSPECTED CONTAMINATION IS ENCOUNTERED DURING CONSTRUCTION OPERATIONS, C.O.S.A. SHALL BE NOTIFIED IMMEDIATELY WHEN CONTAMINATED SOILS AND / OR GROUNDWATER ARE ENCOUNTERED AT LOCATIONS NOT IDENTIFIED IN THE PLANS. THE NOTIFICATION SHOULD INCLUDE THE STATION NUMBER, TYPE OF CONTAMINATED MEDIA, EVIDENCE OF CONTAMINATION AND MEASURES TAKEN TO CONTAIN THE CONTAMINATED MEDIA AND PREVENT PUBLIC ACCESS. THE CONTAMINATED SOIL AND / OR GROUNDWATER SHALL NOT BE REMOVED FROM THE LOCATION WITHOUT PRIOR C.O.S.A. APPROVAL. THE CONTRACTOR MUST STOP THE EXCAVATION IMMEDIATELY AND CONTACT THE C.O.S.A. INSPECTOR. THE CONTRACTOR CANNOT BEGIN EXCAVATION ACTIVITIES WITHOUT WRITTEN PERMISSION FROM THE CITY.

UTILITY GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL COMPLY TO ALL APPLICABLE CITY OF SAN ANTONIO RULES AND REQUIREMENTS FOR STREETS, SIDEWALKS, ALLEYS AND ROADWAY DESIGN (LATEST EDITIONS), THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (LATEST EDITIONS), THE SAN ANTONIO WATER SYSTEM (SAWS) SPECIFICATIONS FOR WATER WORKS CONSTRUCTION (LATEST EDITION).
2. THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS OF UTILITIES MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY CONFLICTS IMMEDIATELY. ANY DAMAGE BY THE CONTRACTOR TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OF NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
4. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE SYSTEMS WHETHER SHOWN ON PLANS OR NOT.
5. ALL UTILITIES SHALL BE INSTALLED PRIOR TO PAVEMENT CONSTRUCTION.
6. ALL UTILITY CONNECTIONS SHALL BE COORDINATED WITH THE MECHANICAL AND ELECTRICAL PLANS. NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL INSTALL ANY BENDS, FITTINGS, ETC. IN THE WATER & SEWER MAIN AS REQUIRED TO AVOID CONFLICTS WITH OTHER UTILITIES. (NO SEPARATE PAY).
8. NO WATER JETTING TO BACKFILL TRENCHES WILL BE ALLOWED ON THIS PROJECT.
9. POLYVINYL CHLORIDE (PVC) SEWER PIPE SHALL BE SDR 26. FITTINGS AND JOINTS SHALL CONFORM TO COMPATIBLE SDR 26 PIPE. SOLVENT CEMENTS JOINTS SHALL NOT BE USED.
10. WHEN SEWER LINES ARE INSTALLED IN THE VICINITY OF WATER MAINS, SUCH INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ).
11. ALL SPOIL AND OTHER UNSUITABLE MATERIAL FROM THIS WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR, AT HIS EXPENSE.
12. ALL SERVICES ARE BROUGHT TO WITHIN 5 FEET OF THE BUILDING UNLESS OTHERWISE NOTED. REFERENCE MEP PLANS FOR UTILITY CONNECTIONS AT THE BUILDING.
13. WHETHER SHOWN ON THE PLANS OR NOT ALL CLEANOUT TOPS AND MANHOLES SHALL BE INSTALLED AT LEAST 3" ABOVE FINISHED GRADE OUTSIDE PAVEMENT AND FLUSH WITH FINISHED GRADE WITHIN THE PAVEMENT AREAS. TOPS WITHIN PAVEMENT SHALL BE TRAFFIC RATED.
14. SANITARY SEWER SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE AND THE SAN ANTONIO WATER SYSTEM PLUMBING SPECIFICATIONS, AND AS DIRECTED BY THE PLUMBING INSPECTOR.
15. THRUST BLOCKING SHALL BE INSTALLED IN ACCORDANCE WITH SAN ANTONIO WATER SYSTEM SPECIFICATIONS.
16. UTILITY CONTRACTOR SHALL COORDINATE WITH CPS ENERGY FOR THE GAS AND ELECTRICAL SERVICE.
17. FIRE LINE SHALL BE INSTALLED BY A LICENSED FIRE SPRINKLER CONTRACTOR.
18. DOMESTIC WATER SHALL BE PVC C900 FOR PIPES < 12" OR C905 FOR PIPES ≥ 12" OR COPPER TUBING AS SPECIFIED IN THE SAWS STANDARD SPECIFICATIONS – ITEM #824.
19. CLEANOUTS SHALL BE TWO-WAYS AND INSTALLED IN ACCORDANCE WITH COSA PLUMBING CODE (EVERY 100') & AS DIRECTED BY PLUMBING INSPECTOR.
20. FIRE LINE SHALL BE PVC C900, CLASS 200 AND SHALL COMPLY WITH AWWA STANDARDS AND SHALL WITHSTAND A WORKING PRESSURE OF NOT LESS THAN 200 P.S.I.
21. CONTRACTOR SHALL MAINTAIN "AS-BUILT" DRAWINGS THROUGHOUT THE COURSE OF CONSTRUCTION & SHALL SUBMIT SAME TO THE ENGINEER FOR APPROVAL PRIOR TO FINAL ACCEPTANCE BY OWNER.

GRADING AND DRAINAGE NOTES

1. CONTRACTOR TO VERIFY ELEVATIONS PRIOR TO CONSTRUCTION. EXISTING CONTOURS BASED ON 2010 BEXAR COUNTY DATA.
2. ALL GRADES AND CONTOURS SHOWN ARE FINAL, TOP OF FINISHED SURFACE ELEVATIONS, CONTRACTOR SHALL SUBTRACT PAVEMENT, BASE, TOPSOIL, MULCH, ...ETC. TO OBTAIN PROPER SUBGRADE ELEVATIONS.
3. POSITIVE DRAINAGE SHALL BE MAINTAINED ON ALL AREAS WITHIN THE SCOPE OF THIS PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM ALL BUILDING FOUNDATIONS. CONTRACTOR SHOULD TAKE PRECAUTIONS NO TO ALLOW ANY PONDING OF WATER. MINIMUM SLOPE 0.50%.
4. NO ABRUPT CHANGE OF GRADE SHALL OCCUR.
5. ALL DISTURBED AREAS SHALL BE REVEGETATED, BY THE CONTRACTOR, IN ACCORDANCE WITH PROJECT SPECIFICATIONS, AND ARCHITECTURAL LANDSCAPING PLANS.
6. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLAN OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY SIZE, GRADE, AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
7. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT WHERE NOT SPECIFICALLY COVERED IN THE PROJECT SPECIFICATIONS SHALL CONFORM TO ALL APPLICABLE CITY OF SAN ANTONIO SPECIFICATIONS FOR CONSTRUCTION, TXDOT STANDARD SPECIFICATIONS, AND BEXAR COUNTY PUBLIC WORKS STANDARD SPECIFICATIONS.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ORIGINAL, OR BETTER CONDITION ANY DAMAGES DONE TO EXISTING SIGNS, UTILITIES, PAVEMENT, CURBS, SIDEWALKS OR DRIVEWAYS (NO SEPARATE ITEM).
9. DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, CPS ENERGY MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVE THAT ARE IN THE PROJECT AREA.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH NECESSARY UTILITY COMPANIES FOR PROVIDING TEMPORARY UTILITY SERVICES DURING CONSTRUCTION.
11. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS FOR UNDERGROUND UTILITIES AND DRAINAGE SYSTEMS WHETHER SHOWN ON PLANS OR NOT.
12. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS, OF DIMENSIONS OR GRADES NECESSARY FOR CONSTRUCTION OF THIS PROJECT.
13. THE CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT AT NEW PAVEMENT AND CURB JUNCTURES. NO JAGGED OR IRREGULAR CUTS IN PAVEMENT WILL BE ACCEPTED.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
15. ALL EXCAVATION IN UNCLASSIFIED.
16. ALL ON-SITE CURBS ARE 6" HIGH UNLESS OTHERWISE SPECIFIED.
17. SEE CIVIL COVER SHEET FOR PROJECT BENCHMARK.
18. CONTRACTOR TO RAISE/LOWER ALL UTILITY BOXES, COVERS, GRATES, VALVES BOXES, MANHOLES, CLEANOUTS, ETC., TO MATCH PROPOSED FINISHED GRADE ELEVATIONS.
19. ALL DISTURBED AREAS WHICH ARE NOT TO BE PAVED SHALL BE COVERED WITH 6" MIN. CLEAN TOPSOIL UNLESS OTHERWISE NOTED. CUT OR FILL SHALL BE ADJUSTED TO ALLOW FOR TOPSOIL IN ORDER TO MAINTAIN PROPOSED ELEVATIONS. AREAS FOR LANDSCAPING SHOULD BE IN ACCORDANCE WITH THE LANDSCAPE ARCHITECTS PLANS.
20. PROVIDE THE REQUIRED MINIMUM DENSITY AND MOISTURE CONTENT OF COMPACTED FILL IN ACCORDANCE WITH THE SOILS REPORT AND THE REQUIREMENTS OF THE PROFESSIONAL ENGINEER (GEOTECH AND CIVIL).
21. A TESTING LABORATORY SHALL BE EMPLOYED BY THE CONTRACTOR TO CHECK THE SUITABILITY OF MATERIAL SELECTED FOR CONTROLLED FILLS, TO TEST AND DETERMINE IF THE REQUIRED IS BEING OBTAINED, AND TO TEST COMPACTION OF EXPOSED SUBGRADES, WHEN COMPACTION TESTS DOES NOT MEET GEOTECH REQUIREMENTS, FILL AND BACKFILL SHALL BE DRIED OUT OR MOISTENED AS NECESSARY, SCARIFIED, AND RECOMPACTED AT NO ADDITIONAL COSTS TO OWNER.

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATIONS SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATIONS SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

SAN ANTONIO WATER SYSTEM
CRITERIA FOR SEWER MAIN CONSTRUCTION
IN THE VICINITY OF WATER MAINS

1. WHERE A SEWER MAIN CROSSES OVER A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN 9 FEET, ALL PORTIONS OF THE SEWER MAIN WITHIN NINE FEET OF THE WATER LINE SHALL BE CONSTRUCTED USING 150 PSI PRESSURE RATED DUCTILE IRON, CAST IRON OR PVC PIPE AND JOINED WITH EQUALLY PRESSURE RATED PRESSURE RING GASKET CONNECTIONS OR CORROSION PROTECTED MECHANICAL COUPLING DEVICES OF A CAST IRON OR DUCTILE IRON MATERIAL. A SECTION OF 150 PSI PRESSURE RATED PIPE AT LEAST EIGHTEEN (18) FEET IN LENGTH MAY BE CENTERED ON THE WATER MAIN IN LIEU OF PIPE CONNECTION REQUIREMENTS. (NO SEPARATE PAY ITEM).
2. WHERE A SEMI-RIGID OR RIGID SEWER MAIN CROSSES UNDER A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN NINE FEET BUT GREATER THAN TWO FEET, THE INITIAL BACKFILL SHALL BE CEMENT STABILIZED SAND (TWO OR MORE BAGS OF CEMENT PER CUBIC YARD OF SAND) FOR ALL SECTIONS OF THE SEWER WITHIN NINE FEET OF THE WATER MAIN.
3. WHERE A SEWER MAIN CROSSES UNDER A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN TWO FEET, THE SEWER MAIN SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI WITHIN NINE FEET OF THE WATER MAIN, SHALL HAVE A SEGMENT OF SEWER PIPE CENTERED ON THE WATER MAIN, SHALL BE PLACED NO CLOSER THAN SIX INCHES BETWEEN OUTER DIAMETERS, AND SHALL BE JOINED WITH PRESSURE RING GASKET CONNECTIONS OR CORROSION PROTECTED MECHANICAL COUPLING DEVICES OF A CAST IRON OR DUCTILE IRON MATERIAL. A SECTION OF 150 PSI PRESSURE RATED PIPE OF A LENGTH GREATER THAN EIGHTEEN (18) FEET MAY BE CENTERED ON THE WATER MAIN IN LIEU OF PIPE CONNECTION REQUIREMENTS. (NO SEPARATE PAY ITEM).
4. WHERE A SEWER MAIN PARALLELS A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN NINE FEET, THE SEWER MAIN SHALL BE BELOW THE WATER MAIN, SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI FOR BOTH PIPE AND JOINTS FOR A DISTANCE OF NINE FEET BEYOND THE POINT OF CONFLICT, SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE BETWEEN OUTER DIAMETERS OF TWO FEET VERTICALLY AND FOUR FEET HORIZONTALLY, AND SHALL BE JOINED WITH PRESSURE RING GASKET CONNECTIONS OR CORROSION PROTECTED MECHANICAL COUPLING DEVICES OF A CAST IRON OR DUCTILE IRON MATERIAL.
5. SANITARY SEWER MANHOLES SHALL NOT BE INSTALLED ANY CLOSER THAN NINE FEET TO WATER MAINS.
6. CORROSION PROTECTED MECHANICAL COUPLING DEVICES SHALL BE OF A CAST IRON MATERIAL.
7. PLAN & PROFILE MUST SHOW TYPE OF CROSSING AND MATERIAL TO USE.

DEMOLITION NOTES

1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE CITY OF SAN ANTONIO STANDARDS AND SPECIFICATIONS.
2. ALL FILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR METHOD (ASTM D-698).
3. CURB RAMPS ARE TO BE CONSTRUCTED ON ALL PERMANENT CURB RETURNS AT THE INTERSECTION OF ALL STREETS OR AS DIRECTED BY THE CITY OF SAN ANTONIO INSPECTOR.
4. ALL CONSTRUCTION BARRICADING TO BE IN ACCORDANCE WITH CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
5. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. **THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.** THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIG TEST" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN PER THE APPROPRIATE REMEDIAL ACTION AGREED UPON BY THE ENGINEER.
6. DISPOSAL OF ALL DEMOLISHED MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL MUNICIPAL REQUIREMENTS.
7. WHERE A STATE OR LOCAL MUNICIPAL STANDARD DETAIL DUPLICATES A DETAIL SHOWN IN THE PLANS, THE MORE STRINGENT DETAIL, AS DETERMINED BY THE REVIEWING AGENCY, SHALL APPLY.
8. ALL ITEMS NOT SPECIFICALLY CALLED OUT TO BE REMOVED SHALL REMAIN. ANY ITEM TO REMAIN WHICH IS REMOVED SHALL BE REPLACED AT THE CONTRACTORS EXPENSE. (NO SEPARATE PAY).
9. CONTRACTOR WILL BE RESPONSIBLE FOR ACQUIRING ALL NECESSARY DEMOLITION PERMITS FOR THE PROJECT AND COORDINATION WITH THE RESPECTIVE UTILITY COMPANIES FOR REMOVAL OF THEIR INDIVIDUAL SERVICES.
10. CONTRACTOR SHALL IMMEDIATELY CONTACT THE ENGINEER REGARDING QUESTIONS ON THE DEMOLITION PLAN.
11. DEMOLITION CONTRACTOR SHALL CLEARLY MARK ALL EXISTING UTILITY SERVICES WHERE THEY CROSS PROPERTY LINES. THIS INFORMATION WILL BE USED BY UTILITY COMPANIES AND CONTRACTORS TO TIE INTO FOR THE PROPOSED UTILITY SERVICES.
12. CONTRACTOR SHALL VERIFY WHICH TREES ARE TO BE SAVED & PROTECTED PRIOR TO COMMENCING CONSTRUCTION, DURABLE FENCE PROTECTION BARRIERS SHALL BE INSTALLED AROUND ALL TREES TO BE SAVED WITH FENCE PLACEMENT A MINIMUM OF 10 FEET FROM TREES TRUNKS. (IF APPLICABLE)
13. CONTRACTOR SHALL NOT DISTURB AREAS AROUND EXISTING TREES TO BE SAVED. (IF APPLICABLE)
14. CONTRACTOR SHALL COMPENSATE OWNER FOR DAMAGE OF TREES THAT WERE TO REMAIN. (IF APPLICABLE)

ENGINEERING
1270 N LOOP 1604 E, SUITE 1310
SAN ANTONIO, TX 78232 TEL 210-774-5504
WWW.UPENGINEERING.COM TEXAS REG. NO. F-17992

PRELIMINARY
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
PREPARED UNDER THE SUPERVISION OF NATASHA F. UHLRICH, P.E. #89502 ON August 1, 2019

MNO INVESTMENTS, LLC
4010 GREYSTONE DRIVE
AUSTIN, TX 78731

80% SUBMITTAL

PLAT NO. 19-11800095
TRAIL STREET TOWNHOMES

GENERAL NOTES

REV	DATE	DESCRIPTION	BY

DESIGNED BY: WPF
DRAFTED BY: JWH
CHECKED BY: NFU

SHEET C2 OF C10

LINE TABLE		
LINE	BEARING	LENGTH
L1	S41°34'01"W	60.21'
L2	S52°09'28"W	50.61'
L3	S36°15'37"W	42.20'

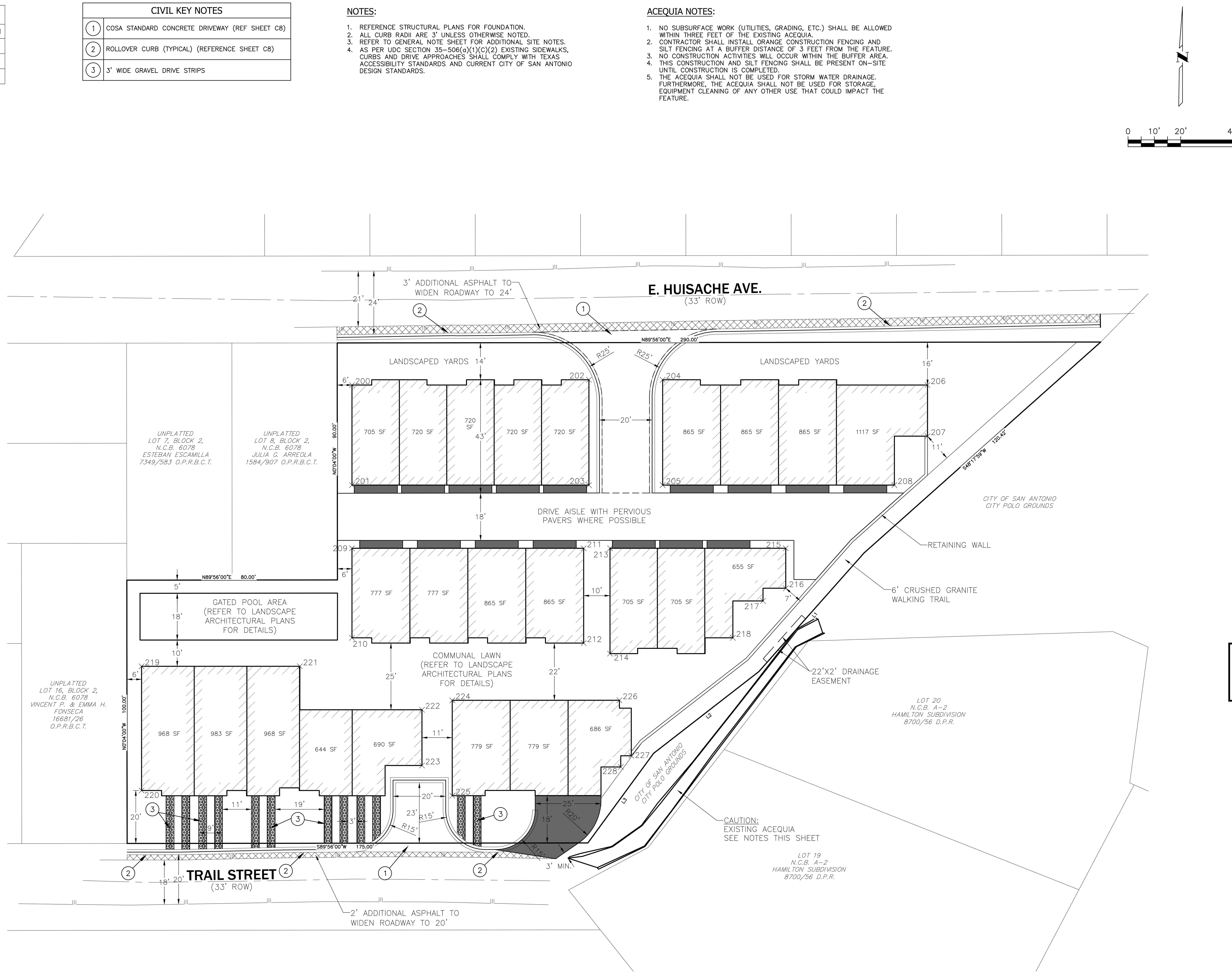
CIVIL KEY NOTES	
1	COSA STANDARD CONCRETE DRIVEWAY (REF SHEET C8)
2	ROLLOVER CURB (TYPICAL) (REFERENCE SHEET C8)
3	3' WIDE GRAVEL DRIVE STRIPS

NOTES:

1. REFERENCE STRUCTURAL PLANS FOR FOUNDATION.
2. ALL CURB RADII ARE 3' UNLESS OTHERWISE NOTED.
3. REFER TO GENERAL NOTE SHEET FOR ADDITIONAL SITE NOTES.
4. AS PER UDC SECTION 35-506(a)(1)(C)(2) EXISTING SIDEWALKS, CURBS AND DRIVE APPROACHES SHALL COMPLY WITH TEXAS ACCESSIBILITY STANDARDS AND CURRENT CITY OF SAN ANTONIO DESIGN STANDARDS.

ACEQUIA NOTES:

1. NO SUBSURFACE WORK (UTILITIES, GRADING, ETC.) SHALL BE ALLOWED WITHIN THREE FEET OF THE EXISTING ACEQUIA.
2. CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING AND SILT FENCING AT A BUFFER DISTANCE OF 3 FEET FROM THE FEATURE.
3. NO CONSTRUCTION ACTIVITIES WILL OCCUR WITHIN THE BUFFER AREA.
4. THIS CONSTRUCTION AND SILT FENCING SHALL BE PRESENT ON-SITE UNTIL CONSTRUCTION IS COMPLETED.
5. THE ACEQUIA SHALL NOT BE USED FOR STORM WATER DRAINAGE. FURTHERMORE, THE ACEQUIA SHALL NOT BE USED FOR STORAGE, EQUIPMENT CLEANING OF ANY OTHER USE THAT COULD IMPACT THE FEATURE.



LEGEND

- BOUNDARY / RIGHT OF WAY LINE
- CONCRETE CURB
- EASEMENT / SETBACK LINE
- ACCESSIBLE ROUTE
- EXISTING EDGE OF PAVEMENT
- GARBAGE DUMPSTER
- CONCRETE WHEEL STOP
- SIGN
- PARKING STALL COUNT
- ACCESSIBLE PARKING
- CONCRETE DRIVEWAY
- COSA CONCRETE DRIVEWAY

BUILDING CORNERS		
Point #	Northing	Easting
200	13713618.53	2133994.71
201	13713580.53	2133994.71
202	13713620.53	2134084.71
203	13713580.53	2134084.71
204	13713620.53	2134112.71
205	13713580.53	2134112.71
206	13713618.53	2134213.30
207	13713599.11	2134213.30
208	13713580.53	2134200.72
209	13713556.53	2133994.71
210	13713522.53	2133994.71
211	13713556.53	2134082.71
212	13713520.53	2134082.71
213	13713556.53	2134092.71
214	13713516.53	2134092.71
215	13713556.53	2134159.46
216	13713541.36	2134159.46
217	13713536.53	2134150.83
218	13713522.53	2134139.37
219	13713511.71	2133914.79
220	13713464.54	2133914.79
221	13713511.71	2133974.91
222	13713495.21	2134021.29
223	13713474.04	2134021.29
224	13713498.79	2134032.79
225	13713462.57	2134032.79
226	13713498.82	2134096.29
227	13713477.74	2134100.79
228	13713473.49	2134096.79

CAUTION:
BUILDING CORNER POINTS ARE FOR BUILDING ALIGNMENT AND ORIENTATION ONLY. FINAL BUILDING CORNERS SHALL BE SET FROM STRUCTURAL FOUNDATION PLANS.

UP ENGINEERING
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PREPARED UNDER THE SUPERVISION OF NATASHA F. UHLRICH, P.E. #89502 ON August 1, 2019

MNO INVESTMENTS, LLC
4010 GREYSTONE DRIVE
AUSTIN, TX 78731

80% SUBMITTAL

PLAT NO. 19-11800095
TRAIL STREET TOWNHOMES

SITE DIMENSION PLAN

REV	DATE	DESCRIPTION	BY

DESIGNED BY:	WPF
DRAFTED BY:	JWH
CHECKED BY:	NFU

SHEET
C3
OF C10

PROPERTY ADDRESS:
335 TRAIL STREET
LOT 1, BLOCK 2, N.C.B. 6078

LINE TABLE		
LINE	BEARING	LENGTH
L1	S41°34'01"W	60.21'
L2	S52°09'28"W	50.61'
L3	S36°15'37"W	42.20'

ACEQUIA NOTES:

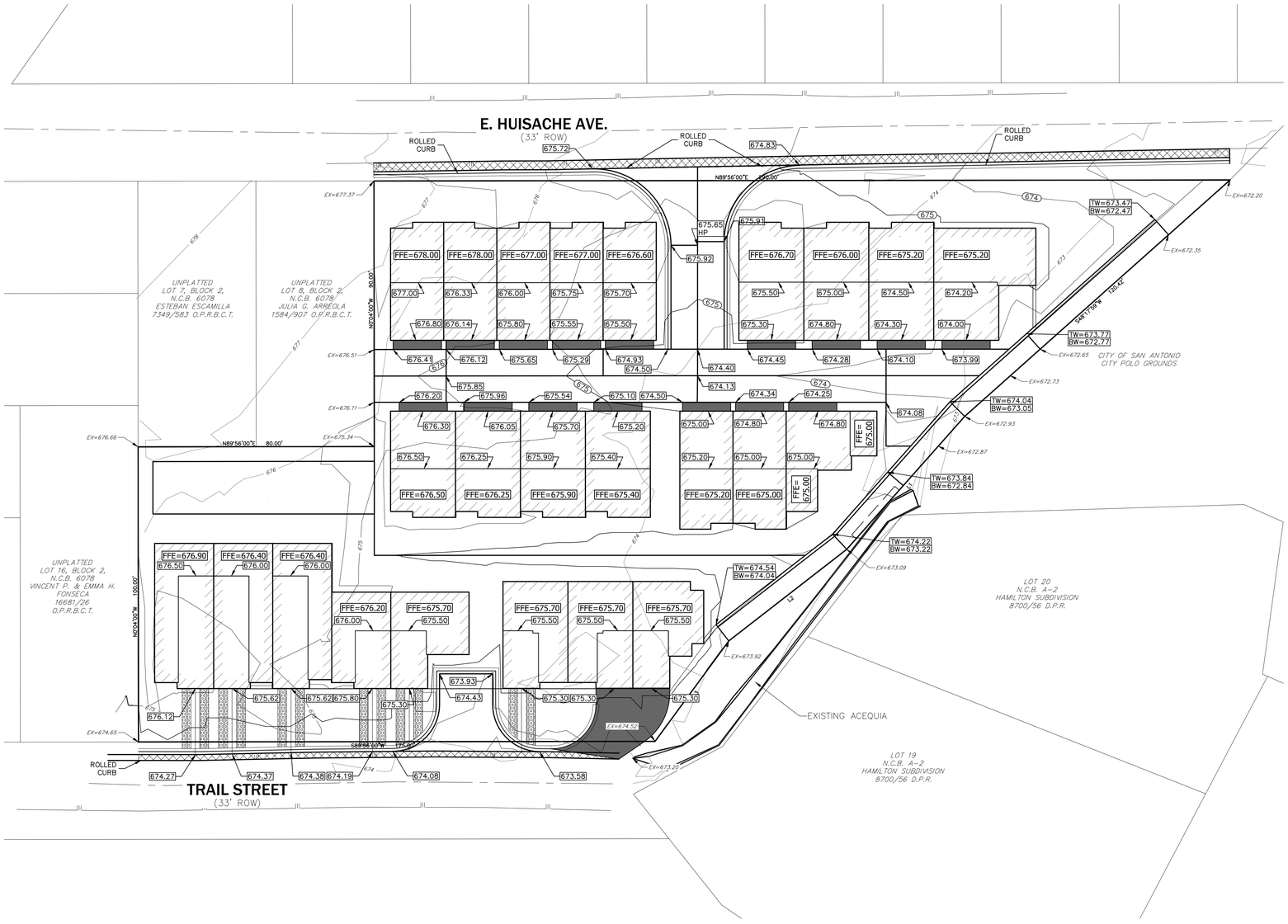
1. NO SUBSURFACE WORK (UTILITIES, GRADING, ETC.) SHALL BE ALLOWED WITHIN THREE FEET OF THE EXISTING ACEQUIA.
2. CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING AND SILT FENCING AT A BUFFER DISTANCE OF 3 FEET FROM THE FEATURE.
3. NO CONSTRUCTION ACTIVITIES WILL OCCUR WITHIN THE BUFFER AREA.
4. THIS CONSTRUCTION AND SILT FENCING SHALL BE PRESENT ON-SITE UNTIL CONSTRUCTION IS COMPLETED.
5. THE ACEQUIA SHALL NOT BE USED FOR STORM WATER DRAINAGE. FURTHERMORE, THE ACEQUIA SHALL NOT BE USED FOR STORAGE, EQUIPMENT CLEANING OF ANY OTHER USE THAT COULD IMPACT THE FEATURE.

LEGEND

- BOUNDARY / RIGHT OF WAY LINE
- CONCRETE CURB
- EASEMENT / SETBACK LINE
- 102 EXISTING CONTOUR
- 102 PROPOSED CONTOUR
- OE OVERHEAD UTILITIES
- SWALE CENTERLINE
- 692.28 PROPOSED ELEVATION
- EX=690.05 EXISTING ELEVATION
- TW TOP OF WALL
- BW BOTTOM OF WALL
- FLOW DIRECTION

N

0 10' 20' 40'



80% SUBMITTAL

PLAT NO. 19-11800095
TRAIL STREET TOWNHOMES

GRADING PLAN

NOTE:
REFER TO GENERAL NOTE SHEET FOR ADDITIONAL GRADING NOTES.

PROPERTY ADDRESS:
335 TRAIL STREET
LOT 1, BLOCK 2, N.C.B. 6078

REV	DATE	DESCRIPTION	BY

DESIGNED BY:	WPF
DRAFTED BY:	JWH
CHECKED BY:	NFU

SHEET
C4
OF C10

UP ENGINEERING
1270 N. LOOP 1604 E. SUITE 1210
SAN ANTONIO, TX 78232 TEL. 210.877.5504
WWW.UPENGINEERING.COM TEXAS REG. NO. F-17992

PRELIMINARY
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PREPARED UNDER THE SUPERVISION OF NATASHA F. UHLRICH, P.E. #83502 ON August 1, 2019

MNO INVESTMENTS, LLC
4010 GREYSTONE DRIVE
AUSTIN, TX 78731

Date: Aug 01, 2019, 3:30pm User ID: jodi
File: I:_Projects\137 - MNO Partners\137.01 - 335 Trail Street\ACAD\Sheets\137.01 GRADING PLAN.dwg

LINE TABLE		
LINE	BEARING	LENGTH
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L3	S36°15'37"W	42.20'

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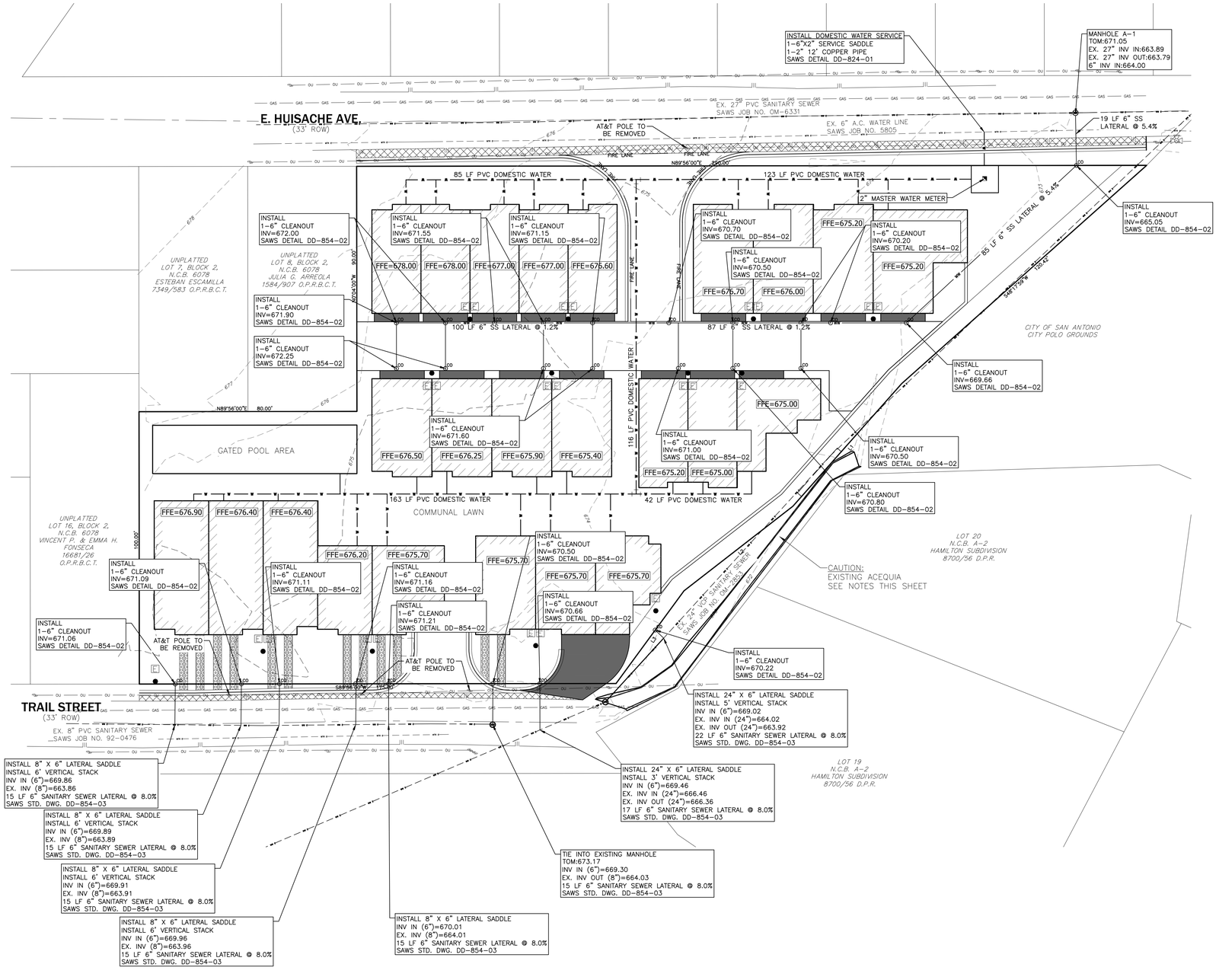
4. THIS CONSTRUCTION AND SILT FENCING SHALL BE PRESENT ON-SITE UNTIL CONSTRUCTION IS COMPLETED.
5. THE ACEQUIA SHALL NOT BE USED FOR STORM WATER DRAINAGE. FURTHERMORE, THE ACEQUIA SHALL NOT BE USED FOR STORAGE, EQUIPMENT CLEANING OF ANY OTHER USE THAT COULD IMPACT THE FEATURE.



LEGEND

- BOUNDARY / RIGHT OF WAY LINE
- CONCRETE CURB
- EASEMENT / SETBACK LINE
- ACCESSIBLE ROUTE
- FIRE LANE
- EXISTING OVERHEAD UTILITIES
- EXISTING GAS MAIN
- EXISTING WASTEWATER MAIN
- EXISTING WATER MAIN
- PROPOSED GAS MAIN
- PROPOSED WASTEWATER MAIN
- PROPOSED WATER MAIN
- LIGHT POLES
- UTILITY POLE
- WATER VALVE
- WATER VAULT
- EXISTING FIRE HYDRANT
- WASTEWATER CLEAN-OUT
- UTILITY MANHOLE
- ELECTRIC PULL BOX
- E — ELECTRIC TRANSFORMER
- G — GAS METER

NOTES:

1. ALL WASTEWATER PIPE TO BE PVC SDR 26.
2. ALL GRAVITY LINES ARE TO BE INSTALLED FROM DOWNSTREAM TO UPSTREAM.
3. DOMESTIC WATER SHALL BE PVC C900 FOR PIPES < 12" OR C905 FOR PIPES ≥12" OR COPPER TUBING AS SPECIFIED IN THE SAWS SPECIFICATIONS.
4. ALL WATER LINE JOINTS ARE TO BE RESTRAINED PER MANUFACTURERS RECOMMENDATIONS.
5. REPAIR ASPHALT AS REQUIRED FOR INSTALLATION OF WATER & WASTEWATER LINES.
6. CONTRACTOR SHALL FURNISH & INSTALL ALL MATERIALS AND APPURTENANCES AS CALLED OUT ON PLANS.
7. REFERENCE GENERAL NOTES SHEETS FOR ADDITIONAL UTILITY NOTES.
8. LIMITS OF CONSTRUCTION ARE SHOWN ON THE EROSION & SEDIMENTATION CONTROL PLAN.
9. CONTRACTOR TO COORDINATE WITH CPS ELECTRIC AND GAS ON ELECTRICAL SERVICE CONNECTION AND INSTALLATION OF RISER POLES AND TRANSFORMER PADS.
10. INSTALL CLEANOUTS EVERY 100 FEET ALONG SANITARY SEWER LINES, OR PER SAWS SPECIFICATIONS. CLEANOUTS IN PAVEMENT SHALL HAVE TRAFFIC RATED COVERS. MATCH TOP TO PROPOSED GRADES.
11. CONTRACTOR SHALL COORDINATE WITH THE CITY FIRE INSPECTOR PRIOR TO INSTALLING FIRE LANE STRIPING AND EXACT LOCATION OF FIRE LANE SIGNS.
12. REFERENCE MEP PLANS FOR GAS AND ELECTRICAL LAYOUT.
13. REFERENCE MEP PLANS FOR INTERNAL WATER SERVICE LINE SIZING AND SUB-METERING.

CAUTION:
CONTRACTOR TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

NOTE:
REFER TO GENERAL NOTE SHEET FOR ADDITIONAL UTILITY NOTES.

PROPERTY ADDRESS:
335 TRAIL STREET
LOT 1, BLOCK 2, N.C.B. 6078

UP ENGINEERING
1270 N. LOOP 1604 E. SUITE 1210
SAN ANTONIO, TX 78232 TEL. 210.877.5504
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PRELIMINARY
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PREPARED UNDER THE SUPERVISION OF
NATASHA F. UHLRICH,
P.E. #89502 ON
August 1, 2019

MNO INVESTMENTS, LLC
4010 GREYSTONE DRIVE
AUSTIN, TX 78731

80% SUBMITTAL

PLAT NO. 19-11800095
TRAIL STREET TOWNHOMES

UTILITY AND FIRE PROTECTION PLAN

REV	DATE	DESCRIPTION	BY

DESIGNED BY:	WPF
DRAFTED BY:	JWH
CHECKED BY:	NFU

SHEET
C5
OF C10

Date: Aug 01, 2019, 3:30pm User ID: jwh1
File: G:_Projects\27-MNO Partners\27.01 - 335 Trail Street\ACAD\Sheets\27.01 UTILITY AND FIRE PROTECTION PLAN.dwg

LINE TABLE		
LINE	BEARING	LENGTH
L1	S41°34'01"W	60.21'
L2	S52°09'28"W	50.61'
L3	S36°15'37"W	42.20'

ACEQUIA NOTES:

1. NO SUBSURFACE WORK (UTILITIES, GRADING, ETC.) SHALL BE ALLOWED WITHIN THREE FEET OF THE EXISTING ACEQUIA.
2. CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING AND SILT FENCING AT A BUFFER DISTANCE OF 3 FEET FROM THE FEATURE.
3. NO CONSTRUCTION ACTIVITIES WILL OCCUR WITHIN THE BUFFER AREA.
4. THIS CONSTRUCTION AND SILT FENCING SHALL BE PRESENT ON-SITE UNTIL CONSTRUCTION IS COMPLETED.
5. THE ACEQUIA SHALL NOT BE USED FOR STORM WATER DRAINAGE. FURTHERMORE, THE ACEQUIA SHALL NOT BE USED FOR STORAGE, EQUIPMENT CLEANING OF ANY OTHER USE THAT COULD IMPACT THE FEATURE.

N

0 10' 20' 40'

LEGEND

- BOUNDARY / RIGHT OF WAY
- EXIST. GRADE ELEVATIONS
- TEMPORARY SILT FENCE
- LIMITS OF CONSTRUCTION / DISTURBANCE
- LIMITS OF TEMPORARY PARKING, STORAGE, SPOILS, AND STAGING AREA.
- STABILIZED CONSTRUCTION ENTRANCE
- ROCK FILTER DAM
- CONCRETE WASHOUT

NOTES:

1. FOR THE PROTECTION OF NATURAL AREAS, NO EXCEPTIONS TO INSTALLING FENCES AT THE LIMIT OF CONSTRUCTION LINE WILL BE PERMITTED (SEE NOTE #6).
2. INSPECTOR HAS THE AUTHORITY TO ADD AND OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN COMPLIANCE WITH CITY RULES AND REGULATIONS.
3. THE CONTRACTOR MAY NOT BLOCK, DIRECT, IMPEDE, OR REROUTE PEDESTRIAN AND VEHICULAR TRAFFIC, NOR PLACE A BARRICADE OR OTHER TRAFFIC CONTROL DEVICE IN A RIGHT-OF-WAY, WITHOUT FIRST OBTAINING A TEMPORARY USE OF RIGHT-OF-WAY PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS THAT ARE REQUIRED TO COMPLY WITH THE CITY CODE REGARDING EXCAVATION IN PUBLIC RIGHT-OF-WAY.
5. CONTRACTOR SHALL CLEAN UP SPOILS THAT MIGRATE INTO EXISTING RIGHT-OF-WAY A MINIMUM OF ONCE PER DAY.
6. CONTRACTOR TO INSTALL CHAIN LINK FENCE AT ALL POINTS WHERE LIMITS OF CONSTRUCTION IS SHOWN.
7. ALL STORM WATER LEAVING THE SITE DURING CONSTRUCTION ACTIVITIES MUST PASS THROUGH THE SILT FENCE OR ROCK BERMS.
8. REFERENCE GENERAL NOTES SHEET FOR EROSION CONTROL NOTES.
9. IF DISTURBED AREA IS NOT TO BE WORKED ON FOR MORE THAN 14 DAYS, DISTURBED AREA NEEDS TO BE STABILIZED BY REVEGETATION, MULCH, TARP OR REVEGETATION MATTING.

EROSION CONTROL MEASURES	
1	LIMITS OF CONSTRUCTION
2	INSTALL SILT FENCE (2' FROM PROPERTY LINE) – SEE DETAIL SHEET C7
3	STAGING AREA
4	CONCRETE WASHOUT PIT – SEE DETAIL SHEET C7
5	STABILIZED CONSTRUCTION ENTRANCE – SEE DETAIL SHEET C7
6	ROCK FILTER DAM – SEE DETAIL SHEET C7
7	INLET PROTECTION – SEE DETAIL SHEET C7

80% SUBMITTAL

PROPERTY ADDRESS:
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LOT 1, BLOCK 2, N.C.B. 6078

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PREPARED UNDER THE SUPERVISION OF NATASHA F. UHLRICH, P.E. #89502 ON August 1, 2019

MNO INVESTMENTS, LLC
4010 GREYSTONE DRIVE
AUSTIN, TX 78731

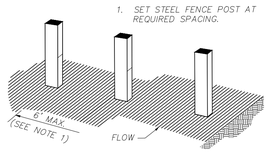
PLAT NO. 19-11800095
TRAIL STREET TOWNHOMES

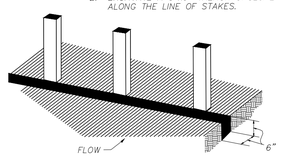
STORM WATER POLLUTION PREVENTION PLAN

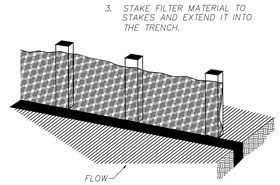
REV	DATE	DESCRIPTION	BY

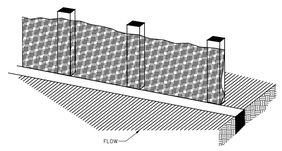
DESIGNED BY: WPF
DRAFTED BY: JWH
CHECKED BY: NFU

SHEET
C6
OF C10



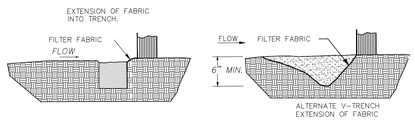






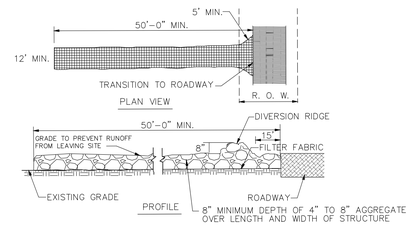
GENERAL NOTES:

1. STEEL POSTS TO BE SET AT 3-FOOT MAXIMUM SPACING WITH MINIMUM EMBEDMENT OF 1-FOOT. IF FACTORY PREASSEMBLE FENCE WITH SUPPORT NETTING IS USED, SPACING OF POST MAY BE INCREASED TO 8 FEET MAXIMUM.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHOULD BE OVERLAPPED 3 FEET AND SECURELY FASTENED WHEN ENDS OF FABRIC MEET.



SILT FENCE

N.T.S.



STABILIZED CONSTRUCTION EXIT

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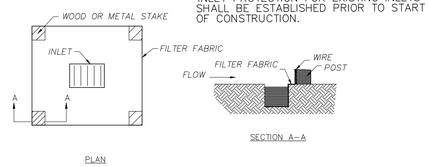
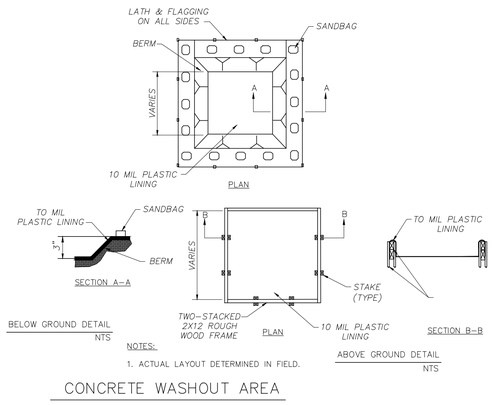


INLET PROTECTION

NTS



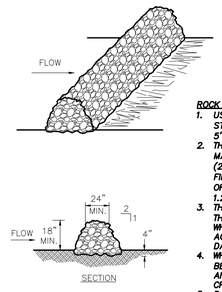
BELOW GROUND DETAIL
NTS

ABOVE GROUND DETAIL
NTS

NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.

CONCRETE WASHOUT AREA



ROCK FILTER DAM

NTS

ROCK BERM NOTES:

1. USE ONLY OPEN GRADED ROCK 100 to 200 mm (4 to 8") DIAMETER FOR STREAM FLOW CONDITIONS. USE OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR OTHER CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE). ROCK BERMS IN CHANNEL APPLICATIONS SHALL BE ANCHORED FIRMLY INTO THE SUBSTRATE A MINIMUM OF 150 mm (6 ") WITH T-POSTS OR WITH 15M OR 20M (#5 OR #6) REBAR, WITH MAXIMUM SPACING APART OF 1.2 m (48") ON CENTER.
3. THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SILTATION PROBLEM.
5. DAILY INSPECTION SHALL BE MADE ON SEVERE-SERVICE ROCK BERMS; SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES 150 mm (6").
6. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

80% SUBMITTAL

PROPERTY ADDRESS:
335 TRAIL STREET
LOT 1, BLOCK 2, N.C.B. 6078

UP ENGINEERING
1270 N. LOOP 1604 E. SUITE 1310
SAN ANTONIO, TX 78232 TEL (210) 877-5504
WWW.UPENGINEERING.COM TEXAS REG. NO. F-17992

PRELIMINARY
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

PREPARED UNDER THE SUPERVISION OF NATASHA F. UHLRICH, P.E. #89502 ON August 1, 2019

MNO INVESTMENTS, LLC
4010 GREYSTONE DRIVE
AUSTIN, TX 78731

PLAT NO. 19-11800095
TRAIL STREET TOWNHOMES

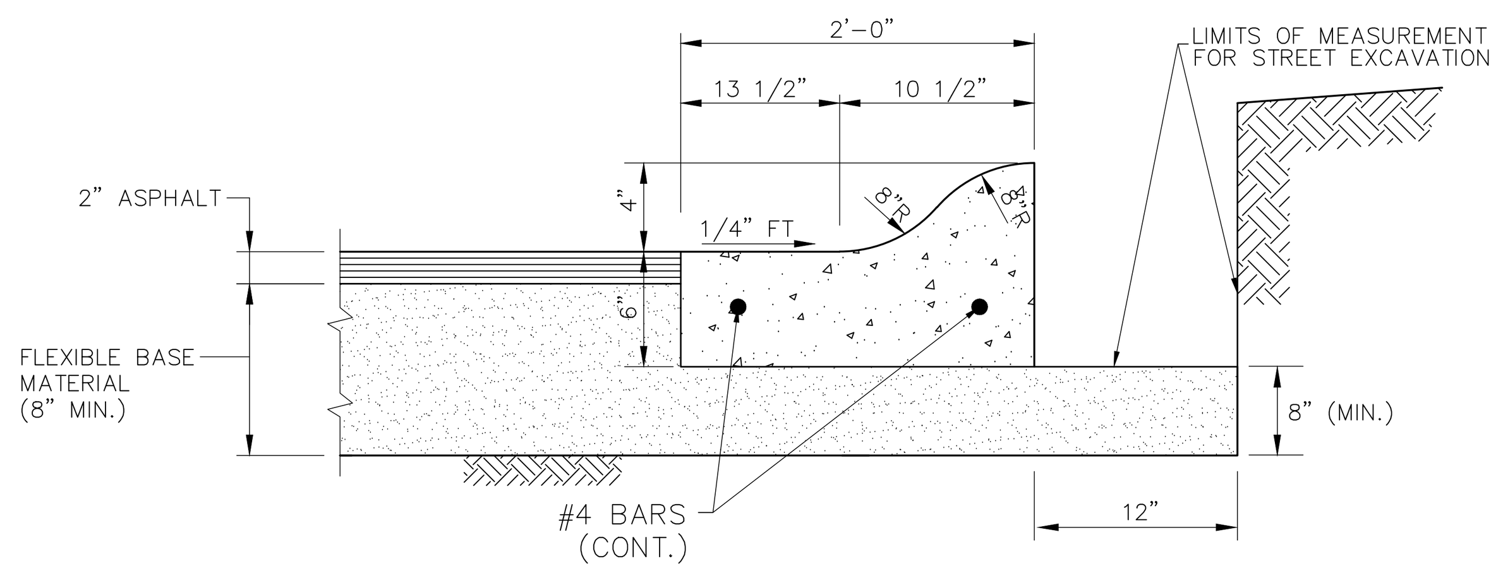
STORM WATER POLLUTION PREVENTION PLAN DETAILS

REV	DATE	DESCRIPTION	BY

DESIGNED BY:	WPF
DRAFTED BY:	JWH
CHECKED BY:	NFU

SHEET
C7
OF C10

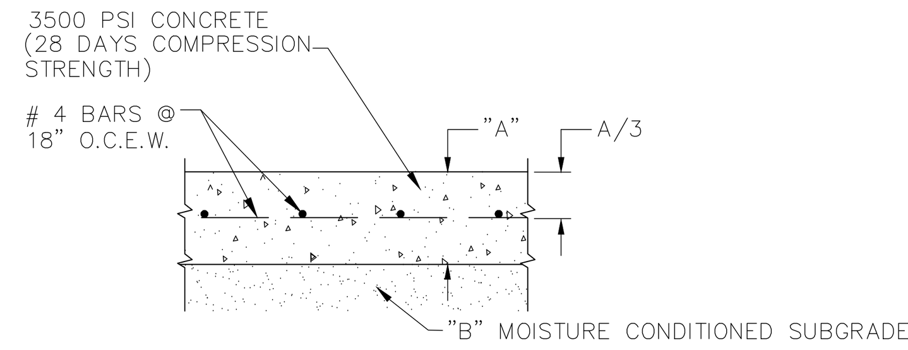
Date: Aug 01, 2019, 3:30pm User ID: jwh
File: U:_Projects\17 - MNO Partners\17.01 - 335 Trail Street\ACAD\Sheets\17.01 SWPPP.dwg



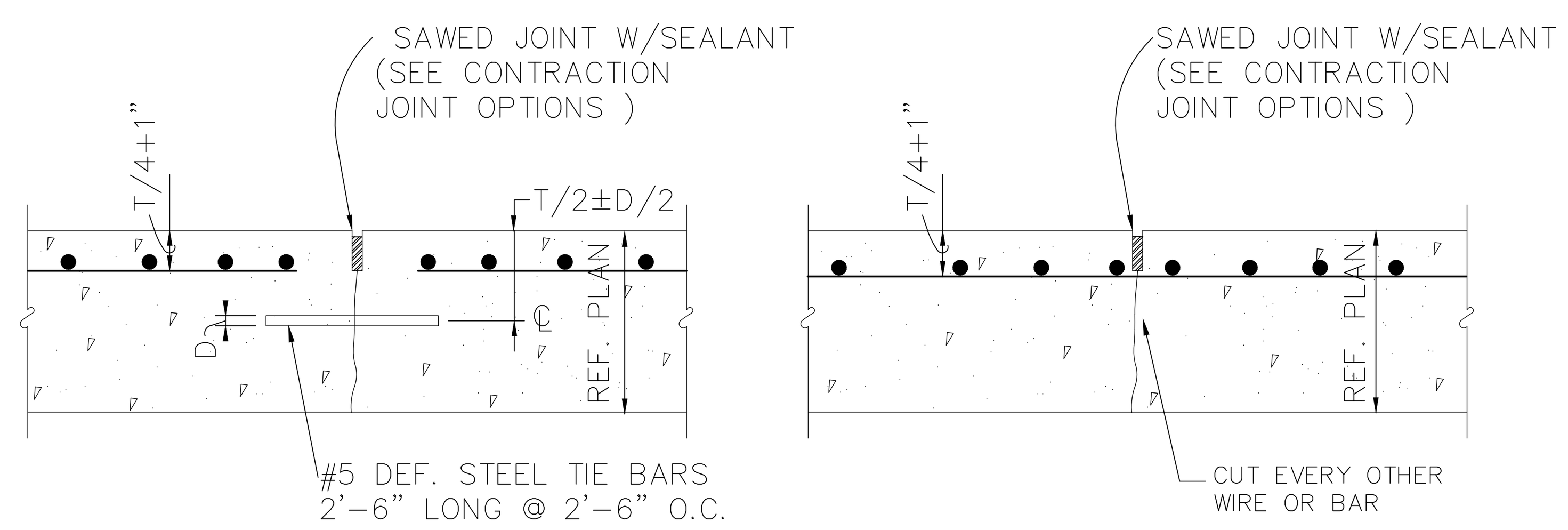
TYPICAL ROLLOVER CURB
NTS

		PARKING AREAS	DRIVE AREAS
"A"	REINFORCED CONCRETE	5"	6"
"B"	MOISTURE CONDITIONED SUBGRADE	6"	6"

NOTE: REFER TO GEOTECHNICAL ENGINEERING STUDY BY InTEC, PROJECT NO. S181369, DATED AUGUST 24, 2018 FOR ADDITIONAL INFORMATION.



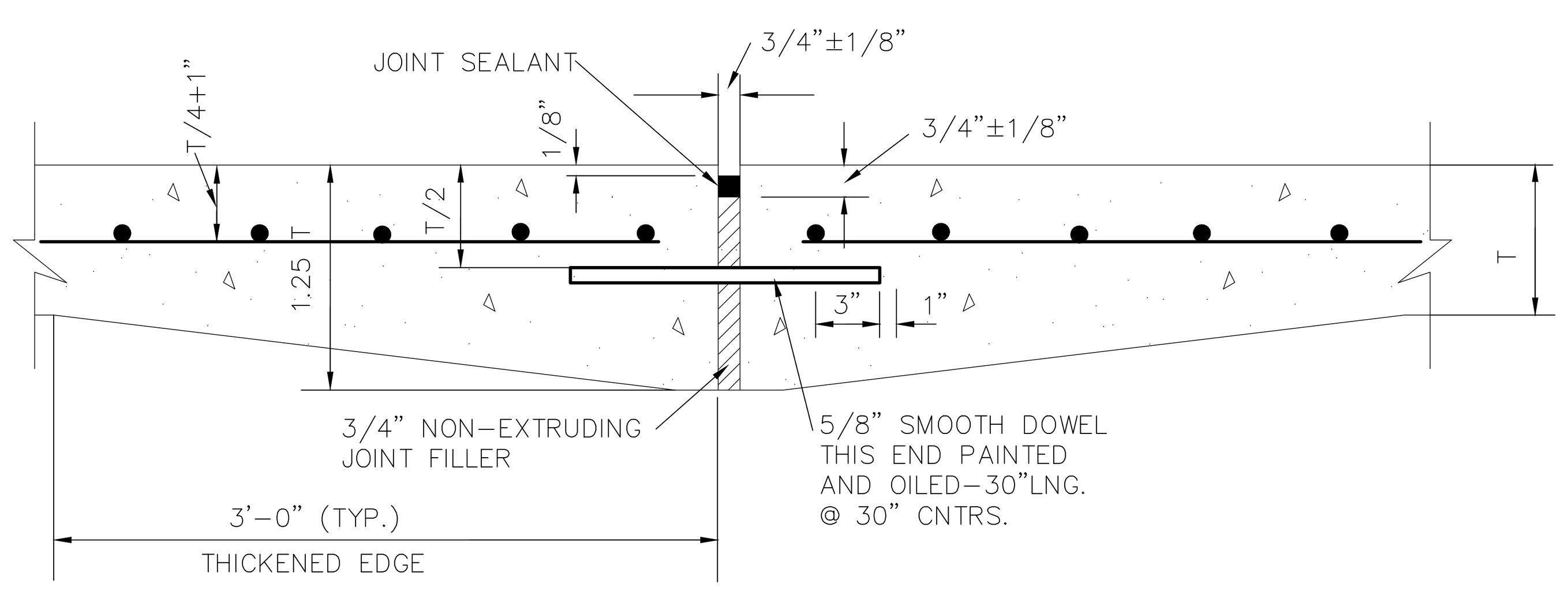
CONCRETE PAVEMENT SECTION
NTS



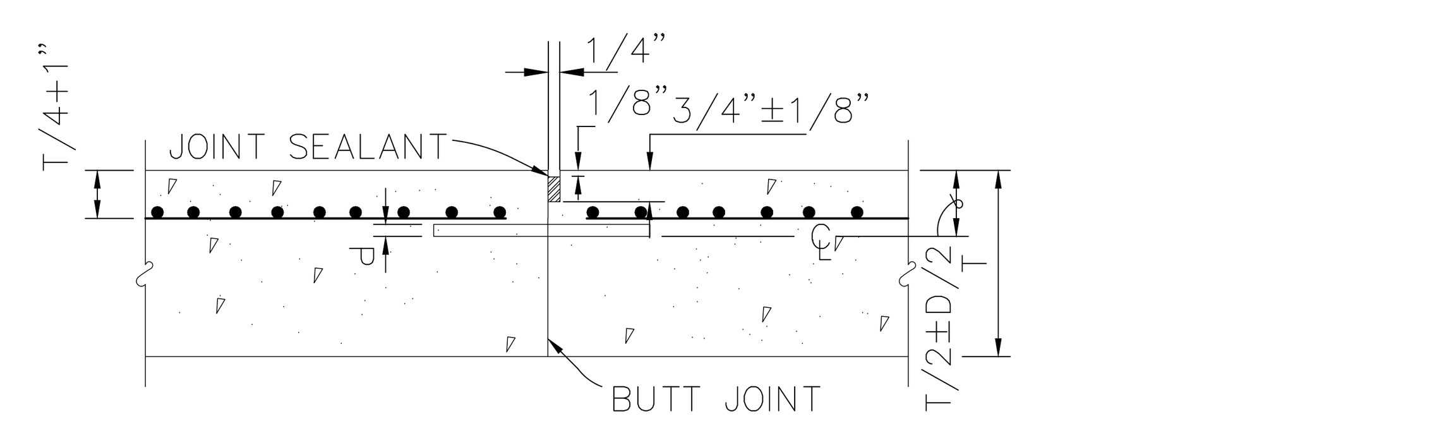
LONGITUDINAL
OPTIONAL

TRANSVERSE OR LONGITUDINAL

PVMT. CONTRACTION JOINT
N.T.S.



PVMT. EXPANSION JOINT
N.T.S.

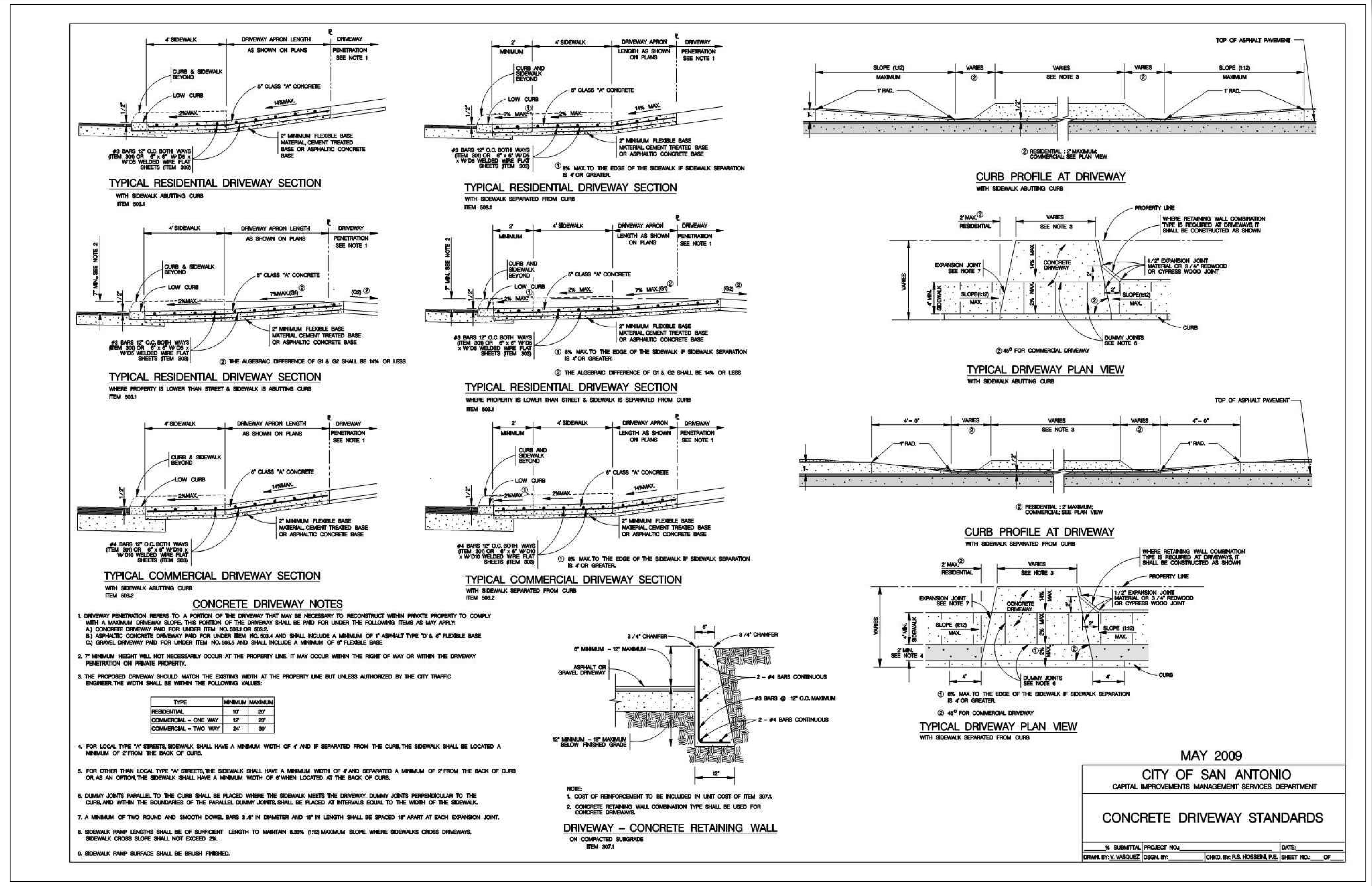


TRANSVERSE OR LONGITUDINAL

NOTE :

JOINT SHOWN TO BE USED AT A REGULARY SCHEDULED TRANSVERSE CONTRACTION JOINT. FOR A TRANSVERSE CONSTRUCTION JOINT AT A LOCATION OTHER THAN REGULARLY SCHEDULED CONTACTION JOINT:
A) THE REINFORCEMENT SHALL BE CARRIED THROUGH THE JOINT
B) TIE BARS SHALL BE USED INLIEU OF DOWELS
C) NO GROOVE OR JOINT SEAL NEEDS TO BE PROVIDED

PAVEMENT CONSTRUCTION JOINTS
N.T.S.



80% SUBMITTAL

UP ENGINEERING
1270 N LOOP 1604 E, SUITE 1310
SAN ANTONIO, TX 78232 TEL 210-774-5504
WWW.UPENGINEERING.COM TEXAS REG. NO. F-17992

PRELIMINARY
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
PREPARED UNDER THE SUPERVISION OF NATASHA F. UHLRICH, P.E. #89502 ON August 1, 2019

MNO INVESTMENTS, LLC
4010 GREYSTONE DRIVE
AUSTIN, TX 78731

PLAT NO. 19-11800095
TRAIL STREET TOWNHOMES

CONSTRUCTION DETAILS

REV	DATE	DESCRIPTION	BY

DESIGNED BY:	WPF
DRAFTED BY:	JWH
CHECKED BY:	NFU

SHEET
C8
OF C10

Date: Aug 01, 2019, 3:30pm User ID: jwh
File: c:_Projects\27 - MNO Partners\27.01 - 335 Trail Street\ACAD\Sheets\27.01 CONSTRUCTION DETAILS.dwg

SAWS CONSTRUCTION NOTES

1. All materials and construction procedures within the scope of this project shall be approved by the San Antonio Water System (SAWS) and comply with the Plans, Specifications, General Conditions and with the following as applicable:

    A. Current Texas Commission on Environmental Quality (TCEQ) "Design Criteria for Domestic Wastewater System", Texas Administrative Code (TAC) Title 30 Part 1 Chapter 217 and "Public Drinking Water", TAC Title 30 Part 1 Chapter 290.
    B. Current TxDOT "Standard Specification for Construction of Highways, Streets and Drainage"
    C. Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction"
    D. Current City of San Antonio "Standard Specifications for Public Works Construction"
    E. Current City of San Antonio "Utility Excavation Criteria Manual" (UECM).

2. The Contractor shall not proceed with any pipe installation work until they obtain a copy of the approved Counter Permit or General Construction Permit (GCP) from the Consultant and has been notified by SAWS Construction Inspection Division to proceed with the work and has arranged a meeting with the inspector and consultant for the work requirements. Work completed by the contractor without and approved Counter Permit and/or a GCP will be subject to removal and replacement at the expense of the contractor and/or the developer.

3. The contractor shall obtain the SAWS Standard Details from the SAWS website, http//www.saws.org/business_center/specs. Unless otherwise noted within the design plans.

4. The contractor is to make arrangements with the SAWS Construction Inspection Division at (210) 233-2973, on notification procedures that will be used to notify affected home residents and/or property owners 48 hours prior to beginning any work.

5. Location and depth of existing utilities and service laterals shown on the plans are understood to be approximate. Actual locations and depths must be field verified by the contractor at least 1 week prior to construction. It shall be the contractor's responsibility to locate utility service lines as required for construction and to protect them during construction at no cost to SAWS.

6. The contractor shall verify the exact location of the underground utilities and drainage structures at least 1-2 weeks prior to construction wether shown on plans or not. Please allow up to 7 business days for locates requesting pipe location markers on SAWS facilities. The following contact information are supplied for verification purposes:

    SAWS Utility Locates: http//www.saws.org/Service/Locates
    COSA Drainage 210-207-0724 or (210) 207-6026
    COSA Traffic Signal Operations (210)-206-8480
    COSA Traffic Signal Damages (210)-207-3951
    Texas State Wide One Call Locator 1-800-545-6005 or 811

7. The Contractor shall be responsible for restoring existing fences, curbs, streets, driveways, driveways, landscaping and structures to its original or better condition if damages are made as a result of the project's construction.

8. All work in Texas Department of Transportation (TxDOT) and/or Bexar County right-of-way shall be done in accordance with respective construction specifications and permit requirements.

9. The contractor shall comply with City of San Antonio or other governing municipality's tree ordinances when excavating near trees.

10. The contractor shall not place any waste material in the 100-year Flood Plain without first obtaining an approved Flood Plain Permit.

11. Holiday work: Contractors will not be allowed to perform SAWS work on SAWS recognized holidays. Requests should be sent to constworkreq@saws.org.

    Weekend work: Contractors are required to notify the SAWS Inspection Construction Department 48 hours in advance to request weekend work. Request should be sent to constworkreq@saws.org.

    Any and all SAWS utility work installed without holiday/weekend approval will be subject to be uncovered for proper inspection.

12. Compaction note (Item 804): The contractor shall be responsible for meeting the compaction requirements on all trench backfill and paying for the tests preformed by a third party. Compaction tests will be done at one location point randomly selected, or as indicated by the SAWS Inspector and/or the test administrator, per each 12-inch loose lift per 400 linear feet at a minimum. This project will not be accepted and finalized by SAWS without this requirement being met and verified by providing all necessary documented test results.

13. A copy of all testing reports shall be forwarded to SAWS Construction Inspection Division.

WATER SECTION

1. Prior to tie-ins, any shutdowns of existing mains of any size must be coordinated with SAWS Construction Inspection Division at least one week in advance of the shutdown. The contractor must also provide a sequence of work as related to the tie-ins; this is at no additional cost to SAWS or the project and it is the responsibility of the contractor to sequence the work accordingly.

    For water mains 12" or higher: SAWS Emergency Operation Center (210) 233-2014.

2. Asbestos Cement (AC) Pipe, also known as transite pipe which is known to contain asbestos-containing material (ACM), may be located within the project limits. Special waste management procedures and health and safety requirements will be applicable when removal and/or disturbance of this pipe occurs. Such work is to be made under Special Specification Item No. 3000, "Special Specification for Handling Asbestos Cement Pipe".

3. Valve removal: Where the contractor is to abandon a water main, the control valve located on the abandoning branch will be removed and replaced with a cap/plug. (NSPI)

4. Suitable anchorage/thrust blocking or joint restraint shall be provided at all of the following main locations: dead ends, plugs, caps, tees, crosses, valves and bends, in accordance with the Standard Drawings DD-839 series and Item No. 839, in the SAWS Standard Specifications for Construction.

5. All valves shall read "open right"

6. PRVs Required: Contractor to verify that no portion of the tract is below ground elevation of 745 feet where the static pressure will normally exceed 80 PSI. At all such locations where the ground level is below 745 feet, the Developer or Builder shall install at each lot, on the customer's side of the meter, an approved type pressure regulator in conformance with the Plumbing Code of the City of San Antonio. No dual services allowed for any lot(s) if *PRV is/are required for such lot(s), only single service connections shall be allowed. *Note: A pressure regulator is also known as a pressure reducing valve (PRV).

7. Pipe Disinfection with Dry HTH for Projects less than 800 linear feet. (Item #847.3): Mains shall be disinfected with dry HTH where shown in the contract documents or as directed by the Inspector, and shall not exceed a total length of 800 feet. This method of disinfection will also be followed for main repairs. The Contractor shall utilize all appropriate safety measure to protect his personnel during disinfection operations.

8. Backflow Prevention Devices:

    All irrigation services within residential areas are required to have backflow prevention devices.

    All commercial backflow prevention devices must be approved by SAWS prior to installation.

9. Final connection to the existing water main shall not be made until the water main has been pressure tested, chlorinated and SAWS has released the main for tie-in and use.

Date: Aug 01, 2019, 3:30pm User ID: justi
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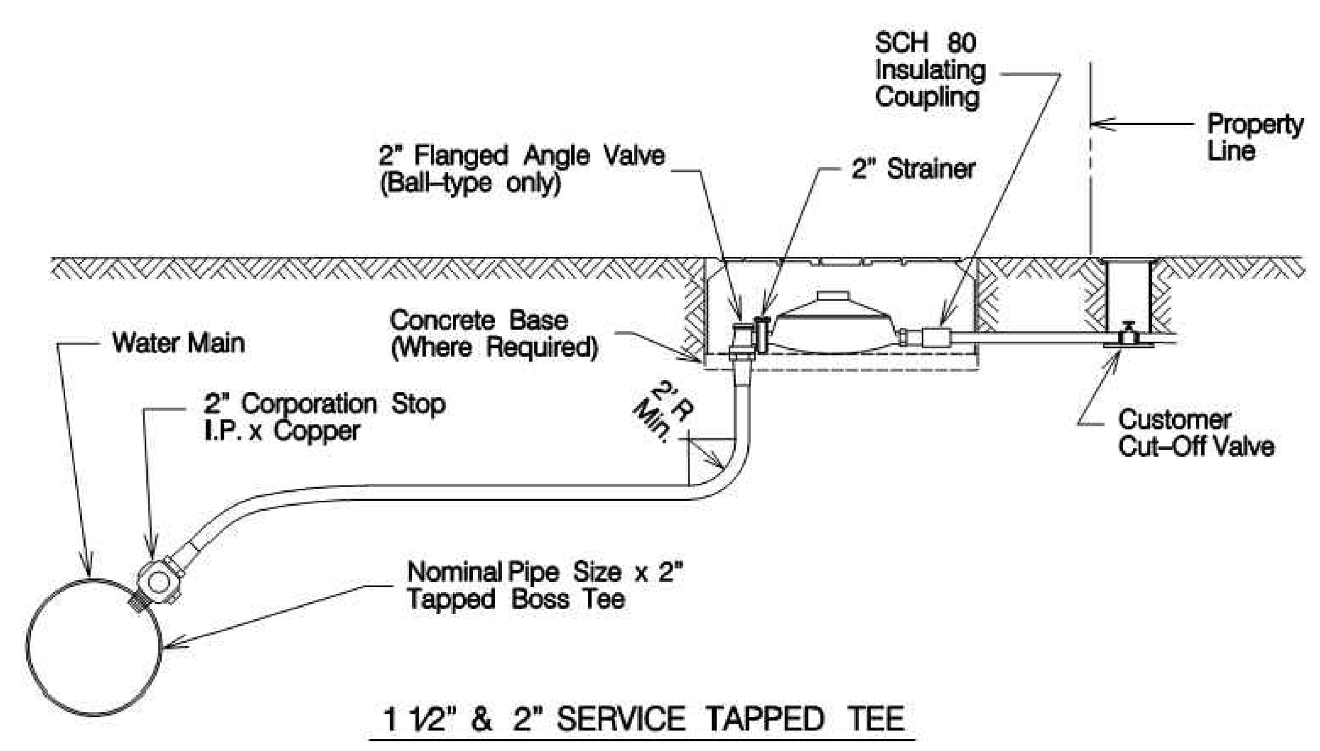
PIPE TAPPING SCHEDULE

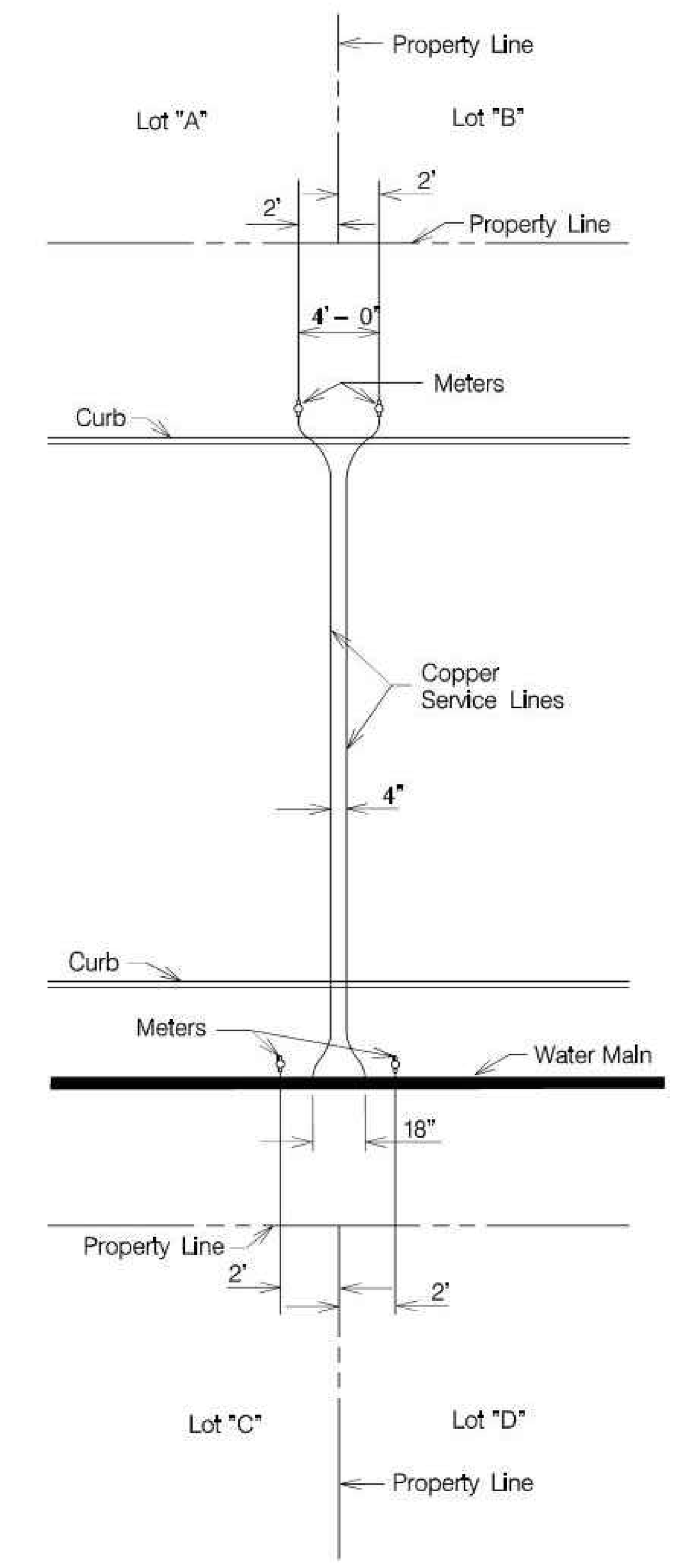
PIPE DIAMETER	SERVICE SIZE 3/4"	1"	1 1/2"	2"
6" A.C.	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle
6" C.I. or D.I.	Tap	Tap	Tap With Service Saddle	Tap With Service Saddle
8" A.C.	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle
8" C.I. or D.I.	Tap	Tap	Tap With Service Saddle	Tap With Service Saddle
8" PVC	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle
10" A.C.	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle
10" C.I. or D.I.	Tap	Tap	Tap With Service Saddle	Tap With Service Saddle
10" PVC	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle
12" A.C.	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle
12" C.I. or D.I.	Tap	Tap	Tap With Service Saddle	Tap With Service Saddle
12" PVC	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle
16" A.C.	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle	Tap With Service Saddle
16" C.I. or D.I.	Tap	Tap	Tap With Service Saddle	Tap With Service Saddle



1 1/2" & 2" SERVICE TAPPED TEE

Note:
For direct tap to main, see Tapping Schedule

PROPERTY OF SAN ANTONIO WATER SYSTEM SAN ANTONIO, TEXAS	COPPER SERVICE INSTALLATION TAPPING SCHEDULE	APPROVED March 2008	REVISED
		DD-824-01	SHEET 3 OF 3



SINGLE SERVICE LINE - SINGLE METER

PROPERTY OF SAN ANTONIO WATER SYSTEM SAN ANTONIO, TEXAS	TYPICAL SERVICE ARRANGEMENT	APPROVED March 2008	REVISED
		DD-824-05	SHEET 1 OF 3

UP ENGINEERING
1270 N LOOP 1604 E, SUITE 1310
SAN ANTONIO, TX 78232 TEL 210-774-5504
WWW.UPENGINEERING.COM TEXAS REG. NO. F-17992

PRELIMINARY
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PREPARED UNDER THE SUPERVISION OF NATASHA F. UHLRICH, P.E. #89502 ON August 1, 2019

MNO INVESTMENTS, LLC
4010 GREYSTONE DRIVE
AUSTIN, TX 78731

80% SUBMITTAL

PLAT NO. 19-11800095
TRAIL STREET TOWNHOMES

SAWS DETAILS

REV	DATE	DESCRIPTION	BY

DESIGNED BY: WPF
DRAFTED BY: JWH
CHECKED BY: NFU

SHEET
C9
OF C10

SAWS CONSTRUCTION NOTES

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   - C. Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction"
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   COSA Drainage 210-207-0724 or (210) 207-6026
   COSA Traffic Signal Operations (210)-206-8480
   COSA Traffic Signal Damages (210)-207-3951
   Texas State Wide One Call Locator 1-800-545-6005 or 811
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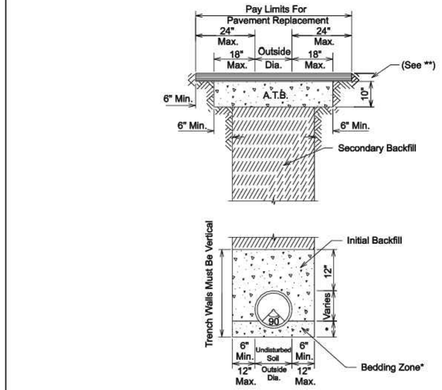
13. A copy of all testing reports shall be forwarded to SAWS Construction Inspection Division.

SEWER NOTES

1. The contractor is responsible for ensuring that no Sanitary Sewer Overflow (SSO) occurs as a result of their work. All contractor personnel responsible for SSO prevention and control shall be trained on proper response. Should an SSO occur, the contractor shall:
   - A. Identify the source of the SSO and notify SAWS Emergency Operations Center (EOC) immediately at (210) 233-2014. Provide the address of the spill and estimated volume or flow.
   - B. Attempt to eliminate the source of the SSO.
   - C. Contain sewage from the SSO to the extent of preventing a possible contamination of waterways.
   - D. Clean up spill site (return contained sewage to the collection system if possible) and properly dispose of contaminated soil/materials.
   - E. Clean the affected sewer mains and remove any debris.
   - F. Meet all post-SSO requirements as per the EPA Consent Decree, including line cleaning and televising the affected sewer mains (at SAWS direction) within 24 hours.

   Should the contractor fail to address an SSO immediately and to SAWS satisfaction, they will be responsible for all costs incurred by SAWS, including any fines from EPQ, TCEQ and/or any other Federal, State or Local Agencies.

   No separate measurement or payment shall be made for this work. All work shall be done according to guidelines set by the TCEQ and SAWS.
2. If bypass pumping is required, the contractor shall perform such work in accordance with SAWS Standard Specifications for Water and Sanitary Sewer Construction, Item No. 864, "Bypass Pumping".
3. Prior to tie-ins, any shutdowns of existing force mains of any size must be coordinated with the SAWS Construction Inspection Division at (210) 233-2973 at least one week in advance of the shutdown. The contractor must also provide a sequence of work as related to the tie-ins; this is at no additional cost to SAWS or the project and it is the responsibility of the contractor to sequence the work accordingly.
4. Sewer pipe where water lines cross shall be 160 psi and meet the requirements of ASTM D2241, TAC 217.53 and TCEQ 290.44(e)(4)(B). Contractor shall center a 20" joint of 160 psi pressure rated PVC at the proposed water crossing.
5. ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY: It shall be the responsibility of the contractor to make allowances and adjustments for top of manholes to match the finished grade of the project's improvements. (NSPI)
6. Spills, Overflows or Discharges of Wastewater: All spills, overflows or discharges of wastewater, recycled water, petroleum products or chemicals must be reported immediately to the SAWS Inspector assigned to the Counter Permit or General Construction Permit (GCP). This requirement applies to every spill, overflow or discharge regardless of size.
7. Manhole and all pipe testing (including the TV inspection) must be performed and passed prior to Final Field Acceptance by SAWS Construction Inspection Division, as per the SAWS Specifications for Water and Sanitary Sewer Construction.
8. All PVC pipe over 14 feet of cover shall be extra strength with minimum pipe stiffness of 115 psi.



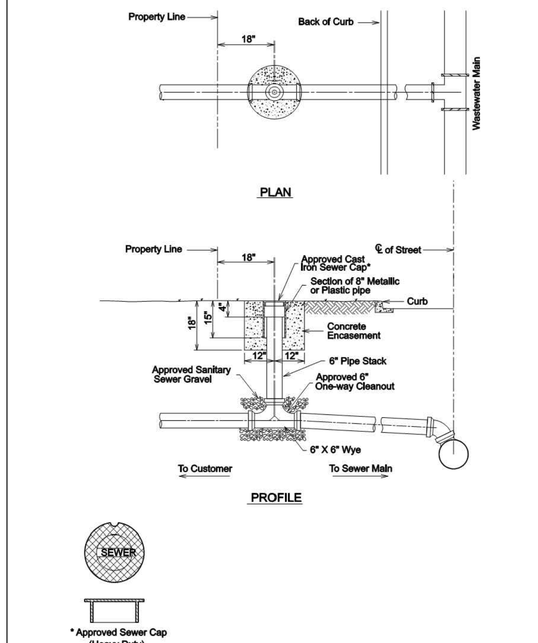
* Sewer Gravel 6" Min. or 1/8 O.D. of the pipe, whichever is greater.

In areas of over excavation, encasement shall extend from trench wall to trench wall. Pay Limits shall not exceed 12" max. as shown on detail. Additional encasement shall be incidental.

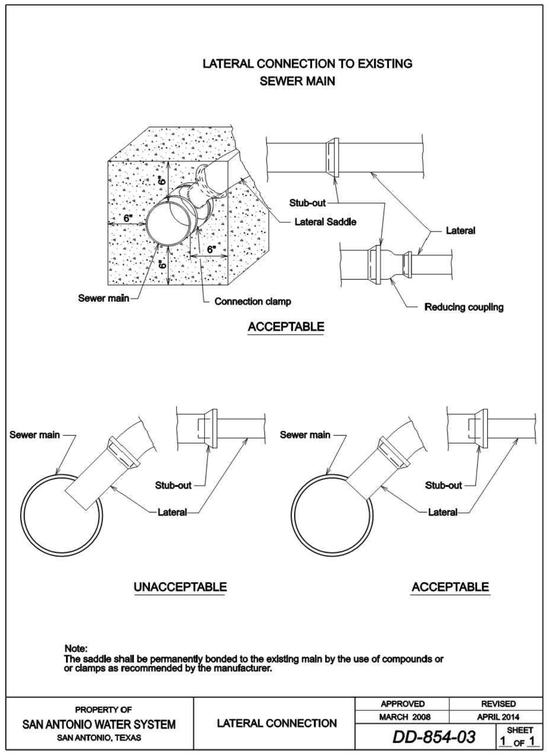
** Min 2" HMAC Type "D" for trench repair in Local / Residential streets.

** Min 3" HMAC Type "C" for trench repair in Collector / Arterial streets.

PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	SANITARY SEWER PIPE LAID IN TRENCH	APPROVED MARCH 2008	REVISED APRIL 2014	SHEET 1 OF 1
		DD-804-01		

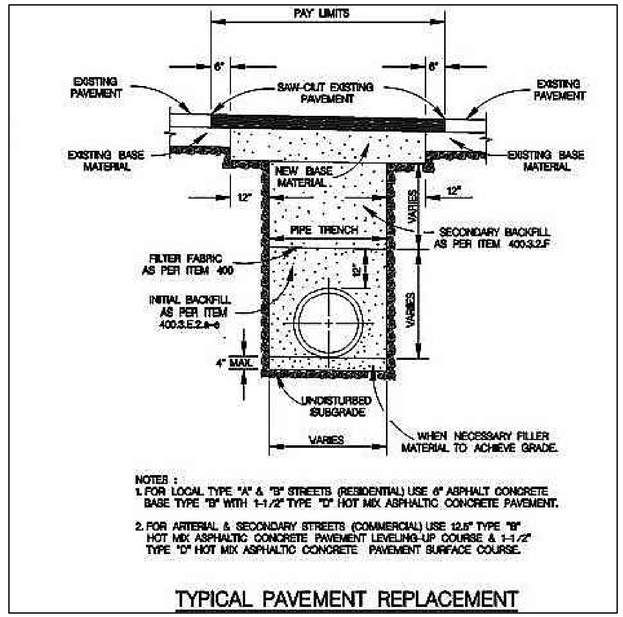


PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	TYPICAL CLEANOUT DETAIL	APPROVED MARCH 2008	REVISED APRIL 2014	SHEET 2 OF 2
		DD-854-02		



Note:
The saddle shall be permanently bonded to the existing main by the use of compounds or or clamps as recommended by the manufacturer.

PROPERTY OF SAN ANTONIO WATER SYSTEM, SAN ANTONIO, TEXAS	LATERAL CONNECTION	APPROVED MARCH 2008	REVISED APRIL 2014	SHEET 1 OF 1
		DD-854-03		



NOTES :
1. FOR LOCAL TYPE "A" & "B" STREETS (RESIDENTIAL) USE 6" ASPHALT CONCRETE BASE TYPE "B" WITH 1-1/2" TYPE "D" HOT MIX ASPHALTIC CONCRETE PAVEMENT.
2. FOR ARTERIAL & SECONDARY STREETS (COMMERCIAL) USE 12.5" TYPE "B" HOT MIX ASPHALTIC CONCRETE PAVEMENT LEVELING-UP COURSE & 1-1/2" TYPE "D" HOT MIX ASPHALTIC CONCRETE PAVEMENT SURFACE COURSE.

TYPICAL PAVEMENT REPLACEMENT

UP ENGINEERING
4270 N. LOOP 1604 E. SUITE 1310
SAN ANTONIO, TX 78233 TEL. 210.545.5504
WWW.UPENGINEERING.COM TEXAS REG. NO. F-17992

PRELIMINARY
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

PREPARED UNDER THE SUPERVISION OF NATASHA F. UHLRICH, P.E. #93502 ON August 1, 2019

MNO INVESTMENTS, LLC
4010 GREYSTONE DRIVE
AUSTIN, TX 78731

80% SUBMITTAL

PLAT NO. 19-11800095
TRAIL STREET TOWNHOMES

SAWS DETAILS

REV	DATE	DESCRIPTION	BY

DESIGNED BY: WPF
DRAFTED BY: JWH
CHECKED BY: NFU

SHEET
C10
OF C10

Date: Aug 01, 2019, 3:38pm User ID: jwh
File: U:_Projects\127 - MNO Partners\127.01 - 135 Trail Street\ACAD\Sheets\127.01 CONSTRUCTION DETAILS.dwg

TRAIL STREET TOWNHOMES

LANDSCAPE IMPROVEMENTS

San Antonio, Texas

Sitework / Planting

INDEX OF SHEETS

LEGENDS

ABBREVIATIONS

SYMBOL	DESCRIPTION
A.D.	AREA DRAIN
B.C.	BOTTOM OF CURB
B.P.	BOTTOM OF PIPE
B.O.C.	BACK OF CURB
B.W.	BOTTOM OF WALL
C.L.	CENTER LINE
C.O.	CLEAN OUT
E.J.	EXPANSION JOINT
E.O.P.	EDGE OF PAVEMENT
ESMT.	EASEMENT
F.H.	FIRE HYDRANT
H.P.	HIGH POINT
L.O.C.	LIMITS OF CONSTRUCTION
N.I.C.	NOT IN CONTRACT
O.C.	ON CENTER
O.C.E.W.	ON CENTER EACH WAY
P.A.	PLANTING AREA
P.D.	PLANTER DRAIN
P.O.B.	POINT OF BEGINNING
P.O.T.	POINT OF TANGENCY
R.O.W.	RIGHT OF WAY
S.S.	SANITARY SEWER
T.C.	TOP OF CURB
T.D.	TOP OF DRAIN
T.F.	TOP OF FOOTING
T.W.	TOP OF WALL
U.N.O.	UNLESS NOTED OTHERWISE
W.D.	WATER DEPTH
W.L.	WATER LEVEL

SYMBOLS & LINE TYPES

SYMBOL	DESCRIPTION
REF:	ENLARGEMENT AREA W/ CALLOUT
X / LS X.X	DETAIL CALLOUT
X.X | XXX	MATERIALS & FINISHES CALLOUT
X / LS X.X	SECTION CALLOUT
X / LS X.X	ELEVATION CALLOUT
XXXXX	SITEWORK LABEL
QTY-XXX	PLANTING LABEL
XXX	EXISTING TOPOGRAPHY-MINOR
XXX	EXISTING TOPOGRAPHY-MAJOR
XXX	PROPOSED TOPOGRAPHY-MINOR
XXX	PROPOSED TOPOGRAPHY-MAJOR
XXX.XX	PROPOSED SPOT ELEVATION
T.O. XXXX / XXXX.XX	PROPOSED DATUM ELEVATION
X"	PIPE SIZE
	WATER FLOW / SWALE DIRECTION
M	ELECTRICAL METER
J	JUNCTION BOX
	CONDUIT
	HOME RUN
	SIGN LIGHT
	TREE OR SIGN BULLET UPLIGHT
	POLE LIGHT
	GFI ELECTRICAL OUTLET

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TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER: 2019-004

ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

COVER SHEET

LC 1.0

MATERIALS SCHEDULE

POOL MATERIALS

KEY	DESCRIPTION / MODEL NUMBER	COLOR	FINISH	CONTACT	REMARKS
P.1	SPA/POOL COPING DRY PAKC 12"x18" - 2" THICK WITH EASED EDGE	COPING - SLATE GRAY #21 GROUT-SILVER SHIMMER#19	NON-SLIP	N/A	• CONTRACTOR TO SUBMIT SAMPLE FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION • GROUT - 1/2" JOINTS; SUBMIT COLOR SAMPLES W/STONE • ALL COPING & GROUT JOINTS WITH GOLDEN SHIELD COPING SEALER • SAND BLAST DEPTH MARKERS W/ WHITE PAINT LETTERS ON STONE COPING TO BE FURNISHED BY POOL CONTRACTOR AND INSTALLED BY DECK CONTRACTOR • SAND BLAST "NO DIVING" SIGN AND INTERNATIONAL SYMBOLS W/ WITH PAINT LETTERS ON STONE COPING TO BE FURNISHED BY THE POOL CONTRACTOR AND INSTALLED BY THE DECK CONTRACTOR • QUANTITY & LOCATION AS REQUIRED TO MEET ALL APPLICABLE CODES, NOT SHOWN ON PLANS OR DETAILS
P.2	POOL PLASTER DIAMOND BRITE AGGREGATE PLASTER	FRENCH GRAY	STANDARD	COMPANY: DIAMOND BRITE PHONE: 1(800) 947-7807	• CONTRACTOR TO SUBMIT SAMPLE FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION • NO MORTAR ON PLASTER
P.3	SCUPPER (QTY 3) MODEL: 36" PURE FLOW SCUPPER	STAINLESS STEEL	STANDARD	COMPANY: BOBE WATER & FIRE FEATURES PHONE: (888) 388-2623	• INSTALL PER MANUFACTURER'S RECOMMENDATIONS OR • SUPPLY SPECS FOR APPROVED OTHER
P.5	SPA/POOL TILE AIM GS 84896 B2, SUBWAY	SUBWAY - BLACK AND GRAY	STANDARD	COMPANY: MASTERTILE OR APPROVED OTHER PHONE: (210) 403-2600	• CONTRACTOR TO SUBMIT SAMPLE FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION
P.6	STEP/BENCH TILE HARMONY 100 1X1	BLACK	NON-SLIP	COMPANY: MASTERTILE OR APPROVED OTHER PHONE: (210) 403-2600	• CONTRACTOR TO SUBMIT SAMPLE FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION
P.7	STAIR RAIL (SINGLE) (QTY) MODEL #: ART-1002 TYPE: 316L STAINLESS STEEL	POLISHED STEEL	N/A	COMPANY: S.R. SMITH, LLC PHONE: 1 (800) 824-4387	• INCLUDE 4" POLISHED STEEL ANCHOR SOCKETS AND ROUND ESCUTCHEON PLATES
P.8	RECESSED STEPS S.R. SMITH, LLC MODEL NO. 62-209-4001	WHITE	N/A	CONTACT: JOHN HANS COMPANY: COMMERCIAL POOL SOLUTIONS PHONE: 210.341.9159	• CONTRACTOR TO SUBMIT PRODUCT DATA FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION INSTALL PER MANUFACTURER'S RECOMMENDATIONS

DRAINAGE

KEY	DESCRIPTION / MODEL NUMBER	COLOR	FINISH	CONTACT	REMARKS
D.1	PLANTER AREA DRAINS (P.D.) PD: NDS 6" ATRIUM GRATE (#90S)	BLACK (1290)	N/A	COMPANY: NDS WEBSTIE: HTTPS://WWW.NDSPRO.COM/	
D.2	4" PERFORATED PIPE DRAIN	N/A	STANDARD	COMPANY: NDS WEBSTIE: HTTPS://WWW.NDSPRO.COM/	

CONCRETE

KEY	DESCRIPTION / MODEL NUMBER	COLOR	FINISH	CONTACT	REMARKS
C.1	STANDARD CONCRETE SIDEWALK	GREY	LIGHT BROOM	COMPANY: OWNER APPROVED VENDOR	• CONTRACTOR TO SUBMIT MOCK UP FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION
C.2	DECORATIVE CONCRETE AT POOL DECK SALT ROCK FINISH	STANDARD	SALT ROCK	COMPANY: CONSTRUCOLOR PHONE: (210) 714-3488	• CONTRACTOR TO SUBMIT MOCK UP FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION • SALT ROCK SHALL BE LESS THAN ¾" CRUSHED AND APPLIED WITH EVEN SPREAD

SITE MATERIALS

KEY	DESCRIPTION / MODEL NUMBER	COLOR	FINISH	CONTACT	REMARKS
S.1	DECOMPOSED GRANITE	HILL COUNTRY BUFF	¾" CRUSHED	COMPANY: KELLER MATERIAL LIMITED PHONE: (210) 967-1300	• 6" INSTALLED AND COMPACTED TO 4" FINISH GRADE • PROVIDE GEO-FABRICK WEED BARRIER
S.2	HARDWOOD MULCH	DARK BROWN	DOUBLE SHREDDED	COMPANY: KELLER MATERIAL LIMITED PHONE: (210) 967-1300	• 4" DEPTH MINIMUM PER SPEC DETAILS
S.3	RIVER ROCK ROCKY MOUNTAIN SIZE: 1"-3"	TEXAS BLEND	N/A	COMPANY: KELLER MATERIAL LIMITED PHONE: (210) 967-1300	• 4" DEPTH MINIMUM PER SPEC DETAILS

FENCING

KEY	DESCRIPTION / MODEL NUMBER	COLOR	FINISH	CONTACT	REMARKS
F.1	4' HT HORIZONTAL WOOD FENCE -HORIZONTAL PICKETS (1X6) AND CAP (2X4) TO BE CEDAR -POST - (3X3) SQUARE TUBING PAINTED	SW 3532 HILL COUNTRY	STANDARD	LOCAL SOURCE	• SUBMIT PRODUCT DATA & SHOP DRAWINGS FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION • CONTRACTOR TO SUBMIT MOCK UP FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION
F.2	6' HT HORIZONTAL WOOD FENCE -HORIZONTAL PICKETS (1X6) AND CAP (2X4) TO BE CEDAR -POST - (3X3) SQUARE TUBING PAINTED	SW 3532 HILL COUNTRY	STANDARD	LOCAL SOURCE	• SUBMIT PRODUCT DATA & SHOP DRAWINGS FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION • CONTRACTOR TO SUBMIT MOCK UP FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION
F.3	6' HT CMU BLOCK WALL SPLIT FACE ONLY ON POOL SIDE.	CASTLE GREY	STANDARD	LOCAL SOURCE	• SUBMIT PRODUCT DATA & SHOP DRAWINGS FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION • CONTRACTOR TO SUBMIT MOCK UP FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO

PAVERS

KEY	DESCRIPTION / MODEL NUMBER	COLOR	FINISH	CONTACT	REMARKS
K.1	GRASSTONE II PAVER SIZE: 8CM	GREYBLEND	STANDARD	COMPANY: PAVESTONE	• SUBMIT PRODUCT DATA FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION CONTRACTOR TO SUBMIT MOCK UP FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION
K.2	CITYSTONE PAVER SIZE: 3X6X5CM	GREYBLEND	STANDARD	COMPANY: PAVESTONE	• SUBMIT PRODUCT DATA FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION CONTRACTOR TO SUBMIT MOCK UP FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO

LIGHTING

KEY	DESCRIPTION / MODEL NUMBER	COLOR	FINISH	CONTACT	REMARKS
L.1	FESTOON LIGHTING WITH GUIDE WIRE	BLACK WIRE	STANDARD	COMPANY: LOCAL SOURCE	• SUBMIT PRODUCT DATA FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION • COORDINATE WIRE ATTACHMENT TO BUILDING WITH ARCHITECT

GENERAL NOTES:

1.) LOCATE AND VERIFY THE CONDITION OF EXISTING UTILITIES PRIOR TO EXCAVATION. TAKE RESPONSIBILITY OF CONTACTING LINE LOCATION SERVICES AND ANY COST INCURRED FOR BODILY INJURY AND / OR DAMAGE OF OWNER'S PROPERTY OR SAID UTILITIES.

2.) THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED BY THE CONTRACTOR OF ANY DISCREPANCIES DISCOVERED BETWEEN THE PLANS AND ACTUAL SITE CONDITIONS BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE LIABLE FOR ALL MODIFICATIONS AND DAMAGES IF WORK PROCEEDS WITHOUT THIS NOTIFICATION.

3.) THE CONTRACTOR IS RESPONSIBLE FOR ALL ASPECTS OF MAINTAINING A SAFE WORK SITE INCLUDING, BUT NOT LIMITED TO PROVIDING FOR TRAFFIC CONTROL, INSTALLATION AND PLACEMENT OF FENCING AND BARRICADES, EXCAVATION AND TRENCH PROTECTION, AND COMPLIANCE WITH ALL FEDERAL AND LOCAL REGULATIONS AND CODES. ALL SAFETY EXPOSURES OR VIOLATIONS SHALL BE RECTIFIED IMMEDIATELY.

4.) THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL EXISTING IMPROVEMENTS BOTH ON SITE AND ADJACENT TO THE WORK SITE AND SHALL REPAIR ANY DAMAGE TO THESE IMPROVEMENTS TO THE SATISFACTION OF THE OWNER.

5.) THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT 48 HOURS PRIOR TO COMMENCEMENT OF WORK TO COORDINATE PROJECT INSPECTION SCHEDULES.

6.) ANY ALTERNATES AND OR SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL. CHANGES TO THE SCOPE OF WORK AND / OR CONTRACT DOCUMENTS RESULTING FROM THE ACCEPTANCE OF THE CONTRACTOR'S ALTERNATES AND / OR SUBSTITUTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

7.) THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF TRASH ON A DAILY BASIS.

8.) THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. PRIOR TO CONSTRUCTION, ALL PERMITS AND APPROVALS REQUIRED FOR CONSTRUCTION OF THE PROJECT SHALL BE PAID FOR AND OBTAINED BY THE CONTRACTOR (PLAN REVIEW FEES ARE PAID BY OWNER) COSTS FOR PERMITS SHALL BE INCLUDED IN THE BID. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME AWARE OF REQUIRED INSPECTIONS THAT ARE ASSOCIATED WITH PERMITS ISSUED FOR THE WORK AND TO SCHEDULE THESE INSPECTIONS AT THE APPROPRIATE STAGE OF CONSTRUCTION. EXAMPLES INCLUDE BUT ARE NOT LIMITED TO ROUGH-IN ELECTRICAL, ROUGH-IN PLUMBING,IRRIGATION PIPING, FOUNDATION STEEL FOR STRUCTURES (INCLUDING WALLS), FIRE INSPECTIONS RELATED TO ENTRY GATES AND ASSOCIATED STRUCTURES AND OTHERS AS MAY APPLY.

9.) COORDINATE WORK WITH SUBCONTRACTORS TO ACCOMPLISH THE SCOPE OF WORK AS SHOWN AND NOTED IN THE CONTRACT DOCUMENTS AS WELL AS, COORDINATE CONSTRUCTION WITH OTHER CONTRACTORS WORKING ON THE SITE.

10.) THE CONTRACTOR SHALL COORDINATE THE STORING OF MATERIALS, PARKING OF VEHICLES, AND RESTRICTIONS OF WORK AND ACCESS WITH THE OWNER. UNDER NO CIRCUMSTANCES SHALL ANY CONTRACTOR STORE MATERIALS, PARK VEHICLES OR EQUIPMENT UNDER THE CANOPY OF EXISTING TREES.

11.) UNLESS SPECIFIED OTHERWISE, THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND PAYING ALL TEMPORARY UTILITIES AND SERVICES NECESSARY TO COMPLETELY INSTALL ALL WORK AS SHOWN AND NOTED IN THE CONTRACT DOCUMENTS.

12.) THE CONTRACTOR IS RESPONSIBLE FOR THE LEGAL OFF-SITE DISPOSAL OF SURPLUS MATERIAL AND DEBRIS.

13.) UPON COMPLETION OF CONSTRUCTION AND PRIOR TO FINAL APPROVAL, THE CONTRACTOR SHALL THOROUGHLY CLEAN THE PROJECT SITE OF ALL TRASH, REPAIR ALL DAMAGE TO FINISH GRADE, INCLUDING TAILINGS FROM EXCAVATIONS, WHEEL RUTS AND ANY SETTLING OR EROSION THAT HAS OCCURRED PRIOR TO COMPLETION. ALL AREAS OF THE PROJECT SITE SHALL BE LEFT IN A NEAT AND PRESENTABLE CONDITION SATISFACTORY TO THE OWNER PRIOR TO SUBMITTAL OF THE FINAL PAYMENT.

14.) THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND SERVICING TEMPORARY TOILET FACILITIES.

CONCRETE NOTES:

1.) ALL CONCRETE CONSTRUCTION, DETAILING AND ERECTION SHALL CONFORM TO THE FOLLOWING:
- A.) ACI #301: SPECIFICATIONS
- B.) ACI #318: BUILDING CODE REQUIREMENTS
- C.) ACI #315: MANUAL OF STANDARD PRACTICE

2.) CONCRETE MATERIALS SHALL CONFORM TO THE FOLLOWING ASTM REQUIREMENTS:
- A.) AGGREGATE - C33
- B.) READY MIXED CONCRETE - C94
- C.) PORTLAND CEMENT - C150
- D.) FIELD CYLINDERS - C31
- E.) COMPRESSIVE TESTING - C39

3.) ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE WEIGHING NOT MORE THAN 145 PCF AND SHALL HAVE A MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI.

4.) THE WATER/CEMENT RATIO FOR STRUCTURAL CONCRETE SHALL NOT EXCEED 0.53.

5.) TOTAL AIR CONTENT SHALL BE 3 TO 5 PERCENT.

6.) PUMPED CONCRETE SHALL MEET THESE ADDITIONAL REQUIREMENTS:
- A.) MAXIMUM COARSE AGGREGATE SIZE - 1 INCH
- B.) INCREASE CEMENT FACTOR BY 1/2 SACK PER CUBIC YARD.
- C.) MAXIMUM SLUMP - 5 INCHES
- D.) DO NOT PUMP THROUGH AN ALUMINUM TUBE.

7.) CONCRETE SHALL NOT BE PLACED PRIOR TO APPROVAL OF THE CONCRETE MIX DESIGNS BY THE LANDSCAPE ARCHITECT. THE MIX DESIGNS SHALL NOT BE APPROVED PRIOR TO RECEIPT OF COMPRESSIVE TEST RESULTS FROM AN INDEPENDENT TESTING LABORATORY CERTIFYING ADEQUATE STRENGTH OF THE MIX DESIGNS AT 28 DAYS.

8.) HORIZONTAL CONSTRUCTION JOINTS ARE ONLY ALLOWED IN SLABS OF BEAMS WITH WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT. CONTROL JOINTS SHALL BE PLACED MAXIMUM 25' O.C. AS REQUIRED WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT.

CONCRETE REINFORCEMENT

1.) ALL REINFORCEMENT SHALL BE DEFORMED BILLET STEEL (GR.60) CONFORMING TO ASTM A615.
- A.) REINFORCING - A615, GRADE 60, DEFORMED
- B.) WELDED WIRE MESH - A185, GRADE 60

2.) SPLICES OF HORIZONTAL REINFORCEMENT SHALL LAP AT LEAST 24" AND SHALL BE CONTINUOUS AROUND CORNERS. MAINTAIN AT LEAST 1" BETWEEN REINFORCING BARS AT SPLICES IN BEAMS AND SLABS. REINFORCING BARS SCHEDULED AS CONTINUOUS SHALL BE LAPPED 24".

3.) DETAILING FABRICATION AND ERECTION OF REINFORCING BARS SHALL COMPLY WITH THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315).

4.) STANDARD PROTECTIVE COVER FOR REINFORCING, UNLESS NOTED OTHERWISE, SHALL BE AS OUTLINED IN ACI 318-83:
- A.) AGAINST DIRT OF FILL - 3 INCHES
- B.) EXPOSED TO EARTH OR WEATHER - 2 INCHES
- C.) SLABS AND WALLS - 1 INCH
- D.) OTHER - 1 1/2 INCHES

5.) PROVIDE SHOP DRAWINGS OF REINFORCING AND ACCESSORIES FOR REVIEW BY ARCHITECT. SHOP DRAWINGS SHALL CLEARLY INDICATE LOCATION, SIZE, SPACING, SPLICES AND PIECE MARK FOR ALL REINFORCING STEEL. THE SHOP DRAWINGS SHALL PROVIDE SUFFICIENT DETAIL TO PERMIT PLACEMENT OF REINFORCEMENT WITHOUT THE USE OF THE DESIGN DRAWINGS AND SHALL INCLUDE A COMPLETE BILL OF MATERIALS.

6.) FABRICATION OF REINFORCING STEEL SHALL NOT COMMENCE UNTIL SUBMITTALS HAVE BEEN REVIEWED BY LANDSCAPE ARCHITECT.

SIDEWALK NOTES:

1.) THESE PLANS INDICATE APPROXIMATE LOCATIONS OF THE CONCRETE SIDEWALKS. DIMENSIONS SHOWN ARE FROM BACK OF CURB OR PROPERTY LINE TO SIDEWALK EDGE AND ARE AT RIGHT ANGLES (OR PERPENDICULAR) TO THE CURB OR PROPERTY LINE. SIDEWALK CONTRACTOR SHALL STAKE SIDEWALK LAYOUT FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO BEGINNING CONSTRUCTION. SET ELEVATIONS OF WALKS FOR POSITIVE DRAINAGE FROM PROPERTY LINE TO CURB. OWNER AND LANDSCAPE ARCHITECT SHALL MAKE FINAL APPROVAL OF FINISHED ELEVATION AND LAYOUT OF FORMS IN THE FIELD PRIOR TO CONCRETE PLACEMENT.

2.) CONTRACTOR SHALL USE FIBERGLASS OR THIN WOOD FORMS TO CREATE SMOOTH AND UNIFORM CURVES ON MEANDERING SIDEWALKS UNLESS OTHERWISE APPROVED BY LANDSCAPE ARCHITECT.

3.) CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI. CONCRETE AND REINFORCING SHALL MEET ALL OTHER APPLICABLE CRITERIA IN THE CONCRETE AND REINFORCEMENT NOTES.

4.) CONTRACTOR TO TIE ALL SIDEWALKS INTO EXISTING WALKS WITH A SMOOTH TRANSITION AND TO MATCH EXISTING WALKS IN COLOR AND FINISH.

5.) CONTRACTOR SHALL COORDINATE SIDEWALK CONSTRUCTION WITH OTHER CONTRACTORS WORKING SIMULTANEOUSLY.

6.) LOCATIONS OF ALL UTILITIES SHOWN ON PLANS ARE APPROXIMATE AND SHALL BE VERIFIED IN FIELD. NOTIFY OWNER OF ANY ELEVATION ADJUSTMENT REQUIRED OF MANHOLES OR UTILITY BOXES. THE APPROPRIATE UTILITY CONTRACTOR WILL MAKE ADJUSTMENT.

7.) STUB OUT WALKS AS SHOWN ON PLANS WITH REDWOOD EXPANSION JOINTS AND 1/2" DOWELS, 12" O.C. TO ALLOW FUTURE CONSTRUCTION. CONTRACTOR SHALL BACKFILL TO TOP OF WALK TO ENSURE NO DOWELS ARE EXPOSED.

8.) CONTROL JOINT LAYOUT AT WALK INTERSECTIONS HAS BEEN SHOWN DIAGRAMMATICALLY ON PLANS AND SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO POURING. WALKS SHALL BE POURED IN SECTIONS WITH NO CORNERS LESS THAN 45 DEGREES TO AVOID FUTURE CRACKING.

NOTE: CONTRACTOR IS RESPONSIBLE FOR PROTECTING HIS WORK FROM VANDALISM OR GRAFFITI PRIOR TO CURING. CONTRACTOR SHALL REPLACE AS NECESSARY ANY SECTIONS OF DAMAGED WALK AT NO ADDITIONAL COST TO THE OWNER.

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TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

MATERIALS SCHEDULE

LC 1.1

TREE PRESERVATION

TREE PRESERVATION: (Tree Survey Method)

MITIGATION CALCULATIONS

SIGNIFICANT TREE:	126 TOTAL INCHES
126 INCH. X 40% REQUIRED TO BE PRESERVED :	50.4 INCH.
SIGNIFICANT TREE INCH. PRESERVED:	34 INCH. (26.9%)
REQUIRED MITIGATION:	**16.4" REQUIRED MITIGATION**
HERITAGE TREE:	193 TOTAL INCHES
193 INCH. X 100% REQUIRED TO BE PRESERVED :	193 INCH. (100%)
HERITAGE TREE INCH. PRESERVED:	52 INCH. (26.9%)
REQUIRED MITIGATION: 141 INCH. X 3:1 =	**423" REQUIRED MITIGATION**
TOTAL REQUIRED MITIGATION ON SITE:	
16.4" SIGNIFICANT + 423" HERITAGE REQUIRED MITIGATION	= **439.4** ***INCHES REQUIRED***
TOTAL MITIGATION PROVIDED:	
TOTAL MITIGATION PROVIDED:	**100.5 INCHES**

MITIGATION CALCULATIONS

REMAINING MITIGATION: 439.4" REQUIRED MITIGATION - 100.5" MITIGATION PROVIDED = 338.9"

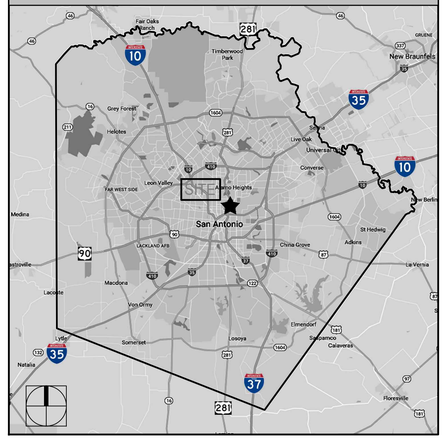
TREE MITIGATION FUND OPTION: 338.9" (NOT MITIGATED) X ($200/INCH) = **$67,780** ***(PLUS FEES)***

** **REFERENCE LP 1.1 FOR PROPOSED MITIGATION INCH CALCULATIONS AND TREE TYPES **

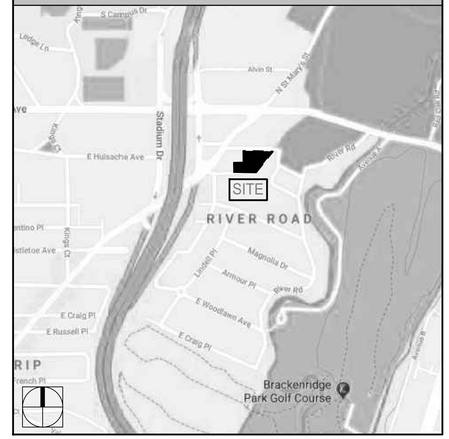
PRESERVED TREES

REMOVED TREES

BEXAR COUNTY MAP



VICINITY MAP



1 TREE PRESERVATION PLAN

SCALE: 1"=20'

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TRAIL STREET

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
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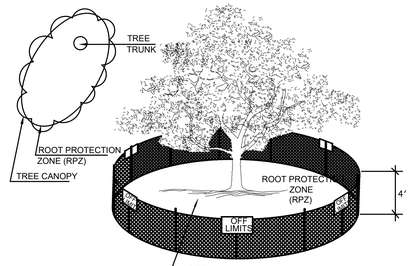
KEY PLAN

TREE PRESERVATION PLAN

TP 1.1

Trail St Townhomes TREE INVENTORY

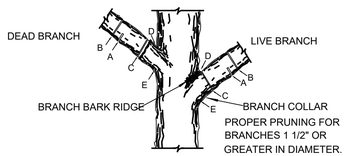
Tag #	Species	Tree Caliper	Understory Species* 5.0" - 11.5" Removed	Understory Species* 5.0" - 11.5" Preserved	Significant Tree 6" - 23.5" Removed	Significant Tree 6" - 23.5" Preserved	Significant Tree** 10.0" - 23.5" Removed	Significant Tree** 10.0" - 23.5" Preserved	Heritage 3:1 Removed	Heritage 3:1 Preserved	Heritage 1:1 Removed	Heritage 1:1 Preserved	Additional Inches Preserved
100	ANAQUA	7				7							
101	PALM TREE	14.5											
1804	HACKBERRY	21					21						
1805	PECAN	30							30				
1806	PECAN	27							27				
1807	CYPRESS	28								28			
1808	MULBERRY (DECLINE)	10											
1809	MULBERRY (DECLINE)	10											
1810	MULBERRY (DECLINE)	11											
1811	MULBERRY	11			11								
1812	HACKBERRY	10					10						
1813	PECAN	28							28				
1814	ANAQUA	7			7								
1815	ELM	8			8								
1816	PECAN(DECLINE)	35											
1817	OAK	56							56				
1818	PECAN	16				16							
1819	PECAN	11				11							
1820	PECAN	23			20								
1821	UNK(OFF-SITE)	14											
1822	HACKBERRY	12					12						
1823	PECAN	24								24			
Sub. Tot. Inches=			0	0	46	34	43	0	141	52	0	0	0
				0		80		43		193		0	
Total inches by category=													
Preservation percentage=			#DIV/0!		Significant		28%		Heritage Preservat		27%		
Mitigation required (Commercial) =			0		Commercial (inche		15.2						
Mitigation required (Residential) =			0		Residential (inches		9.05		Heritage Mitigation (inches)		423		



NOTE:
1. THE FENCING SHOWN ABOVE IS DIAGRAMATIC ONLY AND WILL CONFORM TO THE DRIP LINE AND LIMITED TO PROJECT BOUNDARY.
2. FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

1 EXISTING TREE PROTECTION

ELEVATION - PLAN - 3D VIEW NOT TO SCALE



PROPER PRUNING FOR BRANCHES 1 1/2" OR GREATER IN DIAMETER.

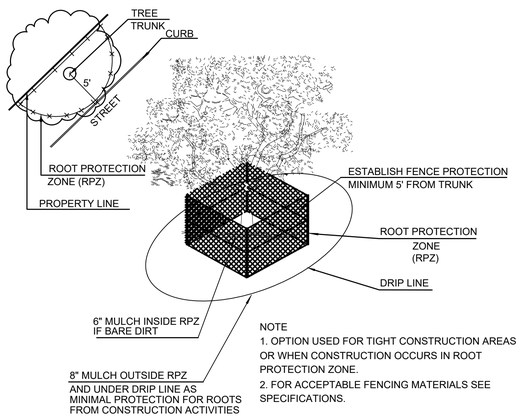
NOTE: DO NOT CUT FROM D to E.

A. FIRST CUT - TO PREVENT THE BARK FROM BEING PEELED WHEN THE BRANCH FALLS.
B. SECOND CUT - TO REDUCE THE WEIGHT OF BRANCH.
C. FINAL CUT - ALLOW FOR HEALING COLLAR BUT NO STUBS
D. BRANCH RIDGES - INDENT PROPERLY BRANCH RIDGES WHICH ARE SITE FOR DECAY.

FOR OAKS ONLY: PAINT ALL WOUNDS OR CUTS WITH PRUNING PAINT WITHIN 20 MIN TO PREVENT THE SPREAD OF OAK WILT.

2 TREE BRANCH PRUNING

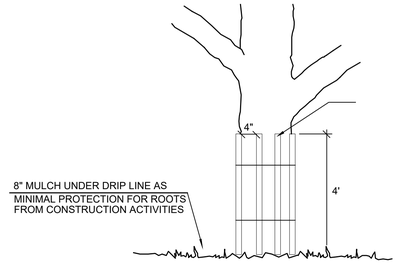
ELEVATION NOT TO SCALE



NOTE
1. OPTION USED FOR TIGHT CONSTRUCTION AREAS OR WHEN CONSTRUCTION OCCURS IN ROOT PROTECTION ZONE.
2. FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

3 LEVEL II A TREE PROTECTION

ELEVATION NOT TO SCALE



NOTE
WRAP TREE TRUNK WITH 2"X4" STUDS AND ROPE OR BAND IN PLACE AS NEEDED TO PROTECT TREES IN WORK AREAS.

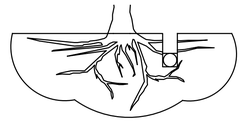
4 LEVEL II B TREE PROTECTION

ELEVATION NOT TO SCALE

TREES THAT ARE MARKED TO BE PRESERVED ON A SITE PLAN AND FOR WHICH UTILITIES MUST PASS TROUGH THEIR ROOT PROTECTION ZONES MAY REQUIRE TUNNELING AS OPPOSED TO OPEN TRENCHES. THE DECISION TO TUNNEL WILL BE DETERMINED ON A CASE BY CASE BASIS BY THE ENGINEER.

TUNNELS SHALL BE DUG THROUGH THE ROOT PROTECTION ZONE IN ORDER TO MINIMIZE ROOT DAMAGE.

TUNNEL TO MINIMIZE ROOT DAMAGE (TOP) AS OPPOSED TO SURFACE-DUG TRENCHES IN ROOT PROTECTION ZONE WHEN THE 5' MINIMUM DISTANCE FROM TRUNK CAN NOT BE ACHIEVED.



OPEN TRENCHING MAY BE USED IF EXPOSED TREE ROOTS DO NOT EXCEED 3" OR ROOTS CAN BE BENT BACK.

5 BORING THROUGH TREE ROOT (RPZ)

SECTION NOT TO SCALE

EXISTING TREE NOTES

1. ALL THE TREES WITH A DIAMETER GREATER THAN 3 INCHES AFFECTED BY CONSTRUCTION SHALL HAVE THE LIMBS AND ROOTS TRIMMED AND PRUNED ACCORDING TO TREE PRUNING, SOIL AMENDING AND FERTILIZATION, UNLESS SPECIFIED TREES SHALL RECEIVE PROTECTION AS SHOWN ON TREE PROTECTION DETAIL ON THIS SHEET.

2. ALL TREES SHALL REMAIN UNLESS NOTED ON THE PLANS.

3. NO SITE PREPARATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED BY CITY INSPECTOR.

4. TREE PROTECTION FENCING SHALL BE REQUIRED. TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION.

5. THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN THREE INCHES IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN THE VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR.

6. THE ROOT PROTECTION ZONE IS THAT AREA SURROUNDING A TREE, AS MEASURED BY A RADIUS FROM THE TREE TRUNK, IN WHICH NO EQUIPMENT, VEHICLES OR MATERIALS MAY OPERATE OR BE STORED. THE REQUIRED RADIUS LENGTH IS 1 FOOT PER DIAMETER INCH OF THE TREE. FOR EXAMPLE, A 10-INCH DIAMETER TREE WOULD HAVE A 5-FOOT RADIUS ROOT PROTECTION ZONE AROUND THE TREE. ROOTS OR BRANCHES THAT ARE IN CONFLICT WITH THE CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. LIVE OAK WOUNDS SHALL BE PAINTED OVER, WITHIN 20 MINUTES TO PREVENT OAK WILT.

7. ACCESS TO FENCED AREAS WILL BE PERMITTED ONLY WITH THE APPROVAL OF THE ENGINEER OR CITY INSPECTOR.

8. GRADING, IF REQUIRED, SHALL BE LIMITED TO A 3 INCH CUT OR FILL WITHIN THE FENCED ROOT ZONE AREAS.

9. TREES, SHRUBS OR BUSHES TO BE CLEARED FROM PROTECTED ROOT ZONE AREAS SHALL BE REMOVED BY HAND AS DIRECTED BY THE PROJECT MANAGER OR CITY INSPECTOR.

10. TREES DAMAGED OR LOST DUE TO CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED TO THE ENGINEER'S SATISFACTION.

11. EXPOSED ROOTS SHALL BE COVERED AT THE END OF EACH DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH OR WET BURLAP.

12. ANY TREE REMOVAL SHALL BE APPROVED BY THE CITY ARBORIST PRIOR TO ITS REMOVAL.

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TRAIL STREET TOWNHOMES

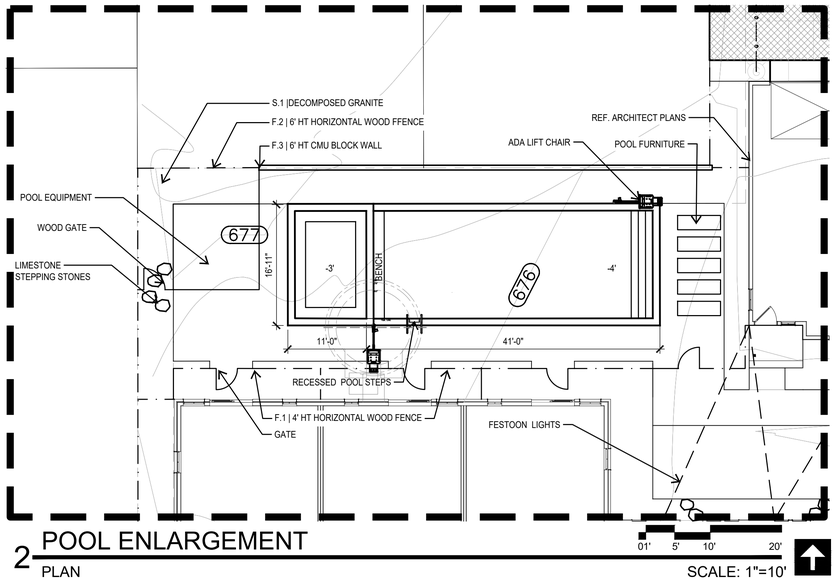
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

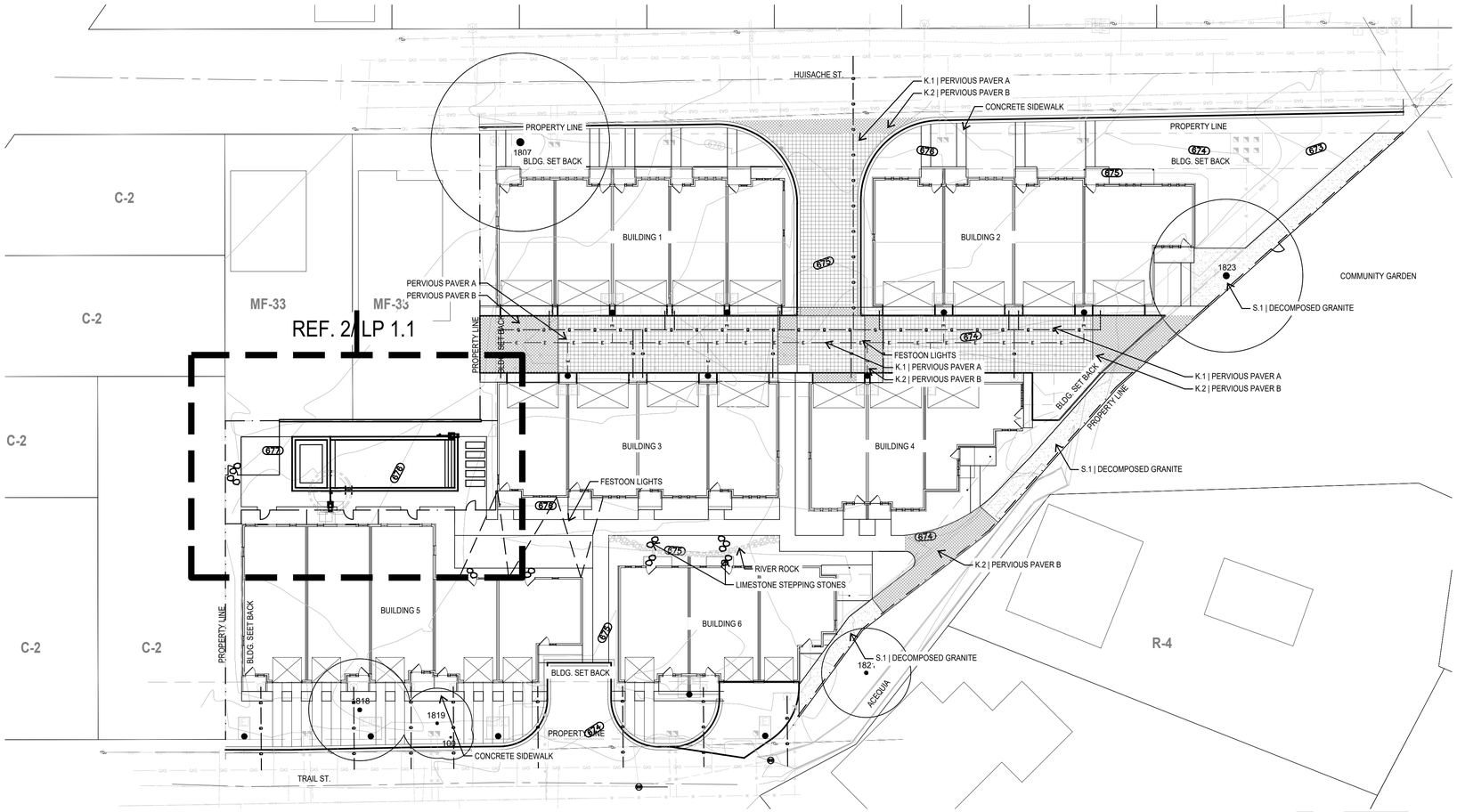
TREE PRESERVATION DETAILS & NOTES

TP 2.1



2 POOL ENLARGEMENT PLAN

SCALE: 1"=10'



1 OVERALL SITE PLAN PLAN

SCALE: 1"=20'

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TRAIL STREET TOWNHOMES

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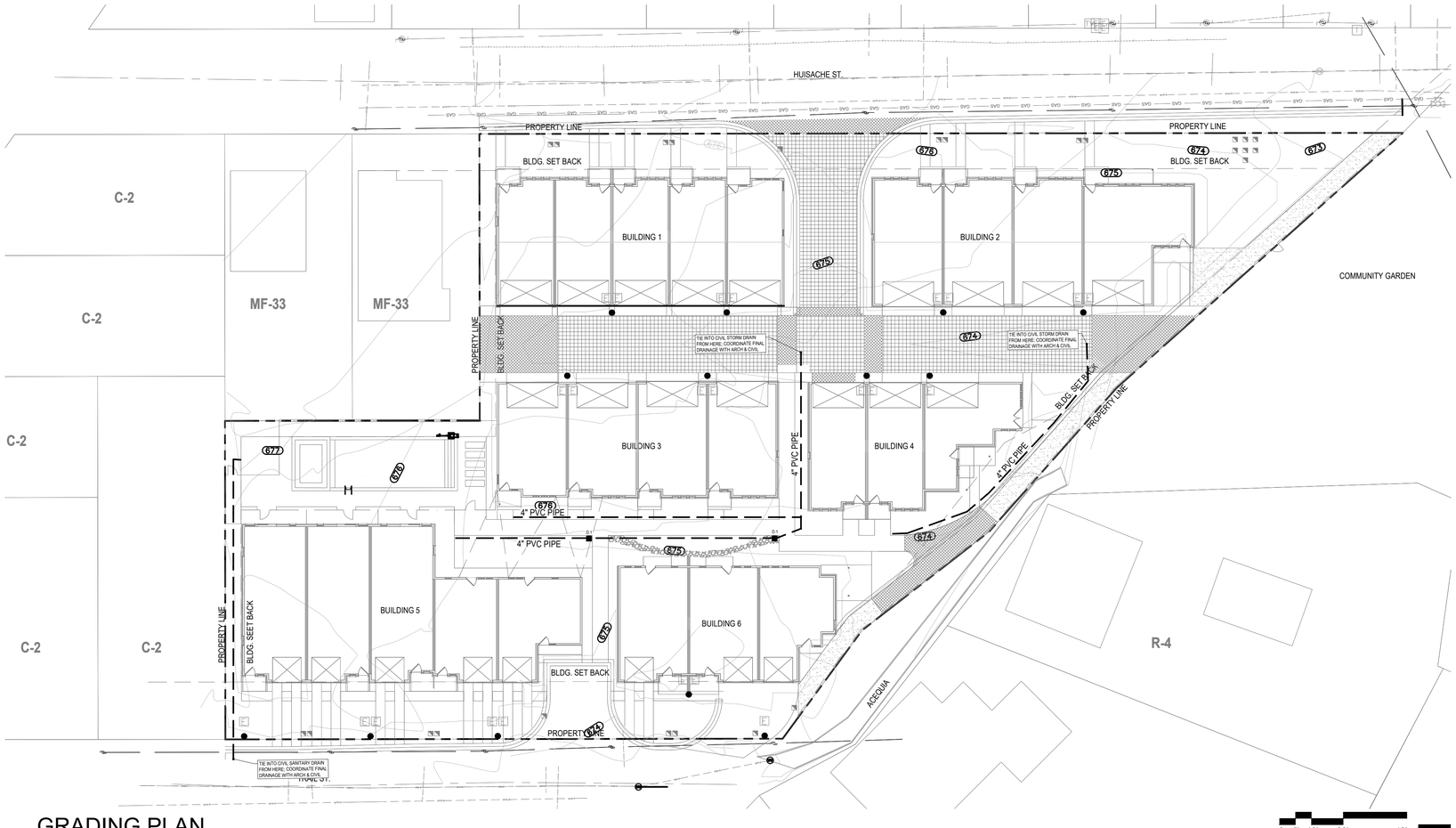
KEY PLAN

OVERALL SITE PLAN

LS 1.1



1 GRADING PLAN

PLAN

0 5' 10' 20' 40'

SCALE: 1"=20'

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TRAIL STREET TOWNHOMES

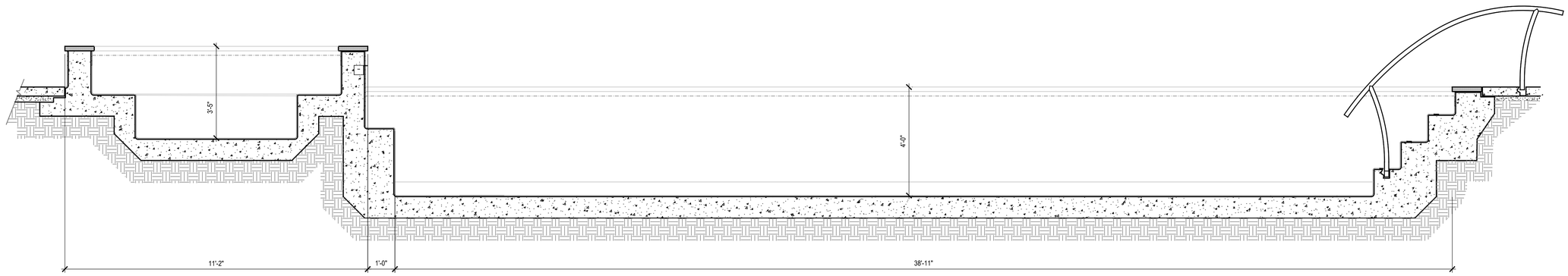
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

LANDSCAPE GRADING

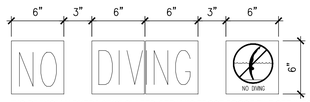
LS 1.2



1 POOL SECTION

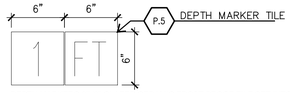
SCALE: 1/2"=1'-0"

NOTE:
NON-SLIP TILE REQUIRED ON ALL DECK SURFACES



"NO DIVING" MARKERS 6"X6" GLAZED CERAMIC FROST PROOF TILE SET INTO CONCRETE POOL DECK. QUANTITY AND LOCATION REQUIRED TO MEET ALL APPLICABLE CODES.

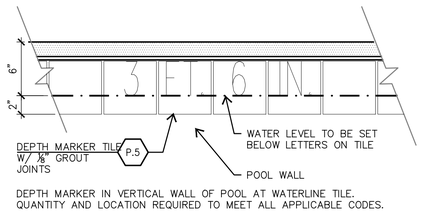
INTEGRAL COLORS FOR LETTERS



DEPTH MARKERS 6"X6" GLAZED CERAMIC FROST PROOF TILE SET INTO CONCRETE POOL DECK. QUANTITY AND LOCATION REQUIRED TO MEET ALL APPLICABLE COEDS.

INTEGRAL COLORS FOR LETTERS

CONCRETE POOL DECK TILE

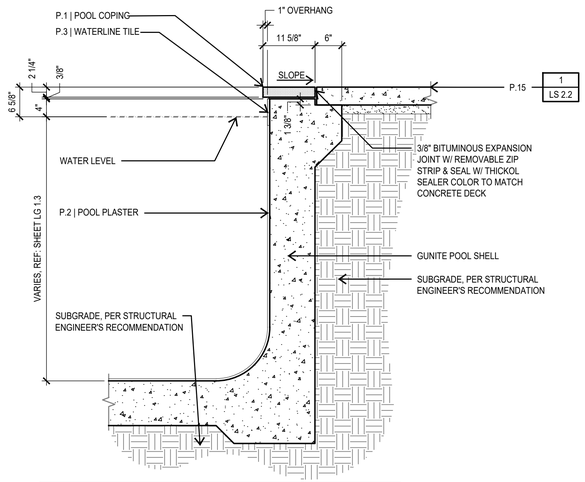


DEPTH MARKER IN VERTICAL WALL OF POOL AT WATERLINE TILE. QUANTITY AND LOCATION REQUIRED TO MEET ALL APPLICABLE CODES.

INTEGRAL COLORS FOR LETTERS

3 POOL MARKERS SECTION

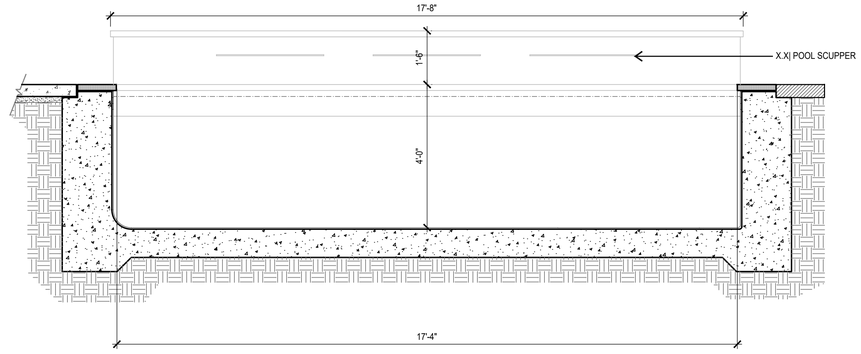
SCALE: 1-1/2"=1'-0"



GENERAL NOTE: SWIMMING POOL DETAILS ARE FOR REFERENCE PURPOSES ONLY. POOL CONTRACTOR TO SUBMIT SHOP DRAWINGS STAMPED AND SIGNED BY A LICENSED, STATE OF TEXAS STRUCTURAL ENGINEER. SHOP DRAWINGS ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ANY INSTALLATION. THE POOL CONTRACTOR IS TO NOTIFY THE LANDSCAPE ARCHITECT IF DESIGN OR LAYOUT CONFLICTS WITH ANY CODES.

4 TYP. POOL WALL SECTION

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

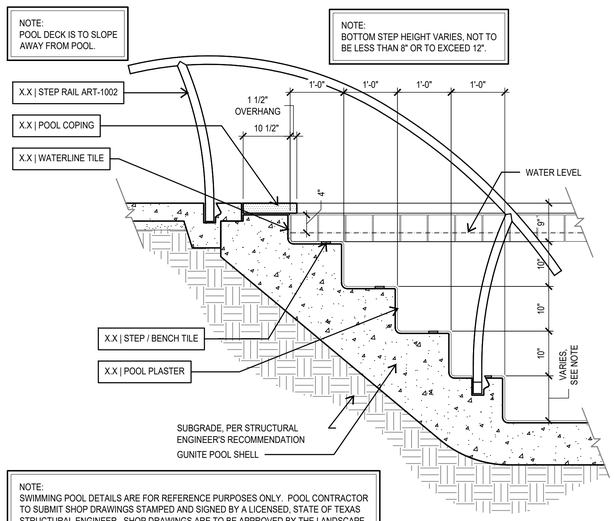


2 POOL SECTION

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

NOTE:
POOL DECK IS TO SLOPE AWAY FROM POOL.

NOTE:
BOTTOM STEP HEIGHT VARIES, NOT TO BE LESS THAN 8" OR TO EXCEED 12".



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5 TYP. POOL STEP SECTION

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

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TRAIL STREET TOWNHOMES

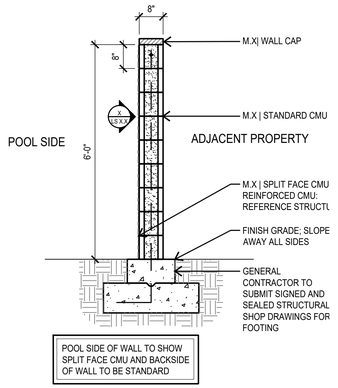
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

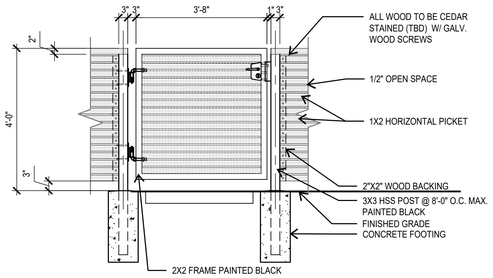
SITE DETAILS

LS 2.1



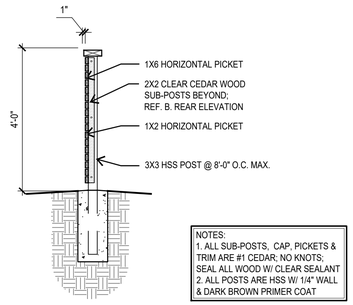
1 CMU BLOCK WALL

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



2 4' HT HORIZONTAL WOOD FENCE

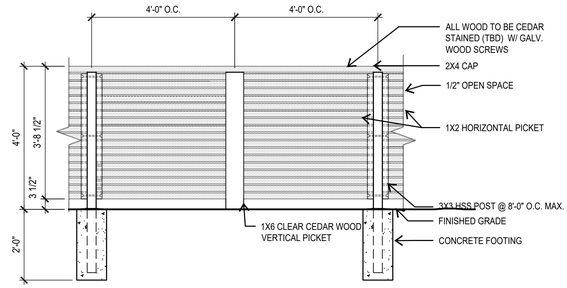
SECTION SCALE: 1/2"=1'-0"



C. SECTION

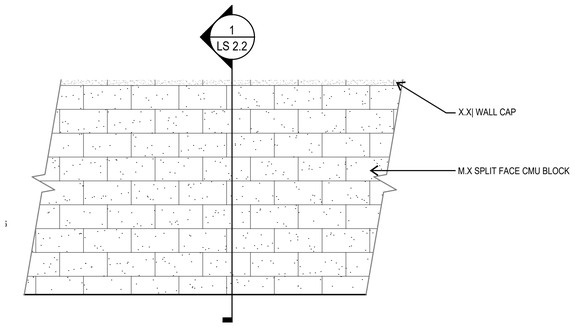
3 4' HT HORIZONTAL WOOD FENCE

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



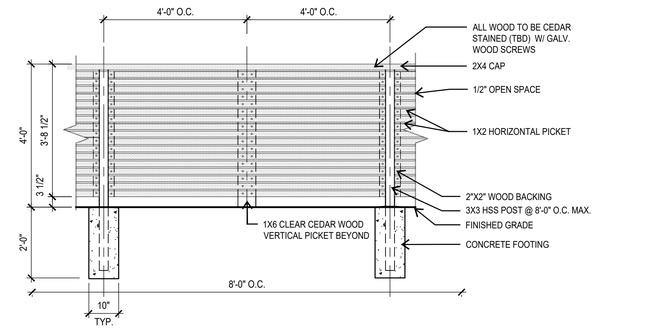
4 BACK 4' HT HORIZONTAL WOOD FENCE

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



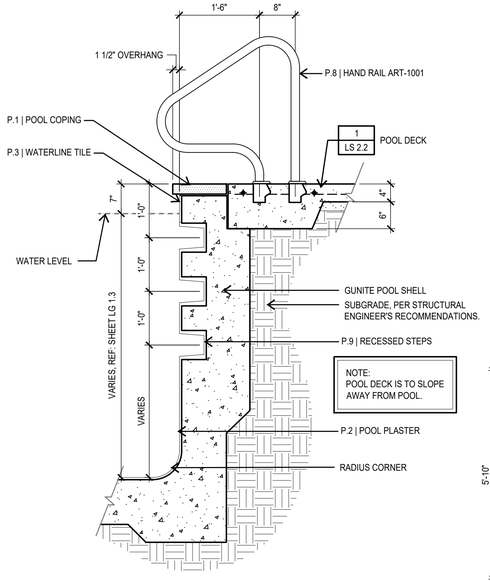
5 CMU BLOCK WALL

ELEVATION SCALE: 1/2"=1'-0"



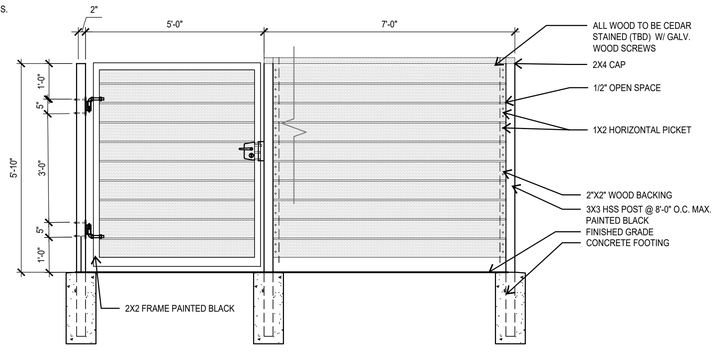
6 FRONT 4' HT HORIZONTAL WOOD FENCE

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



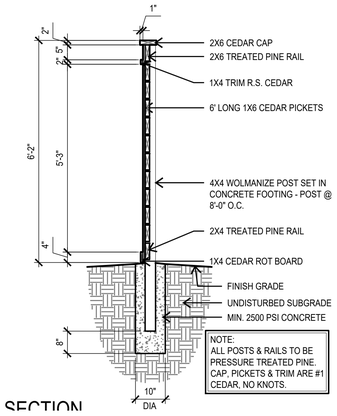
7 RECESSED POOL STEPS

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

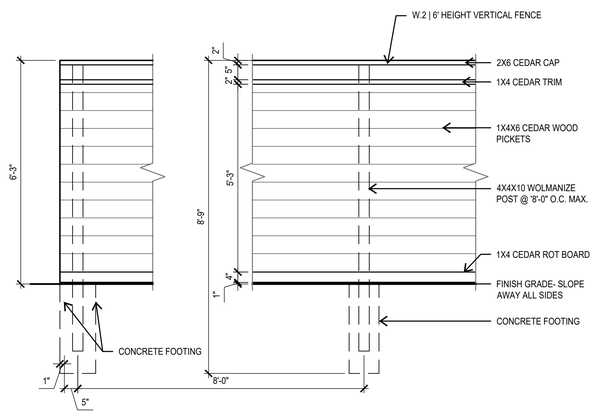


8 6' HT HORIZONTAL WOOD GATE

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



9 SECTION



6' HT HORIZONTAL WOOD PERIMETER/ POOL FENCE

ELEVATION SCALE: 1/2"=1'-0"

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TRAIL STREET TOWNHOMES

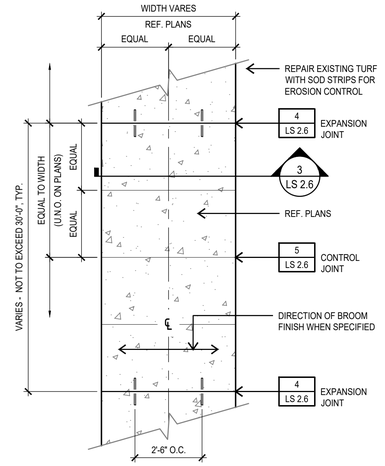
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

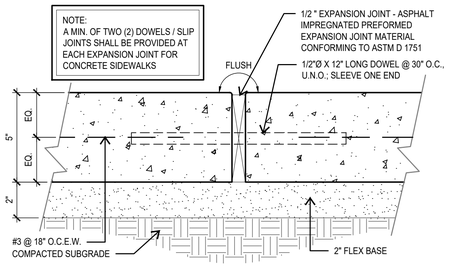
SITE DETAILS FENCING

LS 2.2



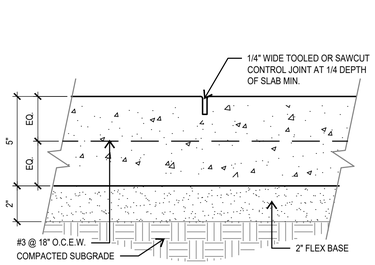
1 SIDEWALK

PLAN VIEW SCALE: 3/8"=1'-0"



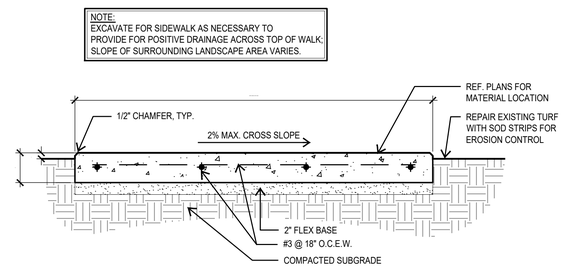
2 EXPANSION JOINT

SECTION SCALE: 3"=1'-0"



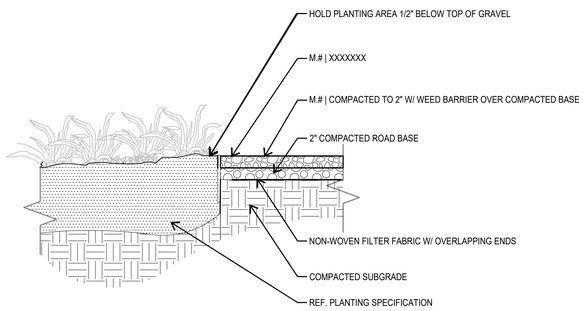
3 CONTROL JOINT

SECTION SCALE: 3"=1'-0"



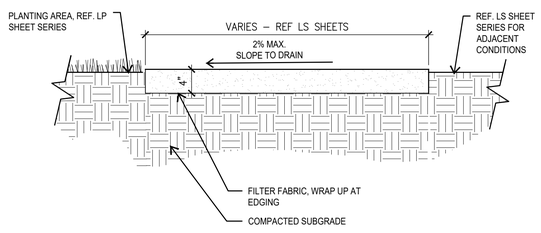
4 CONTROL JOINT

SECTION SCALE: 1"=1'-0"



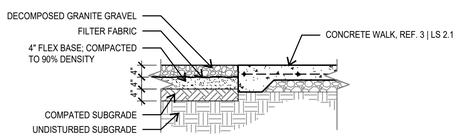
5 DECOMPOSED GRANITE WALK

SECTION SCALE: 1"=1'-0"



6 DECOMPOSED GRANITE WALK

SECTION SCALE: 1"=1'-0"



7 DECOMPOSED GRANITE @ SIDEWALK

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

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TRAIL STREET TOWNHOMES

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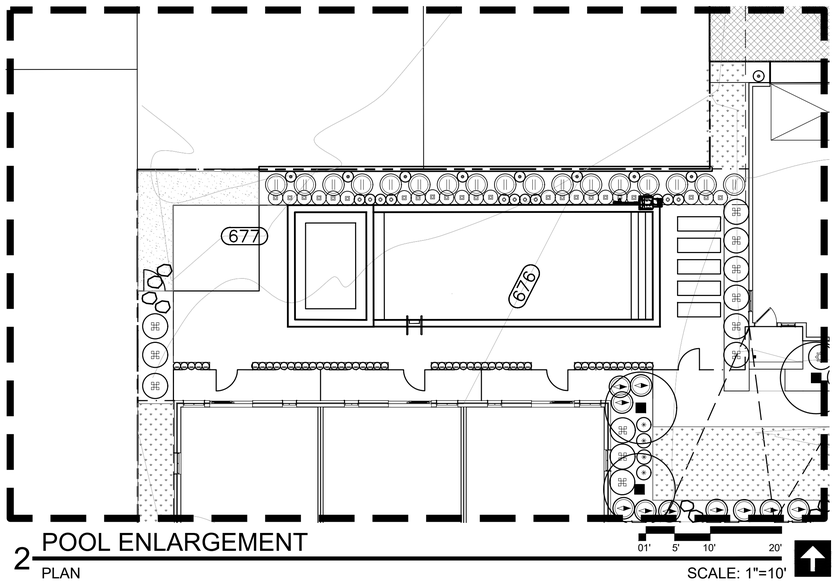
KEY PLAN

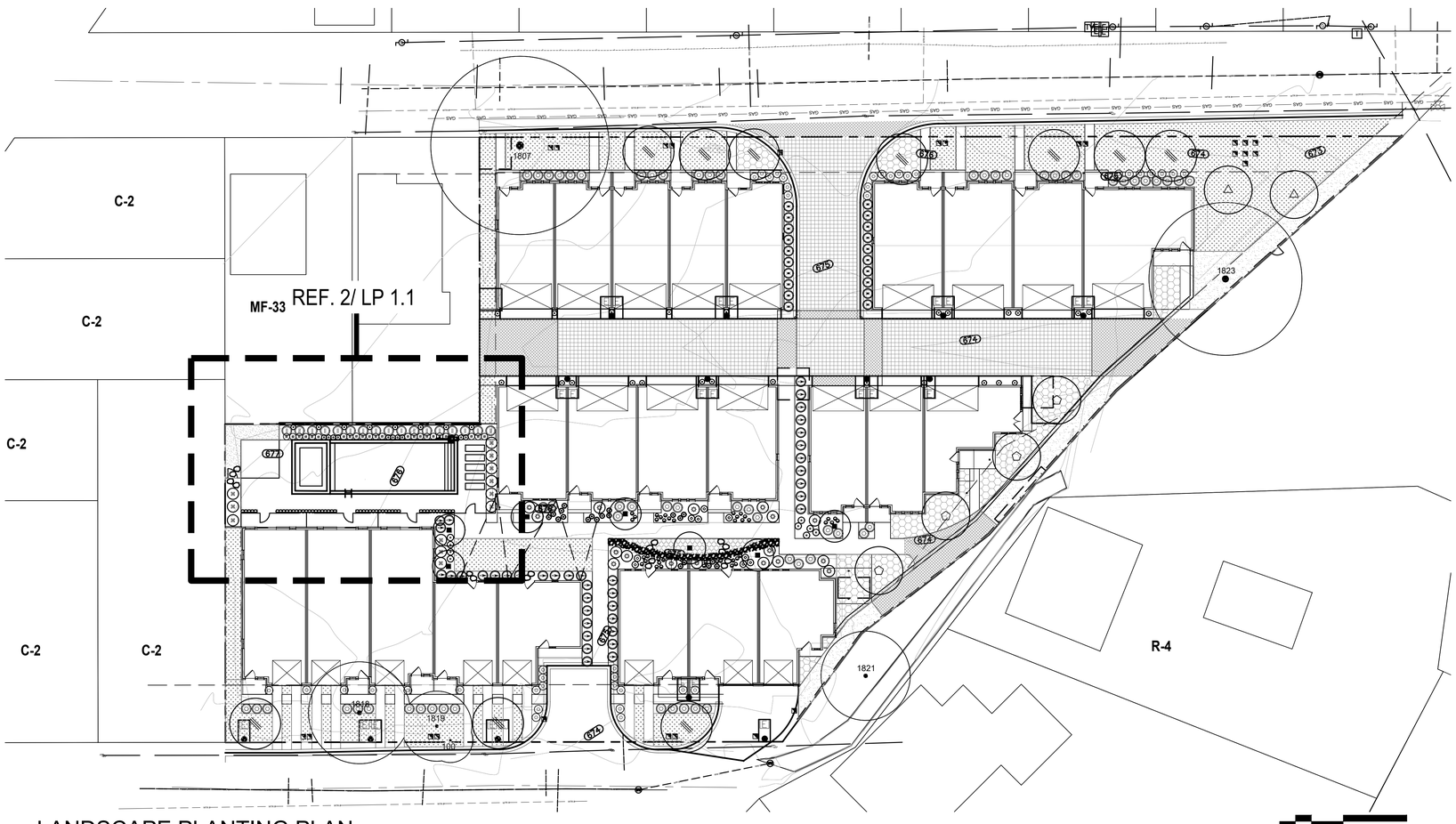
SITE DETAILS

LS 2.3



2 POOL ENLARGEMENT PLAN

SCALE: 1"=10'



1 LANDSCAPE PLANTING PLAN

PLAN

0 5' 10' 20' 40'

SCALE: 1"=20'

MITIGATION TREES

CALLOUT	QUANTITY	COMMON NAME *BOTANICAL NAME*	TREE SIZE	MITIGATION INCHES	TOTAL MITIGATION INCHES APPLIED
MO	3	MONTERREY OAK	4"	2.5"	7.5
MO	7	MONTERREY OAK	4"	4"	28"
RO	2	SHUMARD RED OAK	6"	6"	12"
MS	4	MEXICAN SYCAMORE	8"	8"	32"
CM	7	CREPE MYRTLE RED ROCKET	3"	3"	21"
				TOTAL MITIGATION	**100.5"**

TREE CANOPY ORDINANCE

MANDATORY CRITERIA:

1. FINAL TREE CANOPY. ALL SITES MUST PROVIDE A MINIMUM FINAL TREE CANOPY COVER AS LISTED BELOW FOR THE ENTIRE GROSS PROJECT AREA OUTSIDE OF THE REGULATORY FLOODPLAIN. IDENTIFY "FINAL TREE CANOPY" PERCENT (%) BASED ON THE LAND USE AND AS NOTED ON SECTION (e). NONRESIDENTIAL 25% FOR THE PURPOSE OF THIS SUBMITTAL APPROVAL.

TREE CANOPY ORDINANCE: (Minimum 15% Total Site Area)

SITE AREA =**44,115 SF**

CANOPY AREA REQUIRED = 44,115 SF X 15% = **(6,617.25 SF) TOTAL CANOPY REQ**

EXISTING TREES

(2) EXISTING PECAN - 1200 SF @ 100%	2,400 SF
(1) EXISTING BALD CYPRESS - 875 SF @ 100%	875 SF
(1) EXISTING ANAQUA - 275 SF @ 100%	875 SF

PROPOSED TREES

(2) SHUMARD RED OAK - 1200 SF @ 90%=	2,160 SF
(10) MONTERREY OAK - 875 SF @ 90%=	7,875 SF
(4) MEXICAN SYCAMORE - 1200 SF @ 90%=	4,320 SF
(7)CREPE MYRTLE RED ROCKET - 275 SF @ 90%=	1,732.5 SF
TOTAL TREE CANOPY COVERAGE	**20,237.5 SF (45.9%)**

LANDSCAPE ORDINANCE

POINTS PROVIDED

1. **STREET TREES.** INSTALLATION OF LARGE TREES THAT MEET THE FOLLOWING REQUIREMENT; (NOTE - TREES PLANTED IN R.O.W. REQUEST VARIANCE.) A) THE TREES EXTEND ALONG A MINIMUM OF SEVENTY-FIVE (75) PERCENT OF THE TOTAL FRONTAGE OF THE STREET YARD OF THE PARCEL; B)THE TREES SHALL BE SPACED ON AVERAGE NO MORE THAN FIFTY (50) FEET APART FOR LARGE TREES AND THIRTY (30) FEET FOR SMALLER TREES, C) MEASURED FROM TRUNK TO TRUNK PROVIDED THE DISTANCE BETWEEN TREES DOES NOT EXCEED ONE HUNDRED (100) FEET; AND THE TREES SHALL BE LOCATED NO MORE THAN SEVENTEEN (17) FEET FROM THE STREET RIGHT-OF-WAY LINE **(25) POINTS**

HUISACHE AVE = 290 LF X .75=	217.5 LF
TRAIL ST = 175 LF X .75=	131.25 LF
REQUIRED TREES (217.5 + 131.25 LF) / 50 =	6.9 LARGE TREES
STREET TREES: 4 LARGE TREES + 3 EXISTING TREES=	**7 STREET TREES**

TOTAL POINTS PROVIDED
(25) POINTS

m(ødm)

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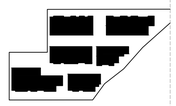
DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

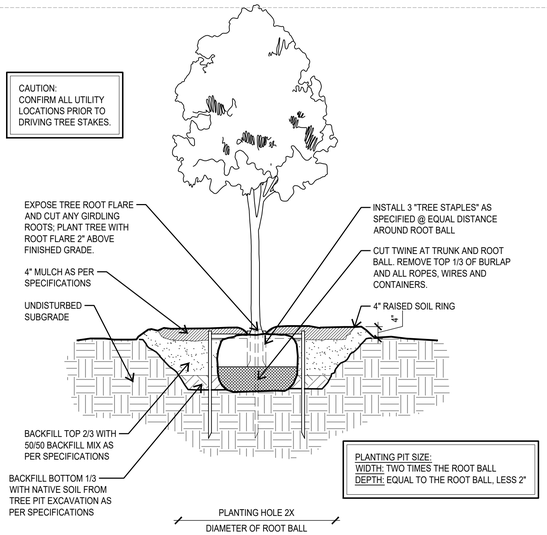
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN



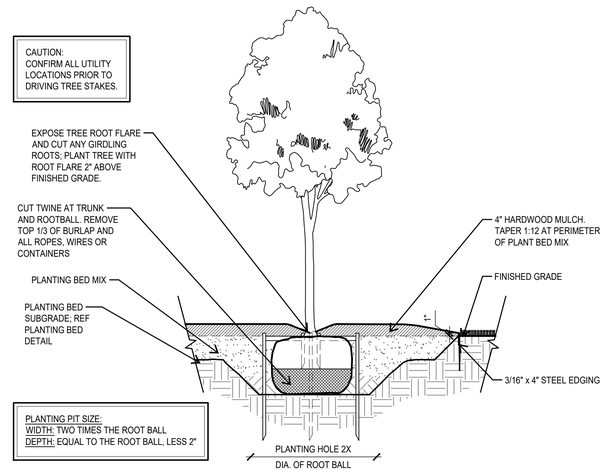
LANDSCAPE PLANTING PLAN

LP 1.1



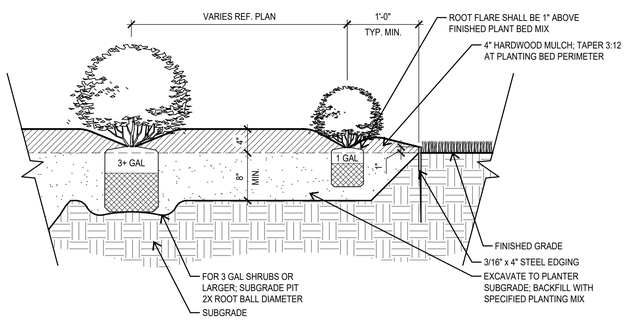
1 TYPICAL TREE PLANTING AT LAWN

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



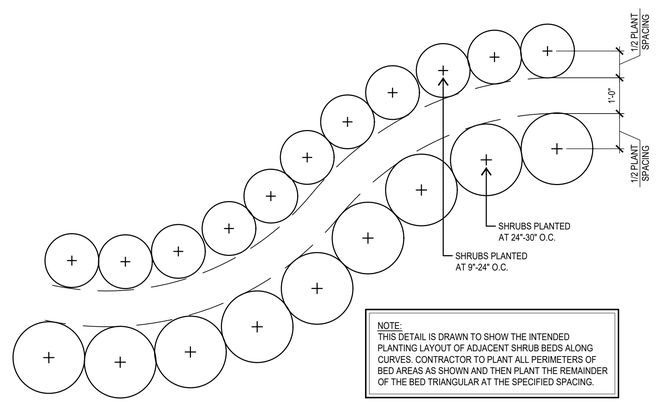
2 TYPICAL TREE PLANTING AT BED

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



3 TYPICAL SHRUB PLANTING

SECTION SCALE: 1"=1'-0"



4 TYPICAL SHRUB SPACING

PLAN SCALE: 1"=1'-0"

GENERAL NOTES

LANDSCAPE CONTRACTOR SHALL ACCEPT THE SITE IN ITS EXISTING CONDITION AND SHALL TIE NEW WORK TO EXISTING CONDITIONS AND CONTROLS (SUCH AS EXISTING GRADES AND WALK ELEVATIONS) AS NECESSARY TO MEET THE INTENT OF THE PLANS.

BEFORE PROCEEDING WITH ANY WORK IN AN AREA, LANDSCAPE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LAYOUTS AND SIZES AND SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN PLANS AND ACTUAL SITE CONDITIONS. IF ANY UTILITIES OR OBSTRUCTIONS ARE DISCOVERED DURING CONTRACT WHICH MAY NOT HAVE BEEN KNOWN DURING DESIGN, CONTRACTOR SHALL STOP WORK AND IMMEDIATELY NOTIFY LANDSCAPE ARCHITECT BEFORE PRECEDING. LANDSCAPE CONTRACTOR SHALL BE LIABLE FOR ALL MODIFICATIONS AND DAMAGE IF WORK PROCEEDS IN EITHER OF THE ABOVE SITUATIONS WITHOUT NOTIFYING LANDSCAPE ARCHITECT.
PRIOR TO ANY EXCAVATION, LANDSCAPE CONTRACTOR SHALL CONTACT APPROPRIATE AUTHORITIES INCLUDING, BUT NOT LIMITED TO, TEXAS ONE CALL SYSTEM AT 1-800-245-4545 TO LOCATE EXISTING UNDERGROUND UTILITIES.

LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ANY DAMAGE TO ANY UTILITIES OR PROPERTY THAT MAY OCCUR IN THE EXECUTION OF HIS CONTRACT WORK. WHEN WORK REQUIRES CROSSING EXISTING WALKS OR CURBS WITH EQUIPMENT, LANDSCAPE CONTRACTOR SHALL PROVIDE APPROVED BRIDGE MATERIAL SUCH AS WOOD PLANKS AND EARTH TO PREVENT DAMAGE TO FINISHED WORK. LANDSCAPE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS THAT MAY BE WORKING ON THE SITE SIMULTANEOUSLY AND SHALL COORDINATE STAGING OF HIS WORK WITH OWNER AND LANDSCAPE ARCHITECT. ALL TRASH AND DEBRIS GENERATED FROM CONTRACT OPERATIONS SHALL BE REMOVED ON A DAILY BASIS. ALL WORK SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AND ORDINANCES.
LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR JOB SITE SAFETY IN CONJUNCTION WITH HIS CONTRACT WORK.

MATERIALS

A.) PLANT MATERIALS:
1. CERTIFIED IN ACCORDANCE WITH TDA REQUIREMENTS.
2. SPECIES AND SIZE AS INDICATED IN PLANT SCHEDULE. LARGER SIZE MAY BE SUBSTITUTED WITHOUT ADDITIONAL COST TOOWNER, PROVIDED ROOT BALL OR SPREAD INCREASES PROPORTIONATELY.
3. WHERE MATERIALS ARE PLANTED IN MASSES, PROVIDE PLANTS OF UNIFORM SIZE.
4. GROWN IN CLIMATIC CONDITIONS SIMILAR TO THOSE AT SITE. FREE FROM DISEASE, INSECT INFESTATIONS, DEFECTS INCLUDING WEAK OR BROKEN LIMBS, CROTCHES, AND DAMAGED TRUNKS, ROOTS OR LEAVES, SUN SCALD, FRESH BARK ABRASIONS, EXCESSIVE ABRASIONS, AND OBJECTIONABLE DISFIGUREMENTS.
5. EXHIBIT NORMAL GROWTH HABITS; VIGOROUS, HEALTHY, FULL, WELL-PROPORTIONED, AND SYMMETRICAL.
6. TREE TRUNKS TO BE STURDY AND EXHIBIT HARDENED SYSTEMS AND VIGOROUS AND FIBROUS ROOT SYSTEMS, NOT ROOT OR POT BOUND.
7. NOT PRUNED, TRIMMED, OR TOPPED.
8. CONTAINER-GROWN STOCK: GROWN IN CONTAINERS FROM SEEDING.

B.) MULCH:
1. SHREDDED, COMPOSTED HARDWOOD BARK OF VARYING LENGTH BY NEW EARTH LLC OR APPROVED SUBSTITUTE. PARTIALLY DECOMPOSED; FREE FROM STICKS, STONES, CLAY, AND GROWTH AND GERMINATION-INHIBITING INGREDIENTS.

C.) MIXES:
1. PLANT BED MIX:
PLANT BED MIX (BACKFILL MIX) SHALL BE NEW EARTH'S 4 WAY MIX AS PRODUCED BY NEW EARTH LLC PH. 210-661-5180. DOCUMENTATION OF PURCHASE OF THIS SPECIFIC MIX SHALL BE SUBMITTED TO LANDSCAPE ARCHITECT. IF EQUAL IS PROPOSED, CONTRACTOR SHALL SUBMIT SAMPLE AND COMPLETE ANALYSIS WITH TEST RESULTS AND METHOD OF PRODUCTION FOR EVALUATION AS AN EQUAL SUBSTITUTE.

PREPARATION

LANDSCAPE CONTRACTOR SHALL RECEIVE THE SITE AT APPROXIMATELY FINISH GRADE LESS ANY SETTLEMENT THAT MAY HAVE OCCURRED SINCE SITE CONSTRUCTION AND BACKFILLING. THIS GRADE SHALL BE RAKED TO REMOVE ALL DEBRIS INCLUDING STICKS, CLODS, AND STONES AND SHALL BE FINE GRADED TO ELIMINATE ALL HUMPS, RUTS, DEPRESSIONS AND ABRUPT CHANGES IN GRADE AND ANY AREA THAT COULD CAUSE WATER TO POND.

A.) IF VEGETATION IS GROWING IN PLANTING/LAWN AREA, APPLY HERBICIDE AT RATES RECOMMENDED BY MANUFACTURER. ALLOW TO DIE, AND THEN GRUB OUT ROOTS TO MINIMUM 1/2 INCH DEPTH.

B.) MARK LOCATION OF TREES AND OUTLINES OF PLANTS BEDS USING COLORED WOOD STAKES OR FLAGS PRIOR TO BEGINNING PLANTING; OBTAIN LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO PROCEEDING.

PLANTING TREES
A.) REMOVE CONTAINERS WITHOUT DAMAGE TO ROOTS.
B.) REMOVE BOTTOM OF PLANT BOXES PRIOR TO PLACING TREES; REMOVE SIDES AFTER PLACEMENT AND PARTIAL BACKFILLING. PREVENT DAMAGE TO ROOTS.
C.) REMOVE UPPER THIRD OF BURLAP FROM BALLED AND BURLAP TREES AFTER PLACEMENT.
D.) PLACE PLANT UPRIGHT AND PLUMB IN CENTER OF HOLE. PULL ANY WEEDS GROWING IN TREE BALL AND EXPOSE ROOT FLARE (THIS WILL BE THE TOP MOST IDENTIFIABLE ROOT), REMOVE ANY GIRDLING ROOTS AND SET PLANT SO THAT ROOT FLARE IS 1" ABOVE FINISH GRADE. ORIENT PLANTS FOR BEST APPEARANCE. BACKFILL THE BOTTOM 1/3 OF THE EXCAVATION WITH SOIL CUT FROM EXCAVATION OF PIT AND THOROUGHLY WATER THIS SOIL TO SETTLE IN. BACKFILL THE REMAINDER OF THE EXCAVATION WITH A 50/50 MIX OF NEW EARTHS 4 WAY MIX AND NATIVE SOIL EXCAVATED FROM THE PIT. PLACE PLANT HEALTH CARE GROUP'S "TREE SAVER" IN BACKFILL AS PER P.H.C.G. DIRECTION AND APPLICATION RATES. LIGHTLY TAMP AND WATER SOIL TO REMOVE ALL AIR POCKETS. FOR PLANTS OUTSIDE OF PLANTING BEDS, CONSTRUCT 3 INCH HIGH WATER CONTAINMENT RING AROUND PLANT. SPREAD MULCH TO MINIMUM 4 INCH DEPTH OVER PLANT BASIN.
E.) ADJUST PLANT HEIGHT IF SETTLEMENT OCCURS AFTER BACKFILL AND STAKE AS DETAILED.
1. TWO TO THREE WEEKS FOLLOWING PLANTING, INJECT PLANT HEALTH CARE INJECTABLE INOCULANT AROUND ROOT BALL FOLLOWING MANUFACTURER'S DIRECTIONS AND APPLICATION RATES. CONTACT LANDSCAPE ARCHITECT TO OBSERVE THIS OPERATION.
F.) TRIM PLANTS TO REMOVE DEAD AND INJURED BRANCHES ONLY. TREAT CUTS OVER 3/4 INCH DIAMETER WITH TREE PAINT.
G.) BRACE PLANTS OVER 65 GALLONS SIZE IMMEDIATELY AFTER PAINTING:
1. FOR TREES 2" CAL. AND GREATER PROVIDE STAKING AS DETAILED. POSITION TO PREVENT HAZARDS TO PEDESTRIANS.
2. DO NOT RESTRICT PLANT MOVEMENT UNDER LIGHT WIND LOADS OR DAMAGE BARK.

PLANT LIST

TREES

CALLOUT	QUANTITY	COMMON NAME / *BOTANICAL NAME*	SIZE	REMARKS
RO	2	SHUMARD RED OAK *QUERCUS SHUMARDII*	6" CAL; MIN 12' HT; MIN 5' SPRD.	SINGLE TRUNK B&B; STRAIGHT TRUNK WITH FULL AND UNIFORM CANOPY; PARK GRADE NOT ACCEPTABLE
MO	10	MONTERREY OAK *QUERCUS POLYMORPHA*	4" CAL; MIN 10' HT; MIN 5' SPRD.	SINGLE TRUNK B&B; PARK GRADE; SEE SPECIFICATIONS
MS	4	MEXICAN SYCAMORE *PLATANUS MEXICANA*	8" CAL; MIN 14' HT; MIN 6' SPRD.	SINGLE TRUNK B&B; PARK GRADE; SEE SPECIFICATIONS

ORNAMENTAL TREES

CALLOUT	QUANTITY	COMMON NAME / *BOTANICAL NAME*	SIZE	REMARKS
CM	7	CREPE MYRTLE RED ROCKET *LAGERSTROEMIA INDICA*	3" CAL; MIN 8' HT; MIN 6' SPRD.	MULTITRUNK, 3-5 TRUNKS, 1-1/2" MIN CANE CAL.; FULL CANOPY; DARK GREEN; CONTAINER GROWN SPECIMEN

SHRUBS

CALLOUT	QUANTITY	COMMON NAME / *BOTANICAL NAME*	SIZE	REMARKS
AF	20	ASPARAGUS FERN *ASPARAGUS AETHIOPICUS*	3 GAL; 24" HT. 24" SPRD.	DARK GREEN; FULL, PLANT 36" O.C.
AG	89	AZTEC GRASS *LIRIOPE MUSCARI*	3 GAL; 24" HT. 24" SPRD.	DARK GREEN; FULL, PLANT 36" O.C.
BCI	61	BICOLOR IRIS *DIETES BICOLOR*	3 GAL.; 24" HT. 24" SPRD.	DARK GREEN; FULL; PLANT 36" O.C.
CFG	35	CREEPING FIG VINE *FICUS PUMILA*	1 GAL; 12" HT. 12" SPRD.	DARK GREEN; FULL, PLANT 36" O.C.
DP	17	DWARF PALMETTO *SABAL MINOR*	3 GAL; 24" HT. 24" SPRD.	DARK GREEN; FULL, PLANT 36" O.C.
LM	23	LIRIOPE *LIRIOPE MUSCARI*	3 GAL; 24" HT. 24" SPRD.	DARK GREEN; FULL, PLANT 36" O.C.
MFG	12	MEXICAN FEATHER GRASS *NASSELLA TENUISSIMA*	5 GAL; 14" HT. 24" SPRD.	DARK GREEN; FULL; PLANT 24" O.C.
PH	9	PURPLE HEART *TRADESCANTIA PALLIDA*	1 GAL; 24" HT. 24" SPRD.	DARK GREEN; FULL, PLANT 36" O.C.
RF	9	RIVER FERN *THELYPTERIS KUNTHII*	3 GAL; 20" HT. 20" SPRD.	DARK GREEN; FULL; PLANT 30" O.C.
SLF	20	SOFT LEAF YUCCA YUCCA RECURVIFOLIA	3 GAL.; 24" HT. 24" SPRD.	DARK GREEN; FULL; PLANT 18" O.C.
TC	39	TURKS CAP *MALVAVISCUS ARBOREUS*	3 GAL; 18" HT. 18" SPRD.	DARK GREEN; FULL, PLANT 30" O.C.
TS	13	YELLOW BELLS *TECOMA STANS*	5 GAL; 24" HT. 24" SPRD.	DARK GREEN; FULL, PLANT 36" O.C.
YHD	17	YAUPON HOLLY DWARF *ILEX VOMITORIA NANA*	5 GAL; 24" HT. 24" SPRD.	DARK GREEN; FULL, PLANT 36" O.C.
YL	42	YELLOW LANTANA *LANTANA*	1 GAL; 12" HT. 12" SPRD.	DARK GREEN; FULL, PLANT 30" O.C.

GROUND COVER

CALLOUT	QUANTITY	COMMON NAME / *BOTANICAL NAME*	SIZE	REMARKS
AJ	FIELD VERIFY	ASIAN JASMINE *TRACHELOSPERMUM ASIATICUM*	3 GAL; 24" HT. 24" SPRD.	DARK GREEN; FULL, PLANT 18" O.C.
BSR	FIELD VERIFY	BLUE SHADE RUELLIA *RUELLIA SQUARROSA*	3 GAL; 24" HT. 24" SPRD.	DARK GREEN; FULL, PLANT 12" O.C.
MULCH	ALL BEDS	HARDWOOD MULCH (APPLY WEED BARRIER FABRIC)	STANDARD	4" THICK PER DETAILS; KELLER MATERIAL LIMITED PH: (210) 967-1300. REFERENCE PLANTING MATERIALS NOTES
RIVER ROCK	FIELD VERIFY	ROCKY MOUNTAIN 1"-3" (APPLY WEED BARRIER FABRIC)	STANDARD	4" THICK PER DETAILS; KELLER MATERIAL LIMITED PH: (210) 967-1300. REFERENCE PLANTING MATERIALS NOTES

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DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

LANDSCAPE PLANTING DETAILS

LP 2.1

ABBREVIATIONS

ABV	ABOVE
ACOUS	ACOUSTICAL
A.C.T.	ACOUSTICAL CEILING TILE
ADJ	ADJACENT
AD	AREA DRAIN
A.F.F.	ABOVE FINISH FLOOR
ALT.	ALTERNATE
ALUM	ALUMINUM
ANCH	ANCHOR / ANCHORAGE
ANOD	ANODIZED
APPROX	APPROXIMATE(LY)
ARCH	ARCHITECT / ARCHITECTURAL
AVE	AVENUE
AVG	AVERAGE
A/C	AIR CONDITIONING
A/V	AUDIO VISUAL
BITUM	BITUMINOUS
BLDG	BUILDING
BM	BEAM
B.M.	BENCH MARK
BTM	BOTTOM
B.O.C.	BOTTOM OF CURB
BTW	BETWEEN
CAB	CABINET
CB	CATCH BASIN
CCTV	CLOSED CIRCUIT TELEVISION
CEM	CEMENT
CER	CERAMIC
CFMF	COLD FORMED METAL FRAMING
CIP	CAST IN PLACE
C.I.	CAST IRON
CIR	CIRCLE
CJ	CONTROL JOINT
CLG	CEILING
CLG HT	CEILING HEIGHT
CLR	CLEAR(ANCE)
CL	CLOSET
CM / cm	CENTIMETER
CMU	CONCRETE MASONRY UNIT
CNTR	COUNTER
COL	COLUMN
COMP	COMPOSITION
CONC	CONCRETE
CONF	CONFERENCE
CONST	CONSTRUCTION
CONTR	CONTRACTOR
CONT.	CONTINUOUS
CG	CORNER GUARD
CSMT.	CASEMENT
CTR.	CENTER
CTSK	COUNTERSUNK
CT	CERAMIC TILE
CU. FT.	CUBIC FOOT (FEET)
CU. YD.	CUBIC YARD
CW	COLD/CHILLED WATER
C-C	CENTER TO CENTER
CO	CASED OPENING
CW	COOL WHITE
DBL.	DOUBLE
DEPT.	DEPARTMENT
DF	DRINKING FOUNTAIN
DH	DOUBLE-HUNG
DIAG	DIAGONAL
DIA.	DIAMETER
DIM.	DIMENSION
DISC.	DISCONNECT
DISP.	DISPENSER
D.L.	DEAD LOAD
DMPFG.	DAMPPROOFING
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DTL	DETAIL
DWG	DRAWING
DWR	DRAWER
EA	EACH
EATD	EXIT ACCESS TRAVEL DISTANCE
EFOB	EXTERIOR FACE OF BUILDING
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
ELEV	ELEVATOR
EL	ELEVATION
EQUIP	EQUIPMENT
EQ	EQUAL
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EXH	EXHAUST
EXIST	EXISTING
EXT	EXTERIOR
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FHC	FIRE HOSE CABINET
FH	FIRE HYDRANT
FIN	FINISH / FINISHED
FIXT	FIXTURE
FLRG	FLOORING
FLR	FLOOR
FLSHG	FLASHING
FLUOR	FLUORESCENT
FPW	FLOOD PROTECTION WALL
FND	FOUNDATION
FRPF	FIREPROOF(ING)
FTG	FOOTING
FT	FOOT / FEET
FURN	FURNISH
FURR	FURRED / FURRING
F.V.	FIELD VERIFY
FVC	FIRE VALVE CABINET
GALV	GALVANIZED
GAL	GALLON
GA	GAUGE
GC	GENERAL CONTRACTOR
GD	GUARD
GEN	GENERAL
GL	GLASS / GLAZING
GMP	GUARANTEED MAXIMUM PRICE
GR	GRADE / GRADING
GYP	GYPSUM
HB	HOSE BIBB
HC	HOLLOW CORE
HDCP	HANDICAPPED
HDWD	HARDWOOD
HDWR	HARDWARE
HD	HEAD
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HT	HEIGHT
HVAC	HEATING / VENTILATING / AIR CONDITIONING
HW	HOT WATER
HYD	HYDRANT
ID	INSIDE DIAMETER
INCAND	INCANDESCENT
INCL	INCLUDE(D)
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
IN	INCH(ES)
JST	JOIST
JT	JOINT
LAM	LAMINATED
LAV	LAVATORY
LGTH	LENGTH
LH	LEFT-HAND
LIN	LINEAR
LT	LIGHT
LVR	LOUVER
M / m	METER
MM / mm	MILLIMETER
MACH	MACHINE
MAINT	MAINTENANCE
MAS	MASONRY
MATL	MATERIAL
MAX.	MAXIMUM
MECH	MECHANICAL
MEP	MECHANICAL / ELECTRICAL / PLUMBING
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
ML	METAL LATH
MO	MASONRY OPENING
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MULL	MULLION
NAT	NATURAL
N.I.C.	NOT IN CONTRACT
NOM	NOMINAL
NO. or #	NUMBER
NR	NOISE REDUCTION
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
OA	OVERALL
O.C.	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED / CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED / OWNER INSTALLED
OH	OVERHEAD
OP	OPERABLE PARTITION
O.H.	OPPOSITE HAND
ORD	OVERFLOW ROOF DRAIN
O.S.	OVERFLOW SCUPPER
O/A	OUTSIDE AIR
PART	PARTITION
PCP	PORTLAND CEMENT PLASTER
PCT	PORCELAIN CERAMIC TILE
PED	PEDESTAL
PERF	PERFORATED
P.G.	PLATE GLASS
PLAST	PLASTER
PLAS	PLASTIC
PL	PLUMBING
PLYWD	PLYWOOD
POL	POLISHED
PRKG	PARKING
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PTD	PAINTED
PVC	POLYVINYL CHLORIDE
PVG	PAVING
PVMT	PAVEMENT
P.L.	PROPERTY LINE
P.LAM	PLASTIC LAMINATE
P/C	PRECAST
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REBAR	REINFORCING BAR
RECEP	RECEPTICLE
REC	RECESSED
REF.	REFERENCE
REF	REFRIGERATOR
REINF	REINFORCED
REQ'D.	REQUIRED
REV.	REVISION
RH	RIGHT-HAND
R	RISER
RM	ROOM
R.O.	ROUGH OPENING
R.O.W.	RIGHT OF WAY
RAG	RETURN AIR GRILLE
R/A	RETURN AIR
SCHED	SCHEDULE
S.C.	SOLID CORE
SD	STORM DRAIN
SECT	SECTION
SF	SQUARE FOOT / FEET
SH	SINGLE-HUNG
SHLV	SHELVES / SHELVING
SHTHG	SHEATHING
SHWR	SHOWER
SIM	SIMILAR
SPEC	SPECIFICATION
SPKR	SPEAKER
SQ	SQUARE
S.S.	STAINLESS STEEL
SS	SANITARY SEWER
S.T.C.	SOUND TRANSMISSION COEFFICIENT
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURE / STRUCTURAL
SW	SWITCH
SYM	SYMMETRICAL
SYS	SYSTEM
SAD	SUPPLY AIR DIFFUSER
S/A	SUPPLY AIR
TB	TOWEL BAR
TEL	TELEPHONE
TEMP	TEMPERED / TEMPORARY / TEMPERATURE
THK	THICK(NESS)
THRES	THRESHOLD
TINT	TINTED
TOC	TOP OF CURB / CONCRETE
TOS	TOP OF STEEL / SLAB
TOSS	TOP OF STRUCTURAL SLAB
TOW	TOP OF WALL
TRANS	TRANSFER
TRZO	TERRAZZO
T	TREAD
T&G	TONGE & GROOVE
T.S.	TUBE STEEL
TV	TELEVISION
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
VAC	VACUUM
VERT	VERTICAL
VEST	VESTIBULE
WC	WATER CLOSET
WNST	WAINSCOT
WDW	WINDOW
WD	WOOD
WH	WALL-HUNG
WP	WATERPROOF(ING)
WR	WATER RESISTANT
WT	WEIGHT
WWF	WELDED WIRE FABRIC
WW	WARM WHITE
W/	WITH
W/I	WITHIN
W/O	WITHOUT
XFMR	TRANSFORMER

SYMBOLS

℄	CENTERLINE
@	AT
∅	ROUND/DIAMETER
PL	PLATE
∠	ANGLE
&	AND
/	PER
☐	SQUARE
+/-	PLUS OR MINUS

GENERAL NOTES

01_THE CONTRACTOR SHALL THOROUGLY REVIEW ALL CONSTRUCTION DOCUMENTS INCLUDING, BUT NOT LIMITED TO, DRAWINGS, NOTES, DIMENSIONS AND SCHEDULES. THE CONTRACTOR SHALL MAKE A DETAILED SITE VISIT, AND SHALL IMMEDIATELY BRING ANY INCONSISTENCY, SITE LAYOUT PROBLEM, OR ANY OTHER REQUEST FOR CLARIFICATION TO THE ARCHITECT FOR RESOLUTION PRIOR TO THE DELIVERY OF ANY BID OR INITIATION OF WORK. FAILURE TO DO SO SHALL CAUSE THE CONTRACTOR TO BE INELIGIBLE FOR EXTRAS RELATING TO SUCH MATTERS.

02_THESE DRAWINGS ARE, IN GENERAL, DIAGRAMMATIC. EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR FROM FIELD MEASUREMENTS TAKEN BY CONTRACTOR'S PERSONNEL. ACTUAL ARRANGEMENT OF THE WORK SHALL FOLLOW LOCATIONS SHOWN ON THE DRAWINGS WITHIN THE CONSTRAINTS OF EXISTING EQUIPMENT AND CONSTRUCTION. DRAWING AND NOTES TO DRAWINGS ARE CORRELATIVE AND HAVE EQUAL AUTHORITY AND PRIORITY. SHOULD THERE BE DISCREPANCIES IN THEMSELVES OR BETWEEN THEM, CONTRACTOR SHALL BASE BID PRICING ON THE MOST EXPENSIVE COMBINATION OF QUALITY AND/OR QUANTITY OF THE WORK INDICATED. IN THE EVENT OF DISCREPANCIES, OBTAIN CLARIFICATION FROM ARCHITECT BEFORE CONTINUING WORK.

03_DO NOT SCALE THESE DRAWINGS. IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR ANY OTHER REQUEST FOR CLARIFICATION.

04_VERIFY ALL DIMENSIONS BEFORE ORDERING MATERIAL AND PROCEEDING WITH THE WORK.

05_MINIMUM CLEARANCE DIMENSIONS INDICATED SHALL BE MAINTAINED PARTICULARLY AT STAIRS, CORRIDORS AND RESTROOMS.

06_CONTRACTOR TO ACQUIRE ALL NECESSARY PERMITS PRIOR TO WORK.

07_CONTRACTOR IS RESPONSIBLE FOR THE SAFETY, ACTIONS AND CONDUCT OF HIS EMPLOYEES AND HIS SUBCONTRACTORS' EMPLOYEES WHILE IN THE PROJECT AREA, ADJACENT AREAS AND IN THE BUILDING AND ITS VICINITY. UPON COMPLETION OF WORK, CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE SITE.

08_CONTRACTOR SHALL SUBMIT REPRODUCIBLE SHOP DRAWINGS TO ARCHITECT FOR OWNER'S, ARCHITECT'S, AND ENGINEER'S APPROVAL.

09_ALL MATERIALS, FINISHES, MANUFACTURED ITEMS, AND EQUIPMENT SHALL BE INSTALLED IN FULL ACCORDANCE WITH THE SUPPLIER'S OR MANUFACTURER'S WRITTEN RECOMMENDATIONS OR THESE DOCUMENTS, WHICHEVER IS MORE STRINGENT. NOTIFY THE ARCHITECT OF ANY VARIATION REQUIRED IN THE DIMENSION NOTED FOR VERIFICATION FOR INSTALLATION OF EQUIPMENT BEFORE CONTINUING THE WORK.

10_EVERY EFFORT HAS BEEN MADE ON THE PART OF THE ARCHITECT TO ENSURE LOCAL CODE COMPLIANCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE WORK CONFORMS WITH ALL APPLICABLE CODES, AND IF DISCREPANCIES ARE NOTED, TO NOTIFY THE ARCHITECT PRIOR TO WORK.

11_MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED BUT NECESSARY FOR PROPER CONSTRUCTION OF ANY PART OF THE WORK SHALL BE INCLUDED AS IF THEY WERE INDICATED ON THE DRAWINGS.

12_PROVIDE BLOCKING AS REQUIRED FOR PROPER SUPPORT OF WALL AND CEILING MOUNTED EQUIPMENT.

13_INSTALL PEX PIPE SYSTEM PLUMBING; INSULATE AS REQUIRED.

14_FOR ALL "MATCH EXISTING" NOTES, ARCHITECT'S INTENT IS FOR CONTRACTOR TO MATCH EXISTING PROFILE AND FINISH AS CLOSE AS POSSIBLE USING AVAILABLE STOCK MATERIALS. IF UNABLE TO MATCH EXISTING, PROVIDE SAMPLES FOR ALTERNATE MATERIALS OR METHODS FOR ARCHITECT'S APPROVAL.

15_DISSIMILAR METALS TO REMAIN SEPARATED TO AVOID GALVANIC CORROSION.

16_ALL EXTERIOR WALLS AND ROOFS TO HAVE CLOSED CELL SPRAY FOAM INSULATION.

17_ALL EXTERIOR WALLS TO BE STUD GRADE 2 X 6 NO. 2 SYP WITH STUDS AT 24" OC UNLESS OTHERWISE NOTED.

18_ALL INTERIOR WALLS TO BE STUD GRADE 2 X 4 OR NO. 2 SYP WITH STUDS AT 16" OC WITH 1/2" GYPSUM BOARD SHEATHING ON BOTH SIDES UNLESS OTHERWISE NOTED. ALL CAVITIES IN WALL ASSEMBLY TO BE FILLED WITH R-11 SOUND BATT INSULATION.

19_ALL CEILINGS TO BE SHEATHED WITH 5/8" GYPSUM BOARD UNLESS OTHERWISE NOTED.

20_ALL INTERIOR PAINTS, STAINS AND SEALANTS TO BE NON-TOXIC.

21_FIRE SUPPRESSION SYSTEM MUST BE INSTALLED BY A CONTRACTOR LICENSED PER STATE FIRE MARSHAL'S REQUIREMENTS. SHOP DRAWINGS OF SYSTEM MUST BE SUBMITTED TO FIRE MARSHAL FOR REVIEW AND APPROVAL.

22_ALL WORK MUST BE IN COMPLIANCE WITH THE APPLICABLE NFPA STANDARDS AND THE INTERNATIONAL FIRE CODE AS AMENDED BY THE CITY OF AUSTIN.

23_MINIMUM OF 15 DAYS MUST BE ALLOWED FOR NEW SYSTEM PLAN REVIEWS

SYMBOLS

NORTH ARROW

1/A3.02 — EXTERIOR ELEVATION

1/A3.02 1/A3.02 — BUILDING SECTION

3/A5.02 — SECTION DETAIL

14/A5.01 — DETAIL REFERENCE
DETAIL NUMBER (LOCATION ON SHEET)
SHEET NUMBER

10/A4.02 — INTERIOR ELEVATION
SHEET LOCATION NUMBER
ELEVATION NUMBER

ROOM NAME
CH: ## — ROOM IDENTIFICATION
CEILING HEIGHT

1 — REVISION NUMBER AND AFFECTED AREA

FLOOR ELEVATION 121'-6" — VERTICAL ELEVATION

9'-0" — PLAN/SPOT/LEVEL ELEVATION

2B.1 — PARTITION TYPE
(RE: PARTITION SCHEDULE FOR DESCRIPTION)

101 — DOOR NUMBER (RE: DOOR SCHEDULE)

2-01 — WINDOW / GLAZING TYPE
(RE: WINDOW SCHEDULE)

CONCRETE 2 — KEYNOTE

EQ # — APPLIANCE TAG (RE: APPLIANCE SCHEDULE)

PL # — PLUMBING TAG (RE: PLUMBING SCHEDULE)

BREAK LINE

MATCH LINE
RE: A2.04 — MATCH LINE

A 1 — COLUMN GRID INDENTIFICATION

MATERIAL REPRESENTATION

SECTION	ELEVATION
CONCRETE	
PRECAST CONCRETE	
CMU	
BRICK	
STONE	
FINISHED WOOD	
METAL LATH & PLASTER/STUCCO	
CERAMIC/QUARRY/ PORCELAIN TILE	
GLASS	
MIRROR	
STEEL	
ALUMINUM	
GRADE/EARTH	
GRAVEL	
PLYWOOD (LOW & HIGH DETAIL)	
BATT/BLANKET INSULATION	
SPRAYED FIREPROOFING	
RIGID INSUL.	

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TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

GENERAL NOTES

A0.02

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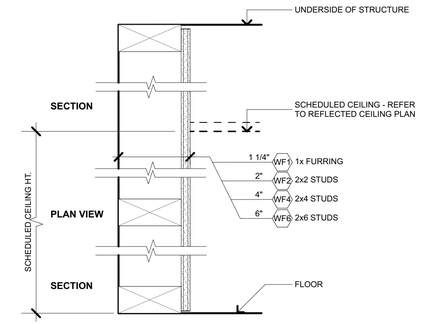
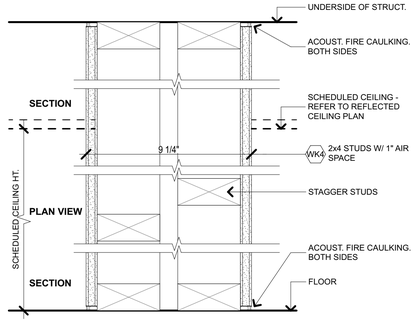


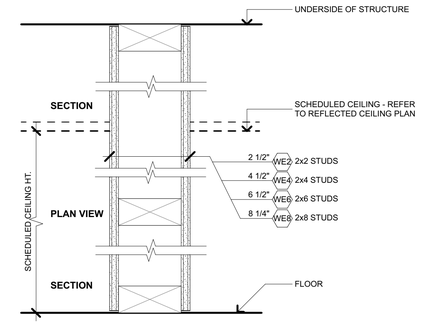
2x STUDS WITH ONE LAYER OF 1/2" GYP. BD. FINISH SIDE

	PARTITION TYPE	L/240 LIMITING HT.	FIRE RATING	STC RATING
WF	WF1	---	---	---
	WF2	---	---	---
	WF4	---	---	---
	WF6	---	---	---



2x STUDS WITH ONE LAYERS OF 5/8" TYPE "X" GYP. BD. EACH SIDE

	PARTITION TYPE	L/240 LIMITING HT.	FIRE RATING	STC RATING
WK	WK4	---	2 HOUR - UL U341	54

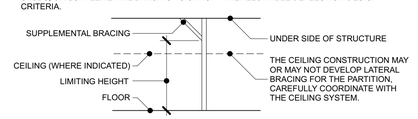


2x STUDS WITH ONE LAYER OF 1/2" GYP. BD. EACH SIDE

	PARTITION TYPE	L/240 LIMITING HT.	FIRE RATING	STC RATING
WE	WE2	---	---	---
	WE4	---	---	---
	WE6	---	---	---
	WE8	---	---	---

PARTITION NOTES

1. STUD SPACING TO BE 16" O.C. U.N.O. THE PROJECT MANDATORY MAXIMUM ALLOWABLE DEFLECTION DESIGN CRITERIA RATIO IS L/240 USING STUDS @ 16" O.C. WHERE "BRITTLE" FINISHES WILL BE APPLIED SUCH AS PLASTER OR CERAMIC TILE, MAX. ALLOWABLE DEFLECTION CRITERIA RATIO IS L/360.
2. THE LIMITING HEIGHTS INDICATED IN EACH PARTITION TYPE ARE THE MAXIMUM UNSUPPORTED HEIGHT FOR THAT PARTITION. IF PROJECT CONDITIONS NEED TO EXCEED THIS LIMIT, IT'S THE CONTRACTOR'S OPTION TO PROVIDE HEAVIER GAUGE STUDS, OR LESS SPACE BETWEEN STUDS, OR SUPPLEMENTAL BRACING TO SATISFY THE ALLOWABLE DEFLECTION DESIGN CRITERIA.



3. SYMBOL DESCRIPTION

4. ALL PARTITION TYPES SHOWN MAY NOT NEED TO BE FIRE RATED ASSEMBLES. REFER TO PARTITION SYMBOL AND THE LIFE SAFTY PLAN FOR PARTITIONS WHICH MUST BE FIRE RATED.
5. WHEN EVER A FIRE RATED PARTITION IS INDICATED ALL ELEMENTS OF THE COMPLETE ASSEMBLY MUST BE CONSTRUCTION IN STRICT COMPLIANCE WITH THE UNDERWRITERS LABORATORY AND OTHER TESTING AGENCY REQUIREMENTS.
6. PROVIDE "WATER RESISTANT" GYP. BD. AS THE SUBSTRATE FOR CERAMIC TILE, OR BACKER BOARD SUBSTRATE FOR CERAMIC TILE IN WET CONDITIONS. IF THE BACKER BOARD IS BEING SUBSTITUTED FOR ONE OF THE GYP. BD. LAYERS IT MUST HAVE APPROVED FIRE RATING CERTIFICATION.
7. THE STC RATINGS LISTED ARE TO SERVE AS A GENERAL INDICATOR FOR THE ACOUST. PERFORMANCE OF THAT PARTITION, HOWEVER, SPECIFIC PROJECT CONDITIONS MAY NOT NECESSARILY YIELD THE LABORATORY TESTED RESULTS.
8. ALL PARTITION TYPES INDICATED ON THIS DRAWING MAY NOT NECESSARILY BE USED ON THIS SPECIFIC PHASE OF THE PROJECT.

TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

PARTITION TYPES

A0.04

FINISH SCHEDULE

TAG	ITEM	DESCRIPTION	NOTES
BRICK 1	KING SIZE BRICK	QUARTER BOND - COORDINATE COURSE-OUT WITH ARCHITECT/OWNER	LIGHT BROWN - VERIFY FINAL COLOR SELECTION W/ ARCHITECT
BRICK 2	KING SIZE BRICK	QUARTER BOND - COORDINATE COURSE-OUT WITH ARCHITECT/OWNER	GRAY - VERIFY FINAL COLOR SELECTION W/ ARCHITECT
CONCRETE 1	CONCRETE SLAB @ BALCONY	LIGHT BROOM FINISH	
COUNTER 1	KITCHEN COUNTERTOP	CAESARSTONE; 2CM QUARTZ	OPTION 1: 5131 P+H CALCATTA NUVO OPTION 2: 4044 AIRY CONCRETE OPTION 3: 1141 PURE WHITE
COUNTER 2	BATHROOM COUNTERTOP	CAESARSTONE; 2CM QUARTZ	OPTION 1: 5131 P+H CALCATTA NUVO OPTION 2: 1141 PURE WHITE OPTION 3: 5143 WHITE ATTICA
EXT CLAD 1	HARDIE SIDING	HARDIE OR SIM, BOARD & BATTEN, SMOOTH, PTD	VERIFY FINAL COLOR SELECTION W/ ARCHITECT
EXT CLAD 2	STUCCO	3-COAT (SMOOTH FIN) STUCCO W/ SINTHETIC INTEGRAL COLOR ON GALV MTL LATH	VERIFY FINAL COLOR SELECTION W/ ARCHITECT
EXT CLAD 3	STANDING SEAM METAL SIDING		TO MATCH ROOF
FLOOR 1	WOOD FLOOR	3/8" ENGINEERED WOOD FLOOR	VERIFY FINAL SPEC SELECTION W/ ARCHITECT
MILLWORK 1	MILLWORK @ KITCHENS	SOLID PANEL; PAINTED	OPTION 1: OFF WHITE OPTION 2: WHITE OPTION 3: LIGHT GRAY
MILLWORK 2	MILLWORK @ BATHROOMS	SOLID PANEL; PAINTED; U.N.O.	OPTION 1: LIGHT GRAY OPTION 2: WHITE OAK; OR SIMILAR OPTION 3: WHITE
PAINT 1	INTERIOR PAINT @ WALLS, CEILINGS, BASEBOARDS, TRIM, DOORS	NEBULOUS WHITE - SW 7063 - SEMI GLOSS	LEVEL 4 PAINTED DRYWALL THROUGHOUT
PAINT 2	EXTERIOR PAINT	COLOR: TBD	
PAINT 3	EXTERIOR PAINT	COLOR: TBD	
ROOF	STANDING SEAM METAL ROOF	2" DOUBLE LOCK, NON-STRIATED 18" PANELS	COLOR - SLATE GRAY
TILE 1	FLOOR TILE @ BATHROOMS	DESIGN AND DIRECT SOURCE; BOROUGH, TIGRES SERIES	OPTION 1: 12X24, ASH OPTION 2: 12X24, CLOUD OPTION 3: 24X24, FOG
TILE 2	FLOOR TILE @ SHOWERS	DESIGN AND DIRECT SOURCE; OPT 1&2: BIANCO ESTRENO; OPT 3: UNGLAZED MOSAICS	OPTION 1: HONED, MOSAIC HEXIGON OPTION 2: MARBLE, 1X1 MOSAIC OPTION 3: 04, PENNIES
TILE 3	WALL TILE @ KITCHEN BACKSPASH	DESIGN AND DIRECT SOURCE; COLORES SERIES, HERITAGE FIELD TILE	OPTION 1: WHITE, 3X12 (HORIZ RUNNING) OPTION 2: WHITE, 2X8 (VERTICAL STACK) OPTION 3: WHITE, 4X4 (STACK)
TILE 4	WALL TILE @ BATHROOMS	DESIGN AND DIRECT SOURCE; OPT 1&3: HERITAGE FIELD TILE; OPT 2: STIPPLE, ZUESANNE SERIES	OPTION 1: WHITE, 2X8 (VERTICAL STACK) OPTION 2: 3X12 (HORIZ RUNNING) OPTION 3: WHITE, 2X8 (HERRINGBONE)
TRIM 1	BASEBOARD & DOOR TRIM	7/8" X 3.5" MDF, SQUARE EDGE	PAINTED 'PAINT 1'
TRIM 2	WINDOW SILL TRIM	7/8" MDF, SQUARE EDGE	PAINTED 'PAINT 1'

PLUMBING SCHEDULE

ITEM	DESCRIPTION
FAUCET - BATHROOM	DELTA, 'TRISIC' SINGLE HANDLE; 559LF-LPU
FAUCET - KITCHEN	DELTA, TRISIC: SINGLE PULL-DOWN HANDLE; 9159-DST
FAUCET - POWDER	DELTA, 'TRISIC' SINGLE HANDLE; 559LF-LPU
FAUCET/CONTROL - SHOWER	DANZE, SHOWER ONLY TRIM KIT; D502562T
FAUCET/CONTROL - TUB	DANZE, TUB AND SHOWER TRIM KIT; D502062T
SINK - BATHROOM	KOHLER, ABOVE COUNTER SINK; K26601
SINK - KITCHEN	BLANCO PRECIS - SUPER SINGLE BOWL - 440150
SINK - POWDER	KOHLER, ABOVE COUNTER SINK; K26601
TOILET	DURAVIT, FLOOR MOUNT ONE-PIECE; 011301.01/02 - SEAT COVER 0062090096
TUB	MTI WHIRLPOOLS ' CAMERON 2' 60"X30"X20" MODEL #152

LIGHTING SCHEDULE

ID	DESCRIPTION
J	J-BOX - FOR OPTIONAL PENDANT
L1	CEILING FAN - MINKA, AIRE JAVA CEILING FAN, FLAT WHITE FINISH, PRODUCT F753-WHF
L2	INTERIOR RECESSED CAN LIGHT - CREE, CR4 4" LED DOWNLIGHT
L3	EXTERIOR RECESSED CAN LIGHT, CREE, CR4 4" LED DOWNLIGHT
L4	WALL MOUNTED VANITY - AFX, SINCLAIR LED VANITY 27" WIDE SNV SERIES
L5	EXTERIOR WALL SCONCE - TBD
L6	CLOSET SURFACE MOUNTED - MINKA, LAVERY FLISH MOUNTED FIXTURE, WHITE FINISH, PRODUCT 1013-44-PL

APPLIANCE SCHEDULE

ITEM	DESCRIPTION
DISHWASHER	24" DISHWASHER
RANGE HOOD	30" CHIMNEY STYLE VENT HOOD
RANGE/OVEN	30" RANGE & OVEN COMBO
REFRIGERATOR	36" REFRIGERATOR/FREEZER COMBO

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TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

SCHEDULES

A0.05

DOOR GENERAL NOTES

- ALL INTERIOR DOOR FRAMES TO BE PAINTED '1X' WOOD
- ALL INTERIOR DOORS TO BE SOLID CORE WOOD
- ALL EXTERIOR DOORS TO BE ANDERSON 'E' SERIES (OR SIMILAR), ALUMINUM CLAD WOOD FRAMES

DOOR AND FRAME SCHEDULE

Element ID	QTY	DOOR			DETAILS			FIRE RATING	HWR	REMARKS
		W	HT	TYPE	HEAD	JAMB	SILL			
A	133	2'-10"	8'-0"	SWING	##/A###	##/A###	##/A###	-	-	
B	81	2'-8"	8'-0"	SWING	##/A###	##/A###	##/A###	-	-	
C	25	6'-0"	8'-0"	SLIDING	##/A###	##/A###	##/A###	-	-	
D	15	5'-0"	8'-0"	SLIDING	##/A###	##/A###	##/A###	-	-	
E	80	2'-8"	8'-0"	POCKET	##/A###	##/A###	##/A###	-	-	
F	22	5'-0"	8'-0"	DBL SWING	##/A###	##/A###	##/A###	-	-	
G	34	3'-0"	8'-0"	SWING	##/A###	##/A###	##/A###	-	-	
H	1	6'-0"	8'-0"	DBL SWING	##/A###	##/A###	##/A###	-	-	
I	2	6'-0"	7'-0"	SLIDING	##/A###	##/A###	##/A###	-	-	
I	6	6'-0"	8'-0"	SLIDING	##/A###	##/A###	##/A###	-	-	
J	1	6'-0"	8'-0"	SLIDING	##/A###	##/A###	##/A###	-	-	
K	16	16'-0"	8'-0"	GARAGE	##/A###	##/A###	##/A###	-	-	RE: MANUFACTURE FOR DETAILS
L	8	9'-0"	8'-0"	GARAGE	##/A###	##/A###	##/A###	-	-	RE: MANUFACTURE FOR DETAILS
M	23	3'-0"	8'-0"	SWING	##/A###	##/A###	##/A###	-	-	W/ TRANSOM TO MATCH ADJ WDW HEADER HEIGHT
	447									

DOOR DETAILS
TBD

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TRAIL STREET TOWNHOMES

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PROJECT NUMBER: 2019-004

ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

DOORS SCHEDULE & DETAILS

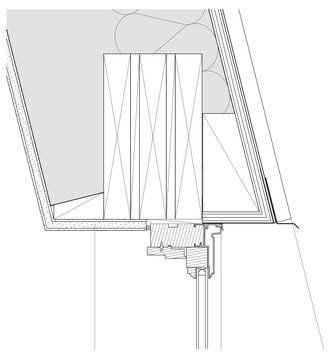
A0.06

WINDOW GENERAL NOTES

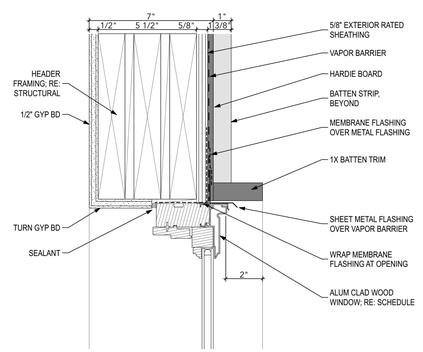
_ALL WINDOWS TO BE ALUMINUM CLAD WOOD WINDOWS; BLACK FINISH
_WINDOWS LOCATED WITHIN 24" FROM A DOOR, IN A SHOWER OR AT A STAIR LANDING, TO HAVE TEMPERED GLASS
_ALL WINDOW HEADERS @ 1ST & 2ND LEVEL TO BE 8' AFF, U.N.O.
_ALL WINDOW HEADERS @ 3RD LEVEL TO BE 9' AFF, U.N.O.
_INCLUDE ONE VELUX FIXED CURB MOUNTED SKYLIGHT, FCM1446 SIZE 17 1/2" X 49 1/2", TO SIT ON MECHANICAL PLATFORM IN EACH UNITS (24 TOTAL)

WINDOW SCHEDULE

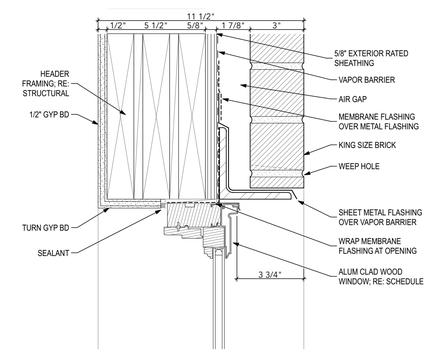
Element ID	QTY	TYPE	SIZE		FRAME		GLASS					REMARKS
			W	HT	MATL	FINISH	PANES	COATING	TMP	LAM	OBS	
01	34	FIXED	2'-0"	2'-0"	WD	PAINTED	DOUBLE	LOW-E	☐	☐	☐	
02	106	DBL-HUNG	3'-0"	6'-0"	WD	PAINTED	DOUBLE	LOW-E	☐	☐	☐	
03	113	DBL-HUNG	2'-0"	6'-0"	WD	PAINTED	DOUBLE	LOW-E	☐	☐	☐	
04	21	DBL-HUNG	8'-0"	6'-0"	WD	PAINTED	DOUBLE	LOW-E	☐	☐	☐	
05	61	DBL-HUNG	3'-0"	5'-0"	WD	PAINTED	DOUBLE	LOW-E	☐	☐	☐	
06	12	DBL-HUNG	4'-0"	5'-0"	WD	PAINTED	DOUBLE	LOW-E	☐	☐	☐	
07	6	DBL-HUNG	3'-0"	5'-0"	WD	PAINTED	DOUBLE	LOW-E	☐	☐	☐	
08	8	DBL-HUNG	6'-0"	5'-0"	WD	PAINTED	DOUBLE	LOW-E	☐	☐	☐	
	361											



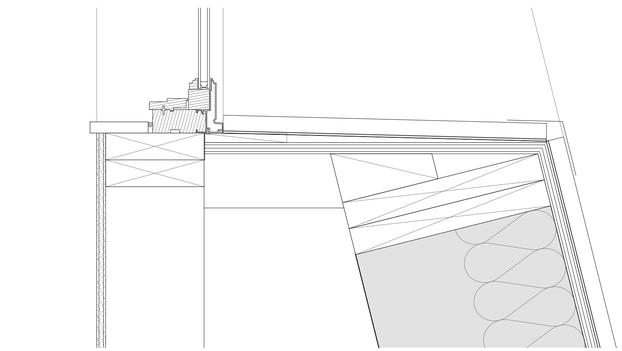
WINDOW HEADER @ STANDING SEAM C3
SCALE: 3" = 1'-0"



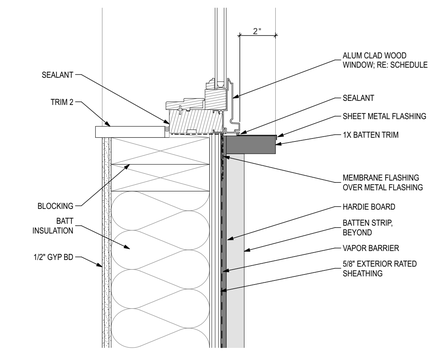
WINDOW HEADER @ HARDIE C2
SCALE: 3" = 1'-0"



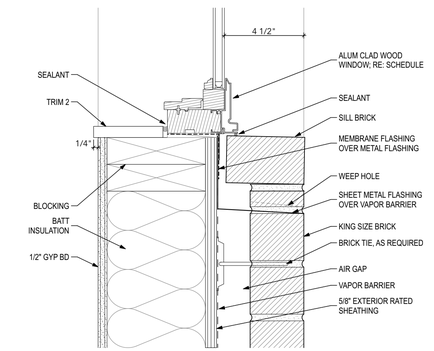
WINDOW HEADER @ BRICK C1
SCALE: 3" = 1'-0"



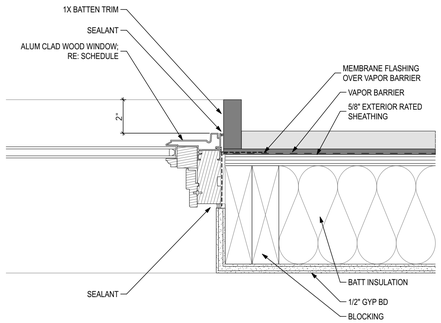
WINDOW SILL @ STANDING SEAM A3
SCALE: 3" = 1'-0"



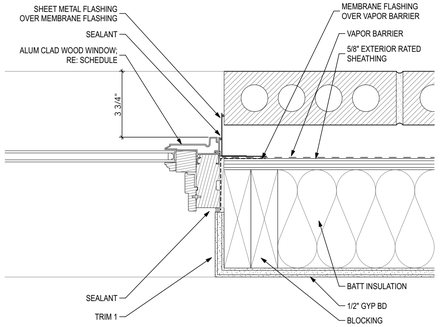
WINDOW SILL @ HARDIE A2
SCALE: 3" = 1'-0"



WINDOW SILL @ BRICK A1
SCALE: 3" = 1'-0"



WINDOW JAMB @ STANDING SEAM B3
SCALE: 3" = 1'-0"



WINDOW JAMB @ HARDIE B2
SCALE: 3" = 1'-0"

WINDOW JAMB @ BRICK B1
SCALE: 3" = 1'-0"

m(ødm)

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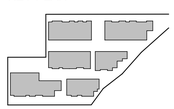
TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

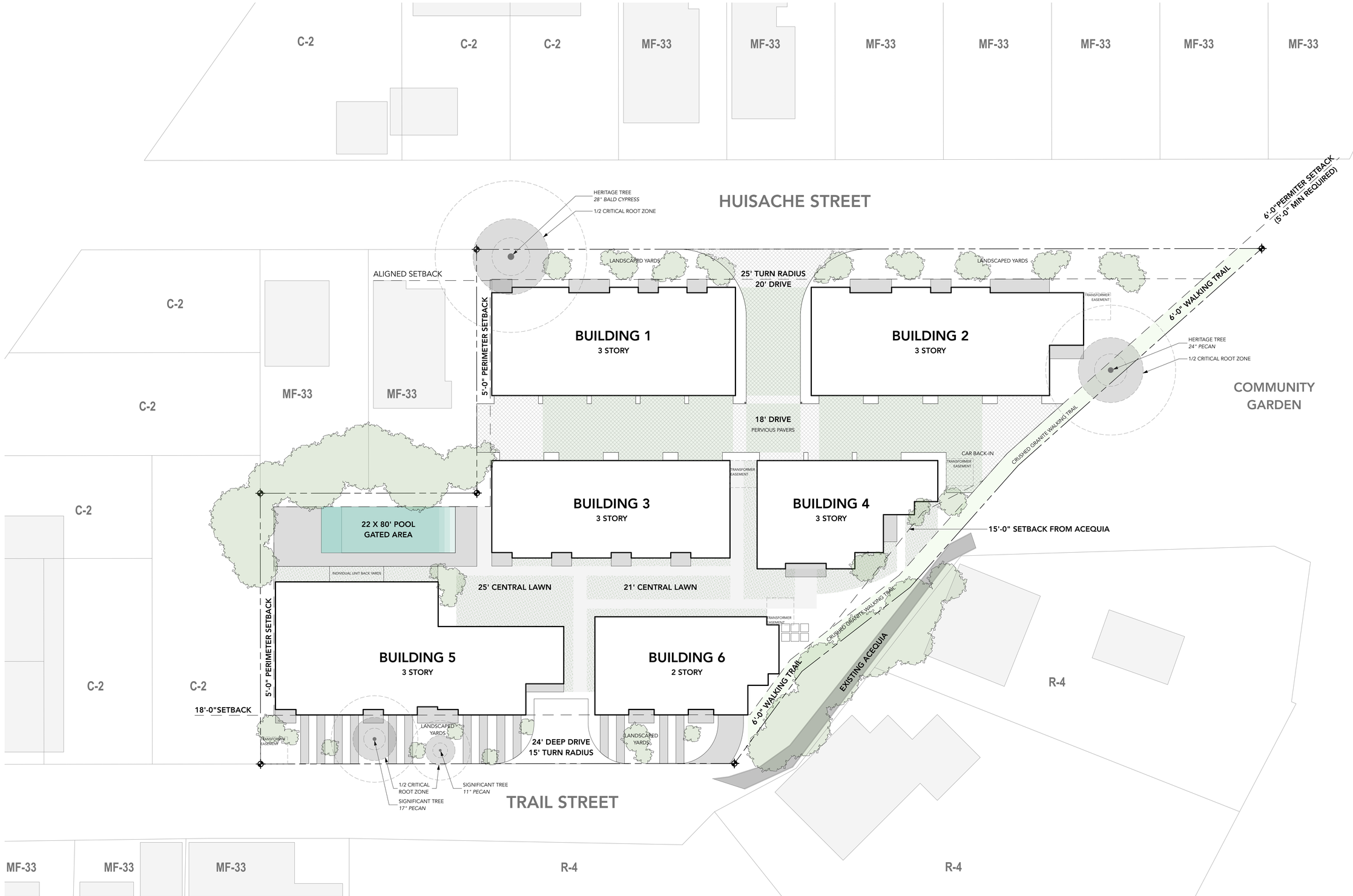
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN



WINDOW SCHEDULE & DETAILS

A0.07



SITE PLAN
SCALE: 1/16" = 1'-0"

m(ødm)

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TRAIL STREET TOWNHOMES

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PROJECT NUMBER:	2019-004
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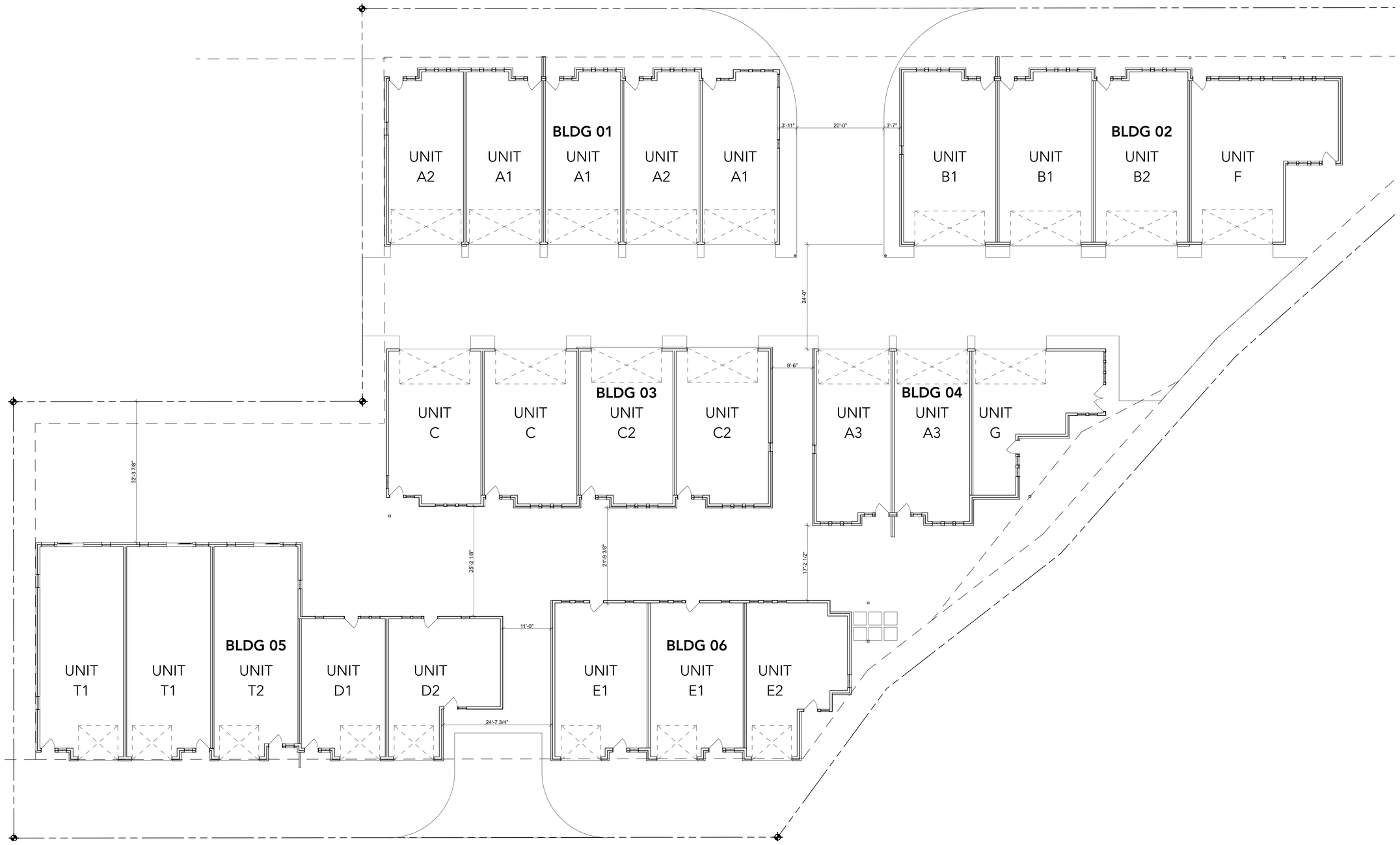
80% CD SET	08/02/19

KEY PLAN

ARCHITECTURAL SITE

A1.01



OVERALL BUILDING PLAN LEVEL 1 A1

SCALE: 3/32" = 1'-0"

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TRAIL STREET TOWNHOMES

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80% CD SET	08/02/19

KEY PLAN

OVERALL BUILDING PLAN - 1ST LEVEL

A1.02

OVERALL BUILDING PLAN LEVEL 2 A1
SCALE: 3/32" = 1'-0"

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ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

OVERALL BUILDING PLAN - 2ND LEVEL

A1.03

OVERALL BUILDING PLAN LEVEL 3 A1

SCALE: 3/32" = 1'-0"

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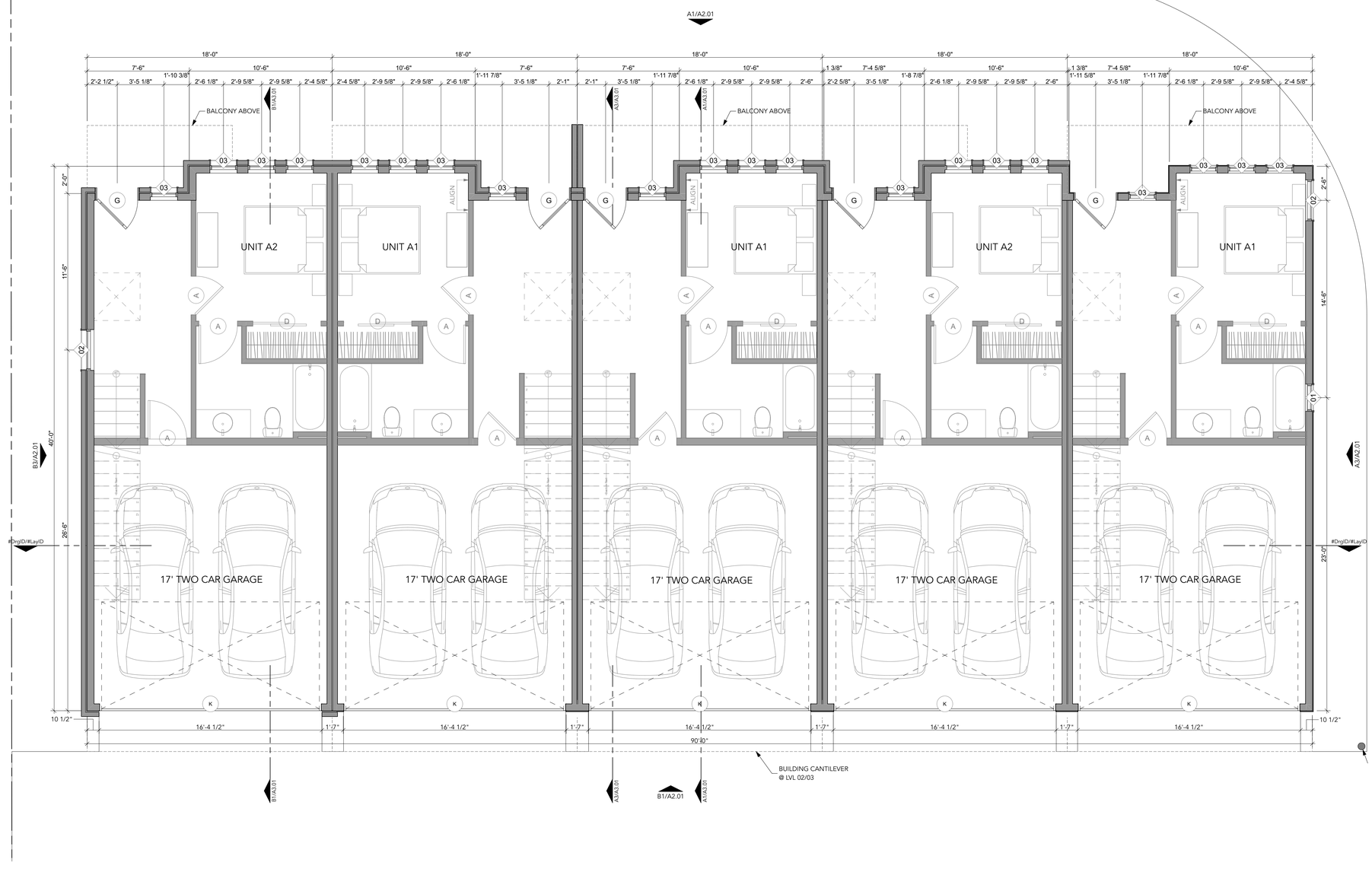
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

OVERALL BUILDING PLAN - 3RD LEVEL

A1.04

GENERAL PLAN NOTES
_ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
_ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
_ALL DEMISING WALLS TO BE WK4, U.N.O.
_ALL INTERIOR WALLS TO BE WE4, U.N.O.
_ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
_WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL



FLOOR PLAN_1ST FLOOR - BLDG 1 A1

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

m(ødm)

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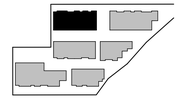
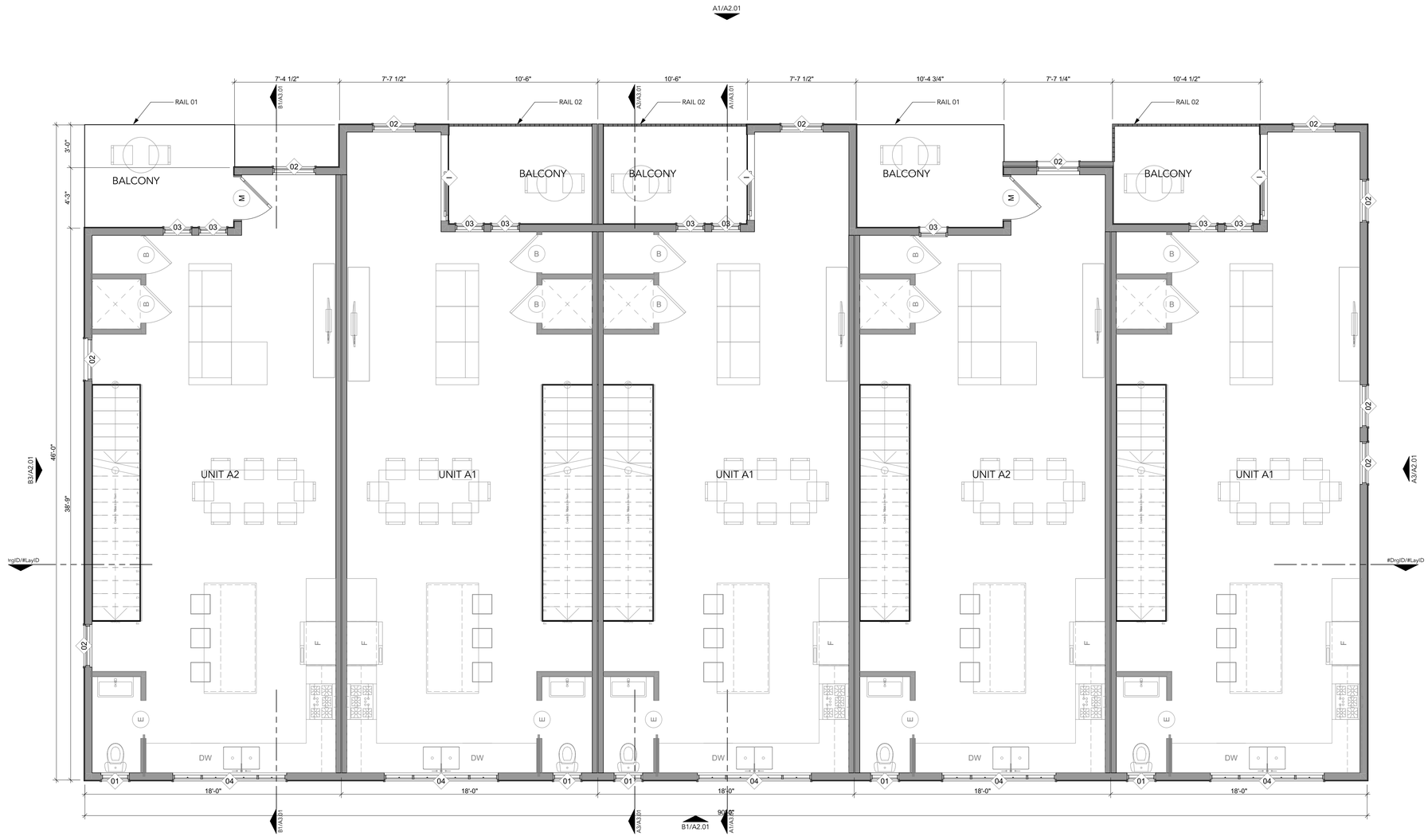
KEY PLAN



BLDG 1 - 1ST FLOOR PLAN

A1.05

GENERAL PLAN NOTES
.ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
.ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
.ALL DEMISING WALLS TO BE WK4, U.N.O.
.ALL INTERIOR WALLS TO BE WE4, U.N.O.
.ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
.WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL



FLOOR PLAN_2ND FLOOR_BLDG 1 A1

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

m(ødm)

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ISSUED SETS	DATE
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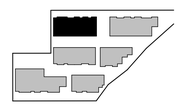
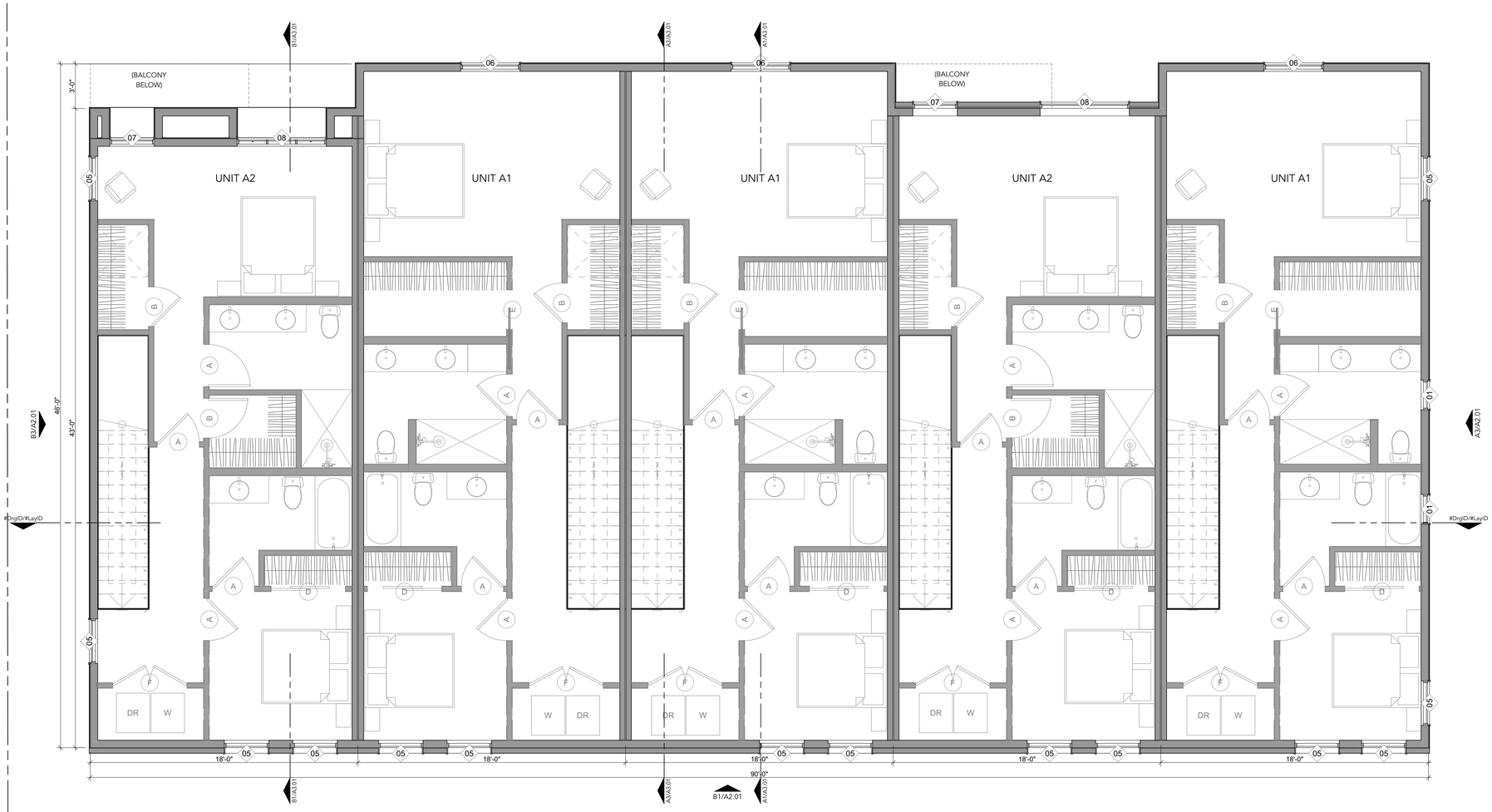
KEY PLAN



BLDG 1 - 2ND FLOOR PLAN

A1.06

GENERAL PLAN NOTES
ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
ALL DEMISING WALLS TO BE WK4, U.N.O.
ALL INTERIOR WALLS TO BE WE4, U.N.O.
ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL



FLOOR PLAN_3RD FLOOR_BLDG 1 A1

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

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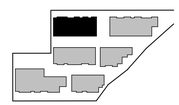
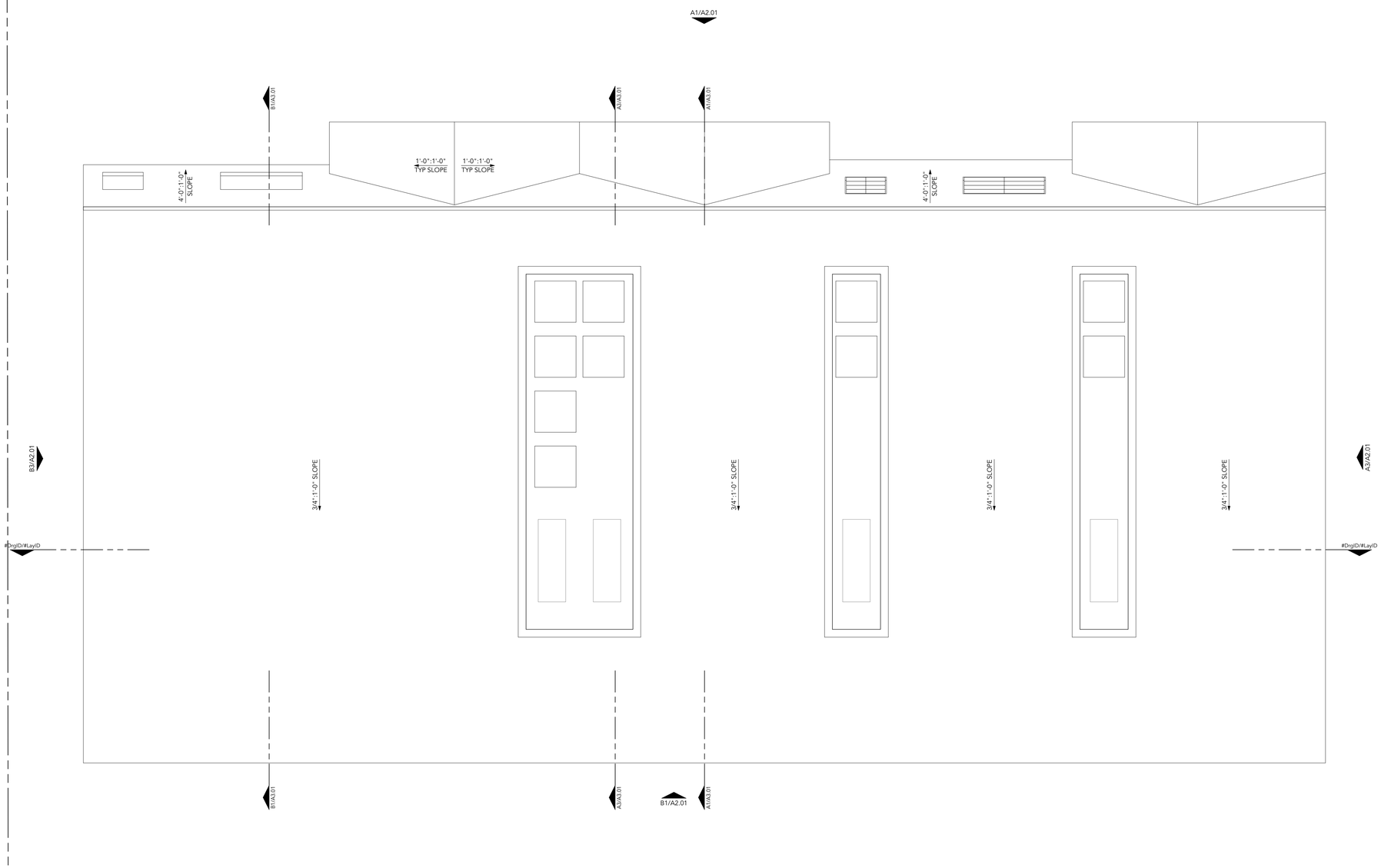
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN



BLDG 1 - 3RD FLOOR PLAN

A1.07



ROOF PLAN_BLDG 1 A1

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

m(ødm)

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TRAIL STREET TOWNHOMES

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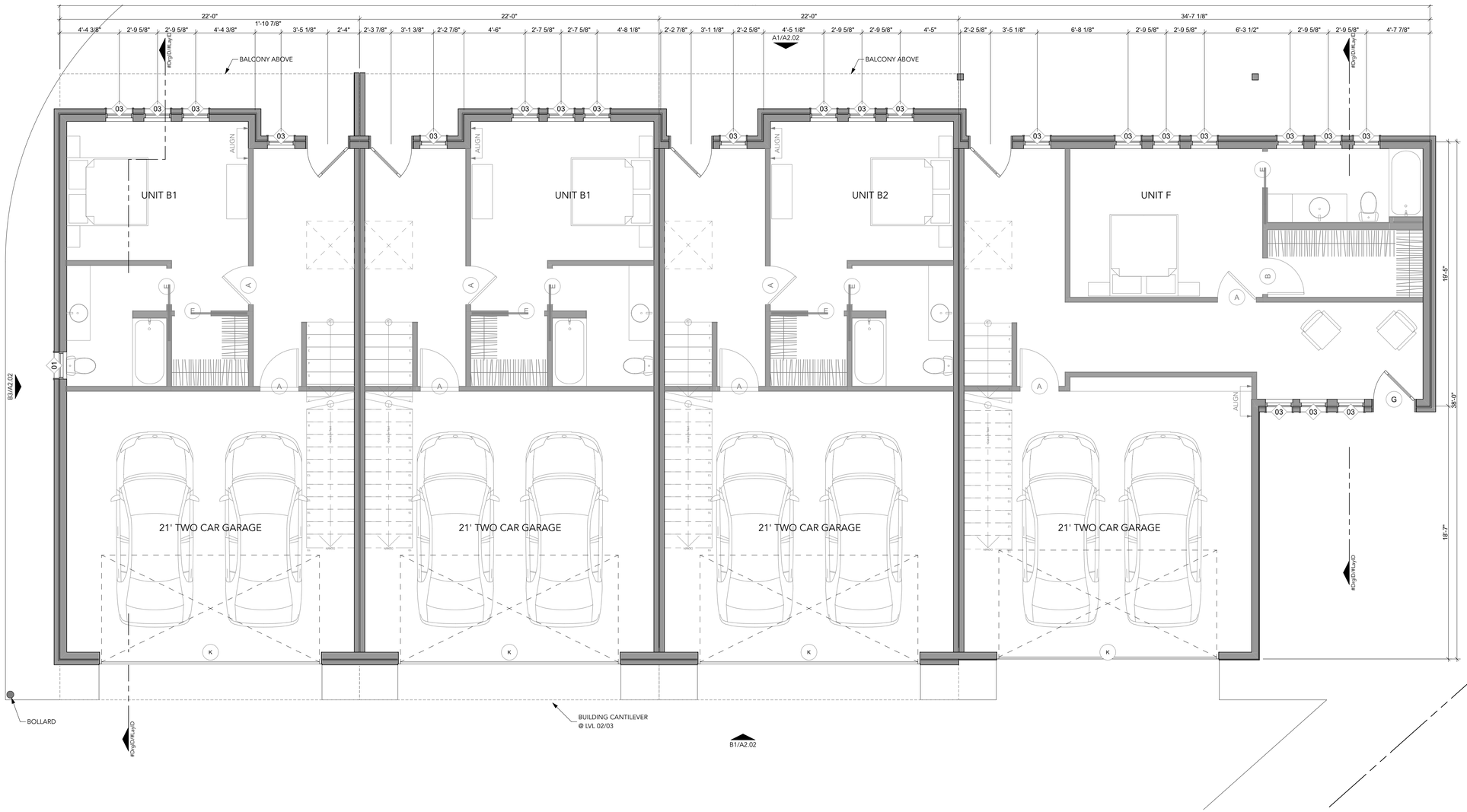
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

BLDG 1 - ROOF PLAN

A1.08

GENERAL PLAN NOTES
_ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
_ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
_ALL DEMISING WALLS TO BE WK4, U.N.O.
_ALL INTERIOR WALLS TO BE WE4, U.N.O.
_ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
_WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL



FLOOR PLAN_1ST FLOOR - BLDG 2

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

A1

BLDG 2 - 1ST FLOOR PLAN

m(ødm)

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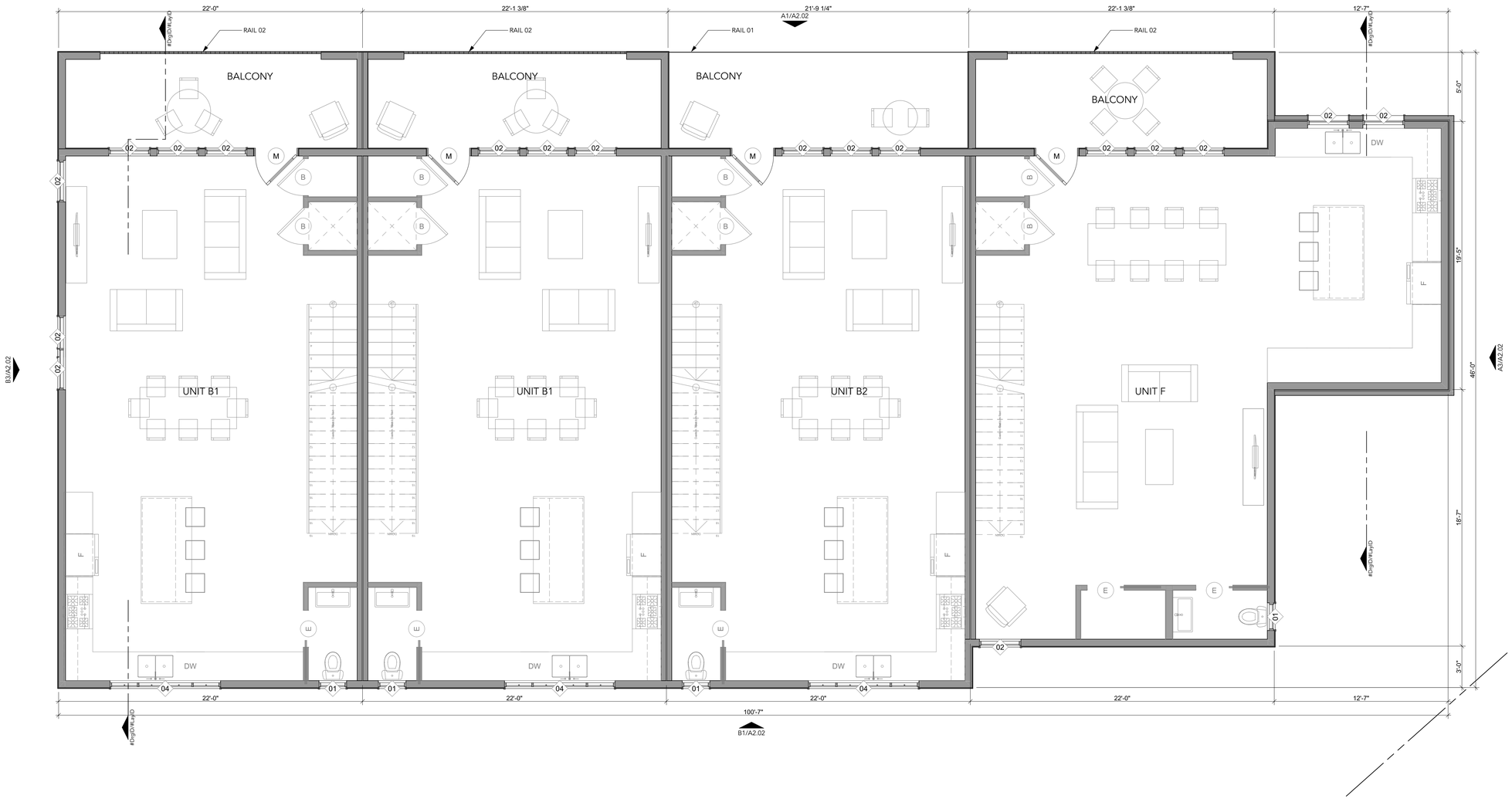
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

A1.09

GENERAL PLAN NOTES
ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
ALL DEMISING WALLS TO BE WK4, U.N.O.
ALL INTERIOR WALLS TO BE WE4, U.N.O.
ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL



FLOOR PLAN_2ND FLOOR - BLDG 2 A1

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

m(ødm)

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PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

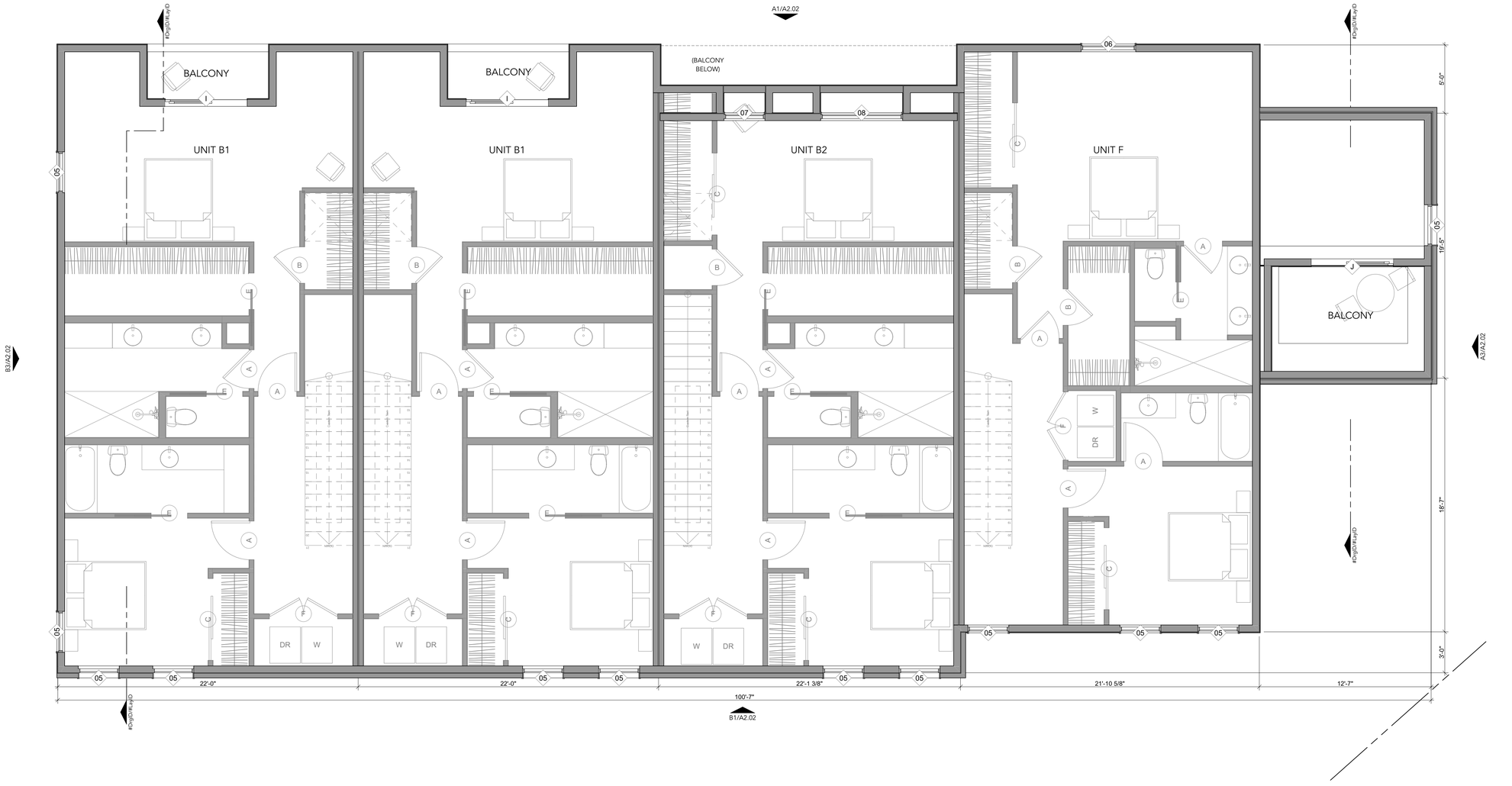
BLDG 2 - 2ND FLOOR PLAN

A1.10

BIM Server: bimserver.local - BIM Server 21/TRL/TRL | Ver. 21.1710 | Friday, August 2, 2019 | 4:00 PM

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL



FLOOR PLAN_3RD FLOOR - BLDG 2 A1

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

m(ødm)

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TRAIL STREET TOWNHOMES

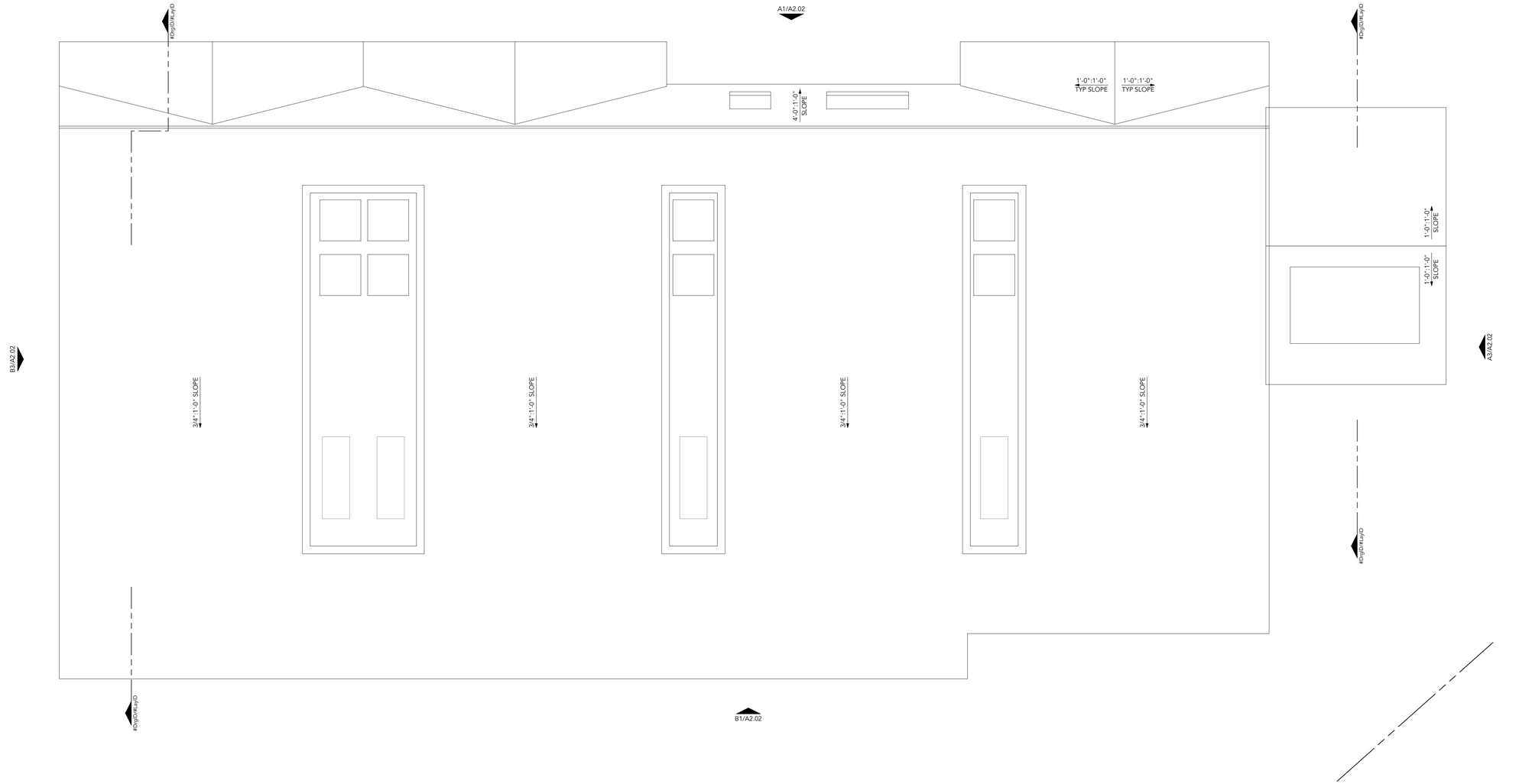
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

BLDG 2 - 3RD FLOOR PLAN

A1.11



ROOF PLAN_BLDG 2 A1

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

m(ødm)

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ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

BLDG 2 - ROOF PLAN

A1.12

BIM Server: bimserver.local - BIM Server 21/TRL/TRL | Ver. 21.1710 | Friday, August 2, 2019 | 4:00 PM

GENERAL PLAN NOTES
ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
ALL DEMISING WALLS TO BE WK4, U.N.O.
ALL INTERIOR WALLS TO BE WE4, U.N.O.
ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

FLOOR PLAN_1ST FLOOR - BLDG 3 A1

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

m(ødm)

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TRAIL STREET TOWNHOMES

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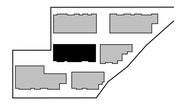
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN



BLDG 3 - 1ST FLOOR PLAN

A1.13

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

FLOOR PLAN_2ND FLOOR - BLDG 3

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

A1

m(ødm)

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TRAIL STREET TOWNHOMES

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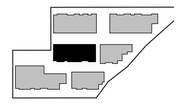
KEY PLAN



BLDG 3 - 2ND FLOOR PLAN

A1.14

GENERAL PLAN NOTES
_ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
_ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
_ALL DEMISING WALLS TO BE WK4, U.N.O.
_ALL INTERIOR WALLS TO BE WE4, U.N.O.
_ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
_WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

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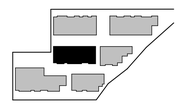
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN



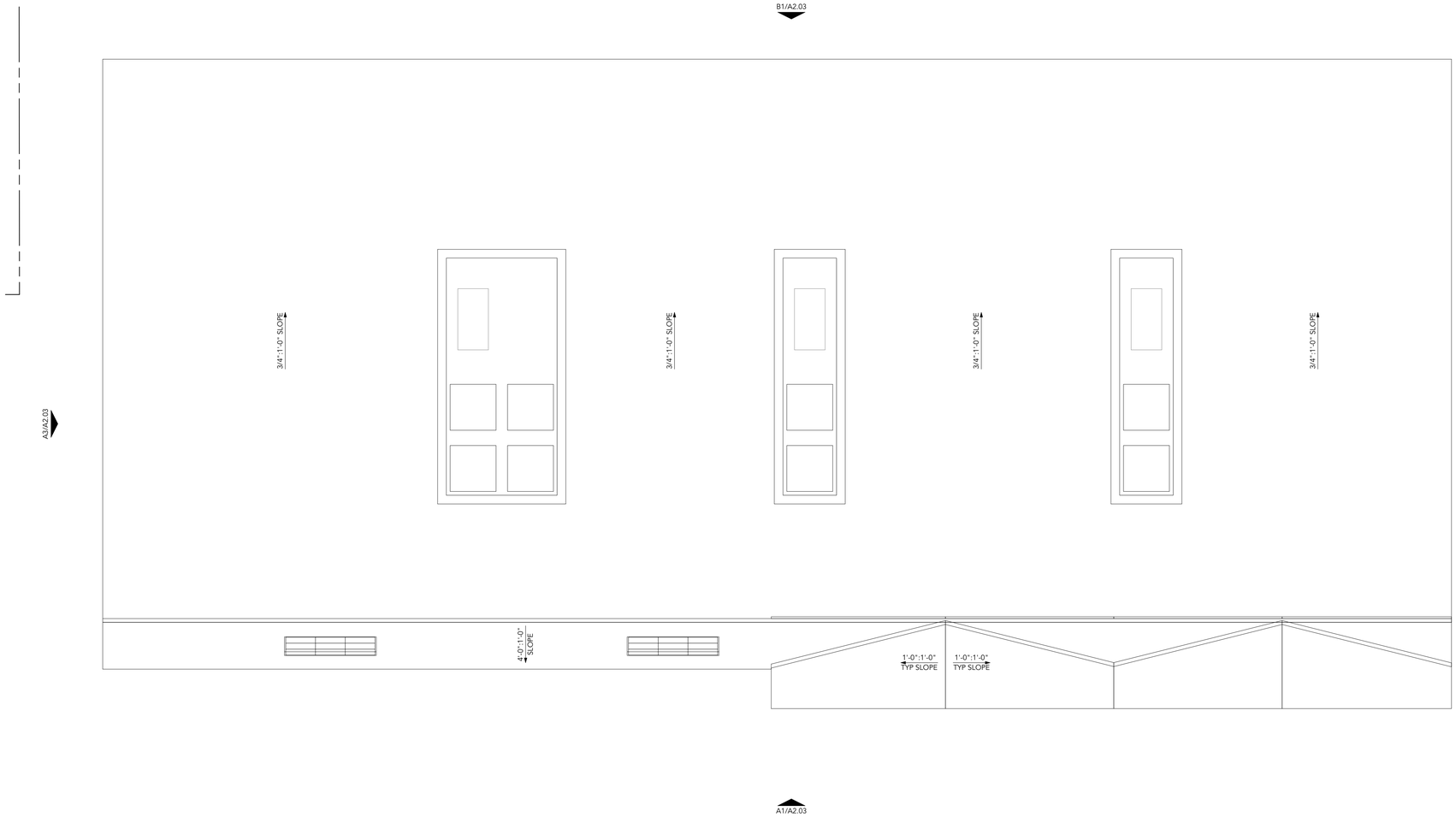
FLOOR PLAN_3RD FLOOR - BLDG 3

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

A1

BLDG 3 - 3RD FLOOR PLAN

A1.15



ROOF PLAN_BLDG 3 A1

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

m(ødm)

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80% CD SET	08/02/19

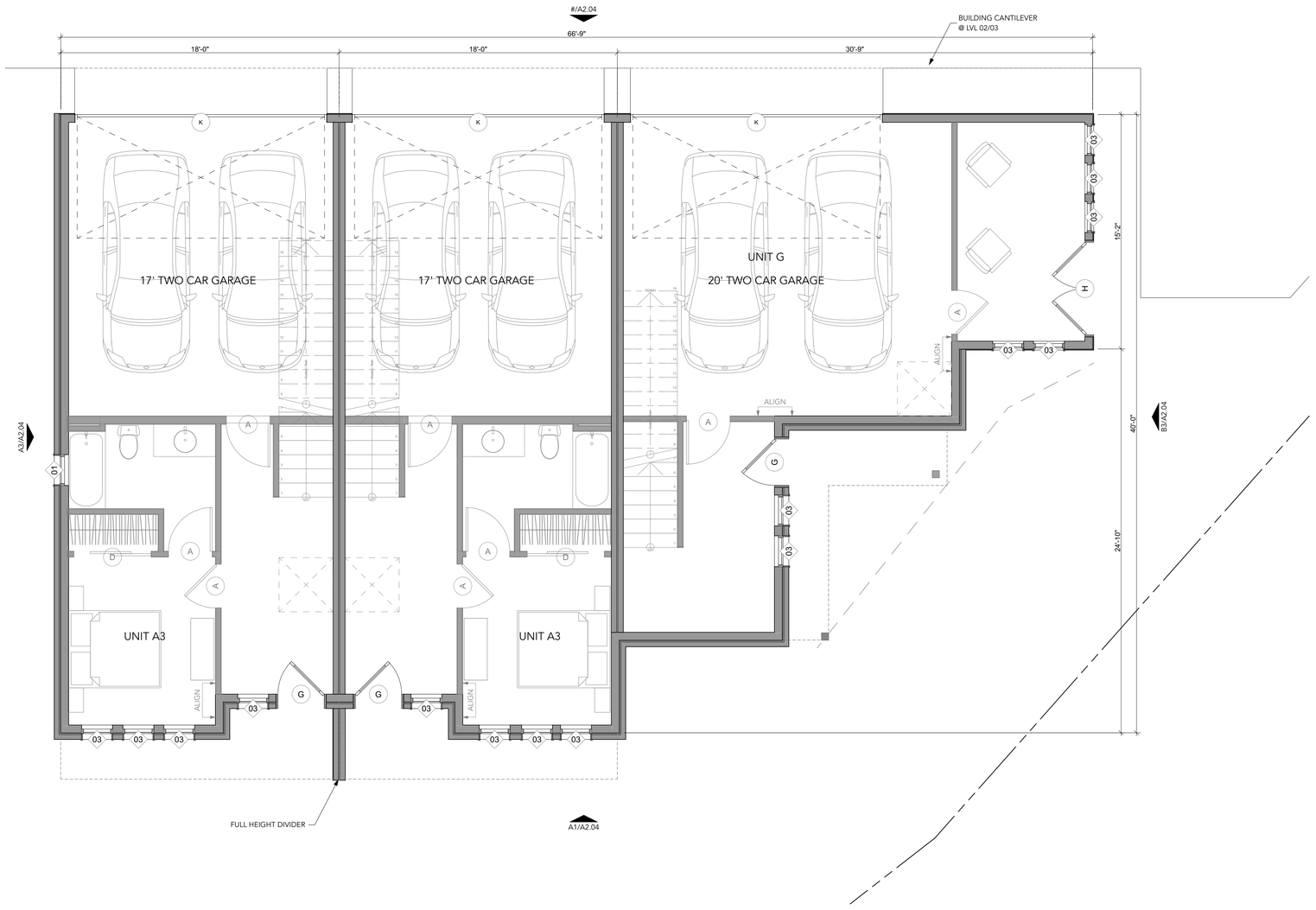
KEY PLAN

BLDG 3 - ROOF PLAN

A1.16

BIM Server: bimserver.local - BIM Server 21/TRL/TRL | Ver. 21.1710 | Friday, August 2, 2019 | 4:00 PM

GENERAL PLAN NOTES
ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
ALL DEMISING WALLS TO BE WK4, U.N.O.
ALL INTERIOR WALLS TO BE WE4, U.N.O.
ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL



FLOOR PLAN_1ST FLOOR - BLDG 4 A1

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

m(ødm)

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ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

BLDG 4 - 1ST FLOOR PLAN

A1.17

GENERAL PLAN NOTES
.ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
.ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
.ALL DEMISING WALLS TO BE WK4, U.N.O.
.ALL INTERIOR WALLS TO BE WE4, U.N.O.
.ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
.WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

FLOOR PLAN_2ND FLOOR - BLDG 4 A1

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

m(ødm)

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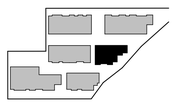
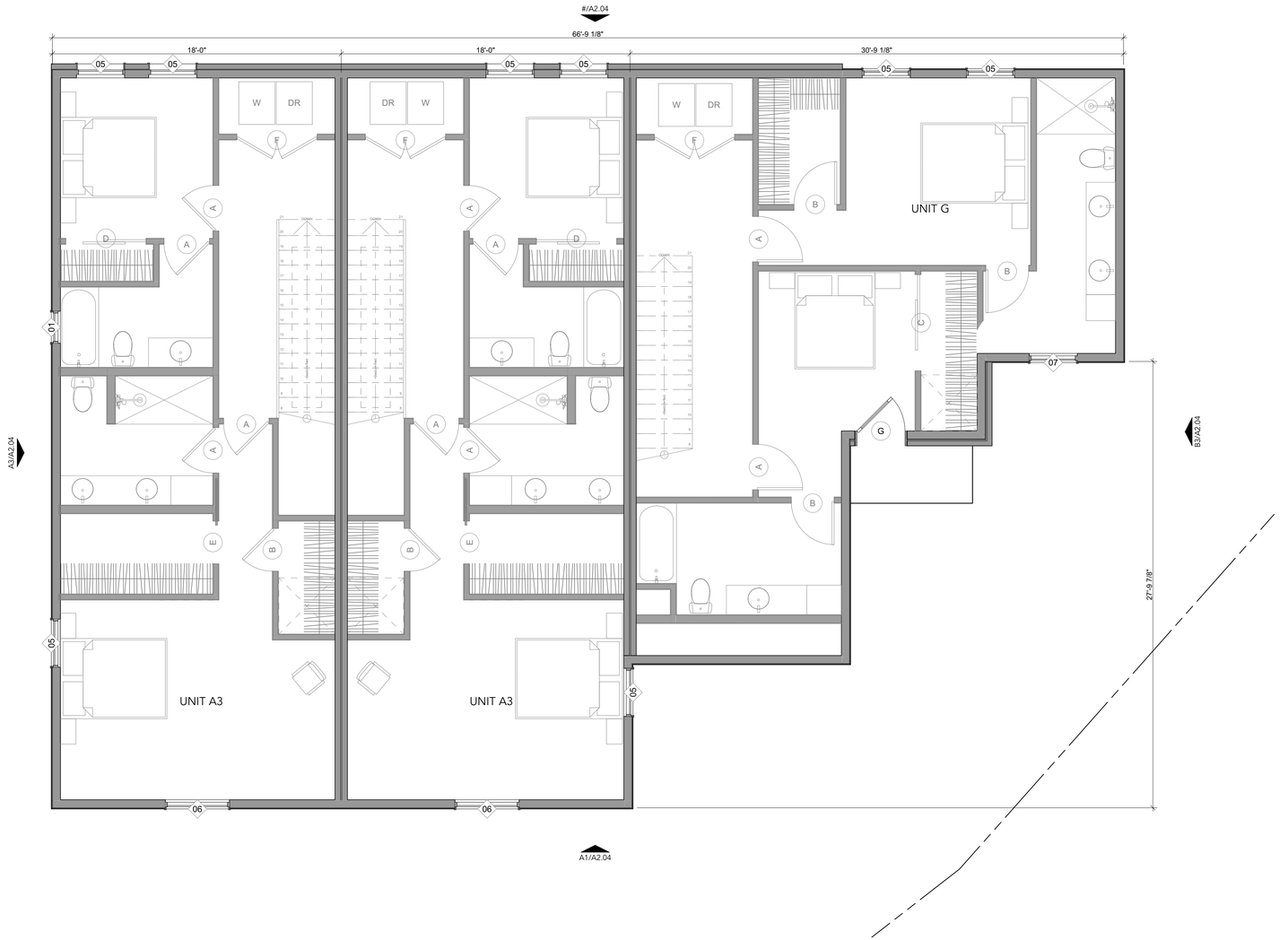
KEY PLAN



BLDG 4 - 2ND FLOOR PLAN

A1.18

GENERAL PLAN NOTES
_ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
_ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
_ALL DEMISING WALLS TO BE WK4, U.N.O.
_ALL INTERIOR WALLS TO BE WE4, U.N.O.
_ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
_WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL



FLOOR PLAN_3RD FLOOR - BLDG 4 A1

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

m(ødm)

Austin [tx] 469.5950
1009 West 6th Street #50 78703

San Antonio [tx] 469.5950
201 Groveton Street 78210

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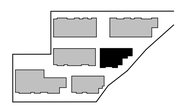
DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

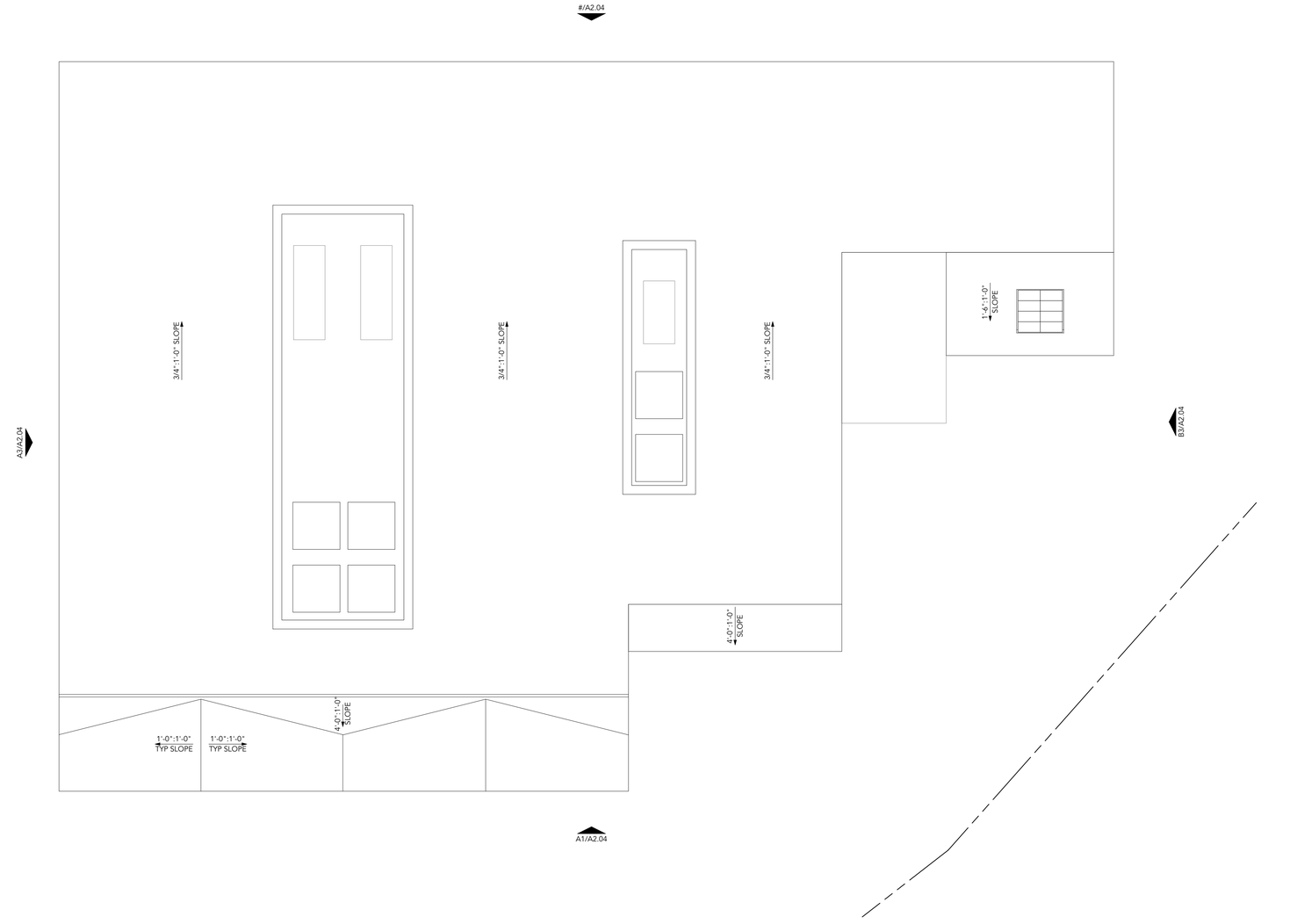
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN



BLDG 4 - 3RD FLOOR PLAN

A1.19



ROOF PLAN_BLDG 4 A1

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

m(ødm)

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TRAIL STREET TOWNHOMES

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PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

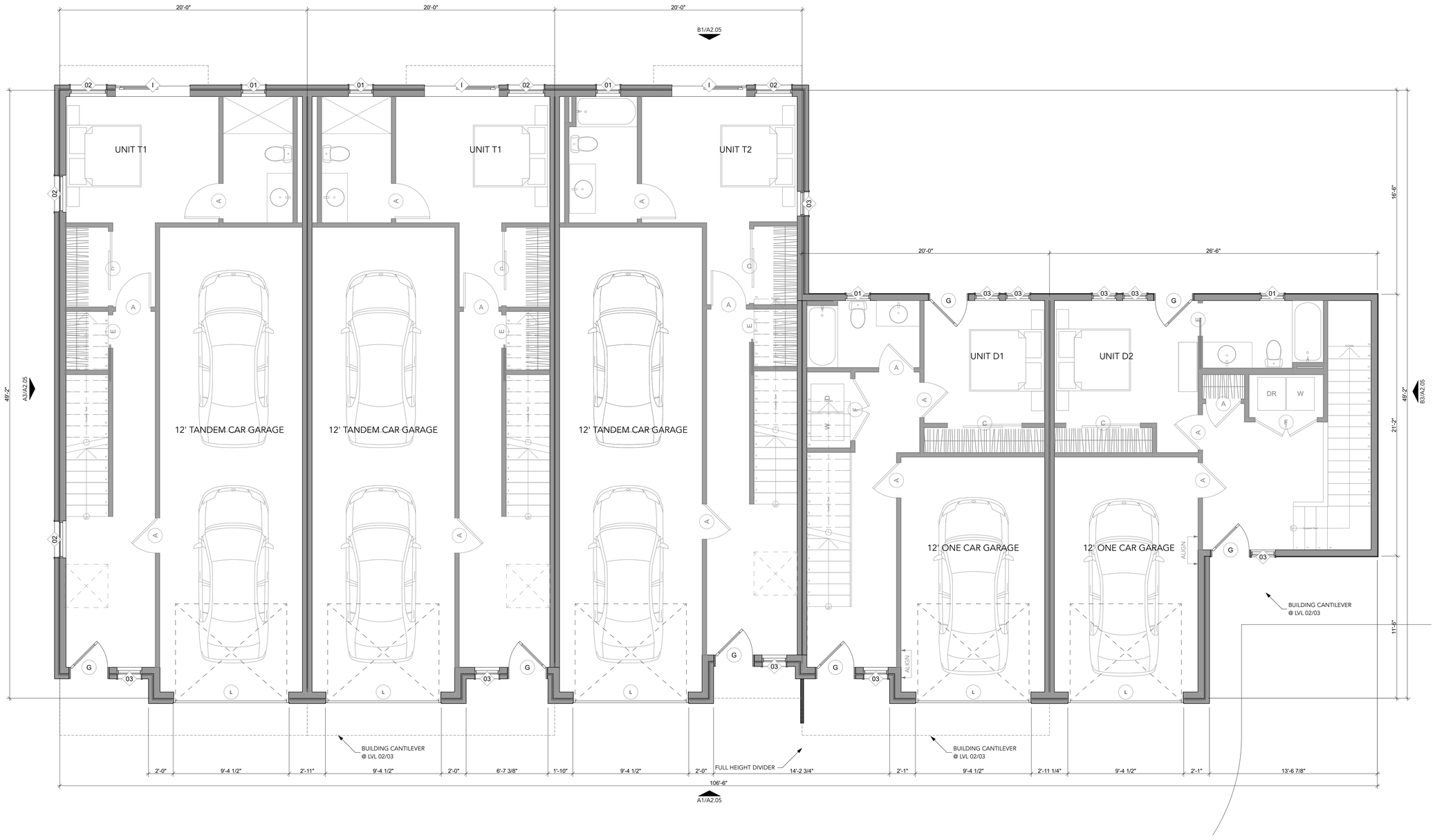
KEY PLAN

BLDG 4 - ROOF PLAN

A1.20

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL



FLOOR PLAN_1ST FLOOR - BLDG 5 A1

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

m(ødm)

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TRAIL STREET TOWNHOMES

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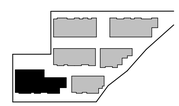
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN



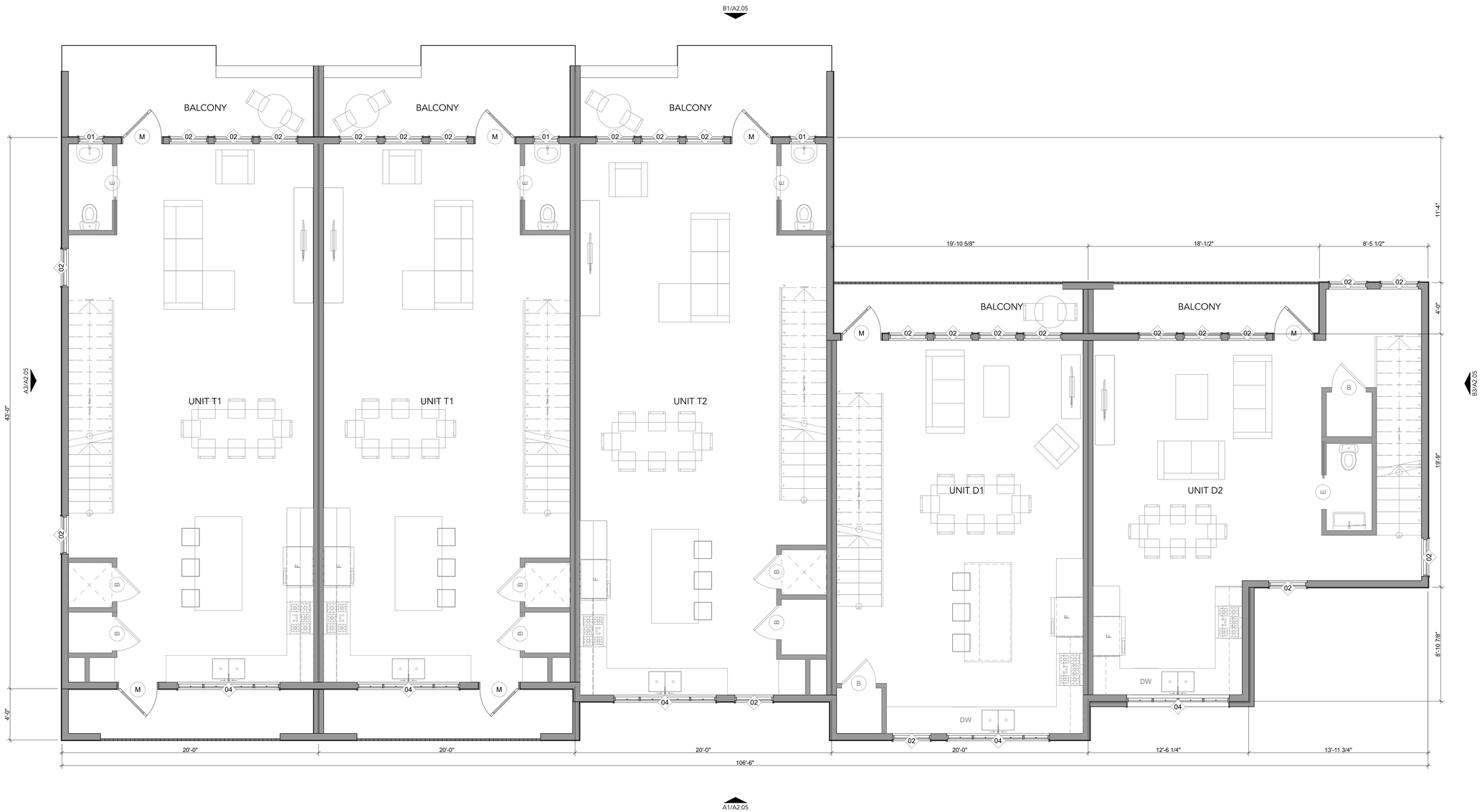
BLDG 5 - 1ST FLOOR PLAN

A1.21

BIM Server: bimserver.local - BIM Server 21/TRL/TRL | Ver. 21.1710 | Friday, August 2, 2019 | 4:01 PM

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL



FLOOR PLAN_2ND FLOOR - BLDG 5 A1

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

m(ødm)

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TRAIL STREET TOWNHOMES

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PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
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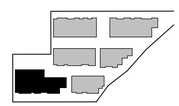
KEY PLAN



BLDG 5 - 2ND FLOOR PLAN

A1.22

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

FLOOR PLAN_3RD FLOOR - BLDG 5 A1

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

m(ødm)

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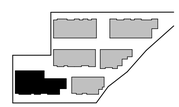
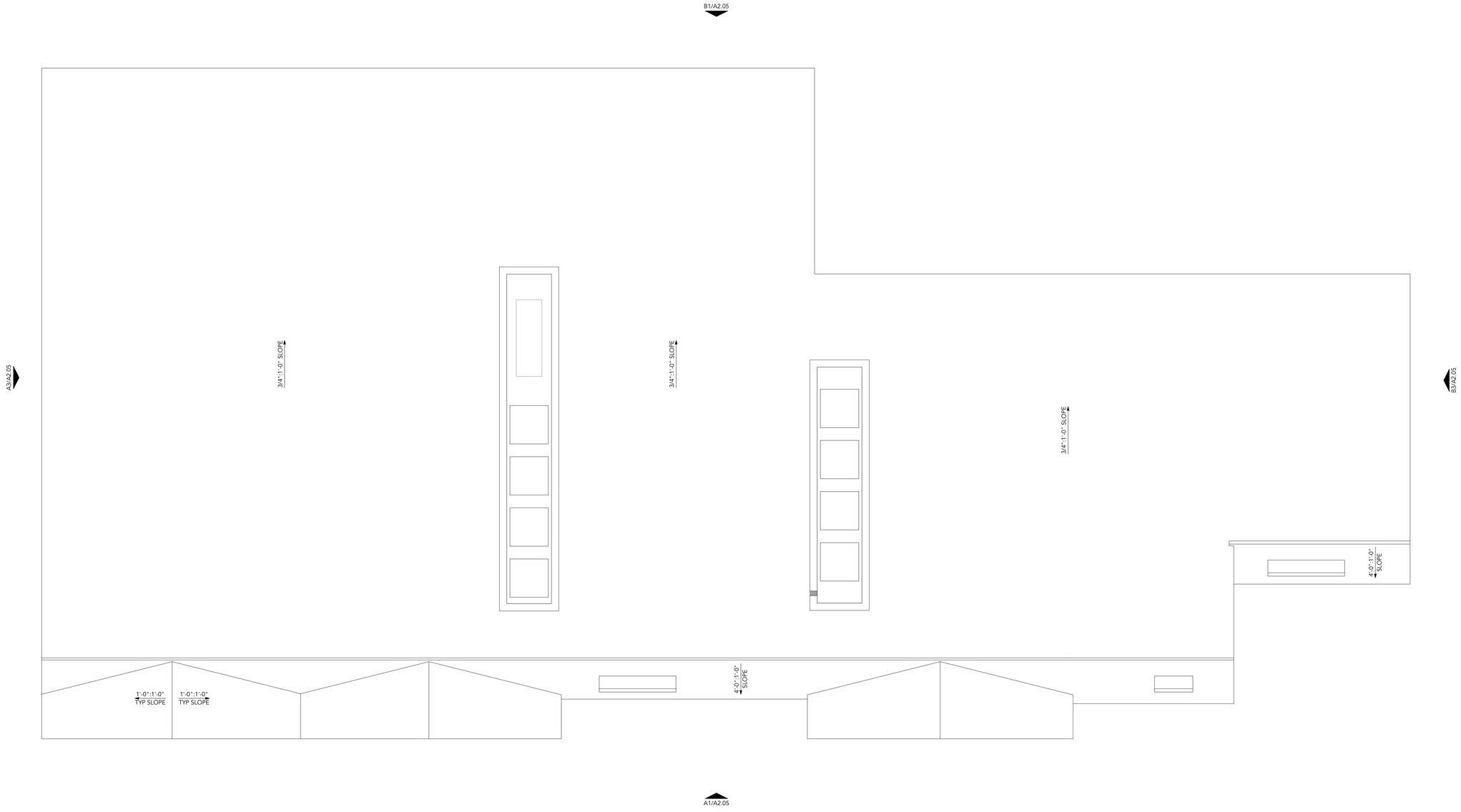
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN



BLDG 5 - 3RD FLOOR PLAN

A1.23



ROOF PLAN_BLDG 5 A1

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

m(ødm)

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TRAIL STREET TOWNHOMES

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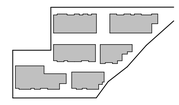
80% CD SET	08/02/19

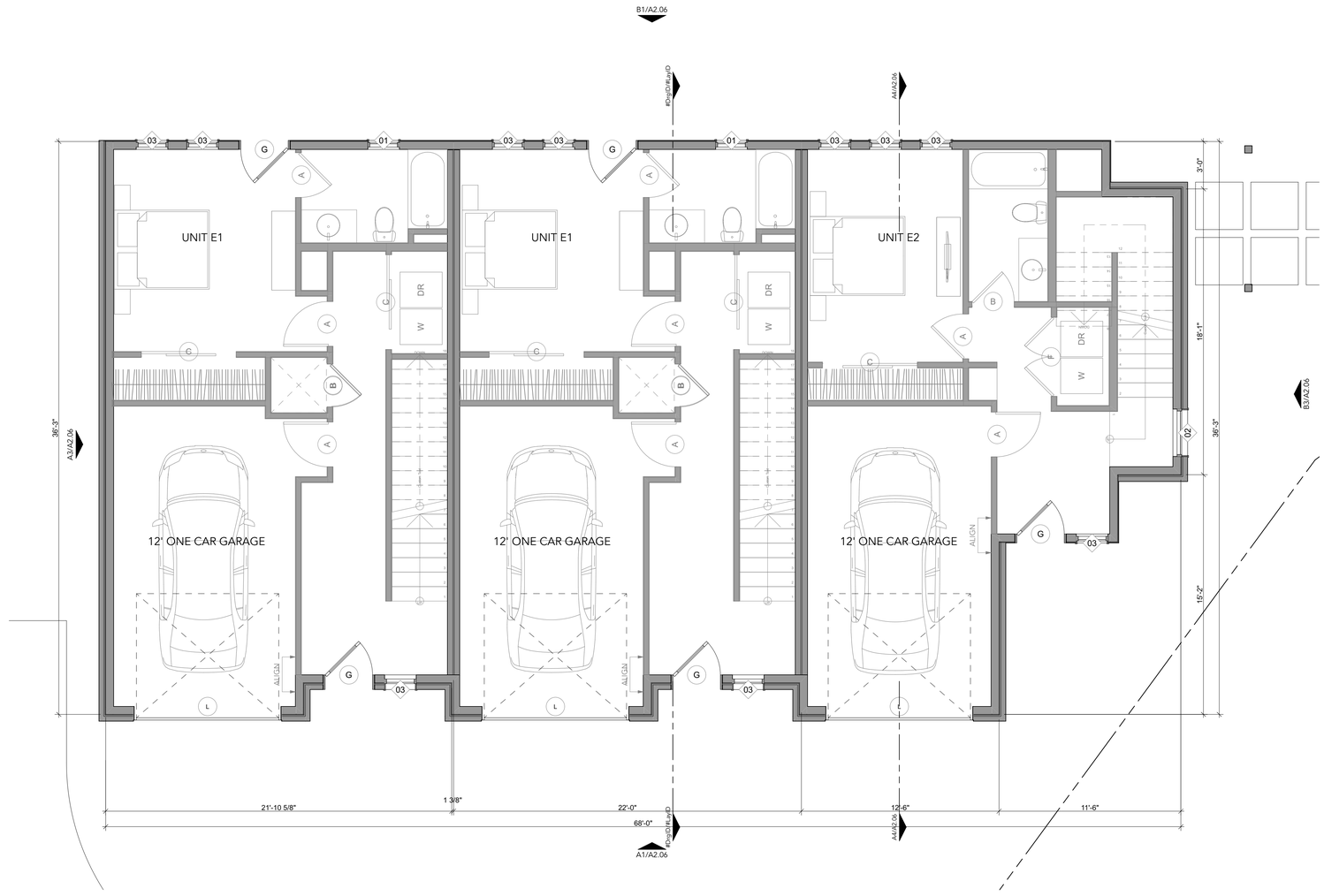
KEY PLAN



BLDG 5 - ROOF PLAN

A1.24

GENERAL PLAN NOTES
_ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
_ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
_ALL DEMISING WALLS TO BE WK4, U.N.O.
_ALL INTERIOR WALLS TO BE WE4, U.N.O.
_ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
_WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL



FLOOR PLAN_1ST FLOOR - BLDG 6 A1

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

m(ødm)

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TRAIL STREET TOWNHOMES

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PROJECT NUMBER:	2019-004
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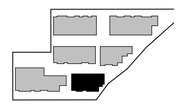
80% CD SET	08/02/19

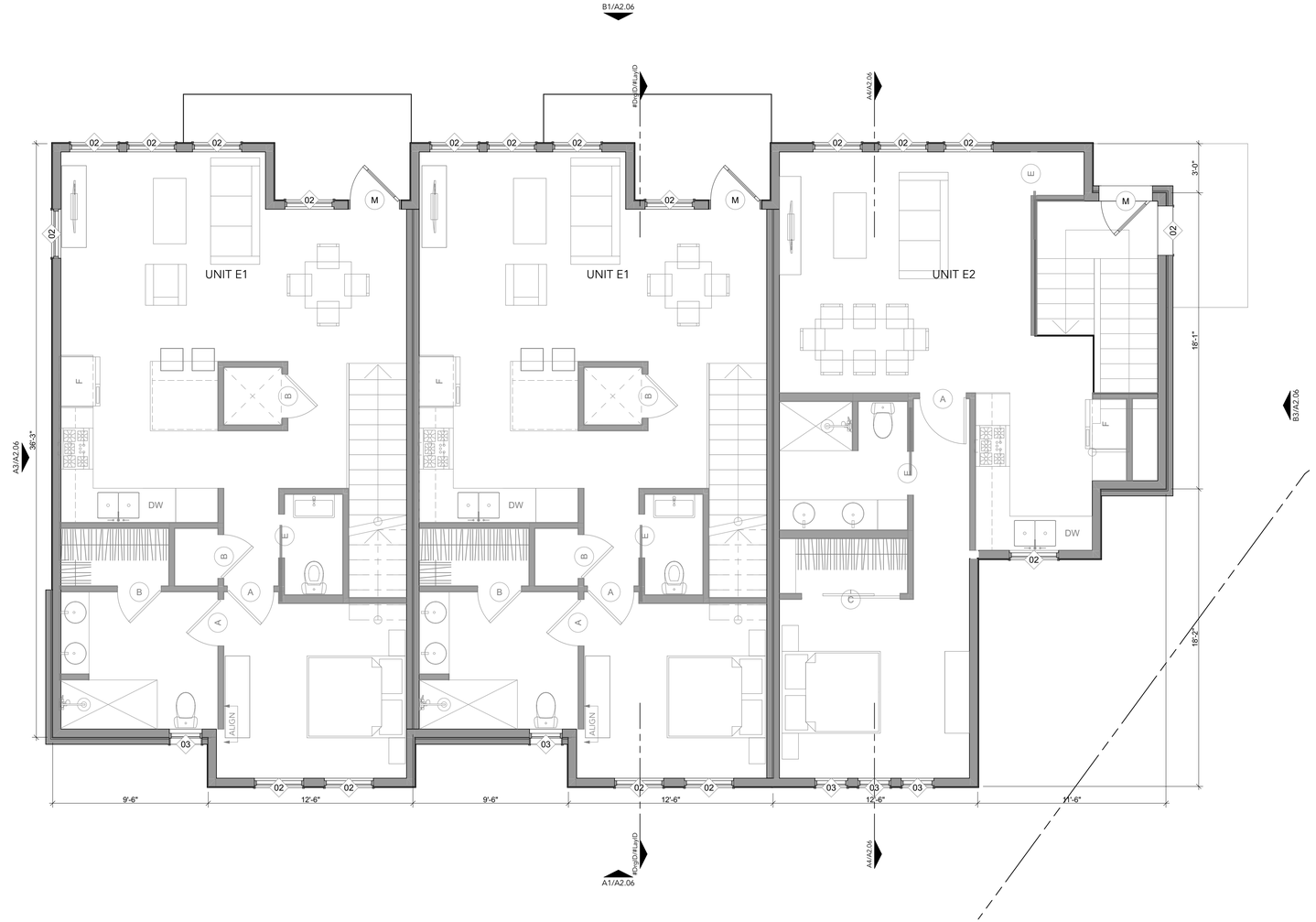
KEY PLAN



BLDG 6 - 1ST FLOOR PLAN

A1.25

GENERAL PLAN NOTES
_ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
_ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
_ALL DEMISING WALLS TO BE WK4, U.N.O.
_ALL INTERIOR WALLS TO BE WE4, U.N.O.
_ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
_WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL



FLOOR PLAN_2ND FLOOR - BLDG 6 — A1

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

m(ødm)

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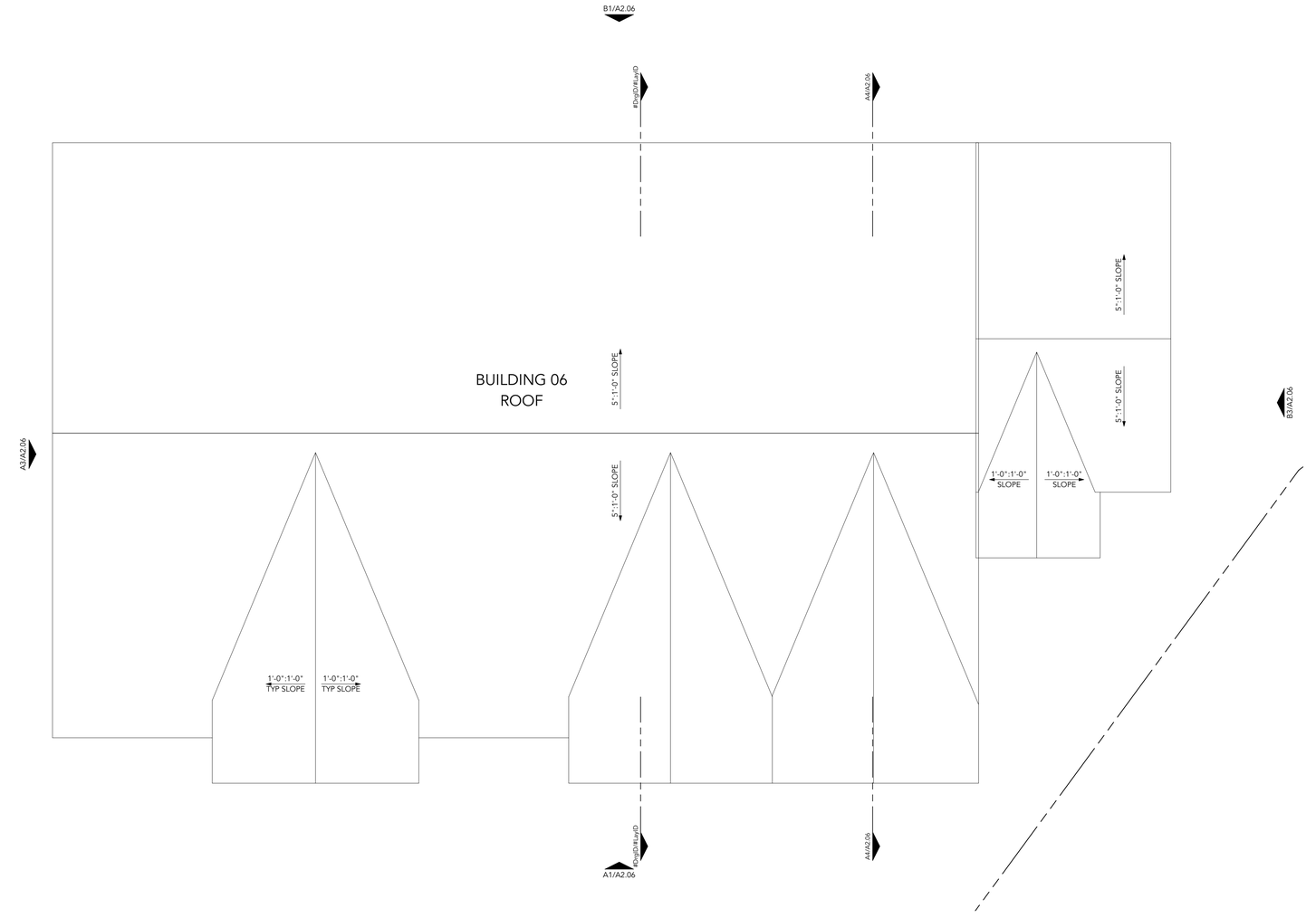
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

BLDG 6 - 2ND FLOOR PLAN

A1.26



ROOF PLAN - BLDG 6 A1

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

m(ødm)

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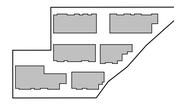
KEY PLAN

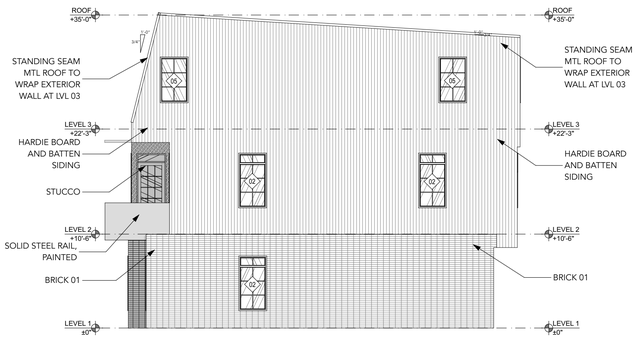


BLDG 6 - ROOF PLAN

A1.27

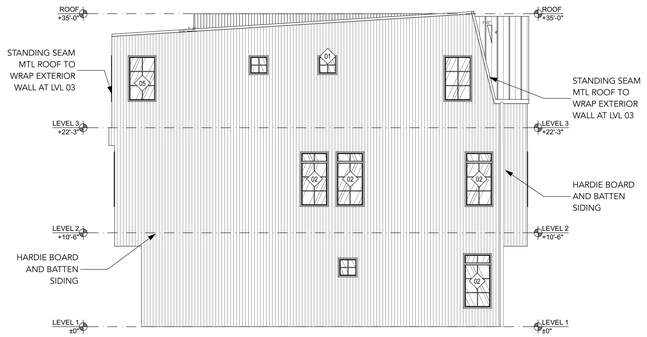
ELEVATION LEGEND	
	HARDIE BOARD AND BATTEN SIDING
	BRICK 01
	STANDING SEAM METAL ROOF

ELEVATION NOTES
_MECHANICAL PLATFORM TO HOLD CONDESORS, TPO/WATERPROOF RECESSED ZONE. _GUTTERS TO BE 4" BOX GUTTER WITH 4"X4" SQAURE DOWNSPOUT TO MATCH. _ALL BRICK 01 TO BE KING BRICK SIZE



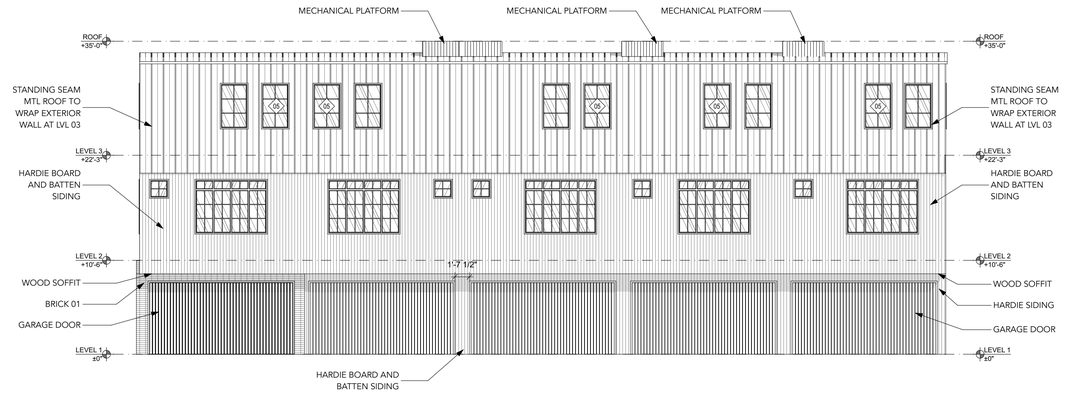
BUILDING 1 WEST ELEVATION B3

SCALE: 1/8" = 1'-0"



BUILDING 1 EAST ELEVATION A3

SCALE: 1/8" = 1'-0"



BUILDING 1 SOUTH ELEVATION B1

SCALE: 1/8" = 1'-0"

BUILDING 1 NORTH ELEVATION A1

SCALE: 1/8" = 1'-0"

m(ødm)

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TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

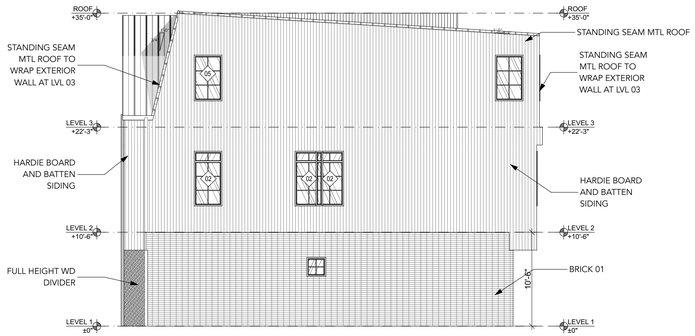
KEY PLAN

BUILDING 1 ELEVATIONS

A2.01

ELEVATION LEGEND	
	HARDIE BOARD AND BATTEN SIDING
	BRICK 01
	STANDING SEAM METAL ROOF

ELEVATION NOTES
_MECHANICAL PLATFORM TO HOLD CONDESORS, TPO/WATERPROOF RECESSED ZONE. _GUTTERS TO BE 4" BOX GUTTER WITH 4"X4" SQAURE DOWNSPOUT TO MATCH. _ALL BRICK 01 TO BE KING BRICK SIZE

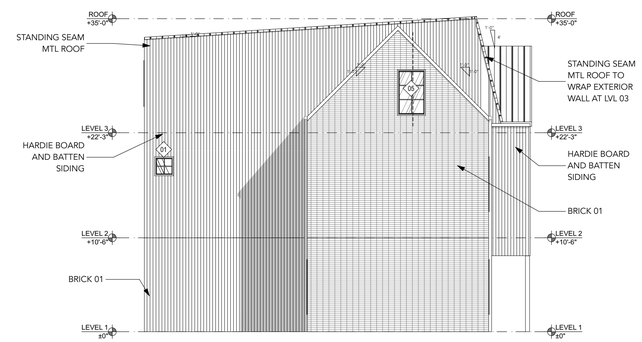


BUILDING 2 WEST ELEVATION B3

SCALE: 1/8" = 1'-0"

BUILDING 2 SOUTH ELEVATION B1

SCALE: 1/8" = 1'-0"



BUILDING 2 EAST ELEVATION A3

SCALE: 1/8" = 1'-0"

BUILDING 2 NORTH ELEVATION A1

SCALE: 1/8" = 1'-0"

m(ødm)

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TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

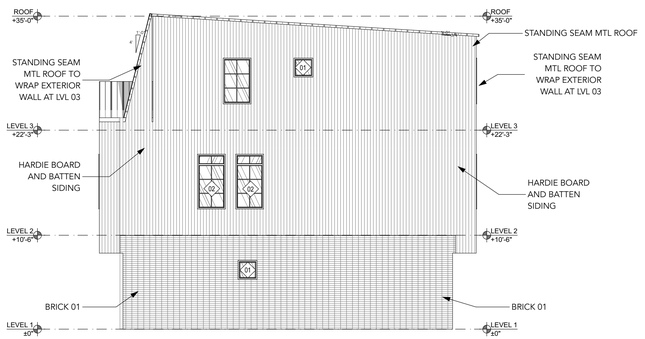
KEY PLAN

BUILDING 2 ELEVATIONS

A2.02

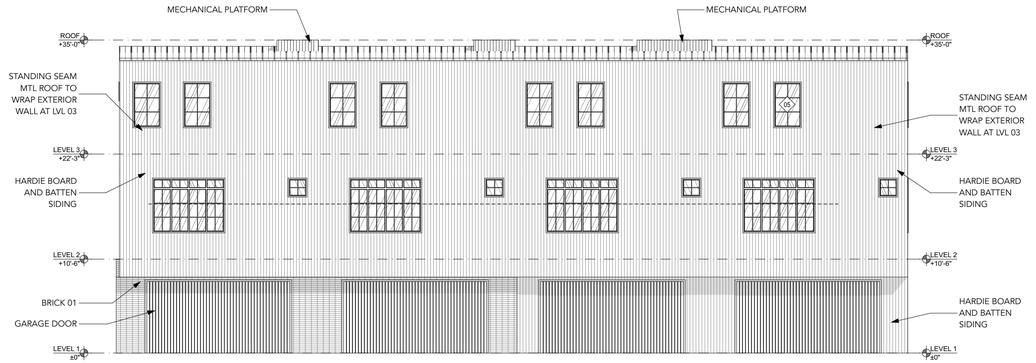
ELEVATION LEGEND	
	HARDIE BOARD AND BATTEN SIDING
	BRICK 01
	STANDING SEAM METAL ROOF

ELEVATION NOTES
1. MECHANICAL PLATFORM TO HOLD CONDESORS, TPO/WATERPROOF RECESSED ZONE.
2. GUTTERS TO BE 4" BOX GUTTER WITH 4"X4" SQAURE DOWNSPOUT TO MATCH.
3. ALL BRICK 01 TO BE KING BRICK SIZE



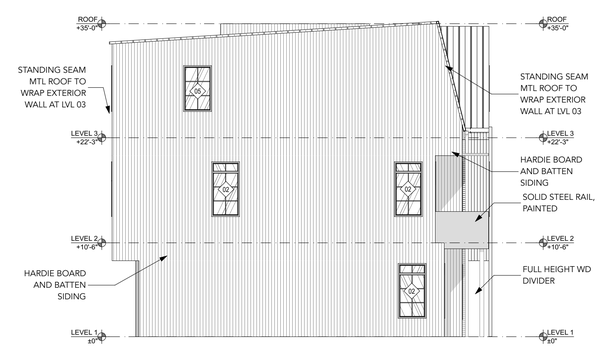
BUILDING 3 EAST ELEVATION B3

SCALE: 1/8" = 1'-0"



BUILDING 3 NORTH ELEVATION B1

SCALE: 1/8" = 1'-0"



BUILDING 3 WEST ELEVATION A3

SCALE: 1/8" = 1'-0"

BUILDING 3 SOUTH ELEVATION A1

SCALE: 1/8" = 1'-0"

m(ødm)

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TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

BUILDING 3 ELEVATIONS

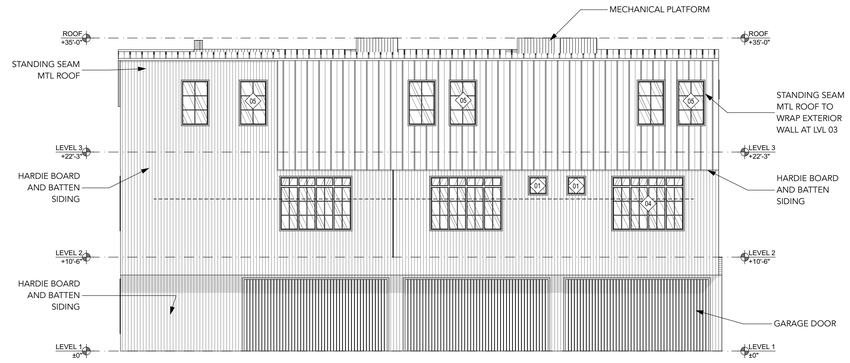
A2.03

ELEVATION LEGEND	
	HARDIE BOARD AND BATTEN SIDING
	BRICK 01
	STANDING SEAM METAL ROOF

ELEVATION NOTES
1. MECHANICAL PLATFORM TO HOLD CONDESORS, TPO/WATERPROOF RECESSED ZONE.
2. GUTTERS TO BE 4" BOX GUTTER WITH 4"X4" SQAURE DOWNSPOUT TO MATCH.
3. ALL BRICK 01 TO BE KING BRICK SIZE

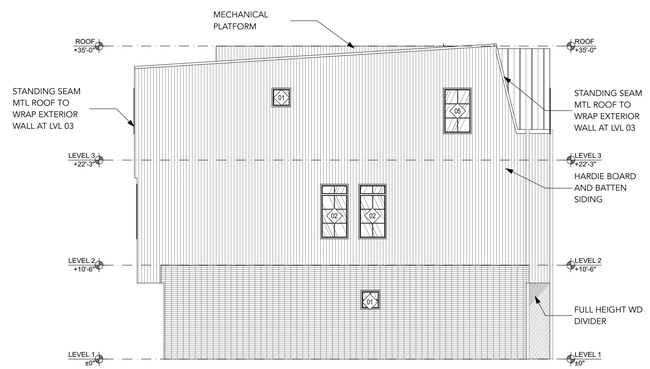
BUILDING 4 EAST ELEVATION B3

SCALE: 1/8" = 1'-0"



BUILDING 4 NORTH ELEVATION

SCALE: 1/8" = 1'-0"



BUILDING 4 WEST ELEVATION A3

SCALE: 1/8" = 1'-0"

BUILDING 4 SOUTH ELEVATION A1

SCALE: 1/8" = 1'-0"

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TRAIL STREET TOWNHOMES

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PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

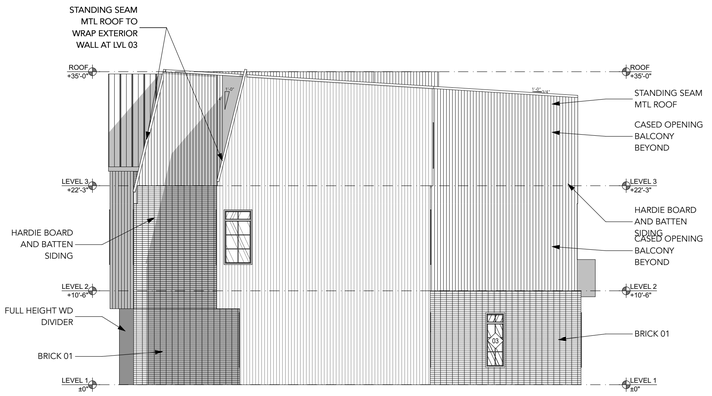
KEY PLAN

BUILDING 4 ELEVATIONS

A2.04

ELEVATION LEGEND	
	HARDIE BOARD AND BATTEN SIDING
	BRICK 01
	STANDING SEAM METAL ROOF

ELEVATION NOTES
_MECHANICAL PLATFORM TO HOLD CONDESORS, TPO/WATERPROOF RECESSED ZONE. _GUTTERS TO BE 4" BOX GUTTER WITH 4"X4"SQAURE DOWNSPOUT TO MATCH. _ALL BRICK 01 TO BE KING BRICK SIZE

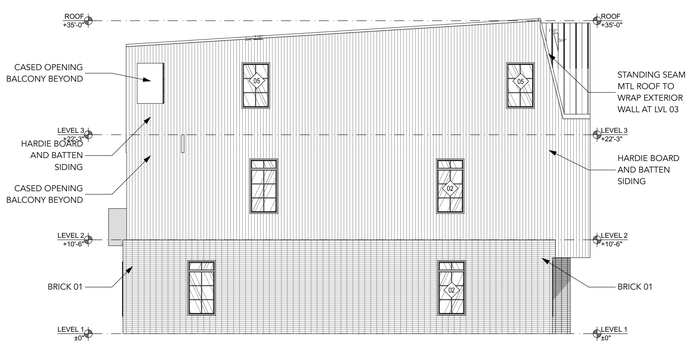


BUILDING 5 EAST ELEVATION B3

SCALE: 1/8" = 1'-0"

BUILDING 5 NORTH ELEVATION B1

SCALE: 1/8" = 1'-0"



BUILDING 5 WEST ELEVATION A3

SCALE: 1/8" = 1'-0"

BUILDING 5 SOUTH ELEVATION A1

SCALE: 1/8" = 1'-0"

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KEY PLAN

BUILDING 5 ELEVATIONS

A2.05

ELEVATION LEGEND	
	EXT CLAD 1 - BOARD & BATTEN
	EXT CLAD 2 - STUCCO
	EXT CLAD 3 - STANDING SEAM METAL
	BRICK - KING SIZE

ELEVATION NOTES
.MECHANICAL PLATFORM TO HOLD CONDESORS, TPO/WATERPROOF RECESSED ZONE, UNO
.GUTTERS TO BE 4" BOX GUTTER WITH 4"X4"SQAURE DOWNSPOUT TO MATCH.

m(ødm)

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DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

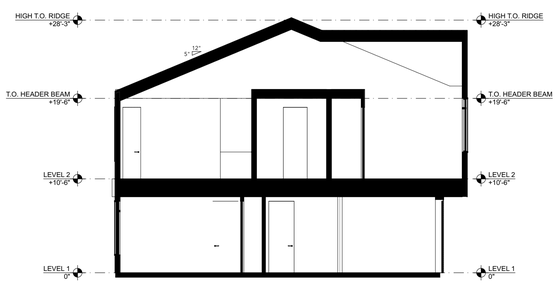
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

BUILDING 6 EAST ELEVATION B3

SCALE: 1/8" = 1'-0"

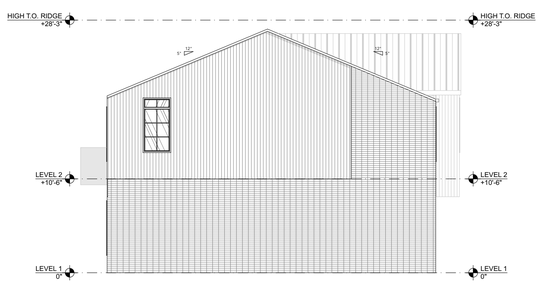
BUILDING 6 NORTH ELEVATION B1

SCALE: 1/8" = 1'-0"



SECTION 01 @ UNIT E2 A4

SCALE: 1/8" = 1'-0"



BUILDING 6 WEST ELEVATION A3

SCALE: 1/8" = 1'-0"

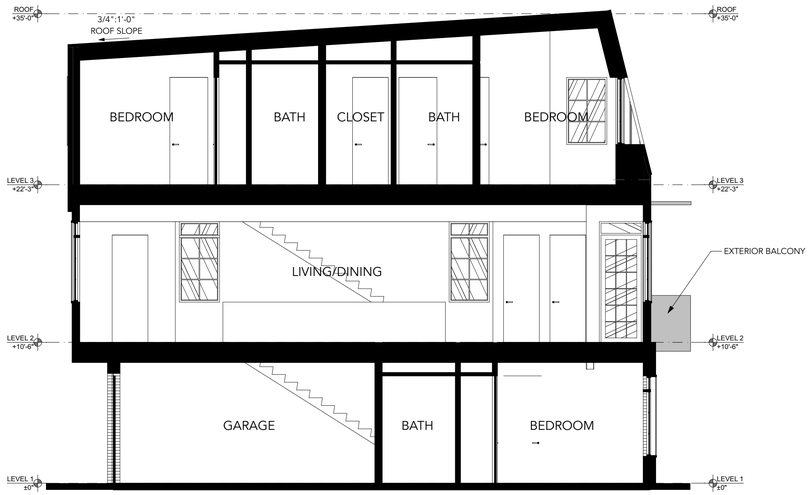
BUILDING 6 SOUTH ELEVATION A1

SCALE: 1/8" = 1'-0"

KEY PLAN

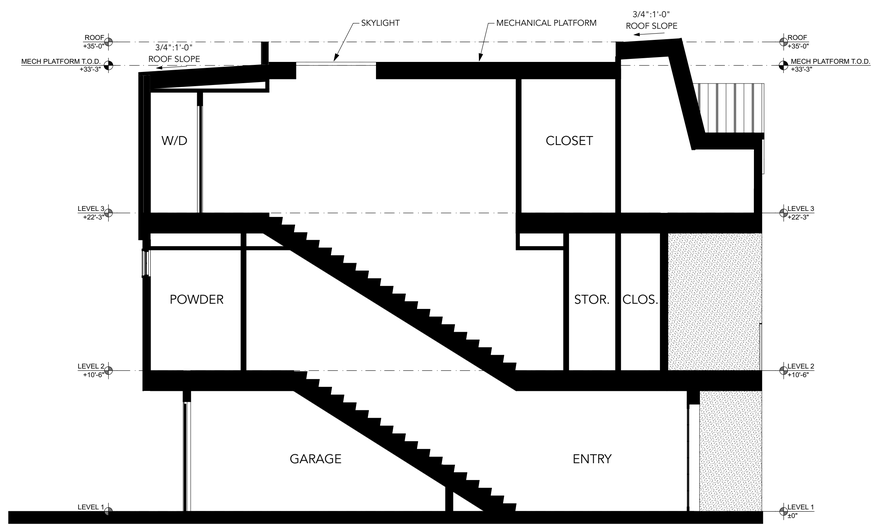
BUILDING 6 ELEVATIONS

A2.06



SECTION 01 @ UNIT A2 B1

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



SECTION 02 @ UNIT A1 A3

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

SECTION 01 @ UNIT A1 A1

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

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TRAIL STREET TOWNHOMES

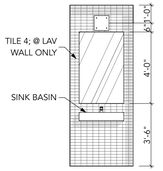
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

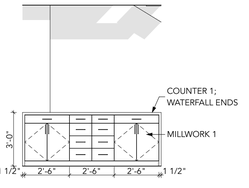
BUILDING SECTION

A3.01



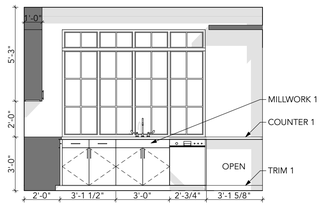
POWDER ELEVATION 2 D5

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



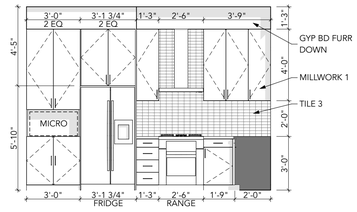
KITCHEN ISLAND ELEVATION D4

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



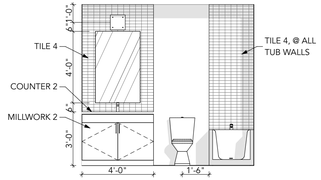
KITCHEN ELEVATION 2 D3

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



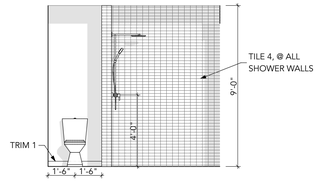
KITCHEN ELEVATION 1 D2

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



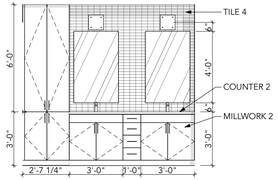
BATHROOM 1 ELEVATION 1 C4

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



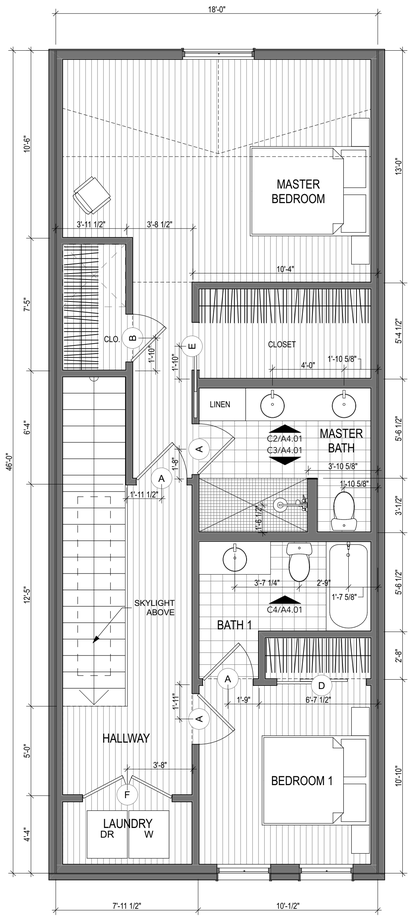
MASTER BATH ELEVATION 2 C3

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



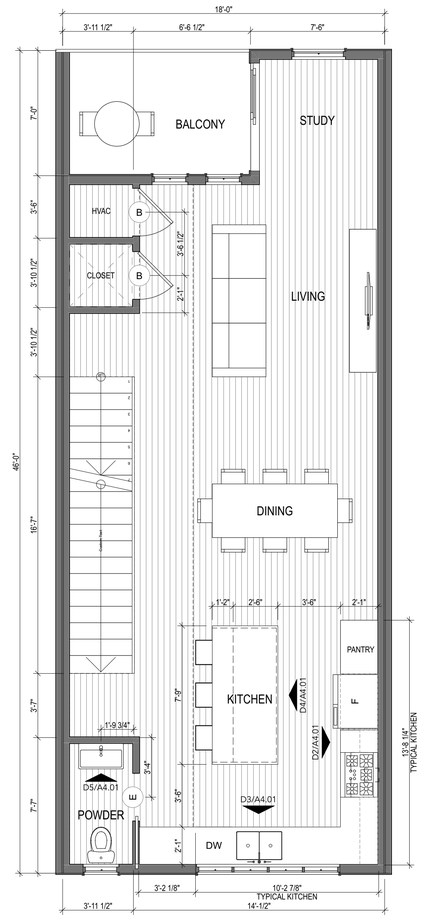
MASTER BATH ELEVATION 1 C2

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



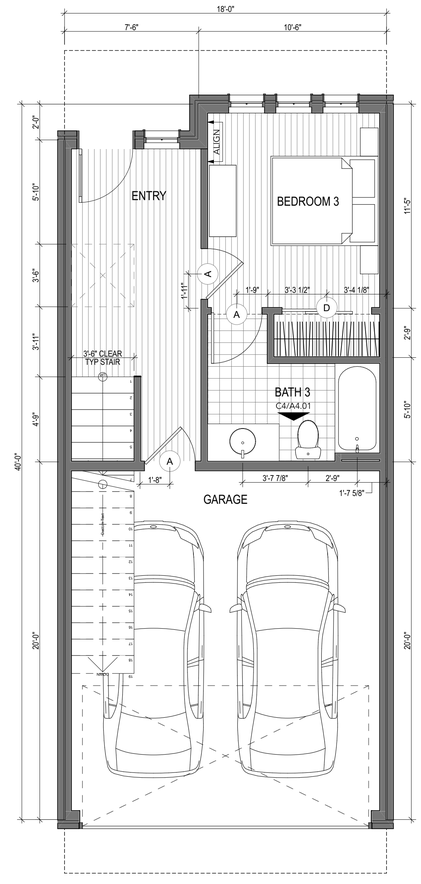
UNIT A1 LEVEL 3 A3

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



UNIT A1 LEVEL 2 A2

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



UNIT A1 LEVEL 1 A1

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

FINISH PLAN LEGEND	
	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

UNIT AREA BREAKDOWN	
A1	1,932.81
BALCONY	73.50
GARAGE	355.12
	2,361.43 sq ft

FINISH NOTES

- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

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TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
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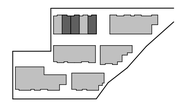
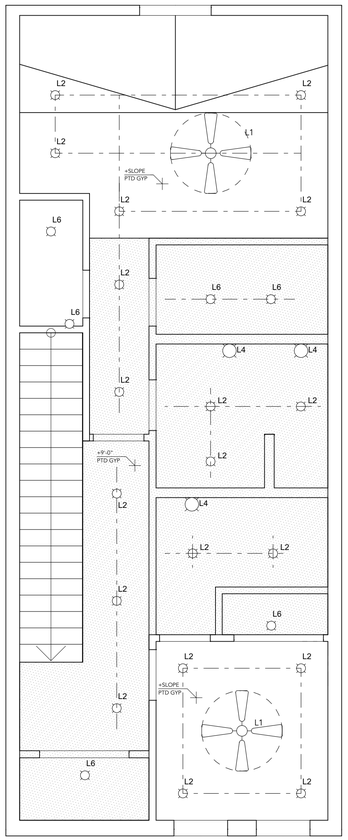
80% CD SET	08/02/19

KEY PLAN



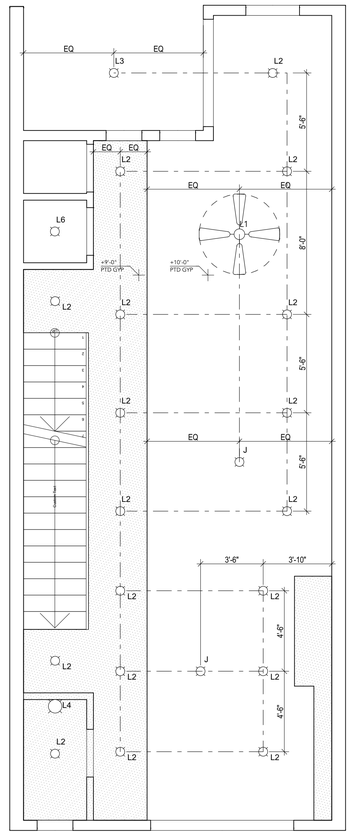
UNIT A1 PLAN

A4.01



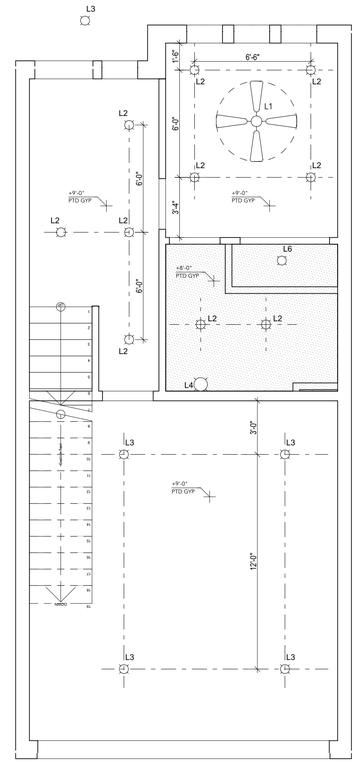
UNIT A1 RCP - LEVEL 3 A3

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



UNIT A1 RCP - LEVEL 2 A2

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



UNIT A1 RCP - LEVEL 1 A1

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

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TRAIL STREET TOWNHOMES

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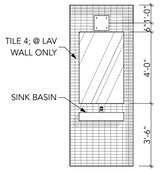
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

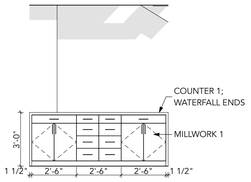
UNIT A1 RCP

A4.02



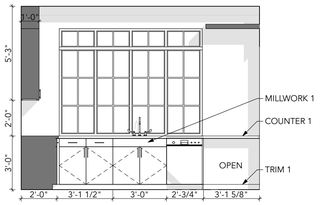
POWDER ELEVATION 2 D5

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



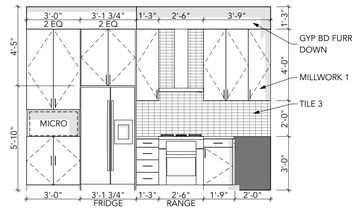
KITCHEN ISLAND ELEVATION D4

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



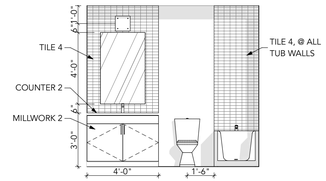
KITCHEN ELEVATION 2 D3

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



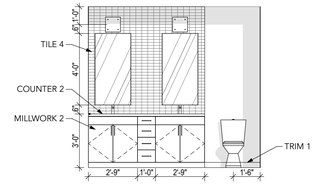
KITCHEN ELEVATION 1 D2

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



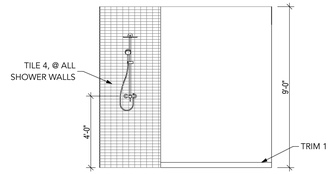
BATHROOM 1 ELEVATION 1 C4

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



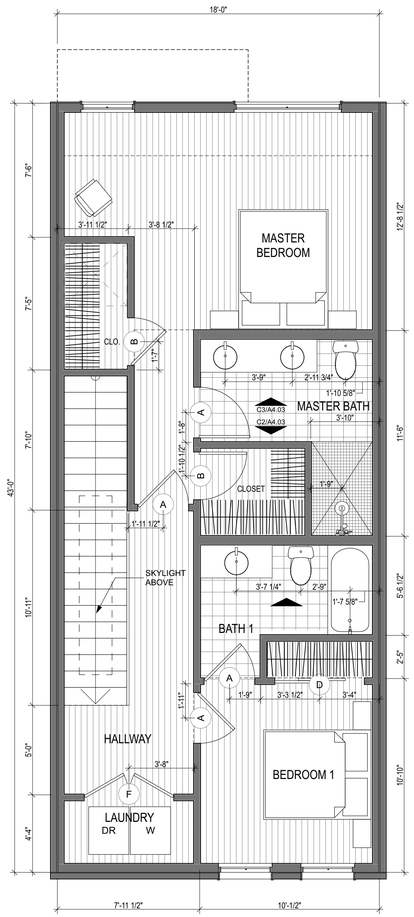
MASTER BATH ELEVATION 1 C3

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



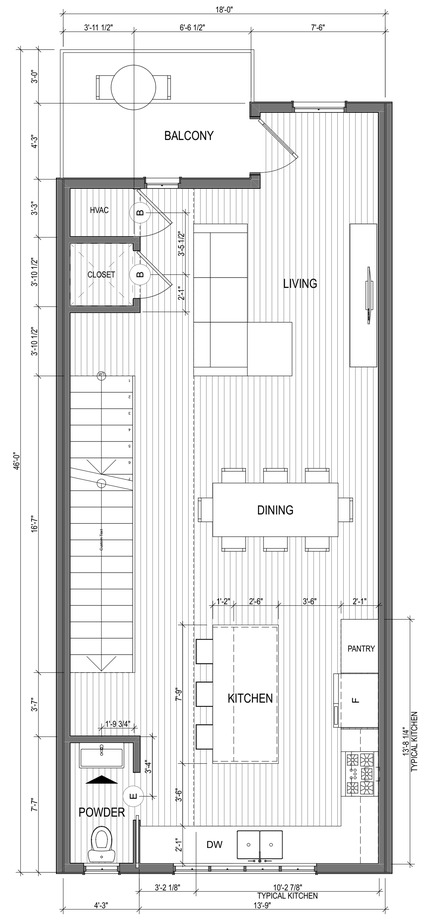
MASTER BATH ELEVATION 2 C2

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



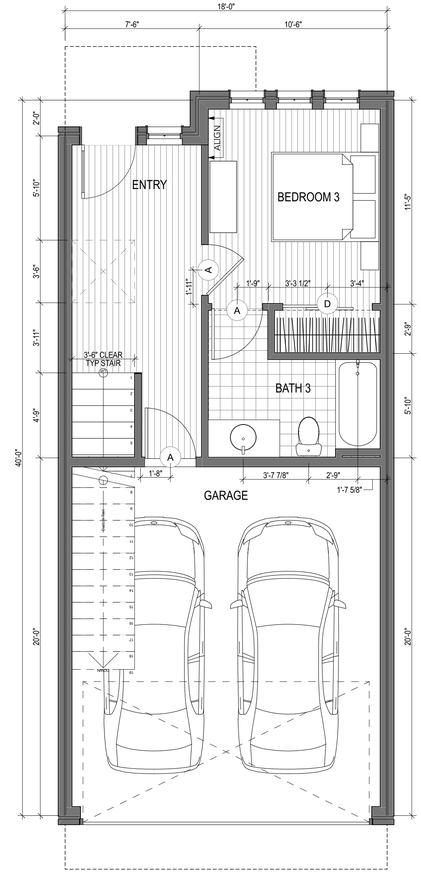
UNIT A2 LEVEL 3 A3

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



UNIT A2 LEVEL 2 A2

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



UNIT A2 LEVEL 1 A1

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

FINISH PLAN LEGEND

	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

UNIT AREA BREAKDOWN

A2	1,853.63
BALCONY	76.13
GARAGE	355.12
	2,284.88 sq ft

FINISH NOTES

- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

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TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

UNIT A2 PLAN

A4.03

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TRAIL STREET TOWNHOMES

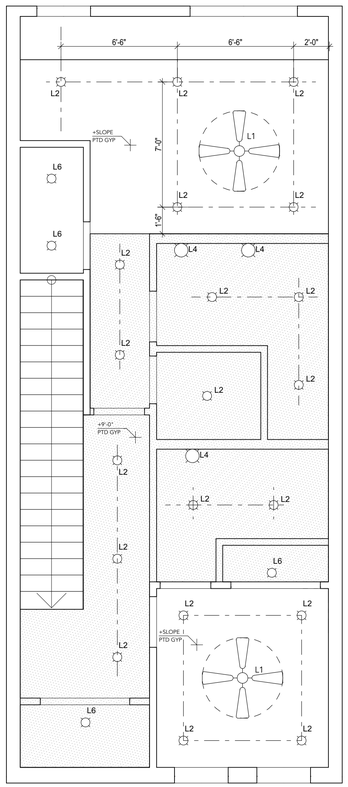
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

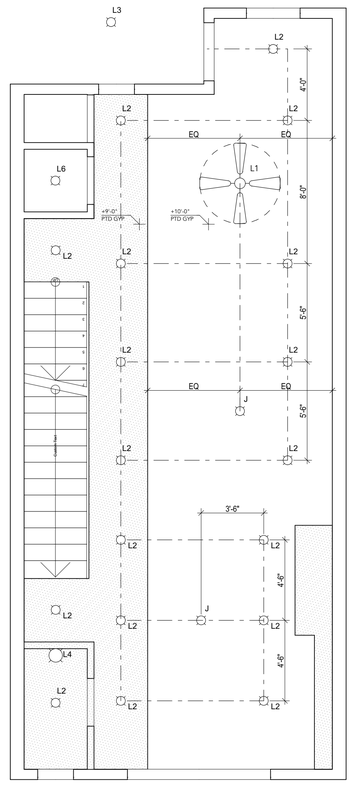
UNIT A2 RCP

A4.04



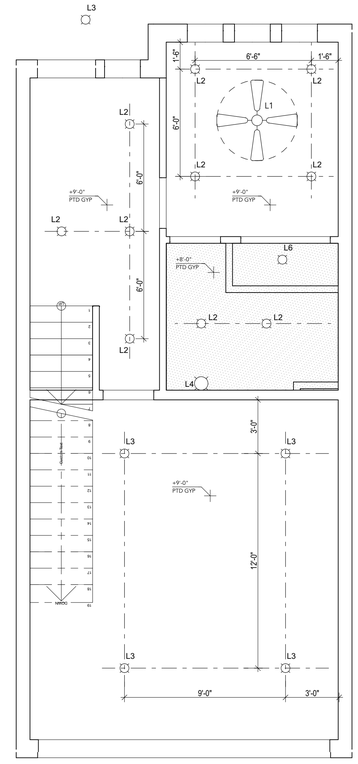
RCP - LEVEL 3 A3

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



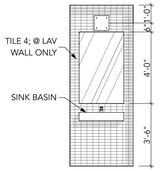
RCP - LEVEL 2 A2

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



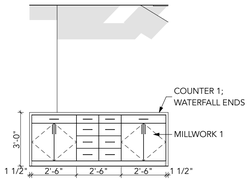
RCP - LEVEL 1 A1

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



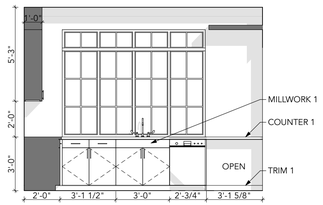
POWDER ELEVATION 2 D5

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



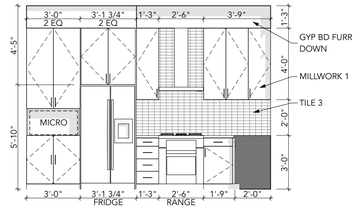
KITCHEN ISLAND ELEVATION D4

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



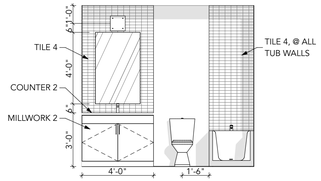
KITCHEN ELEVATION 2 D3

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



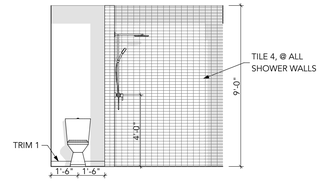
KITCHEN ELEVATION 1

SCALE: 1/4" = 1'-0" D2



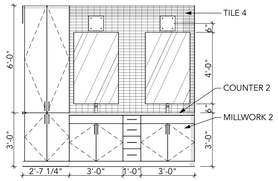
BATHROOM 1 ELEVATION 1

SCALE: 1/4" = 1'-0" C4



MASTER BATH ELEVATION 2

SCALE: 1/4" = 1'-0" C3



MASTER BATH ELEVATION 1

SCALE: 1/4" = 1'-0" C2

FINISH PLAN LEGEND

	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

FINISH NOTES

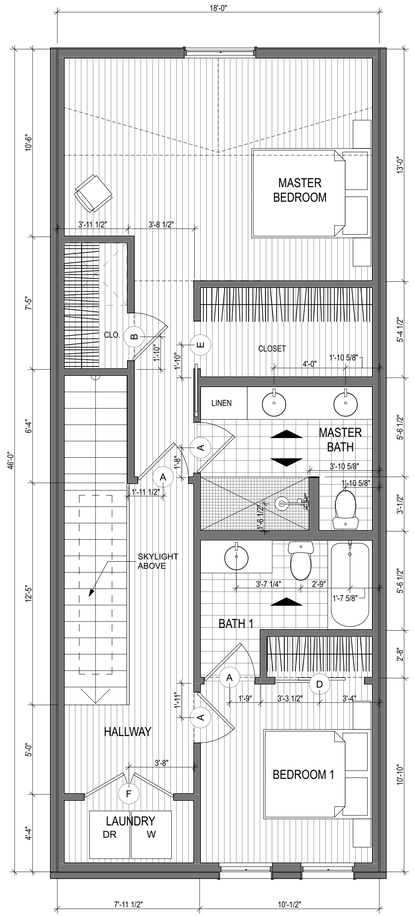
- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

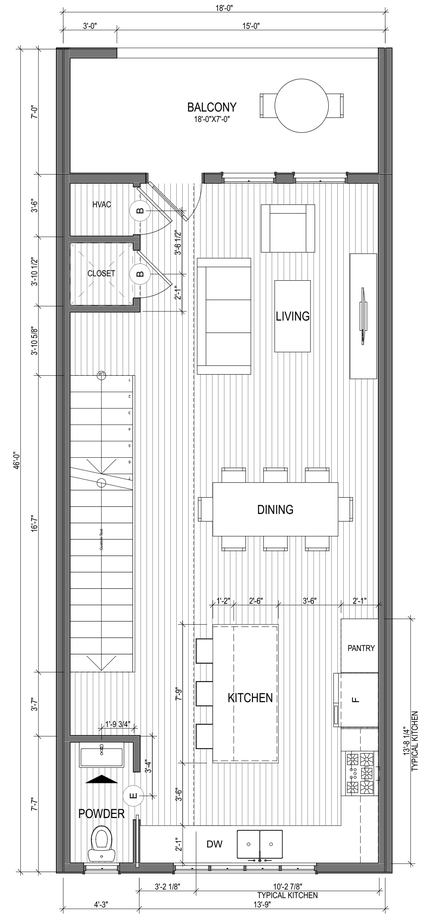
UNIT AREA BREAKDOWN

A3	1,880.26
BALCONY	126.00
GARAGE	355.12
	2,361.38 sq ft



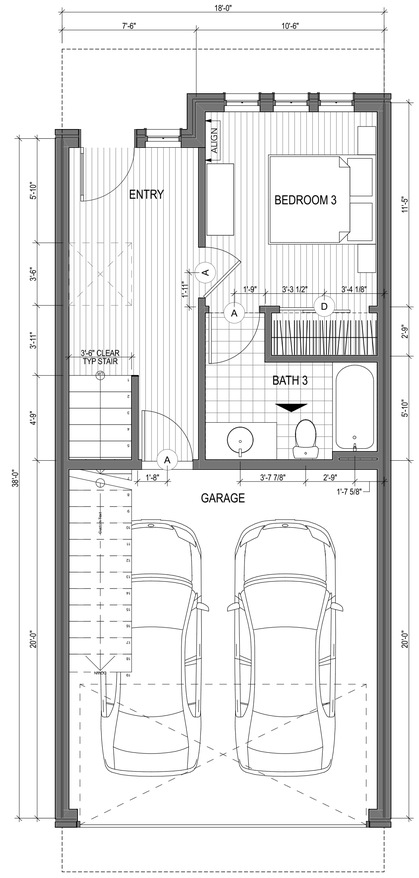
UNIT A3 LEVEL 3 A3

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



UNIT A3 LEVEL 2 A2

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



UNIT A3 LEVEL 1 A1

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

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San Antonio [tx] 469.5950
201 Groveton Street 78210

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DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

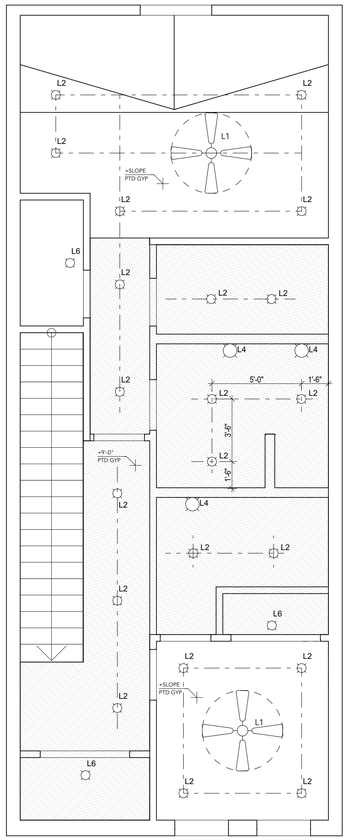
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

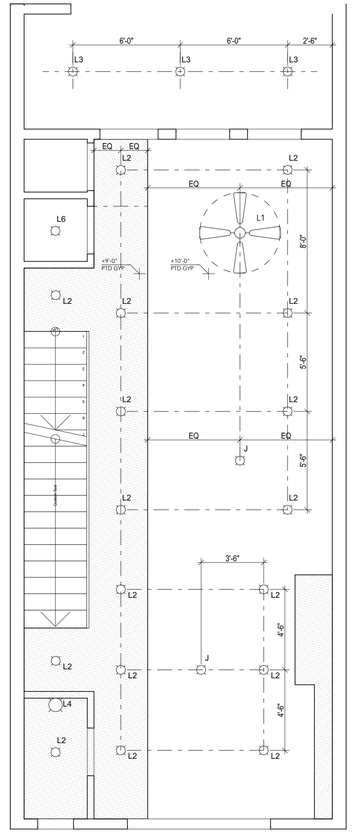
UNIT A3 PLAN

A4.05



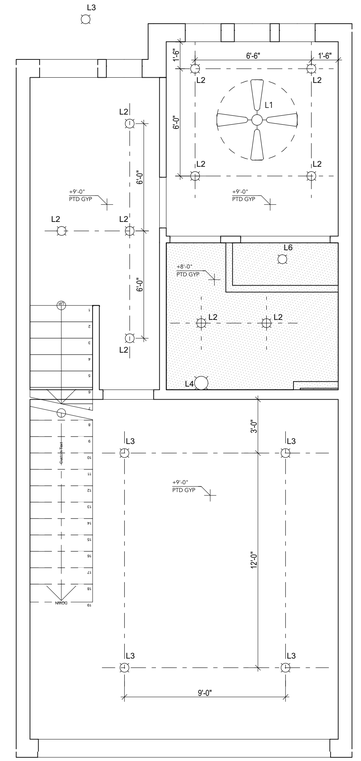
RCP - LEVEL 3 A3

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



RCP - LEVEL 2 A2

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



RCP - LEVEL 1 A1

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

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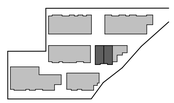
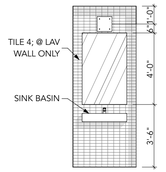
KEY PLAN



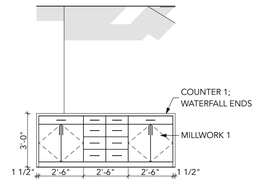
UNIT A3 RCP

A4.06



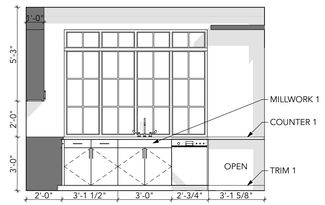
POWDER ELEVATION 2 D5

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



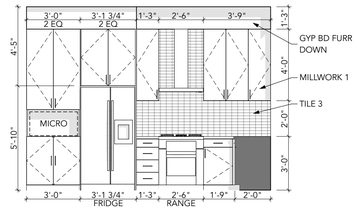
KITCHEN ISLAND ELEVATION D4

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



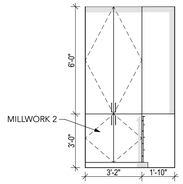
KITCHEN ELEVATION 2 D3

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



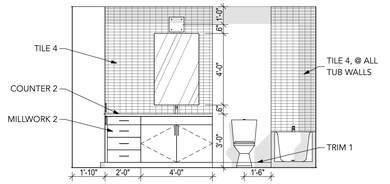
KITCHEN ELEVATION 1 D2

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



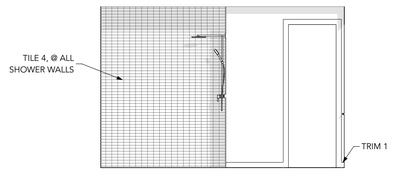
BATH 1 ELEVATION 2 C5

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



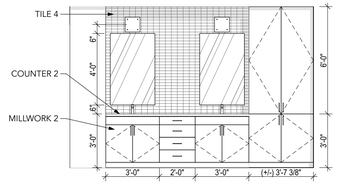
BATH 1 ELEVATION 1 C4

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



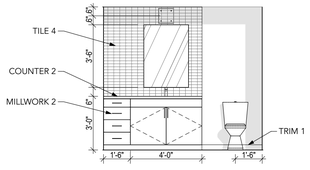
MASTER BATH ELEVATION 2 C3

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



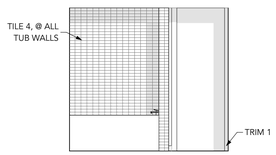
MASTER BATH ELEVATION 1 C2

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



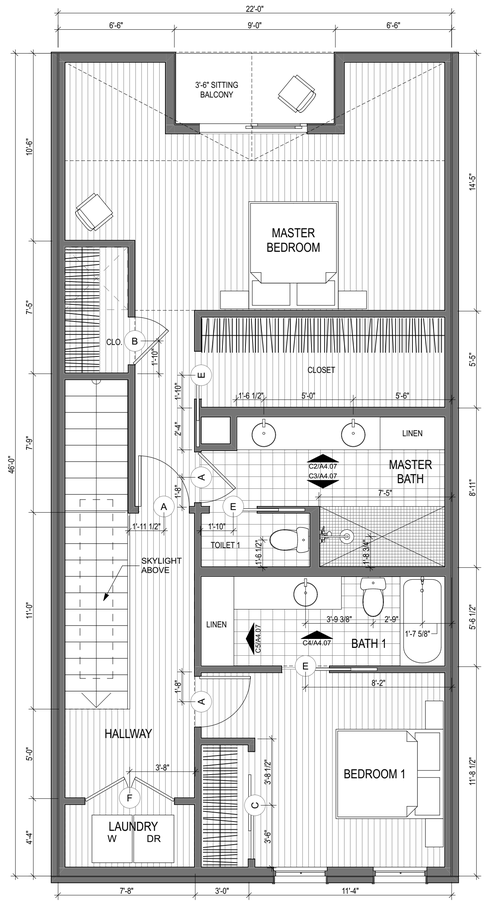
BATH 3 ELEVATION 1 C5

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



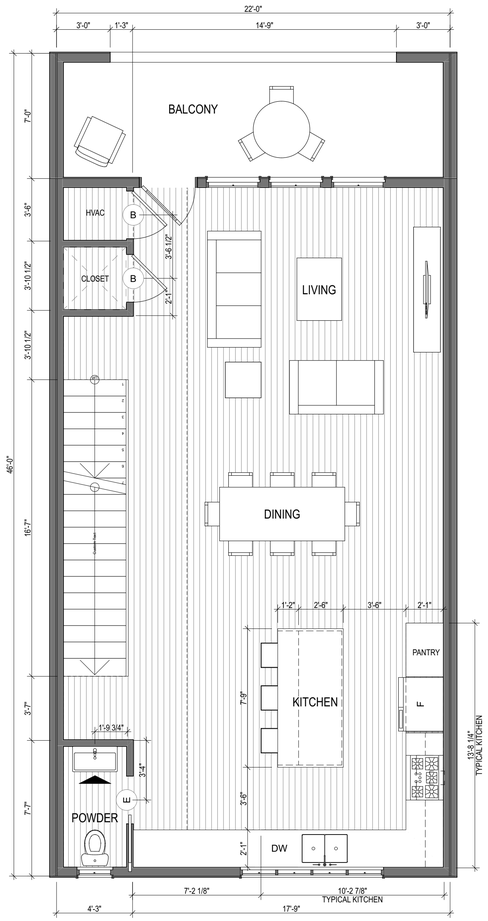
BATHROOM 3 ELEVATION 2 B5

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



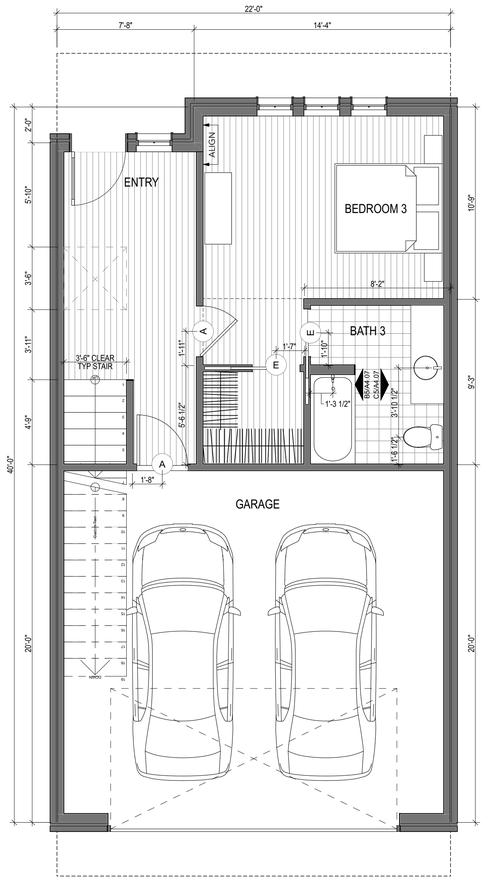
UNIT B1 LEVEL 3 A3

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



UNIT B1 LEVEL 2 A2

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



UNIT B1 LEVEL 1 A1

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

FINISH PLAN LEGEND	
	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

UNIT AREA BREAKDOWN	
B1	2,262.21
BALCONY	190.00
GARAGE	436.79
	2,889.00 sq ft

FINISH NOTES

- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

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TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

UNIT B1 PLAN

A4.07

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TRAIL STREET TOWNHOMES

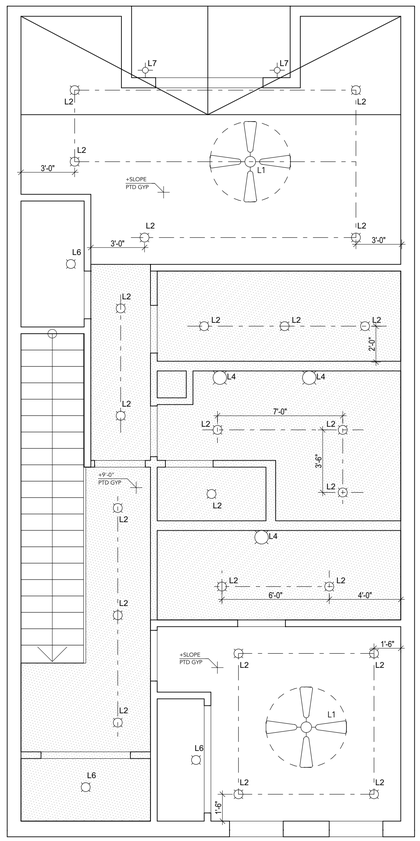
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

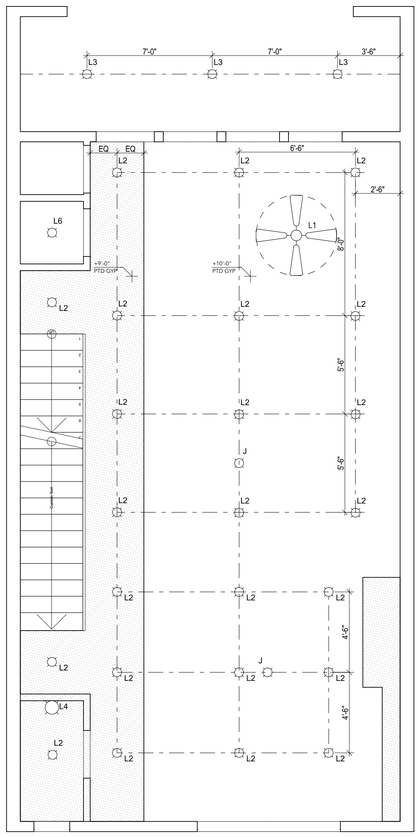
UNIT B1 RCP

A4.08



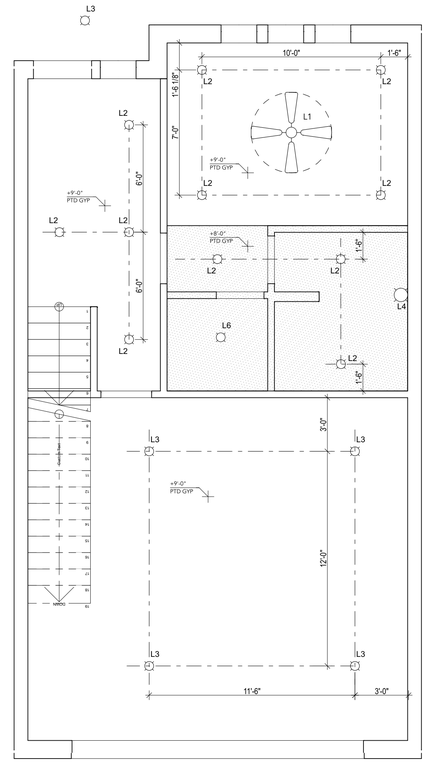
RCP - LEVEL 3 A3

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



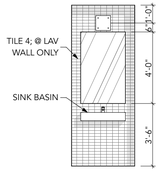
RCP - LEVEL 2 A2

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



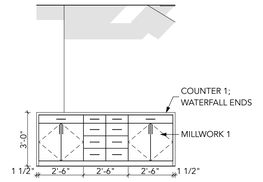
RCP - LEVEL 1 A1

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



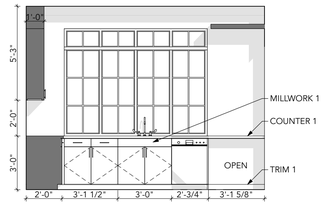
POWDER ELEVATION 2 D5

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



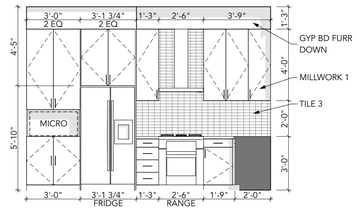
KITCHEN ISLAND ELEVATION D4

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



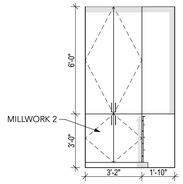
KITCHEN ELEVATION 2 D3

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



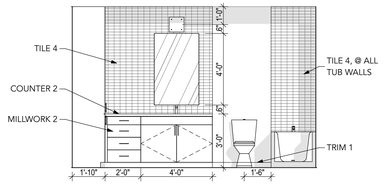
KITCHEN ELEVATION 1 D2

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



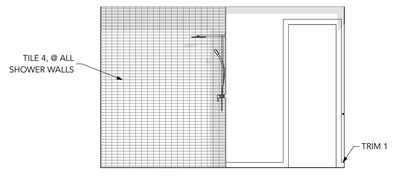
BATH 1 ELEVATION 2 C5

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



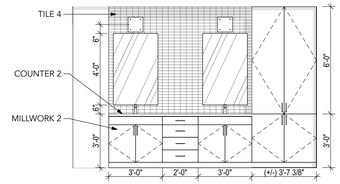
BATH 1 ELEVATION 1 C4

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



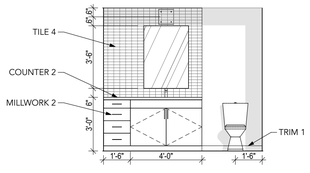
MASTER BATH ELEVATION 2 C3

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



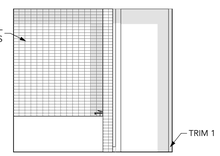
MASTER BATH ELEVATION 1 C2

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



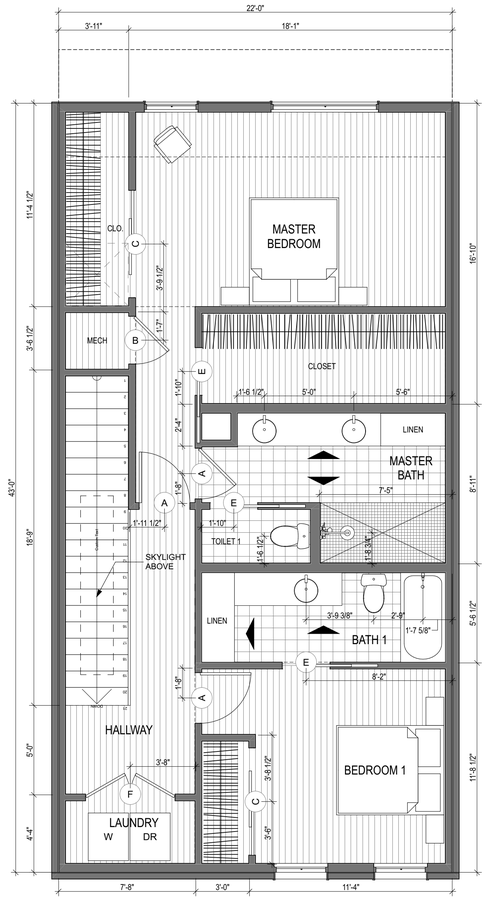
BATH 3 ELEVATION 1 C5

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



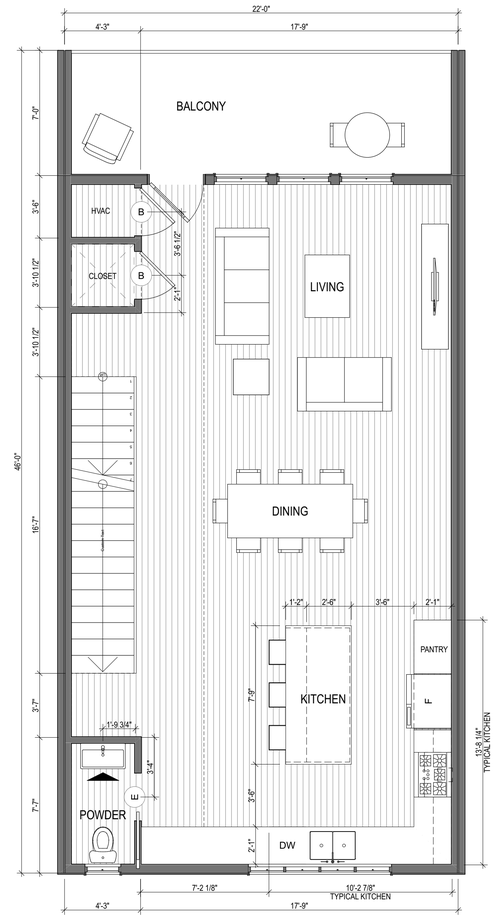
BATHROOM 3 ELEVATION 2 B5

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



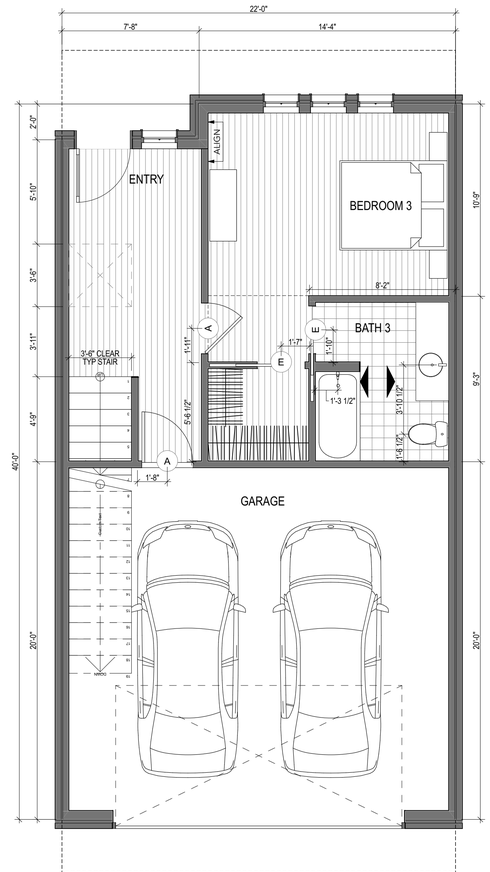
UNIT B2 LEVEL 3 A3

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



UNIT B2 LEVEL 2 A2

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



UNIT B2 LEVEL 1 A1

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

FINISH PLAN LEGEND

	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

UNIT AREA BREAKDOWN

B2	2,231.87
BALCONY	154.00
GARAGE	436.79
	2,822.66 sq ft

FINISH NOTES

- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

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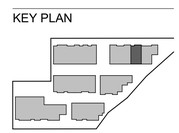
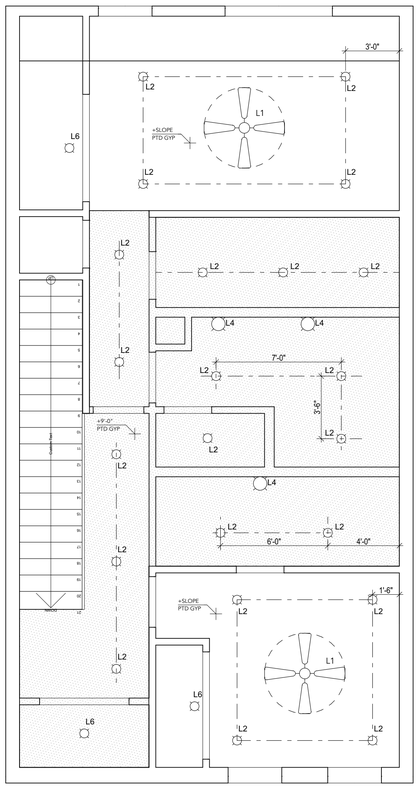
80% CD SET	08/02/19

KEY PLAN



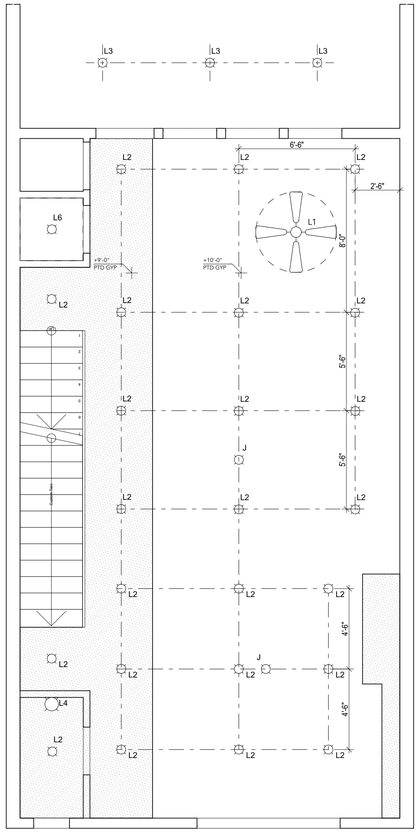
UNIT B2 PLAN

A4.09



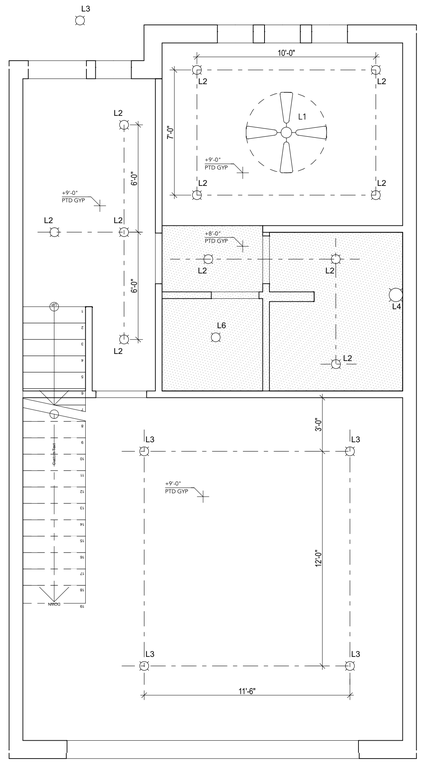
RCP - LEVEL 3 A3

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



RCP - LEVEL 2 A2

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



RCP - LEVEL 1 A1

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

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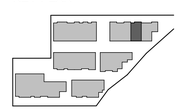
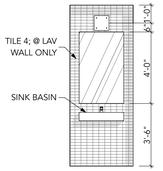
KEY PLAN



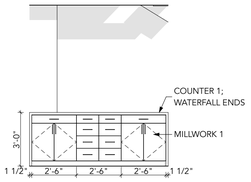
UNIT B2 RCP

A4.10



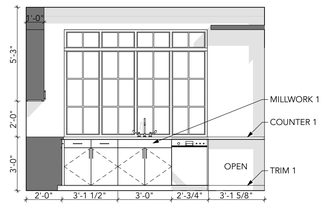
POWDER ELEVATION 2 D5

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



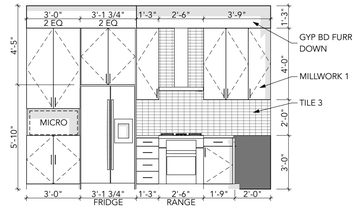
KITCHEN ISLAND ELEVATION D4

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



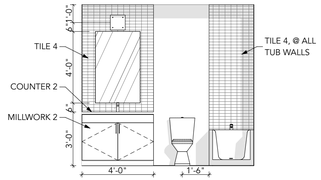
KITCHEN ELEVATION 2 D3

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



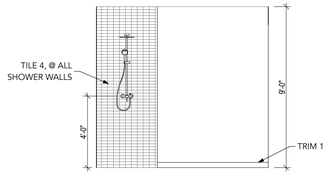
KITCHEN ELEVATION 1 D2

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



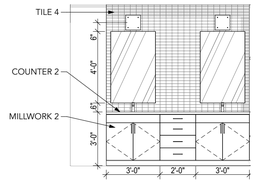
BATHROOM 1 ELEVATION 1 C4

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



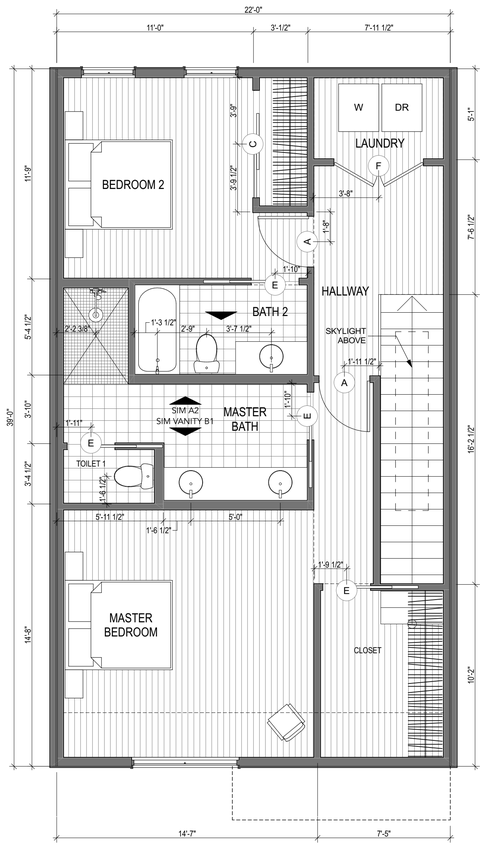
MASTER BATH ELEVATION 2 C3

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



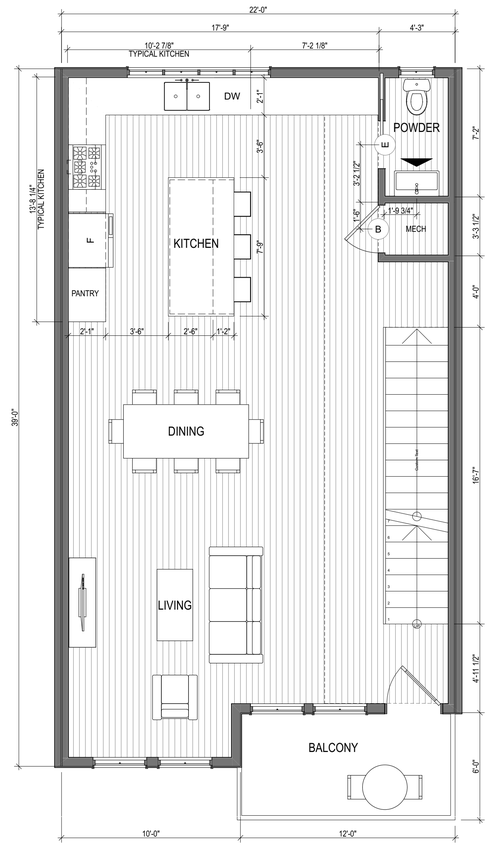
MASTER BATH ELEVATION 1 C2

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



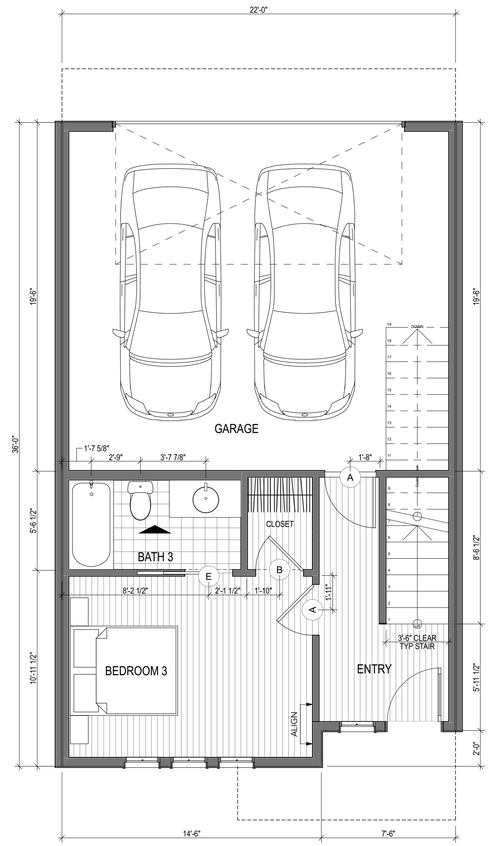
UNIT C LEVEL 3 A3

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



UNIT C LEVEL 2 A2

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



UNIT C LEVEL 1 A1

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

FINISH PLAN LEGEND

	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

FINISH NOTES

- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

UNIT AREA BREAKDOWN

C	2,024.05
GARAGE	433.07
BALCONY	72.00
	2,529.12 sq ft

m(ødm)

Austin [tx] 469.5950
1009 West 6th Street #50 78703

San Antonio [tx] 469.5950
201 Groveton Street 78210

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DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

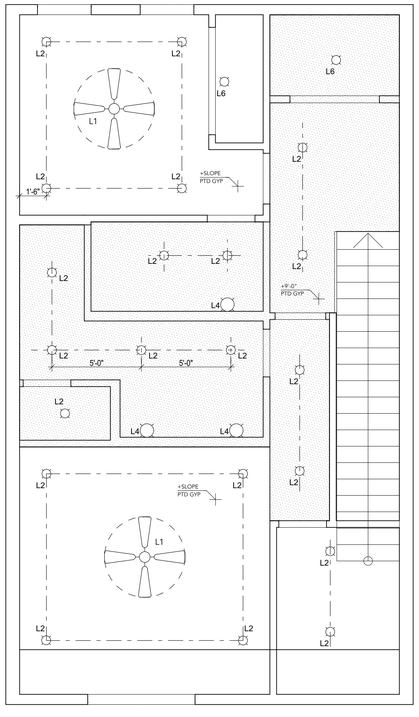
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

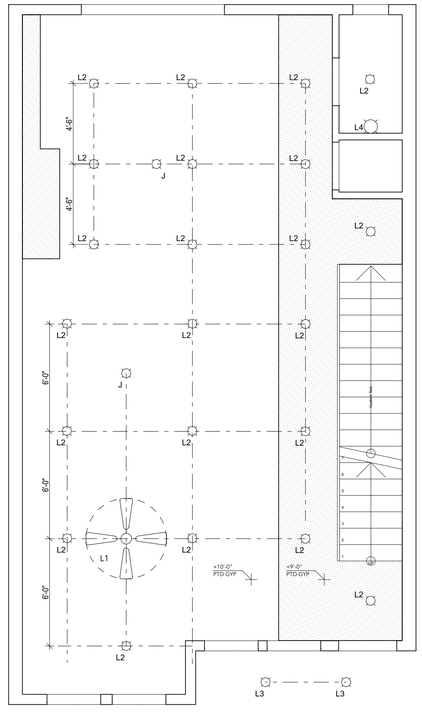
UNIT C PLAN

A4.11



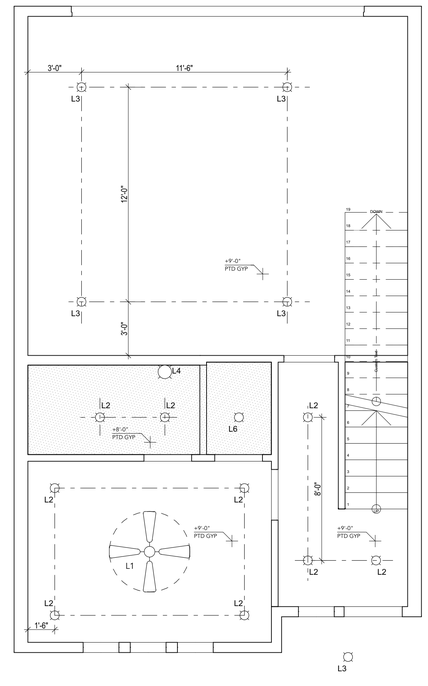
RCP - LEVEL 3 A3

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



RCP - LEVEL 2 A2

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



RCP - LEVEL 1 A1

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

m(ødm)

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1009 West 6th Street #50 78703

San Antonio [210] 469.5950
201 Groveton Street 78210

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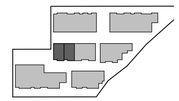
DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

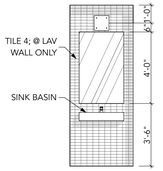
KEY PLAN



UNIT C RCP

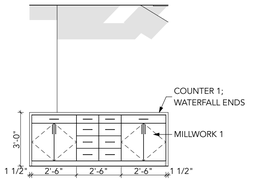
A4.12

BIM Server: bimserver.local - BIM Server 21/TRL/TRL | Ver. 21.1710 | Friday, August 2, 2019 | 4:02 PM



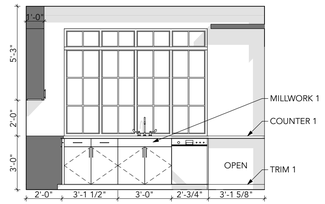
POWDER ELEVATION 2 D5

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



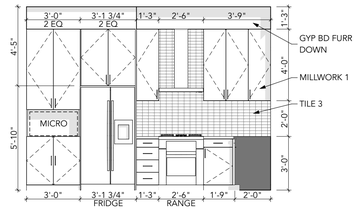
KITCHEN ISLAND ELEVATION D4

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



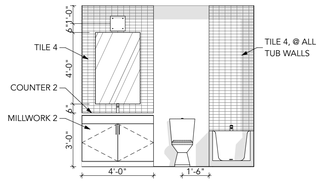
KITCHEN ELEVATION 2 D3

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



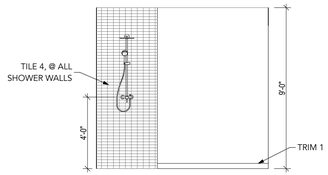
KITCHEN ELEVATION 1 D2

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



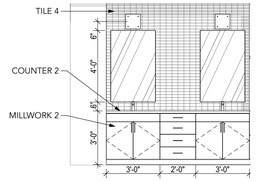
BATHROOM 1 ELEVATION 1 C4

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



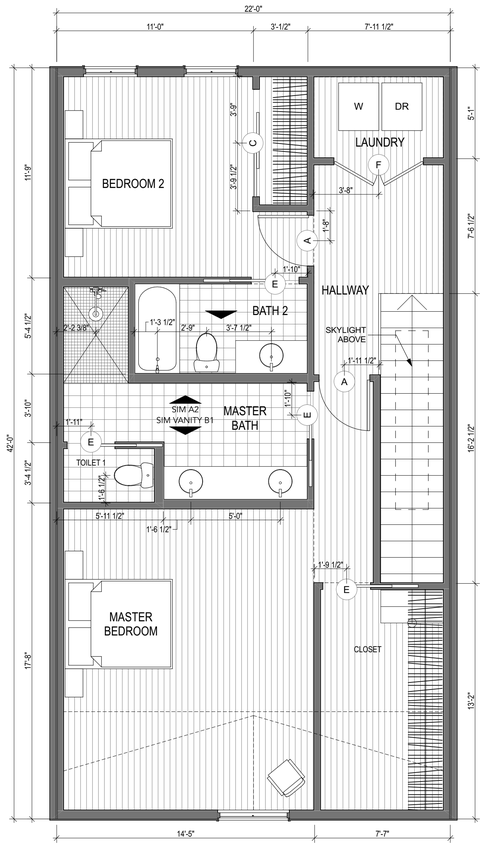
MASTER BATH ELEVATION 2 C3

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



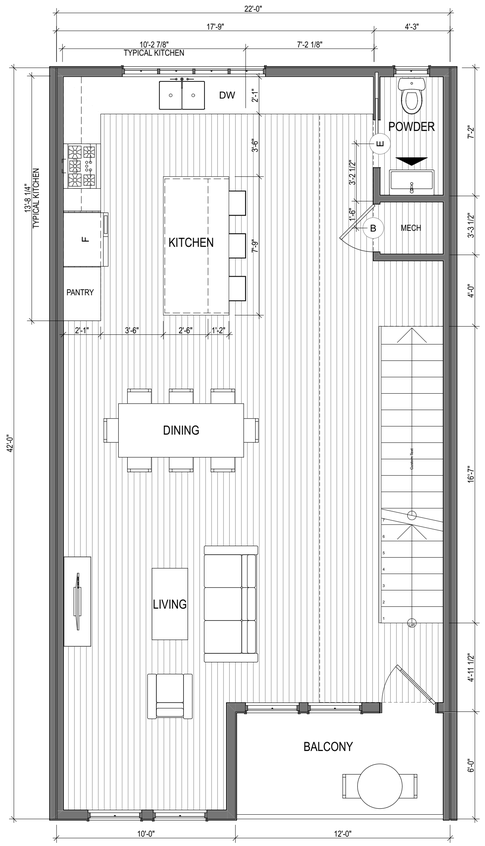
MASTER BATH ELEVATION 1 C2

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



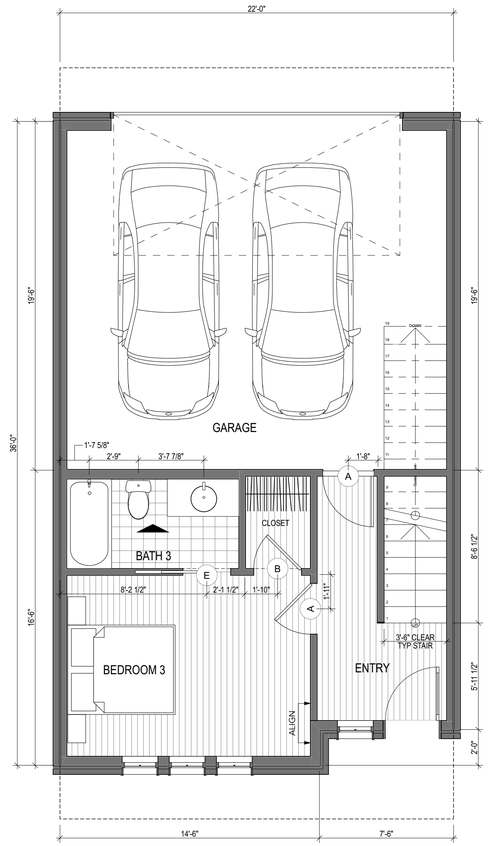
UNIT C2 LEVEL 3 A3

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



UNIT C2 LEVEL 2 A2

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



UNIT C2 LEVEL 1 A1

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

FINISH PLAN LEGEND

	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

UNIT AREA BREAKDOWN

C	2,138.04
GARAGE	433.07
BALCONY	54.00
	2,625.11 sq ft

FINISH NOTES

- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

m(ødm)

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DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

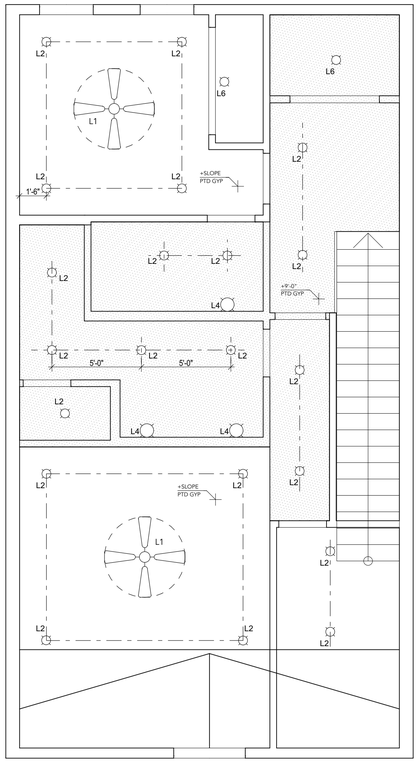
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

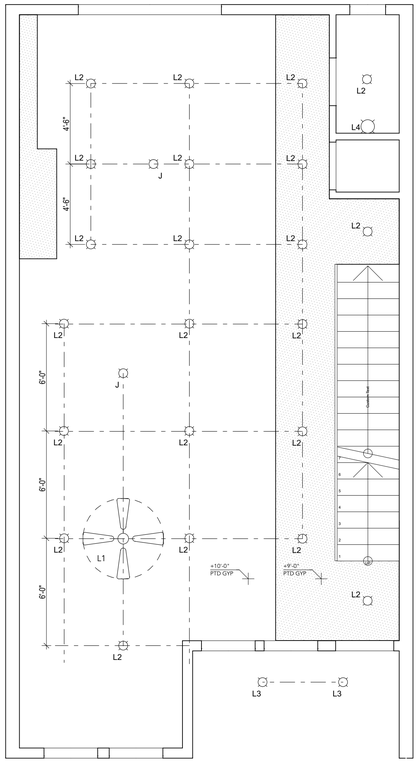
UNIT C2 PLAN

A4.13



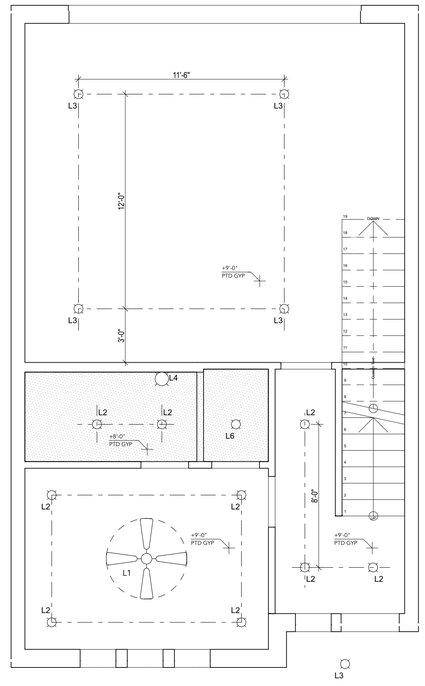
RCP - LEVEL 3 A3

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



RCP - LEVEL 2 A2

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



RCP - LEVEL 1 A1

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

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DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

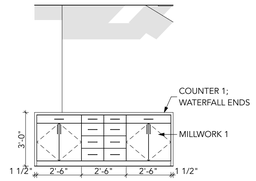
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

UNIT C2 RCP

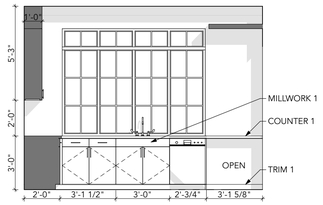
A4.14

BIM Server: bimserver.local - BIM Server 21/TRL/TRL | Ver. 21.1710 | Friday, August 2, 2019 | 4:02 PM



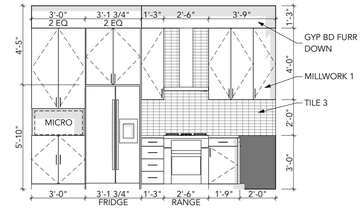
KITCHEN ISLAND ELEVATION D4

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



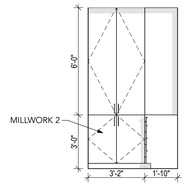
KITCHEN ELEVATION 2 D3

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



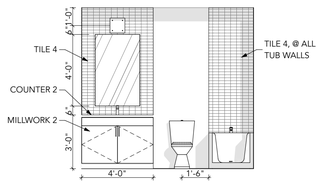
KITCHEN ELEVATION 1 D2

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



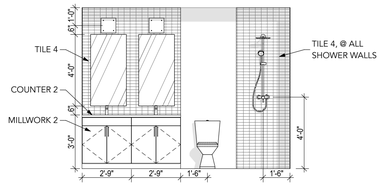
BATH 1 ELEVATION 2 C4

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



BATHROOM 1 ELEVATION 1 C3

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



MASTER BATH ELEVATION 1 C2

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

FINISH PLAN LEGEND

	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

FINISH NOTES

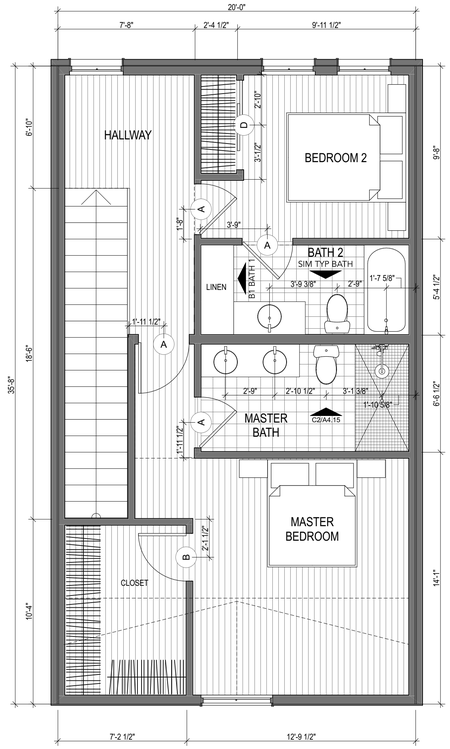
- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

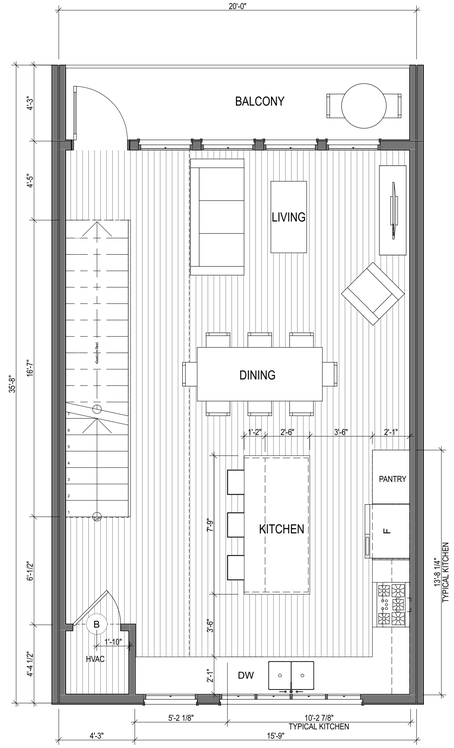
UNIT AREA BREAKDOWN

D1	1,739.59
GARAGE	240.57
BALCONY	84.92
	2,065.08 sq ft



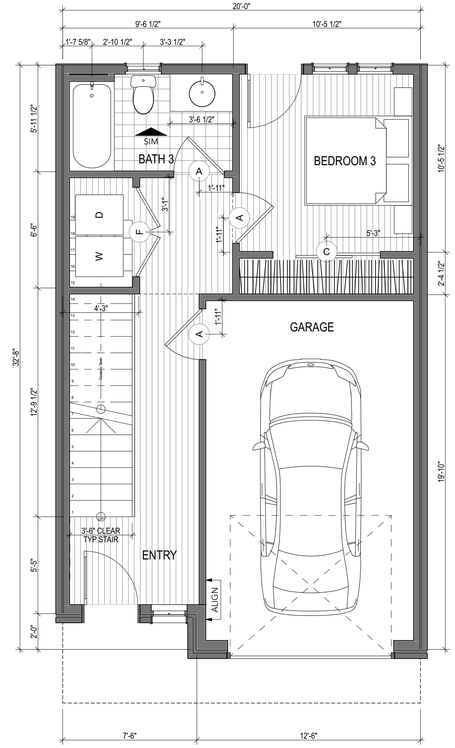
UNIT D1 LEVEL 3 A3

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



UNIT D1 LEVEL 2 A2

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



UNIT D1 LEVEL 1 A1

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

m(ødm)

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201 Groveton Street 78210

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DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

UNIT D1 PLAN

A4.15

m(ødm)

Austin [512] 469.5950
1009 West 6th Street #50 78703

San Antonio [210] 469.5950
201 Groveton Street 78210

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TRAIL STREET TOWNHOMES

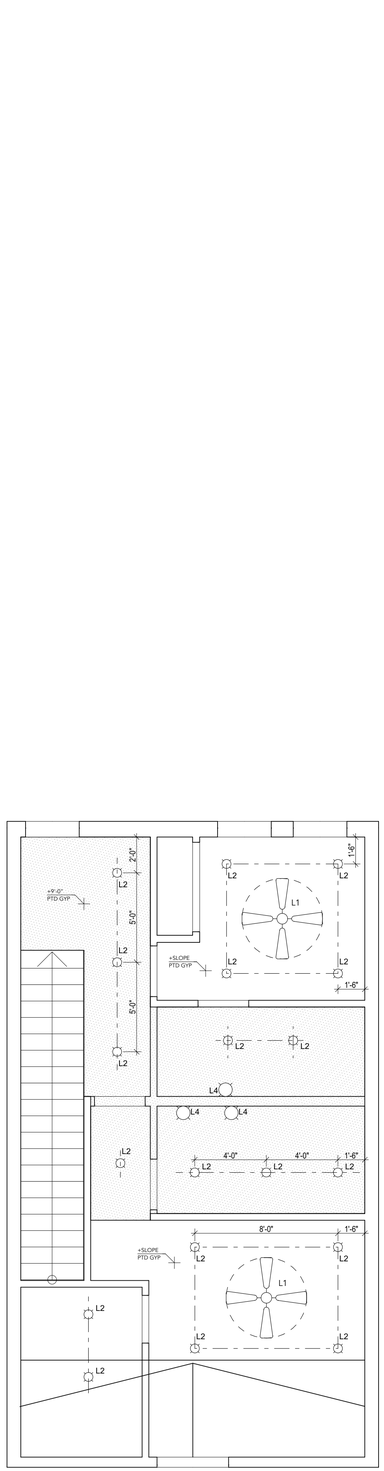
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

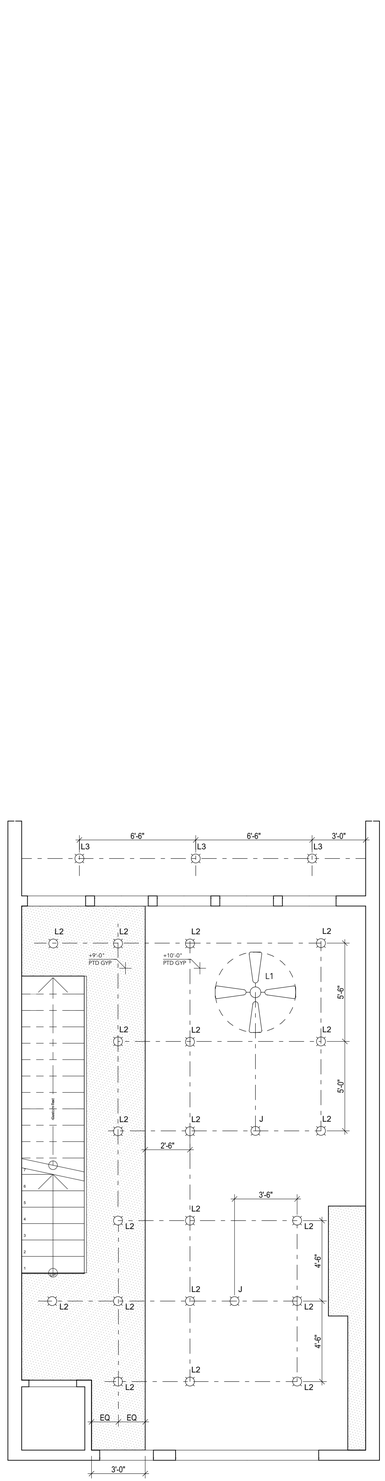
KEY PLAN

UNIT D1 RCP

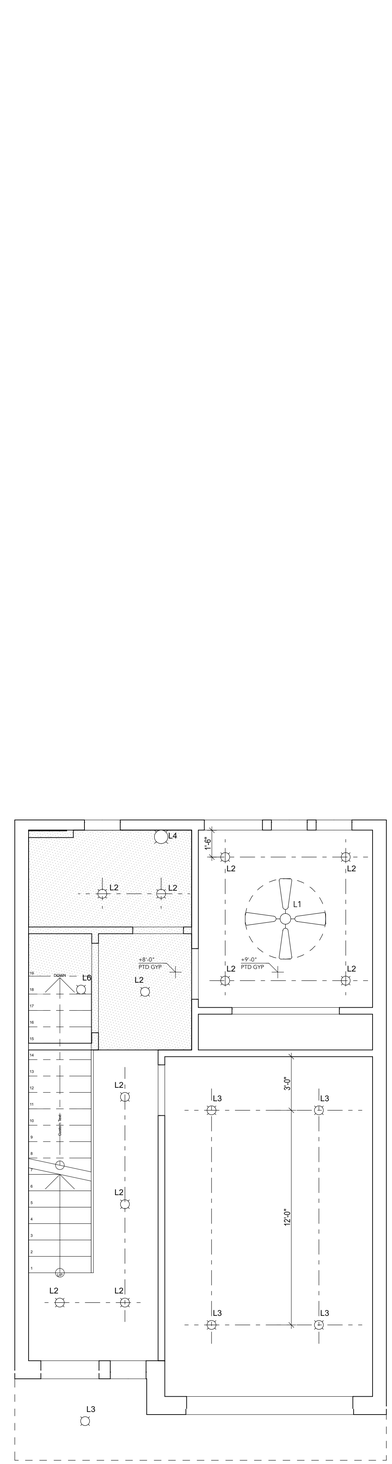
A4.16



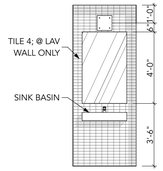
RCP - LEVEL 3 A3
SCALE: 1/4" = 1'-0"



RCP - LEVEL 2 A2
SCALE: 1/4" = 1'-0"

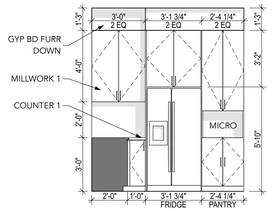


RCP - LEVEL 1 A1
SCALE: 1/4" = 1'-0"



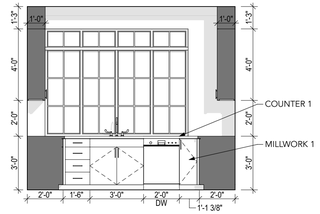
POWDER ELEVATION 2 D5

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



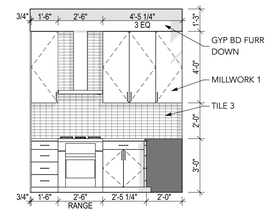
KITCHEN ELEVATION 3 D4

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



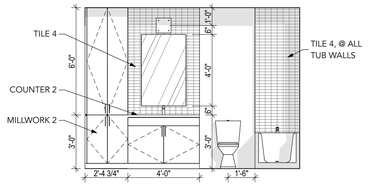
KITCHEN ELEVATION 2 D3

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



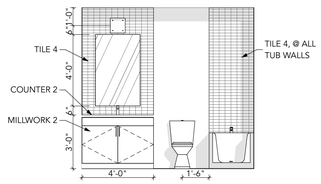
KITCHEN ELEVATION 1 D2

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



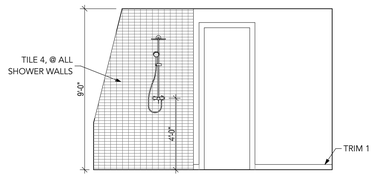
BATHROOM 1 ELEVATION 1 C5

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



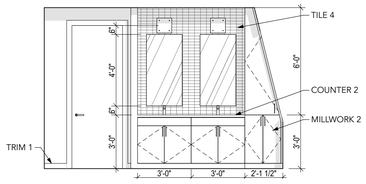
BATHROOM 1 ELEVATION 1 C4

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



MASTER BATH ELEVATION 2 C3

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



MASTER BATH ELEVATION 1 C2

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

FINISH PLAN LEGEND	
	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

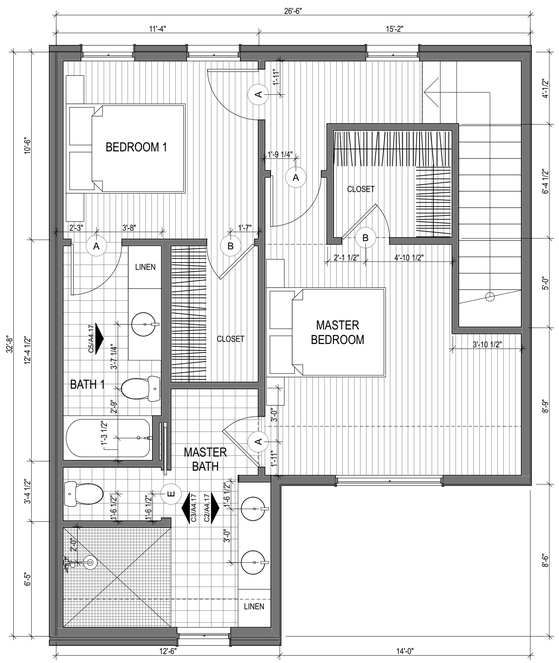
UNIT AREA BREAKDOWN	
D2	1,882.25
GARAGE	243.55
BALCONY	73.42
	2,199.22 sq ft

FINISH NOTES

- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

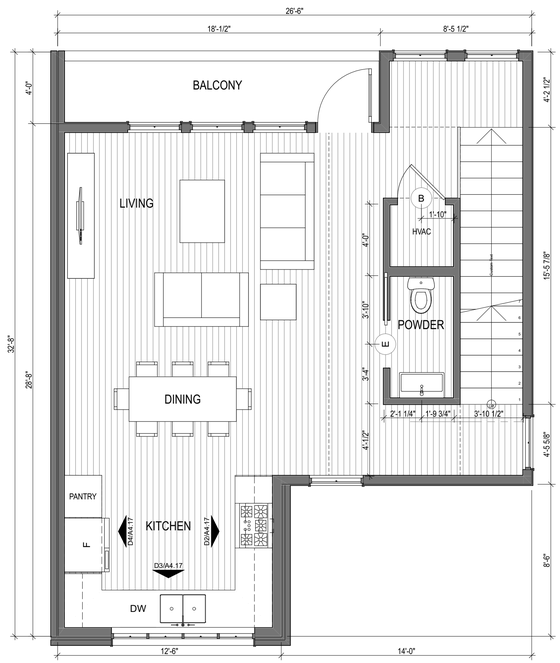
GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL



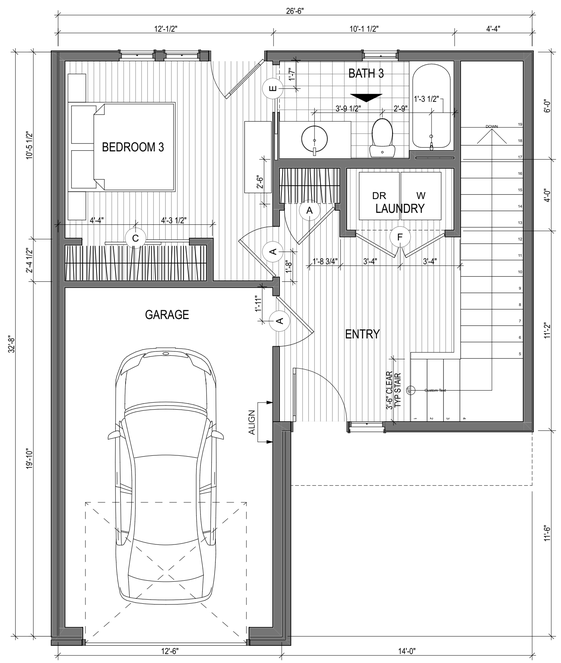
UNIT D2 LEVEL 3 A3

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



UNIT D2 LEVEL 2 A2

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



UNIT D2 LEVEL 1 A1

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

m(ødm)

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San Antonio [tel] 469.5950
201 Groveton Street 78210

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DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

UNIT D2 PLAN

A4.17

m(ødm)

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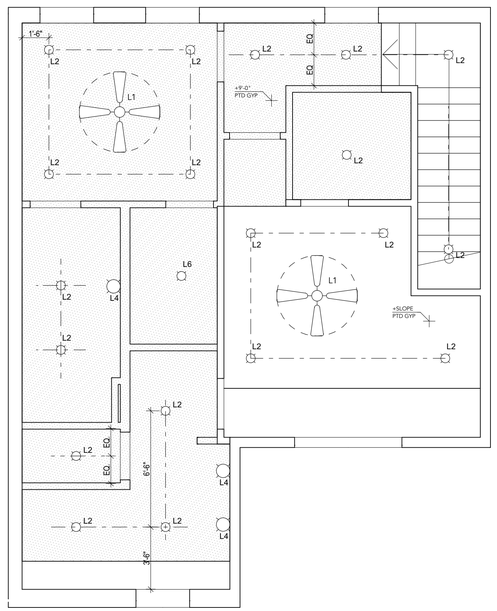
DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

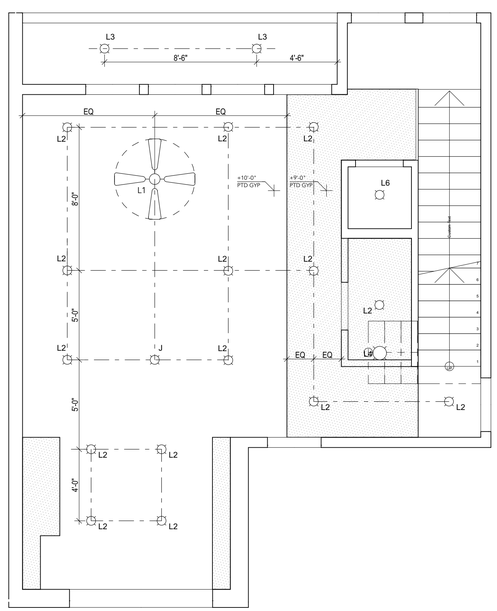
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19



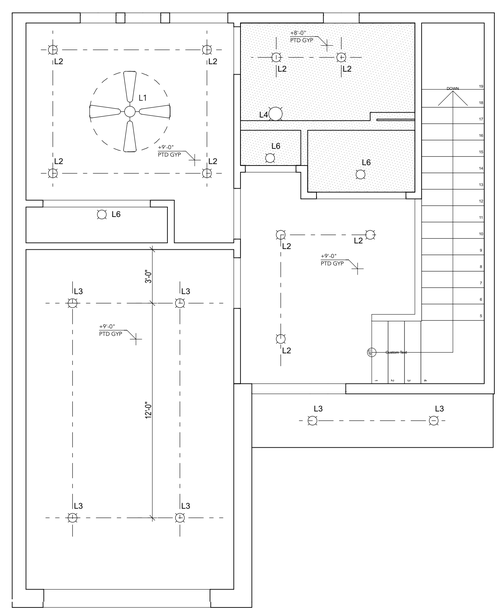
RCP - LEVEL 3 A3

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



RCP - LEVEL 2 A2

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



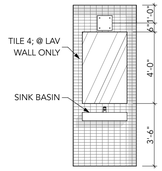
RCP - LEVEL 1 A1

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

KEY PLAN

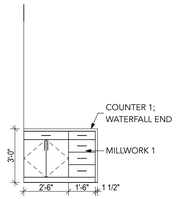
UNIT D2 RCP

A4.18



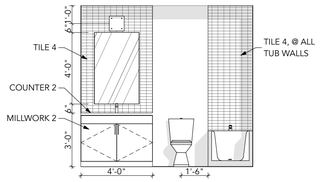
POWDER ELEVATION 2 D5

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



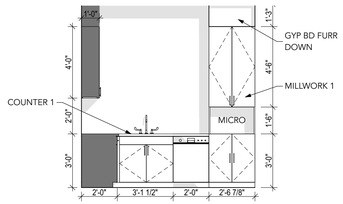
KITCHEN ELEVATION 3 D4

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



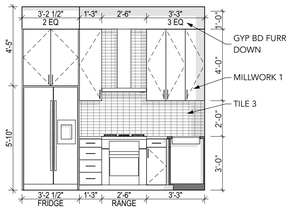
BATHROOM 1 ELEVATION 1 C4

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



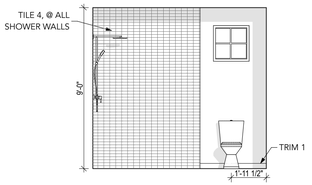
KITCHEN ELEVATION 2 D3

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



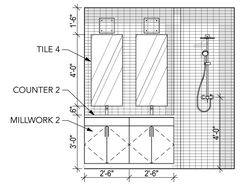
KITCHEN ELEVATION 1 D2

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



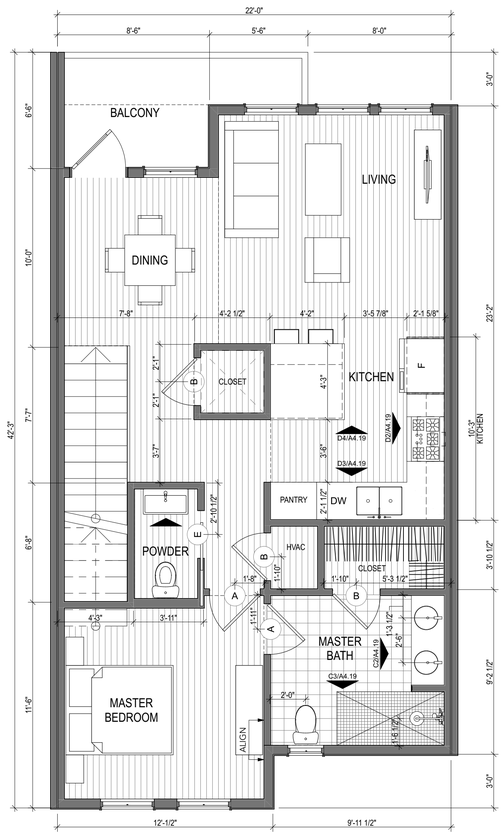
MASTER BATH ELEVATION 2 C3

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



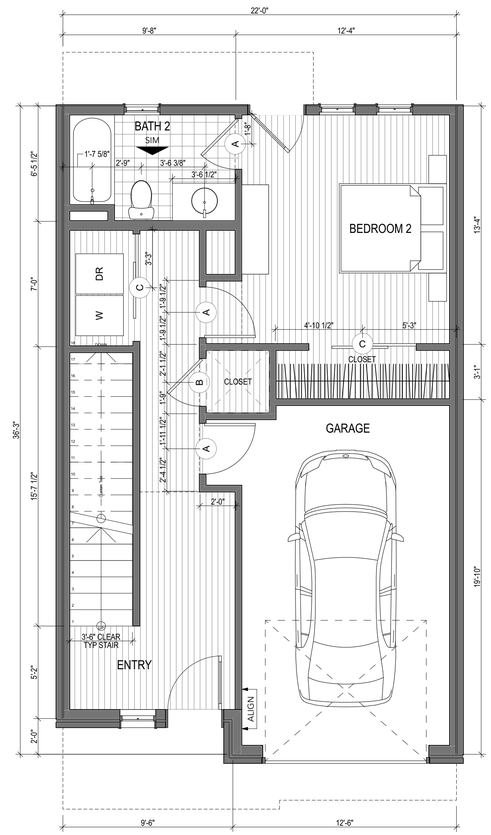
MASTER BATH ELEVATION 1 C2

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



UNIT E1 LEVEL 2 A2

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



UNIT E1 LEVEL 1 A1

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

FINISH PLAN LEGEND

	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

FINISH NOTES

- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

UNIT AREA BREAKDOWN

E1	1,335.25
GARAGE	247.11
BALCONY	71.76
	1,654.12 sq ft

m(ødm)

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DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

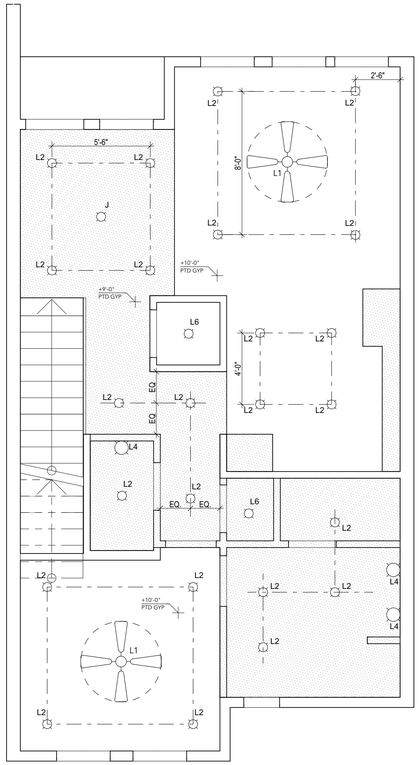
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

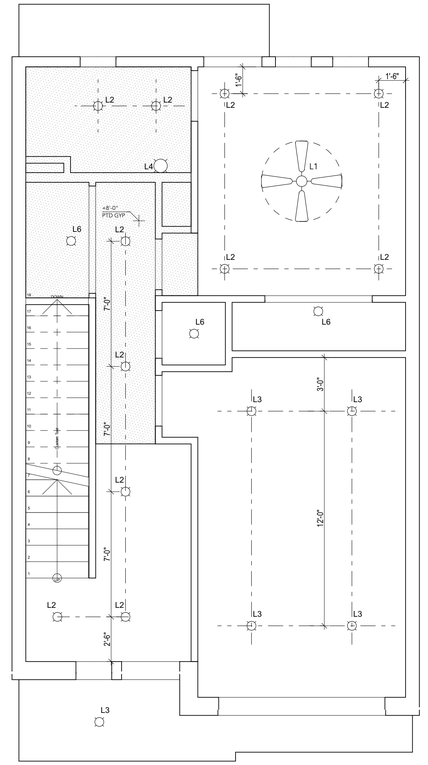
UNIT E1 PLAN

A4.19



UNIT E1 RCP - LEVEL 2 A2

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



UNIT E1 RCP - LEVEL 1 A1

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

m(ødm)

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TRAIL STREET TOWNHOMES

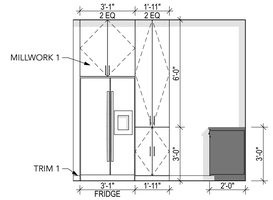
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

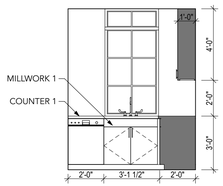
UNIT E1 RCP

A4.20



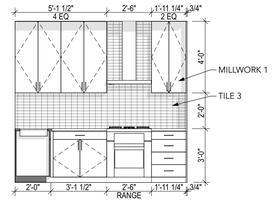
KITCHEN ELEVATION 3 D4

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



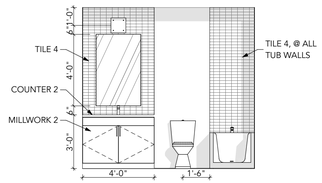
KITCHEN ELEVATION 2 D3

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



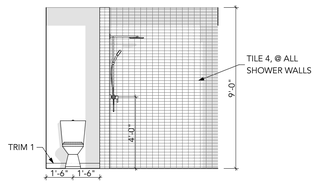
KITCHEN ELEVATION 1 D2

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



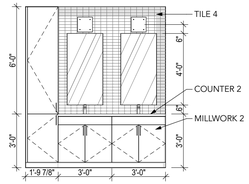
BATHROOM 1 ELEVATION 1 C4

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



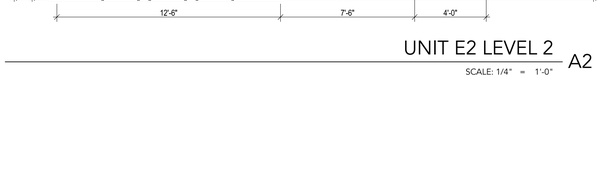
MASTER BATH ELEVATION 2 C3

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



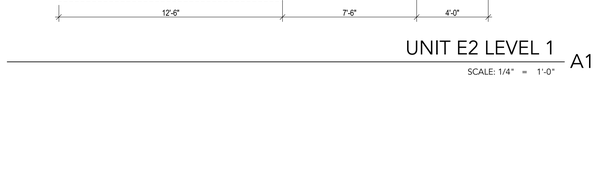
BATH 1 ELEVATION 1 C2

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



UNIT E2 LEVEL 2 A2

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



UNIT E2 LEVEL 1 A1

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

FINISH PLAN LEGEND

	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

UNIT AREA BREAKDOWN

E2	1,221.71
GARAGE	243.35
BALCONY	63.50
	1,528.56 sq ft

FINISH NOTES

- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

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DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

UNIT E2 PLAN

A4.21

m(ødm)

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TRAIL STREET TOWNHOMES

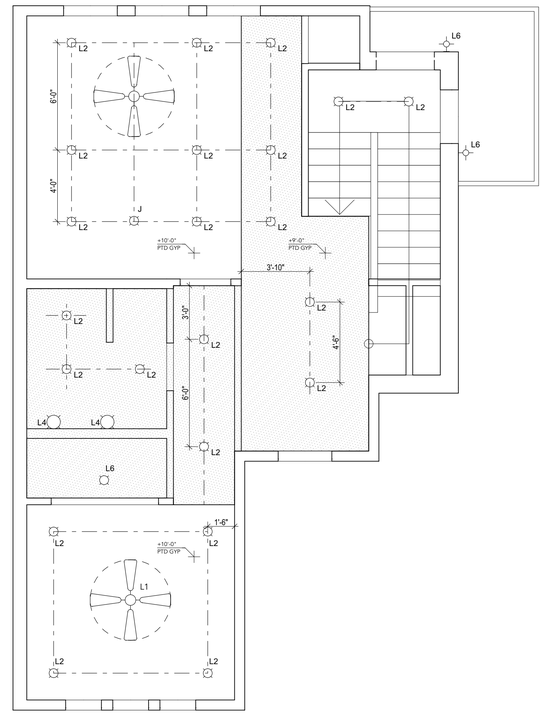
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

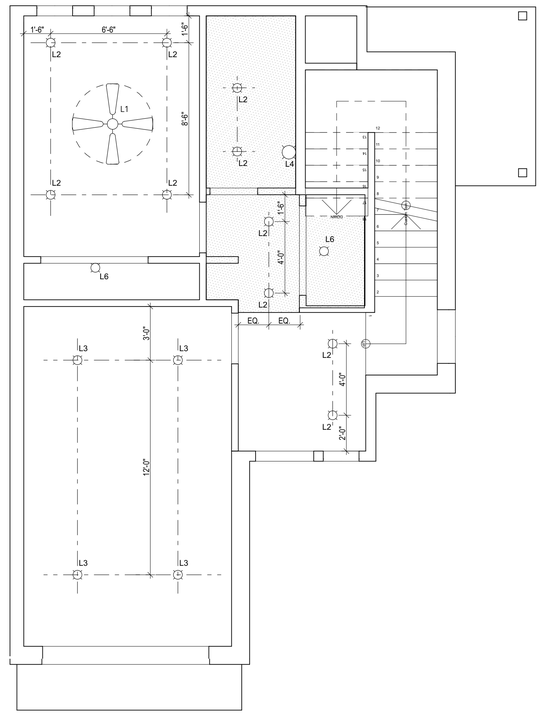
UNIT E2 RCP

A4.22



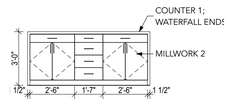
UNIT E2 RCP - LEVEL 2 A2

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



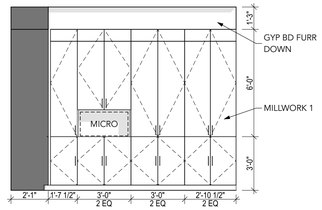
UNIT E2 RCP - LEVEL 1 A1

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



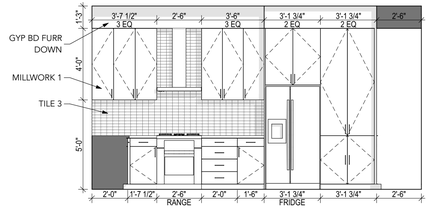
KITCHEN ISLAND ELEVATION D5

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



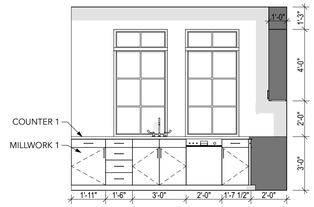
KITCHEN ELEVATION 3 D4

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



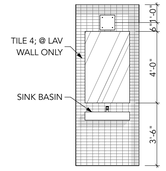
KITCHEN ELEVATION 2 D3

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



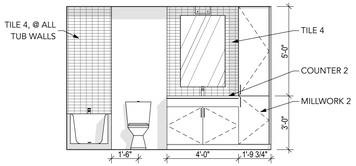
KITCHEN ELEVATION 1 D2

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



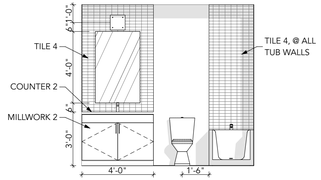
POWDER ELEV 2 C5

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



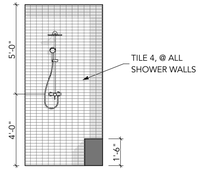
BATH 3 ELEVATION 1 C4

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



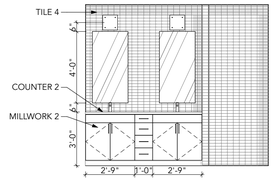
BATHROOM 1 ELEVATION 1 C3

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



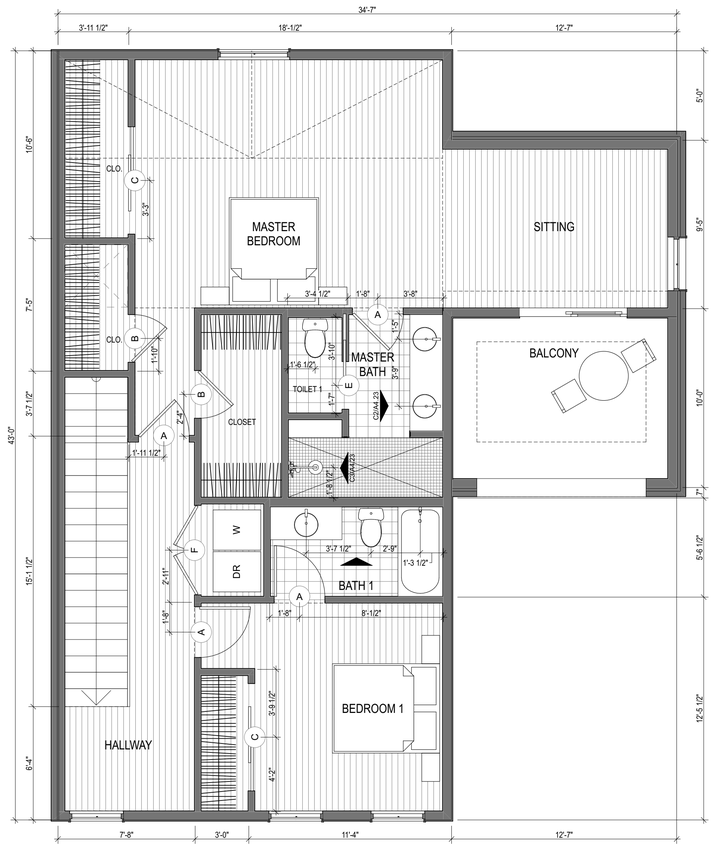
M BATH ELEV 2 C3

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



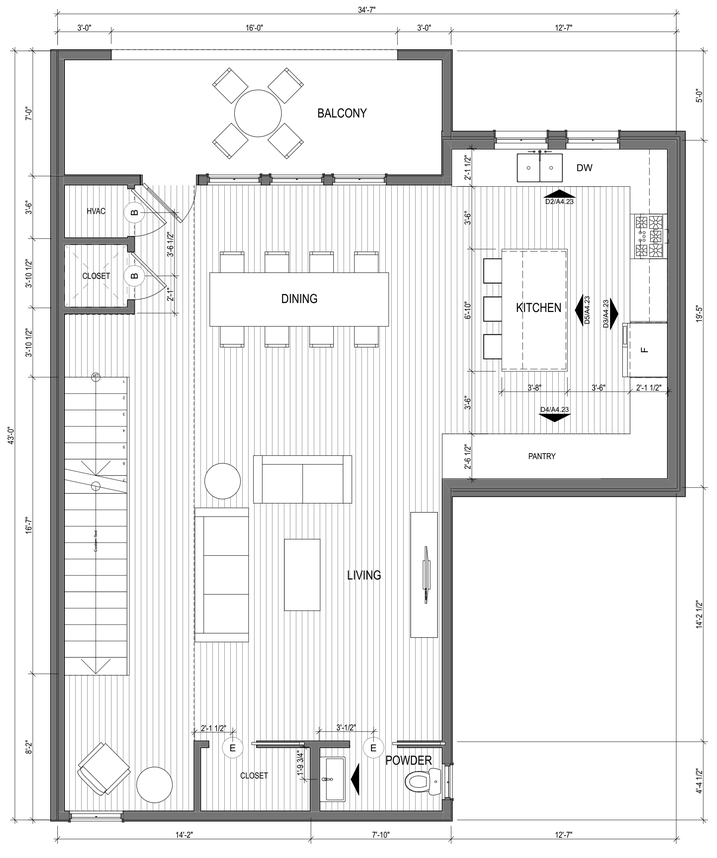
MASTER BATH ELEV 1 C2

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



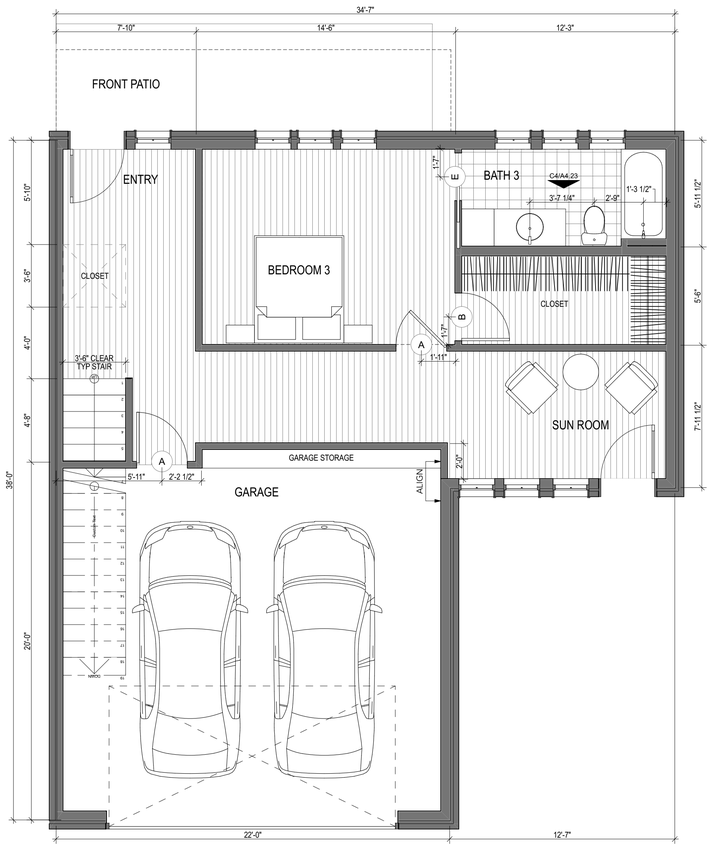
UNIT F LEVEL 3 A4

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



UNIT F LEVEL 2 A2

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



UNIT F LEVEL 1 A1

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

FINISH PLAN LEGEND

	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

FINISH NOTES

- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

UNIT AREA BREAKDOWN

F	2,737.11
GARAGE	450.74
BALCONY	273.15
	3,461.00 sq ft

m(ødm)

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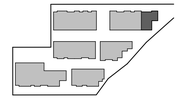
TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

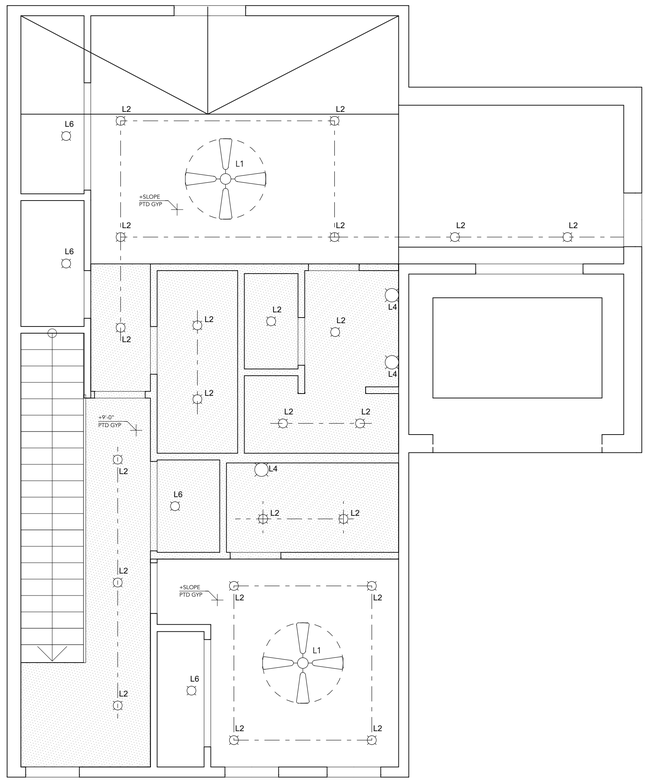
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN



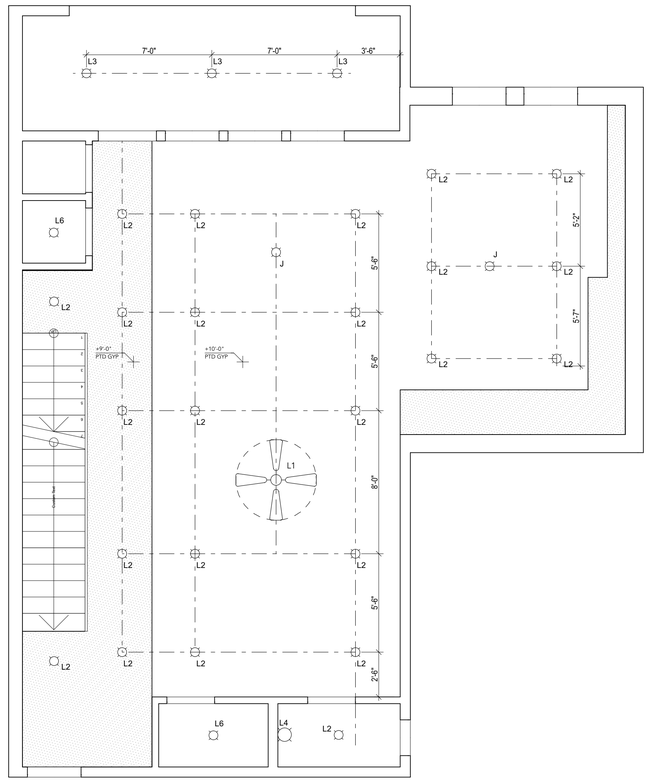
UNIT F PLAN

A4.23



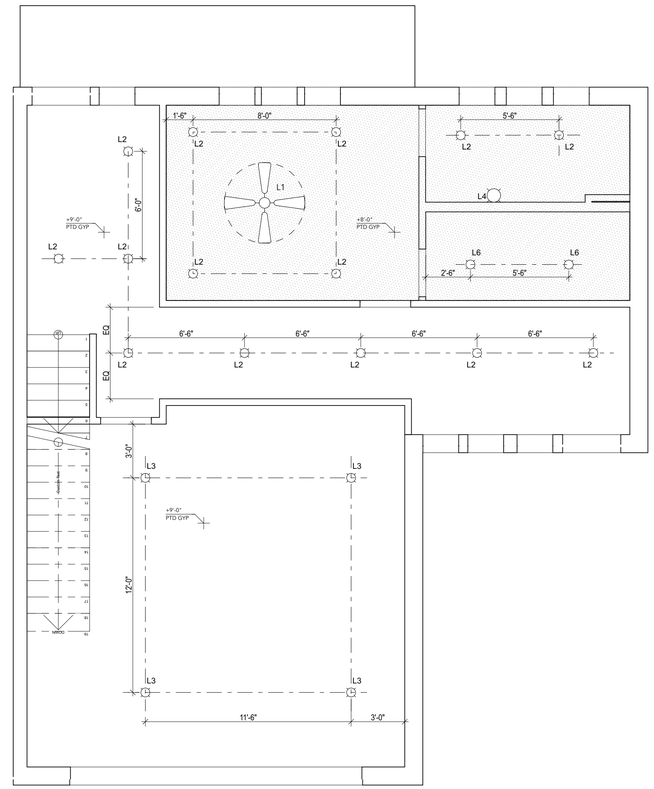
RCP - LEVEL 3 A4

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



RCP - LEVEL 2 A2

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



RCP - LEVEL 1 A1

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

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TRAIL STREET TOWNHOMES

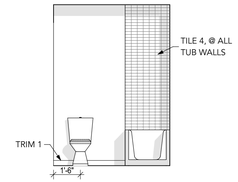
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

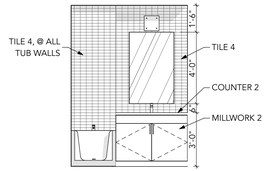
UNIT F RCP

A4.24



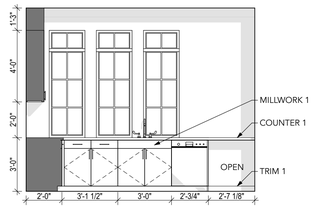
BATHROOM 3 ELEVATION 2 D5

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



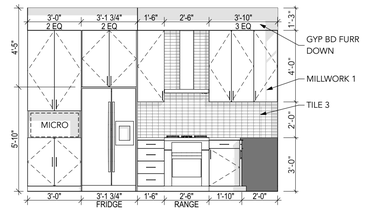
BATHROOM 3 ELEVATION 1 D4

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



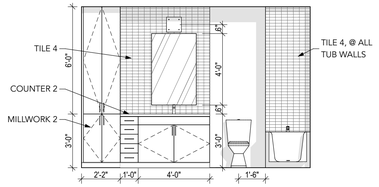
KITCHEN ELEVATION 2 D3

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



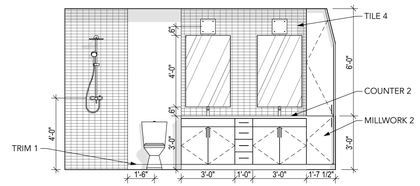
KITCHEN ELEVATION 1 D2

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



BATHROOM 1 ELEVATION 1 C3

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



MASTER BATH ELEVATION 1 C2

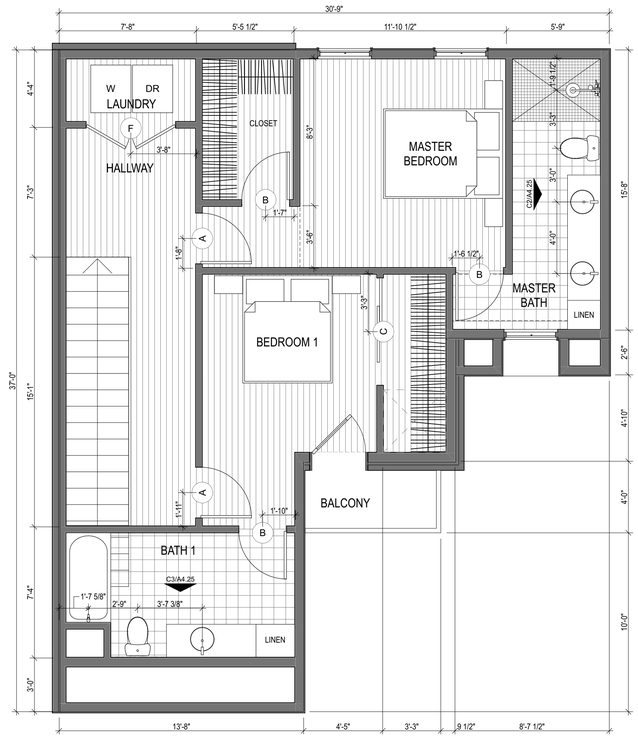
SCALE: 1/4" = 1'-0"

FINISH PLAN LEGEND	
	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

FINISH NOTES
_STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
_ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

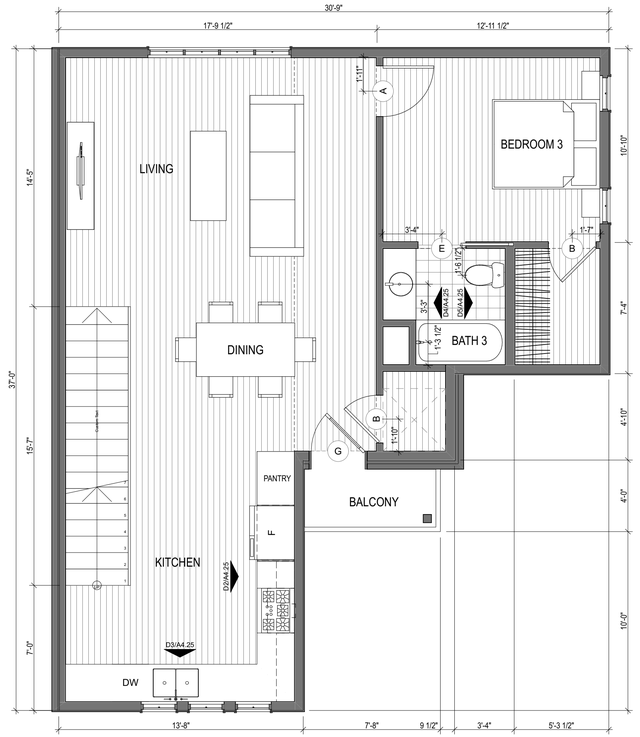
GENERAL PLAN NOTES
_ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
_ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
_ALL DEMISING WALLS TO BE WK4, U.N.O.
_ALL INTERIOR WALLS TO BE WE4, U.N.O.
_ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
_WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

UNIT AREA BREAKDOWN	
G	2,001.95
GARAGE	434.41
BALCONY	61.34
	2,497.70 sq ft



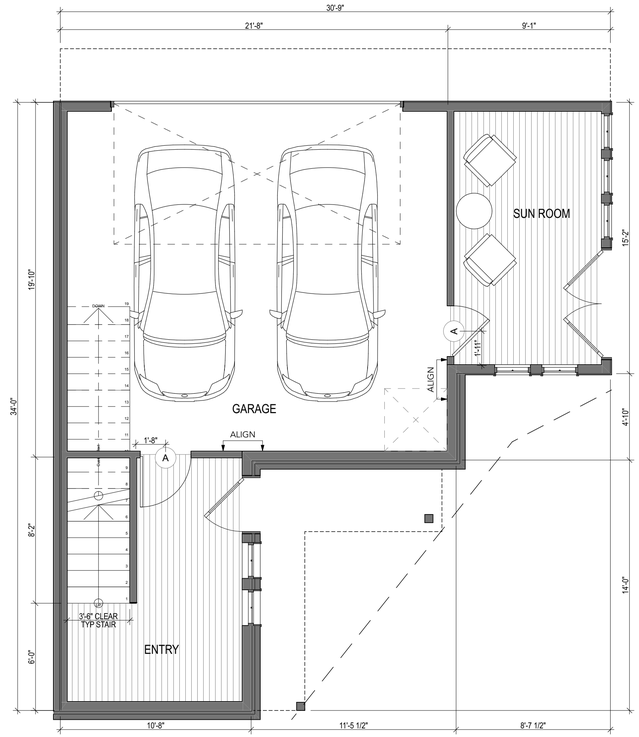
UNIT G LEVEL 3 A4

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



UNIT G LEVEL 2 A2

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



UNIT G LEVEL 1 A1

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

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TRAIL STREET

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

UNIT G PLAN

A4.25

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TRAIL STREET TOWNHOMES

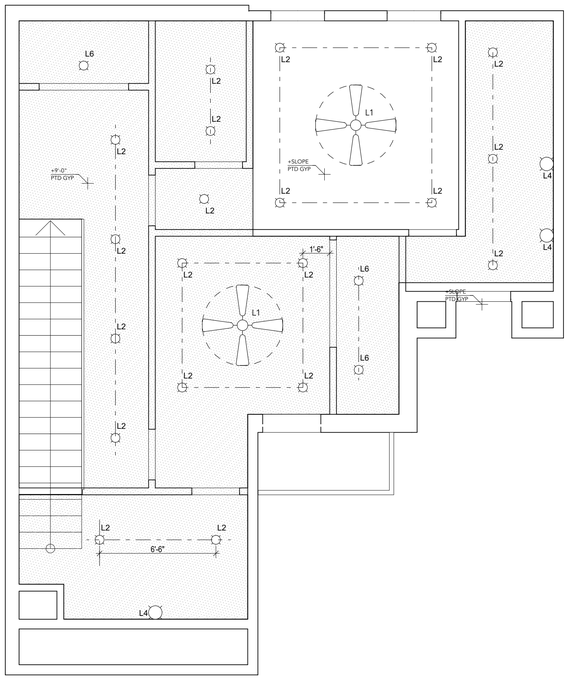
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

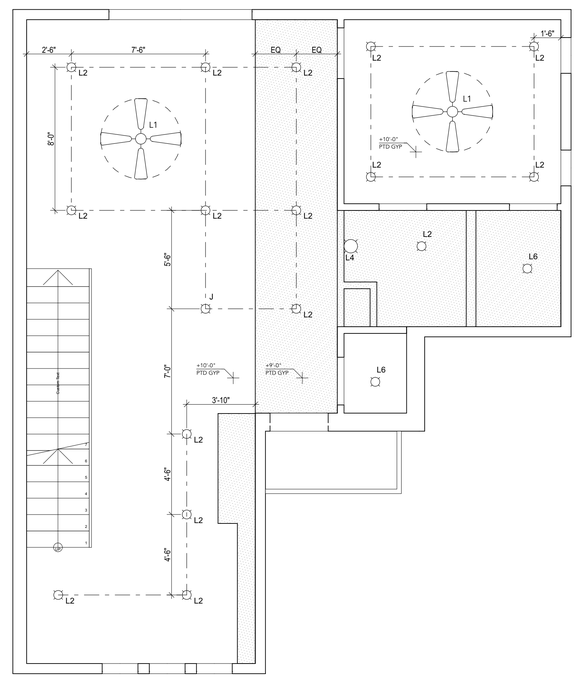
UNIT G RCP

A4.26



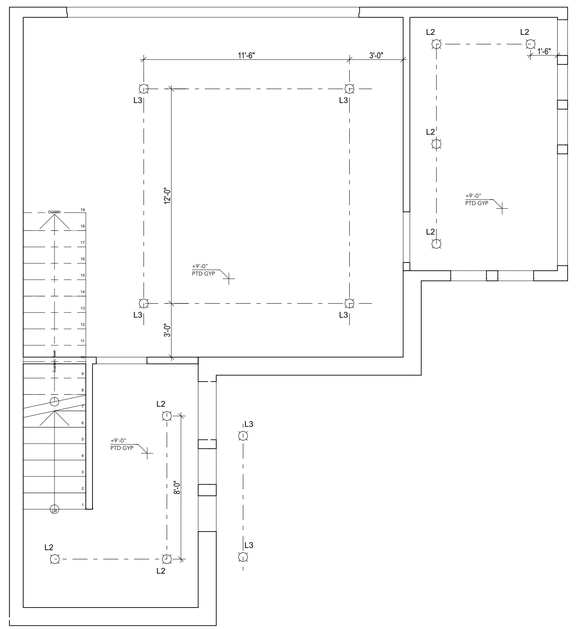
RCP - LEVEL 3 A4

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



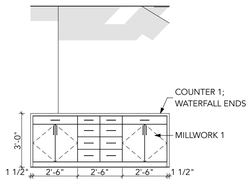
RCP - LEVEL 2 A2

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



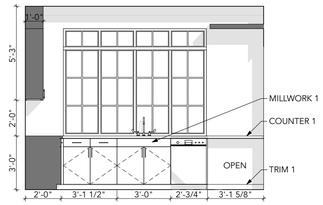
RCP - LEVEL 1 A1

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



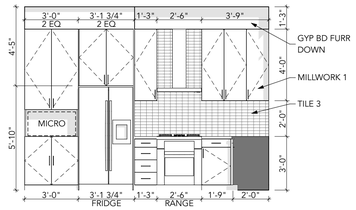
KITCHEN ISLAND ELEVATION D4

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



KITCHEN ELEVATION 2 D3

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

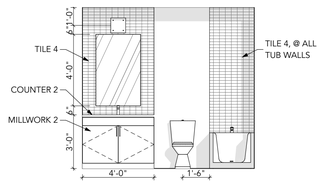


KITCHEN ELEVATION 1 D2

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

POWDER ELEVATION 2 C4

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

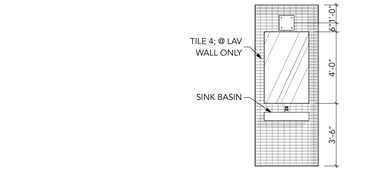


BATHROOM 1 ELEVATION 1 C4

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

BATHROOM 1 ELEVATION 1 B4

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

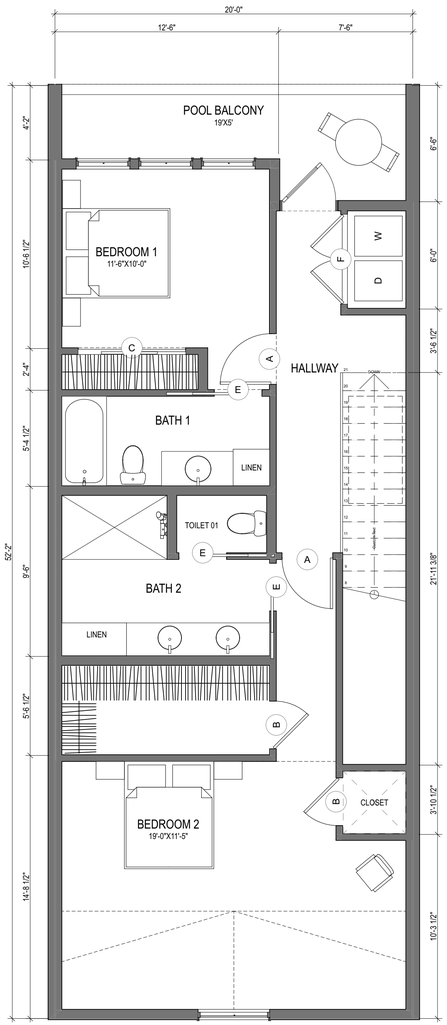


MASTER BATH ELEVATION 1 A4

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

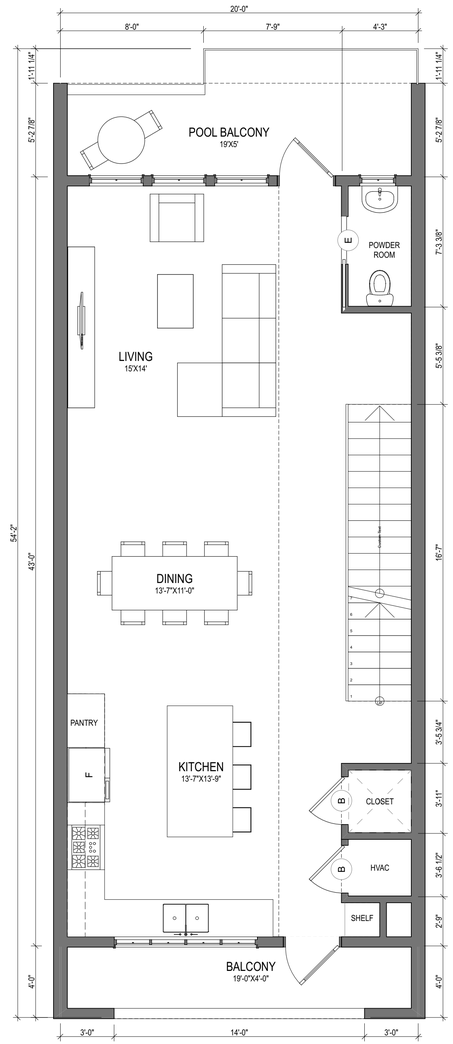
MASTER BATH ELEVATION 2 A4

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



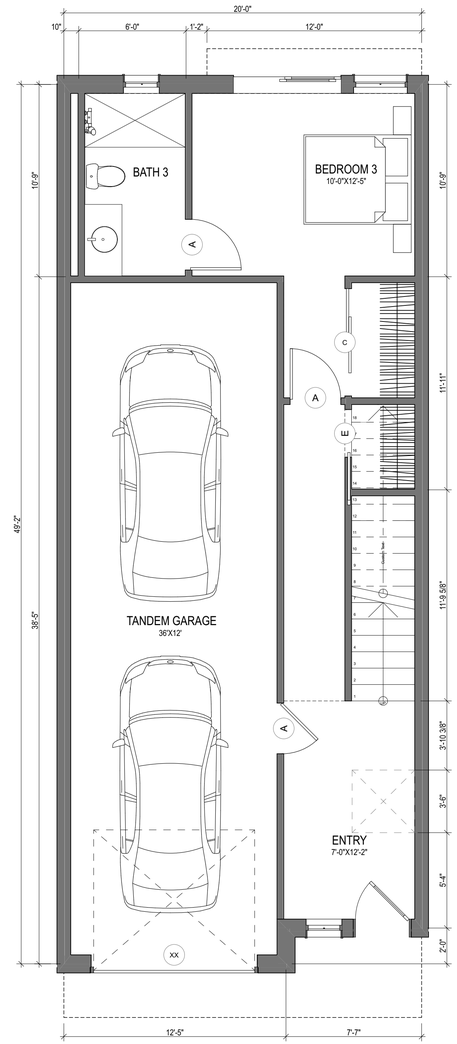
UNIT T1 LEVEL 3 A3

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



UNIT T1 LEVEL 2 A2

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



UNIT T1 LEVEL 1 A1

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

FINISH PLAN LEGEND

	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

UNIT AREA BREAKDOWN

T1	2,307.29
GARAGE	463.86
BALCONY	308.17
	3,079.32 sq ft

FINISH NOTES

- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

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DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

UNIT T1 PLAN

A4.27

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TRAIL STREET TOWNHOMES

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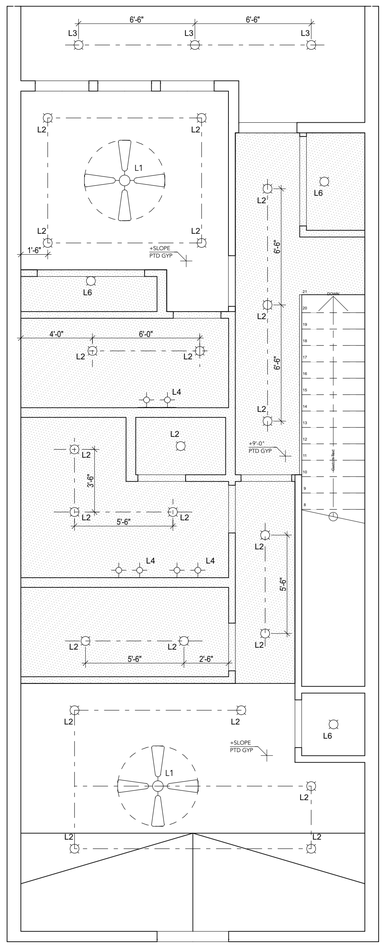
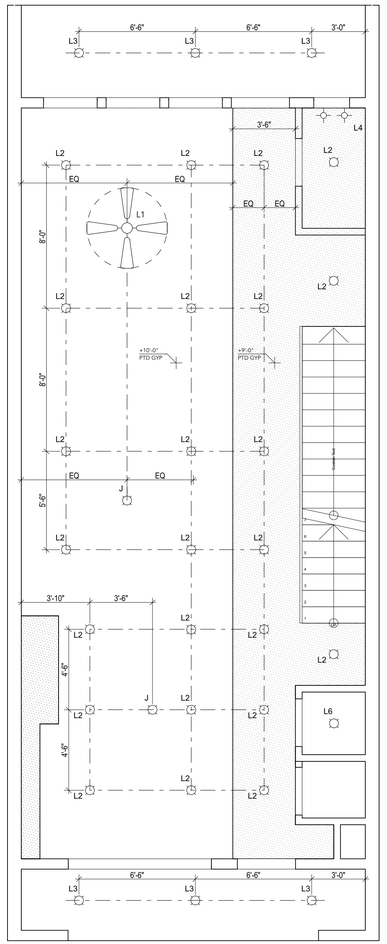
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19



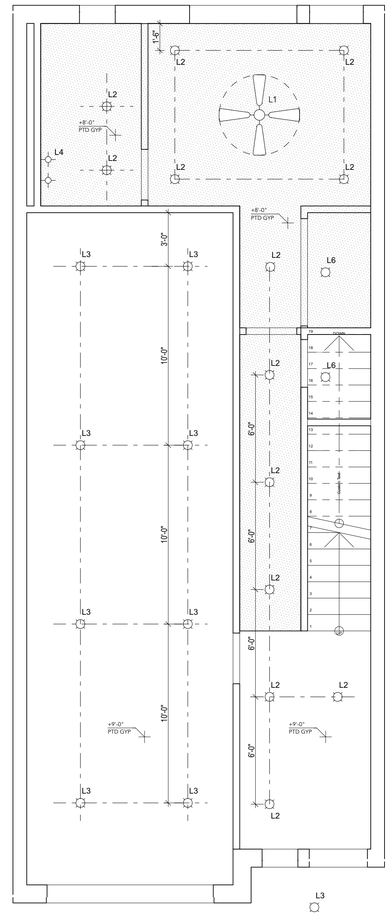
RCP - LEVEL 3 A3

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



RCP - LEVEL 2 A2

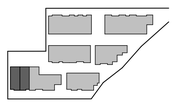
SCALE: 1/4" = 1'-0"



RCP - LEVEL 1 A1

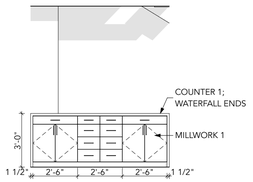
SCALE: 1/4" = 1'-0"

KEY PLAN



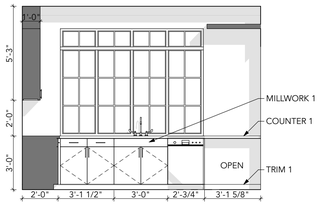
UNIT T1 RCP

A4.28



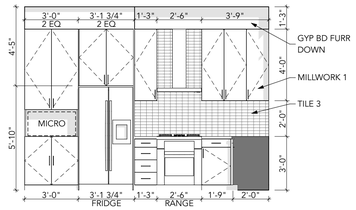
KITCHEN ISLAND ELEVATION D4

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



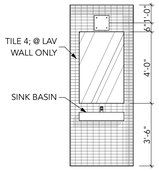
KITCHEN ELEVATION 2 D3

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



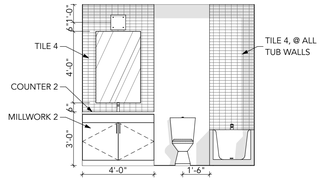
KITCHEN ELEVATION 1 D2

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



POWDER ELEVATION 2 C4

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



BATHROOM 1 ELEVATION 1 C4

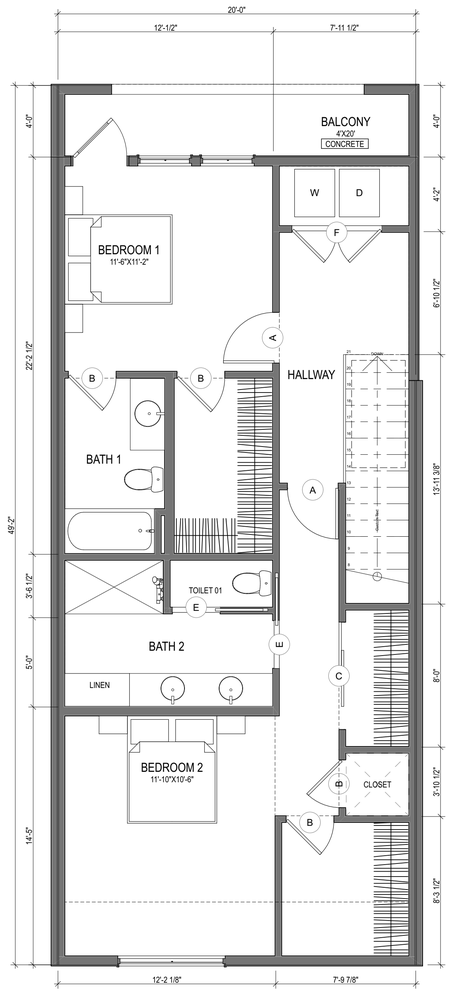
SCALE: 1/4" = 1'-0"

MASTER BATH ELEVATION 1 B4

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

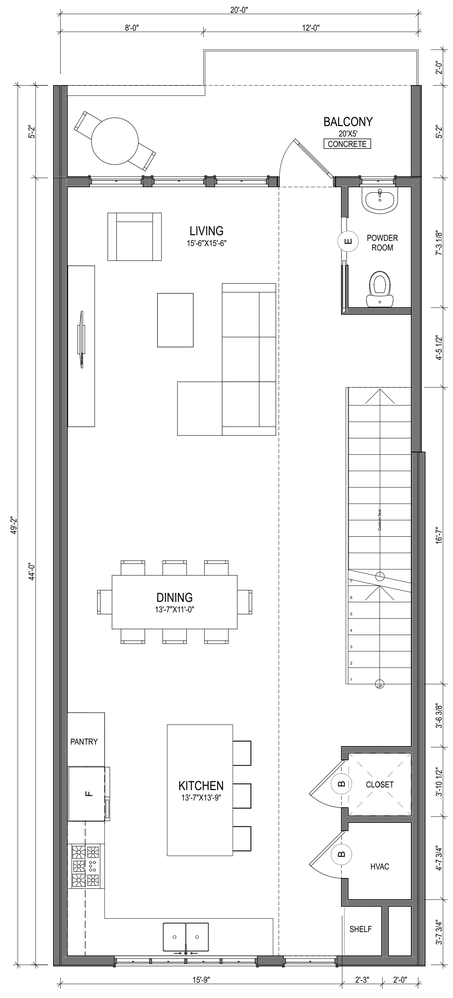
MASTER BATH ELEVATION 2 A4

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



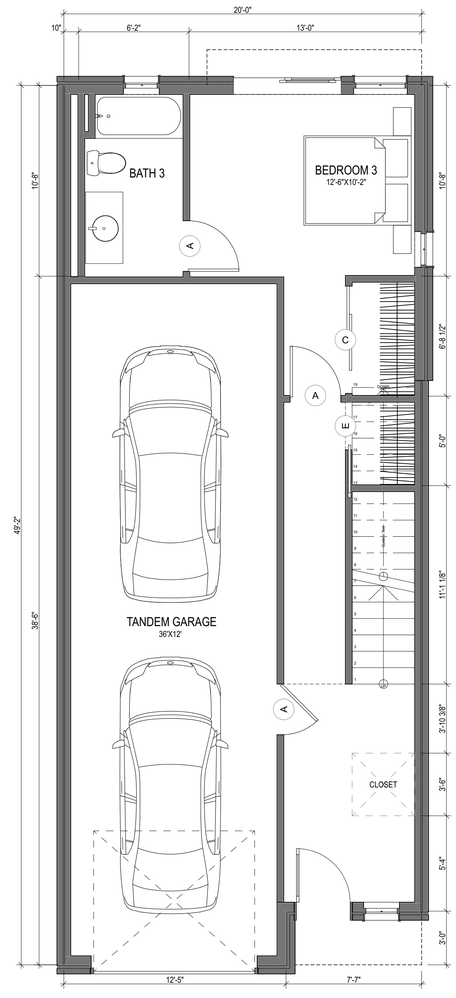
UNIT T2 LEVEL 3 A3

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



UNIT T2 LEVEL 2 A2

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



UNIT T2 LEVEL 1 A1

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

FINISH PLAN LEGEND

	'FLOOR 1' - WOOD FLOOR
	'TILE 1' - BATHROOM FLOOR
	'TILE 2' - SHOWER FLOOR
	CONCRETE 1

UNIT AREA BREAKDOWN

T2	2,278.82
GARAGE	465.18
BALCONY	207.42
	2,951.42 sq ft

FINISH NOTES

- STAIR FLOOR FINISH TO MATCH 'WOOD 1', TYPICAL
- ALL INTERIOR WALLS TO BE 'PAINT 1', UNO

GENERAL PLAN NOTES

- ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STUDS, U.N.O.
- ALL PLAN DIMENSIONS AT DEMISING WALLS TO BE TAKEN FROM WALL CENTERLINE, U.N.O.
- ALL DEMISING WALLS TO BE WK4, U.N.O.
- ALL INTERIOR WALLS TO BE WE4, U.N.O.
- ALL SINGLE SIDED OR FUR OUT WALLS TO BE WF4, U.N.O.
- WHERE INDICATED, UNIT TO BE ELEVATOR CAPABLE FOR FUTURE INSTALL

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TRAIL STREET TOWNHOMES

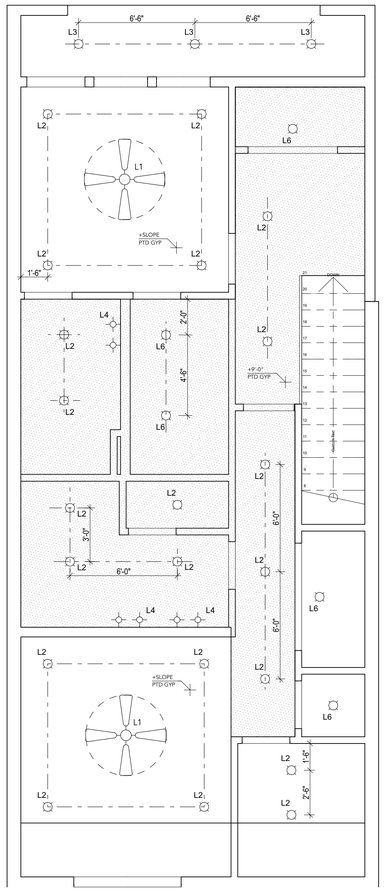
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

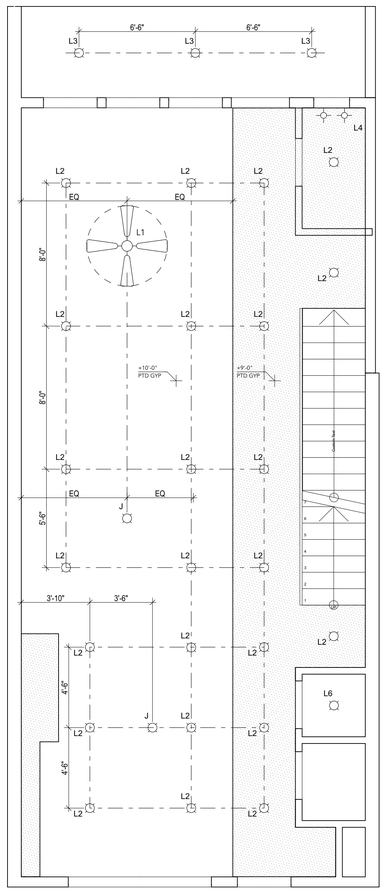
UNIT T2 PLAN

A4.29



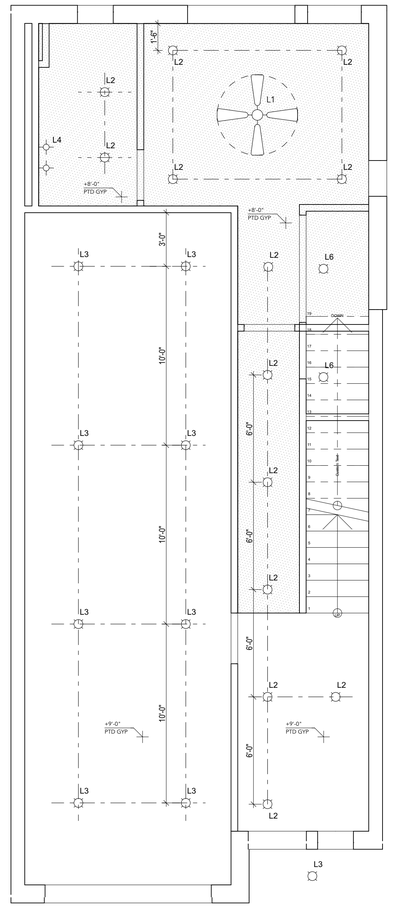
RCP - LEVEL 3 A3

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



RCP - LEVEL 2 A2

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



RCP - LEVEL 1 A1

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

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TRAIL STREET TOWNHOMES

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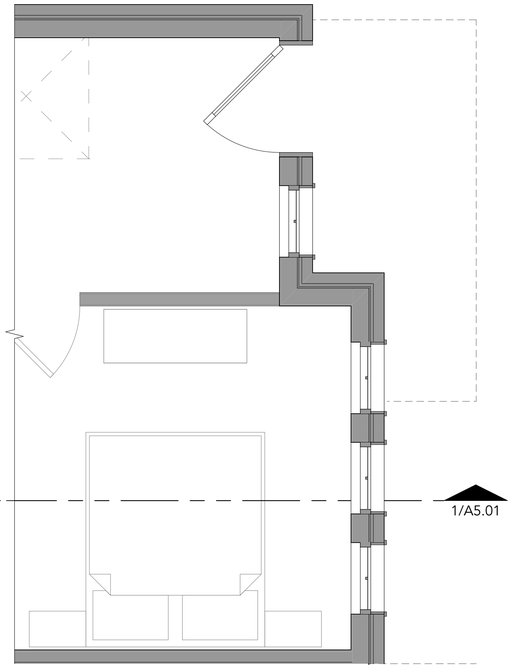
PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

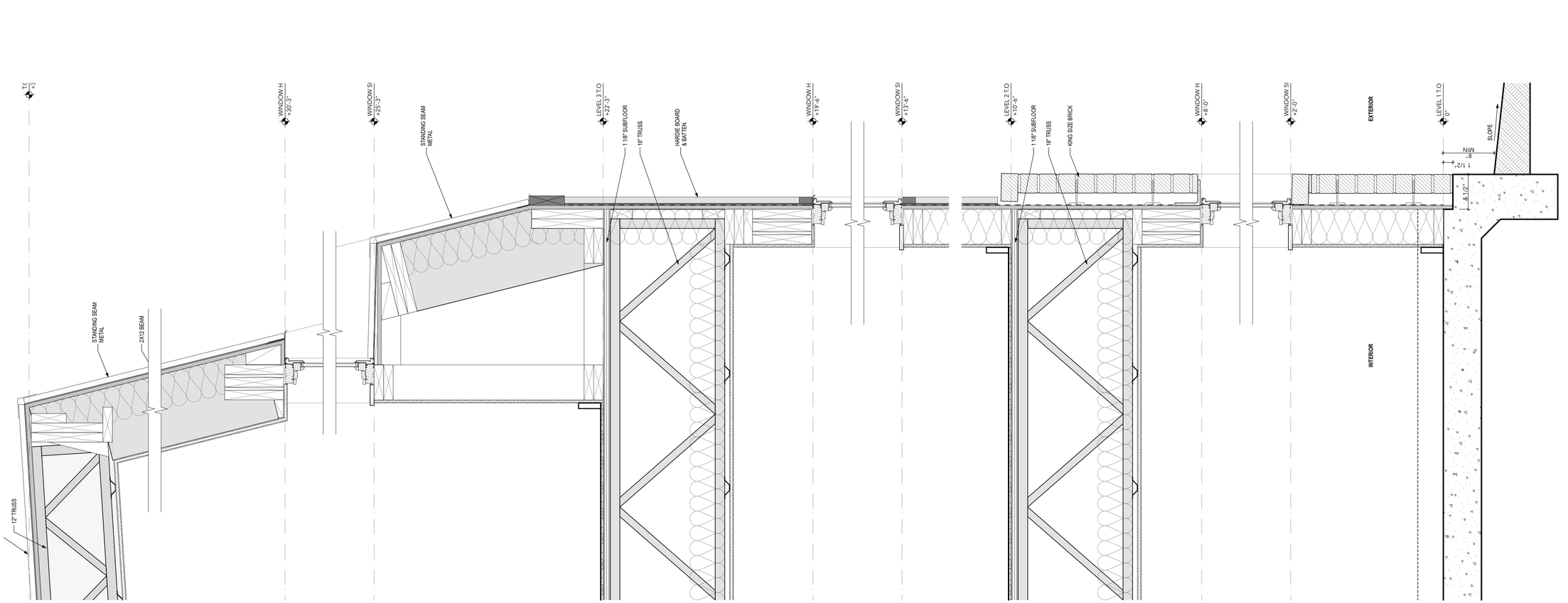
UNIT T2 RCP

A4.30

DETAIL ELEVATION @ UNIT A2 FRONT 7
SCALE: 1/2" = 1'-0"



ENLARGED PLAN - LEVEL 1 8
SCALE: 1/2" = 1'-0"



WALL SECTION @ UNIT TYPE A2 FRONT 1
SCALE: 1 1/2"= 1'-0"

m(ødm)

Austin [512] 469.5950
1009 West 6th Street #50 78703

San Antonio [210] 469.5950
201 Groveton Street 78210

markodomstudio.com

DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

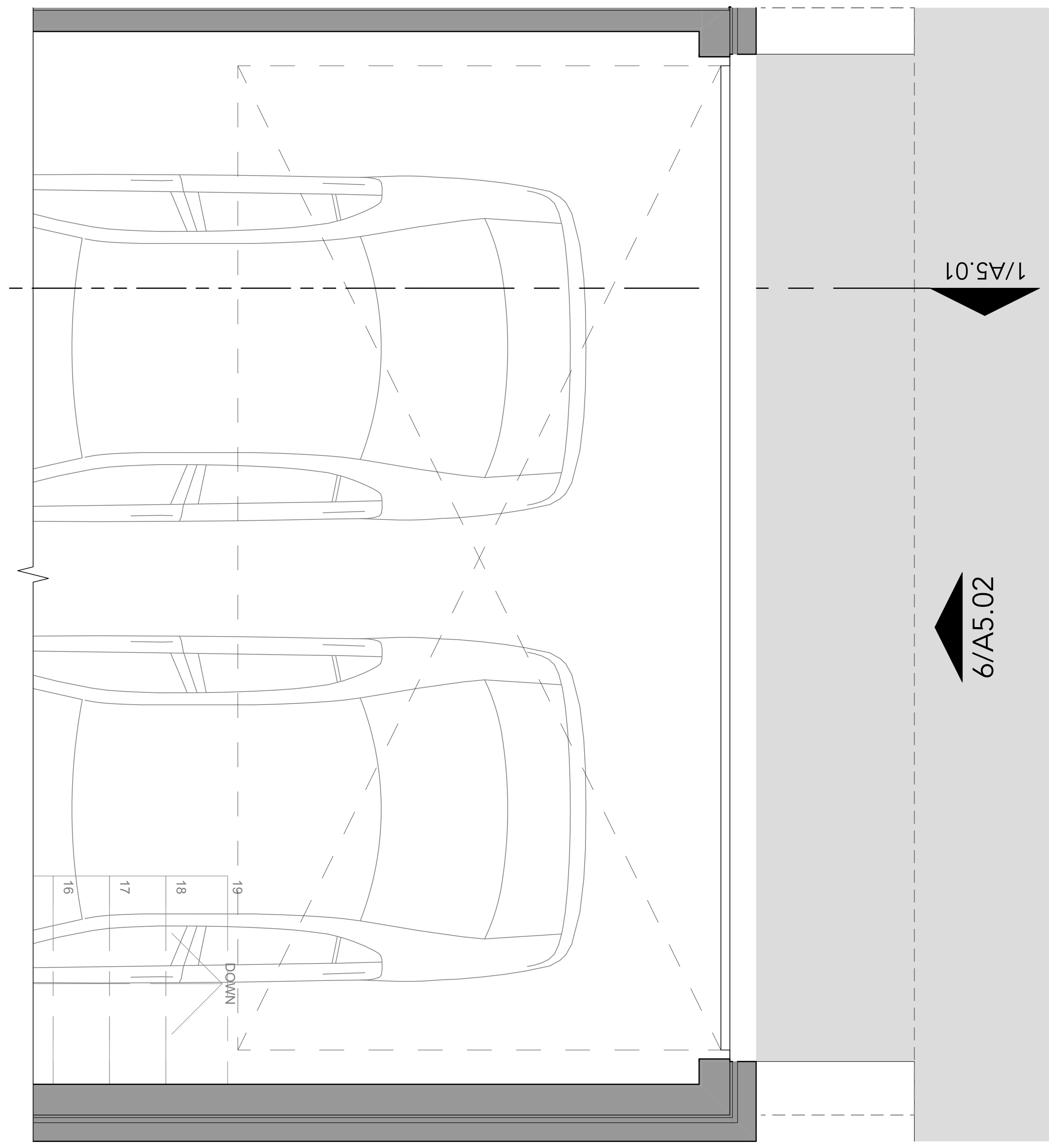
KEY PLAN

WALL SECTION @ UNIT A2 FRONT

A5.01

DETAIL ELEVATION @ UNIT A2 REAR 6

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



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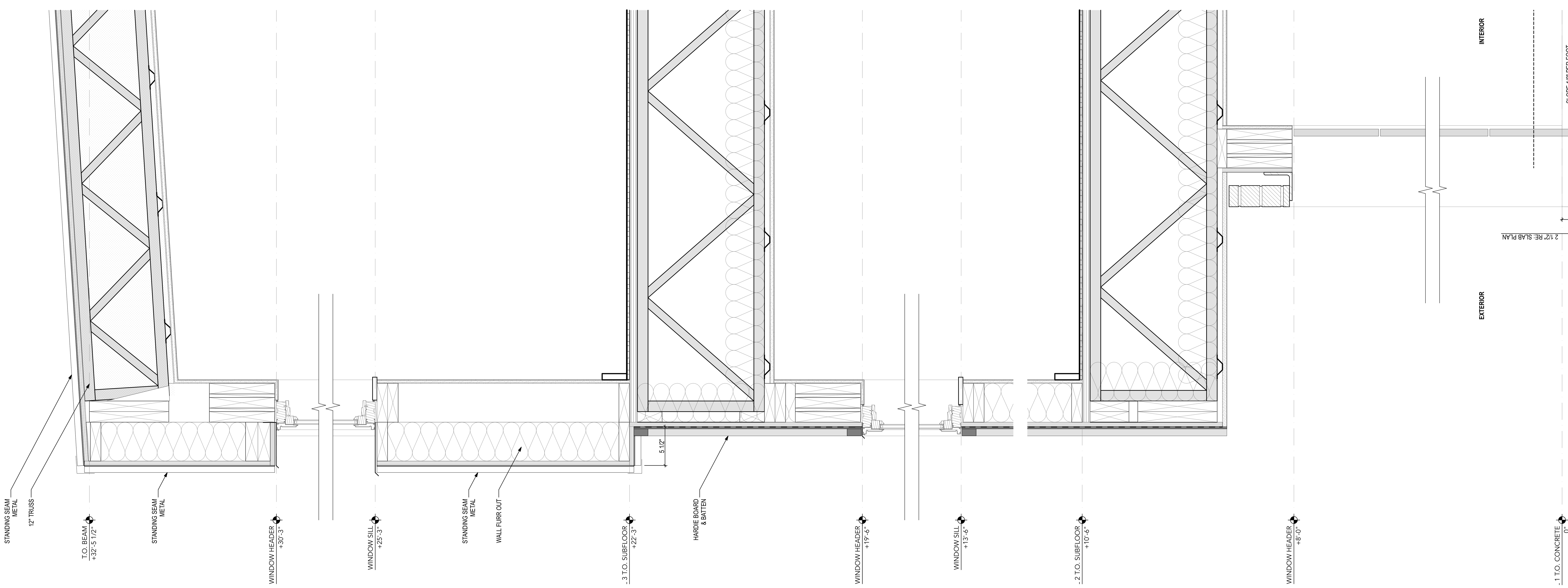

WALL SECTION @ UNIT TYPE A2 FRONT 1

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

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TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

KEY PLAN

WALL SECTION @ UNIT A2 REAR

A5.02

BIM Server: bimserver.local - BIM Server 21/TRL/TRL | Ver. 21.1710 | Friday, August 2, 2019 | 4:03 PM

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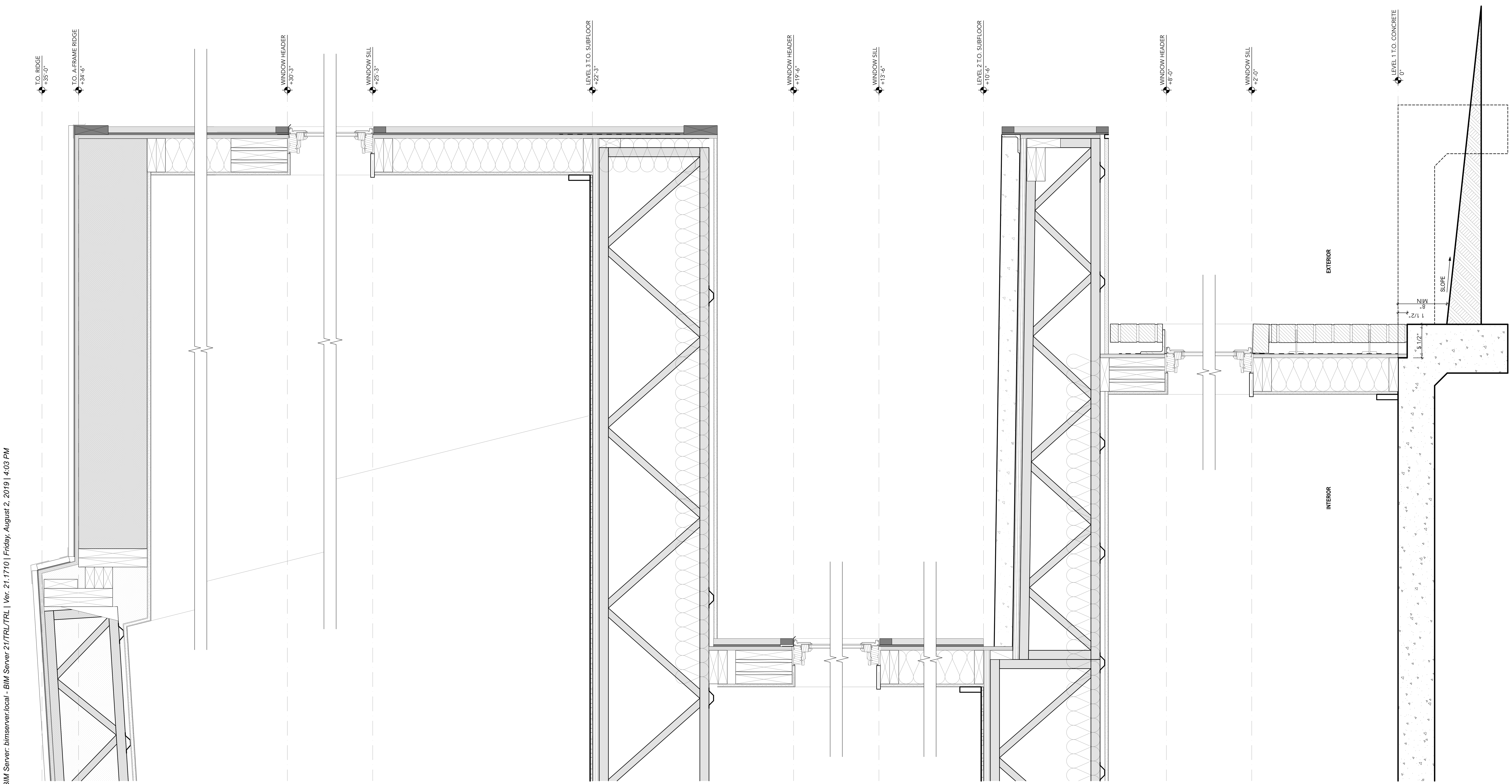


WALL SECTION @ UNIT TYPE A2 FRONT 1

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

TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER:	2019-004
ISSUED SETS	DATE
80% CD SET	08/02/19

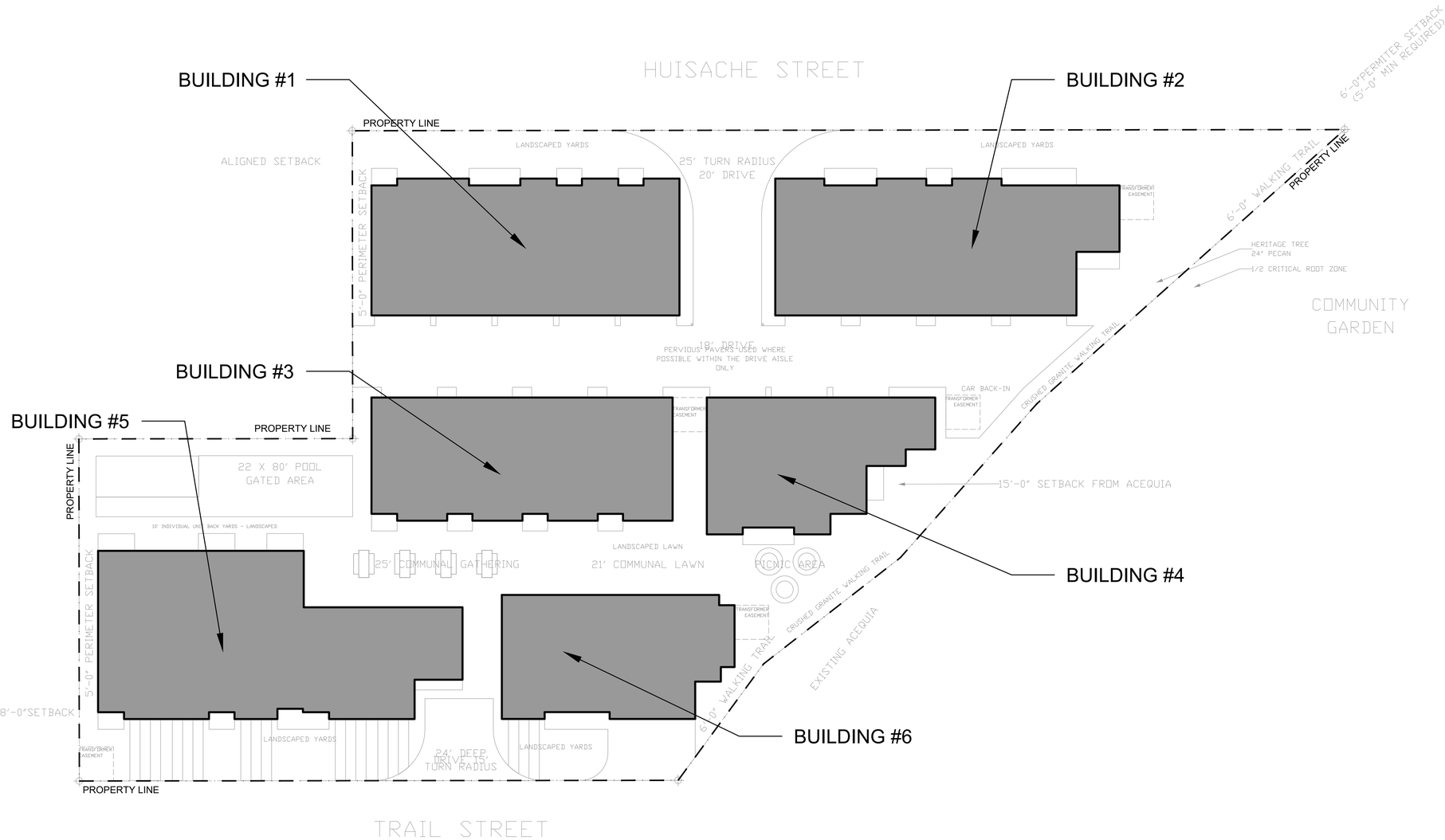
KEY PLAN

WALL SECTION @ UNIT A1 FRONT

A5.03

TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212



1 STRUCTURAL SITE PLAN

Scale: 1"=1'-0"

DRAWING INDEX:

Call the P.E.

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Christopher P. Hillman, P.E.
LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

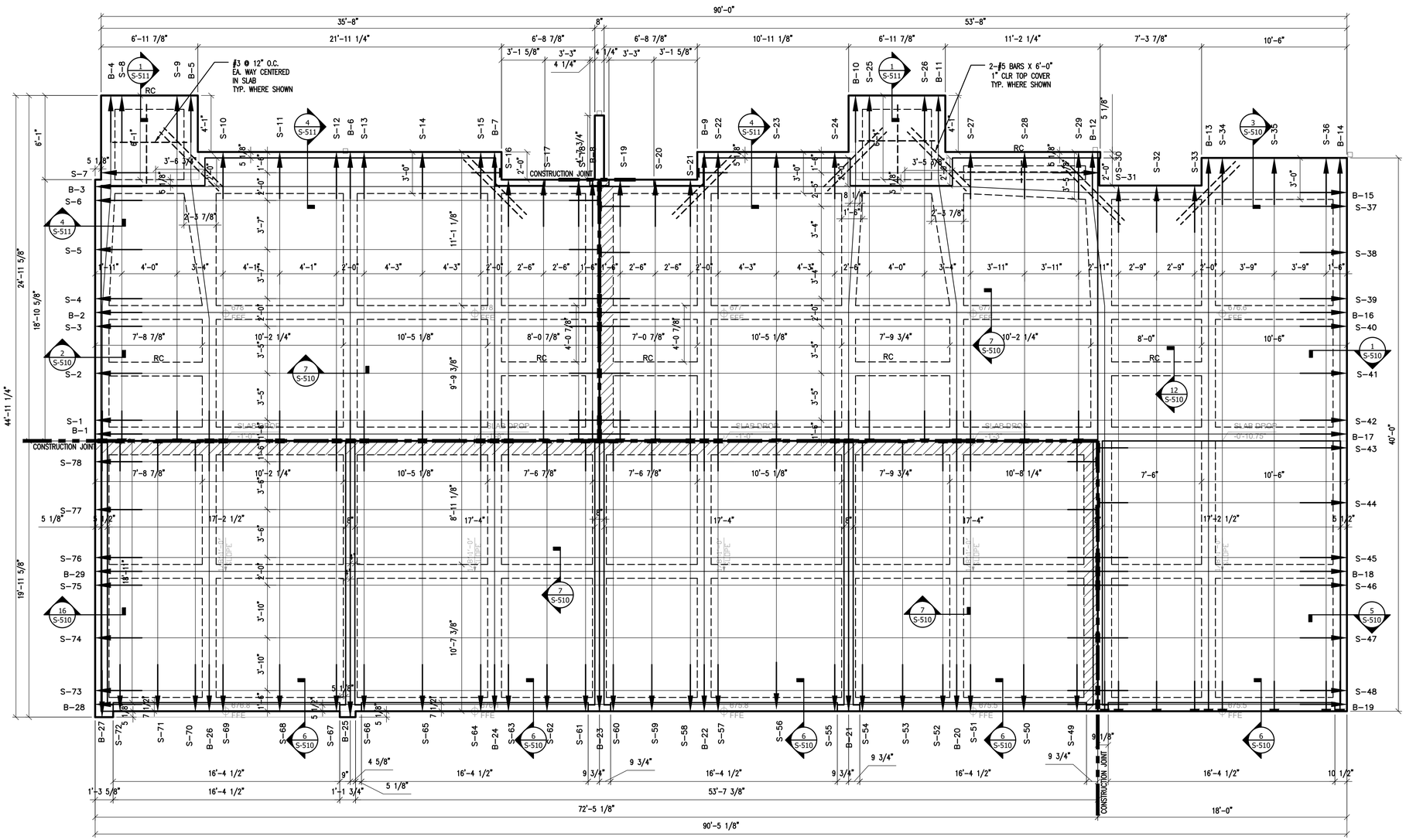
TRAIL STREET TOWNHOMES
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ???? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
STRUCTURAL SITE PLAN

Sheet No.:
S-010



FOUNDATION NOTES

THIS SLAB TYPE IS BASED ON PTI DC10.5-12 (STANDARD REQUIREMENTS FOR DESIGN AND ANALYSIS OF SHALLOW POST-TENSIONED CONCRETE FOUNDATIONS ON EXPANSIVE SOIL)

SLAB TYPE:	BRAB TYPE I, BRAB TYPE II, BRAB TYPE III, BRAB TYPE IV
DESCRIPTION:	UNREINFORCED, LIGHTLY REINFORCED AGAINST SHRINKAGE AND TEMPERATURE CRACKING, REINFORCED AND STIFFENED, STRUCTURAL (NOT DIRECTLY SUPPORTED ON THE GROUND)
SLAB THICKNESS:	4 INCHES
NOTES ON EXPANSIVE SOILS:	

THE DESIGN OF FOUNDATIONS SUPPORTED ON EXPANSIVE OR COMPRESSIBLE SOILS INCLUDES CONSIDERATION OF VARIOUS SITE CONDITIONS; THEREFORE, IT IS NECESSARY FOR OTHER MEMBERS OF THE PROJECT'S DESIGN AND CONSTRUCTION TEAM TO UNDERSTAND THE ASSUMPTIONS THAT HAVE BEEN MADE.

THE FOLLOWING DESIGN CRITERIA IS CONTAINED IN THE PROJECT GEOTECHNICAL REPORT BY ??????, REPORT #?????, DATED ?????. REFER TO GEOTECHNICAL REPORT SOIL PREPARATION REQUIREMENTS FOR THIS DESIGN.

SITE PREPARATION:	---	
EFFECTIVE PI:	---	
BEARING CAPACITY:	--- PSF (TOTAL DEAD PLUS LIVE LOAD)	
BEARING DEPTH:	-- FEET BELOW GRADE	
CENTER LIFT	Em = -.-- FT	Ym = -.-- INCHES
EDGE LIFT	Em = -.-- FT	Ym = -.-- INCHES

BEAM SCHEDULE

GRADE BEAM TYPE	DESCRIPTION	WIDTH	DEPTH	REINFORCEMENT
	POST TENSIONED BEAM (TYP. U.N.O.)	--"	--"	- TENDON BOTTOM
RC	REBAR BEAM	--"	--"	2-#5 BOTTOM
	POST TENSIONED DEEPENED BEAM	--"	--"	- TENDON BOTTOM
RC	REBAR DEEPENED BEAM	--"	--"	2-#5 BOTTOM
	THICKENED SLAB	12"	12"	2-#5 BOTTOM

DESIGN ASSUMPTIONS:
1. CONCRETE GRADE BEAMS SHALL EXTEND ABOVE THE FINISHED GRADE ADJACENT TO THE FOUNDATION AT ALL POINTS A MINIMUM OF 6 INCHES.
2. SITE SLOPE SHALL CAUSE WATER TO FLOW AWAY FROM THE BUILDING FOUNDATION FOR A MINIMUM DISTANCE OF 10 FEET AT A MINIMUM SLOPE OF 5%
3. NO TREES OR OTHER VEGETATION OVER SIX FEET IN HEIGHT SHALL BE PLANTED WITHIN 20 FEET OF BUILDING PERIMETER UNLESS SPECIALLY ACCOUNTED FOR IN THE DESIGN OF THE FOUNDATION
4. NO SIGNIFICANT DISCHARGE OF WATER SHALL OCCUR ADJACENT TO THE FOUNDATION. THIS MAY INCLUDE ROOF DRAINAGE AND AIR CONDITIONING CONDENSATE, BOTH OF WHICH CAN BE DIRECTED TO A SUBGRADE DRAINAGE SYSTEM.
5. THE BUILDER, CONTRACTOR, OR ENGINEER HAS PROVIDED THE OWNER WITH INFORMATION RELATED TO SLAB-ON-GROUND FOUNDATION LONG-TERM MAINTENANCE RECOMMENDATIONS.
6. THE FOUNDATION IS NOT CONSTRUCTED OVER AN AREA COVERING PARTIAL CUT AND/OR PARTIAL FILL OF EXPANSIVE OR COMPRESSIBLE SOILS (TRANSITION LOTS). SPECIAL CONSIDERATION SHALL BE GIVEN FOR ADDITIONAL DIFFERENTIAL MOVEMENT IN THE DESIGN OF FOUNDATIONS CONSTRUCTED ON THESE CONDITIONS.
7. UNLESS OTHERWISE NOTED ON THE PLANS: STOOPS, ELECTRICAL/MECHANICAL PADS, PORCHES AND PATIOS, OR OTHER FOUNDATION EXTENSIONS OUTSIDE OF THE MAIN FOUNDATION ARE DESIGNED AND CAST INDEPENDENTLY OF THE FOUNDATION.

COMPATIBILITY NOTES:
1. SHALLOW FOUNDATION SYSTEMS CONSTRUCTED ON ACTIVE SOILS ARE EXPECTED TO DEFORM. THE FOUNDATION FLEXIBILITY DISTRIBUTES LOCALIZED SOIL MOVEMENTS TO A MORE UNIFORM SLAB SHAPE. IT IS IMPORTANT THAT OTHER CONSULTANTS AND SUPPLIERS CONSIDER COMPATIBLE DESIGNS OR PRODUCTS FOR FLEXIBLE FOUNDATION SYSTEM. DEFORMATION COMPATIBILITY SHOULD BE ADDRESSED FOR NON-FLEXIBLE EXTERIOR FINISHES, BRITTLE FLOOR FINISHES, AND AREAS THAT SLOPE TO DRAIN OR WHERE UTILITY CONNECTIONS MAY BE LOCATED.
2. RESTRAINT-TO-SHORTENING CRACKS ARE NOT CONSIDERED TO BE A STRUCTURAL PROBLEM. EFFORTS HAVE BEEN MADE TO LOCATE REINFORCING STEEL, CONTROL JOINTS, CONSTRUCTION JOINTS, OR KEYWAYS IN SUCH AREAS SUBJECT TO SUCH CRACKING.

DIMENSIONAL TOLERANCES:

1. GRADE BEAM DEPTH:	+/-1 INCH
2. GRADE BEAM WIDTH:	+/-1 INCH
3. SLAB THICKNESS:	-1/2 INCH, +1 INCH

PLACEMENT TOLERANCES:

1. CLEAR COVER:	ZERO TOLERANCE
2. SLAB TENDONS/VERTICAL:	WITHIN MIDDLE 1/3 OF SLAB
3. SLAB TENDONS/HORIZONTAL:	+/-1 FOOT; 1:6 DEFLECTION
4. BEAM TENDON ANCHORS/VERTICAL:	+/-1 INCH
5. BEAM TENDON ANCHORS LOW POINT:	-1 INCH, +3 IN.
6. BEAM TENDON HORIZONTAL:	+/-2 INCH FROM BEAM CENTERLINE
7. SLAB REBAR/VERTICAL:	+/-3/4 INCH
8. SLAB REBAR/HORIZONTAL:	+/-3 INCH

SLAB LEVELNESS:
1. SLAB LEVELNESS TOLERANCES SHOULD CONFORM TO ACI 117R-90 SECTION 4.5.6 WITH A MINIMUM LOCAL FL NUMBER OF 10. FOR TYPICAL RESIDENTIAL CONSTRUCTION ACI 117 TOLERANCES WOULD PERMIT A MAXIMUM DIFFERENCE IN ELEVATION OF 1.25 INCHES BETWEEN ANY TWO POINTS ON THE SLAB SURFACE 10 FEET APART. IT IS ADVISABLE TO RECORD SLAB ELEVATION MEASUREMENTS ON NEWLY CONSTRUCTED SLABS.

ARCHITECT/ENGINEER COORDINATION:
1. WHERE FEATURES SUCH AS SLAB DROPS, BLOCKOUTS, RECESSES, SLOPES, DRAINS AND DIMENSIONS ARE PROVIDED ON THESE DRAWINGS, THEY SHALL BE VERIFIED ON THE ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION. IF ANY SUCH INFORMATION IS MISSING OR A DISCREPANCY OCCURS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER TO RESOLVE.

TENDON ELONGATION SCHEDULE

NUMBER	LENGTH	ELONGATION (P=26600 LBS) (-10%)	CALCULATED	(+10%)	MEASURED
B-1	36'-7"	2 7/16"	2 11/16"	2 15/16"	
B-2	36'-7"	2 7/16"	2 11/16"	2 15/16"	
B-3	36'-7"	2 7/16"	2 11/16"	2 15/16"	
B-4	25'-1"	1 5/8"	1 13/16"	2"	
B-5	25'-2"	1 11/16"	1 13/16"	2"	
B-6	21'-0"	1 3/8"	1 9/16"	1 11/16"	
B-7	21'-0"	1 3/8"	1 9/16"	1 11/16"	
B-8	19'-0"	1 1/4"	1 3/8"	1 1/2"	
B-9	21'-0"	1 3/8"	1 9/16"	1 11/16"	
B-10	25'-1"	1 5/8"	1 13/16"	2"	
B-11	25'-2"	1 11/16"	1 13/16"	2"	
B-12	40'-7"	2 11/16"	3"	3 1/4"	
B-13	40'-1"	2 5/8"	2 15/16"	3 1/4"	
B-14	40'-1"	2 5/8"	2 15/16"	3 1/4"	
B-15	54'-2"	3 9/16"	3 15/16"	4 3/8"	
B-16	54'-2"	3 9/16"	3 15/16"	4 3/8"	
B-17	54'-2"	3 9/16"	3 15/16"	4 3/8"	
B-18	18'-2"	1 3/16"	1 5/16"	1 7/16"	
B-19	18'-2"	1 3/16"	1 5/16"	1 7/16"	
B-20	19'-8"	1 5/16"	1 7/16"	1 9/16"	
B-21	19'-8"	1 5/16"	1 7/16"	1 9/16"	
B-22	19'-8"	1 5/16"	1 7/16"	1 9/16"	
B-23	19'-8"	1 5/16"	1 7/16"	1 9/16"	
B-24	19'-8"	1 5/16"	1 7/16"	1 9/16"	
B-25	20'-1"	1 5/16"	1 1/2"	1 5/8"	
B-26	19'-8"	1 5/16"	1 7/16"	1 9/16"	
B-27	20'-1"	1 5/16"	1 1/2"	1 5/8"	
B-28	72'-7"	4 13/16"	5 5/16"	5 7/8"	
B-29	72'-7"	4 13/16"	5 5/16"	5 7/8"	
S-1	36'-7"	2 7/16"	2 11/16"	2 15/16"	
S-2	36'-7"	2 7/16"	2 11/16"	2 15/16"	
S-3	36'-7"	2 7/16"	2 11/16"	2 15/16"	
S-4	36'-7"	2 7/16"	2 11/16"	2 15/16"	
S-5	36'-7"	2 7/16"	2 11/16"	2 15/16"	
S-6	36'-7"	2 7/16"	2 11/16"	2 15/16"	
S-7	29'-1"	1 15/16"	2 1/8"	2 5/16"	
S-8	25'-1"	1 5/8"	1 13/16"	2"	
S-9	25'-1"	1 5/8"	1 13/16"	2"	
S-10	21'-0"	1 3/8"	1 9/16"	1 11/16"	
S-11	21'-0"	1 3/8"	1 9/16"	1 11/16"	
S-12	21'-0"	1 3/8"	1 9/16"	1 11/16"	
S-13	21'-0"	1 3/8"	1 9/16"	1 11/16"	
S-14	21'-0"	1 3/8"	1 9/16"	1 11/16"	
S-15	21'-0"	1 3/8"	1 9/16"	1 11/16"	
S-16	19'-0"	1 1/4"	1 3/8"	1 1/2"	
S-17	19'-0"	1 1/4"	1 3/8"	1 1/2"	
S-18	19'-0"	1 1/4"	1 3/8"	1 1/2"	
S-19	19'-0"	1 1/4"	1 3/8"	1 1/2"	
S-20	19'-0"	1 1/4"	1 3/8"	1 1/2"	
S-21	19'-0"	1 1/4"	1 3/8"	1 1/2"	
S-22	21'-0"	1 3/8"	1 9/16"	1 11/16"	
S-23	21'-0"	1 3/8"	1 9/16"	1 11/16"	
S-24	21'-0"	1 3/8"	1 9/16"	1 11/16"	
S-25	25'-1"	1 5/8"	1 13/16"	2"	
S-26	25'-1"	1 5/8"	1 13/16"	2"	
S-27	21'-0"	1 3/8"	1 9/16"	1 11/16"	
S-28	21'-0"	1 3/8"	1 9/16"	1 11/16"	
S-29	21'-0"	1 3/8"	1 9/16"	1 11/16"	
S-30	38'-2"	2 1/2"	2 13/16"	3 1/16"	
S-31	29'-2"	1 15/16"	2 1/8"	2 3/8"	
S-32	38'-2"	2 1/2"	2 13/16"	3 1/16"	
S-33	38'-1"	2 1/2"	2 13/16"	3 1/16"	
S-34	40'-1"	2 5/8"	2 15/16"	3 1/4"	
S-35	40'-1"	2 5/8"	2 15/16"	3 1/4"	
S-36	40'-1"	2 5/8"	2 15/16"	3 1/4"	
S-37	54'-1"	3 9/16"	3 15/16"	4 3/8"	
S-38	54'-1"	3 9/16"	3 15/16"	4 3/8"	
S-39	54'-2"	3 9/16"	3 15/16"	4 3/8"	
S-40	54'-2"	3 9/16"	3 15/16"	4 3/8"	
S-41	54'-2"	3 9/16"	3 15/16"	4 3/8"	
S-42	18'-2"	1 3/16"	1 5/16"	1 7/16"	
S-43	18'-2"	1 3/16"	1 5/16"	1 7/16"	
S-44	18'-2"	1 3/16"	1 5/16"	1 7/16"	
S-45	18'-2"	1 3/16"	1 5/16"	1 7/16"	
S-46	18'-2"	1 3/16"	1 5/16"	1 7/16"	
S-47	18'-2"	1 3/16"	1 5/16"	1 7/16"	
S-48	18'-2"	1 3/16"	1 5/16"	1 7/16"	
S-49	19'-8"	1 5/16"	1 7/16"	1 9/16"	
S-50	19'-8"	1 5/16"	1 7/16"	1 9/16"	
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S-61	19'-8"	1 5/16"	1 7/16"	1 9/16"	
S-62	19'-8"	1 5/16"	1 7/16"	1 9/16"	
S-63	19'-8"	1 5/16"	1 7/16"	1 9/16"	
S-64	19'-8"	1 5/16"	1 7/16"	1 9/16"	
S-65	72'-7"	4 13/16"	5 5/16"	5 7/8"	
S-66	72'-7"	4 13/16"	5 5/16"	5 7/8"	
S-67	72'-7"	4 13/16"	5 5/16"	5 7/8"	
S-68	19'-8"	1 5/16"	1 7/16"	1 9/16"	
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S-70	19'-8"	1 5/16"	1 7/16"	1 9/16"	
S-71	19'-8"	1 5/16"	1 7/16"	1 9/16"	
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S-75	72'-7"	4 13/16"	5 5/16"	5 7/8"	
S-76	72'-7"	4 13/16"	5 5/16"	5 7/8"	
S-77	72'-7"	4 13/16"	5 5/16"	5 7/8"	
S-78	72'-7"	4 13/16"	5 5/16"	5 7/8"	

HOLDOWN LEGEND

HOLDOWN LOCATION RE:S1-130

KEY PLAN

1 BUILDING #1 - FOUNDATION PLAN

Scale: 1/4" = 1'-0"

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LICENSED ENGINEER #
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ON
08/02/2019
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TRAIL STREET TOWNHOMES

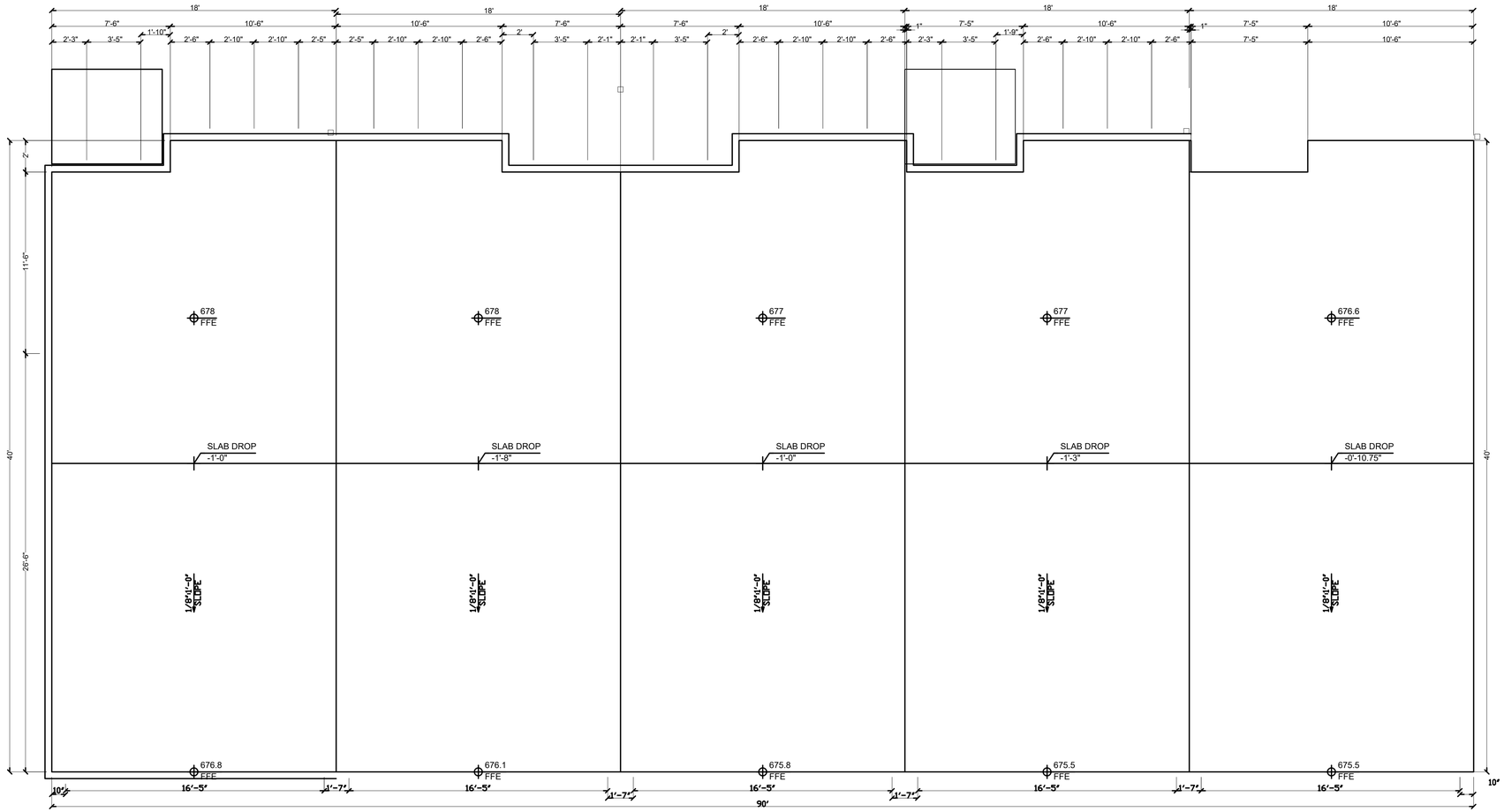
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #1 - FOUNDATION PLAN

Sheet No.:
S1-110



1 BUILDING #1 - SLAB FORMING PLAN

Scale: 1/4" = 1'-0"

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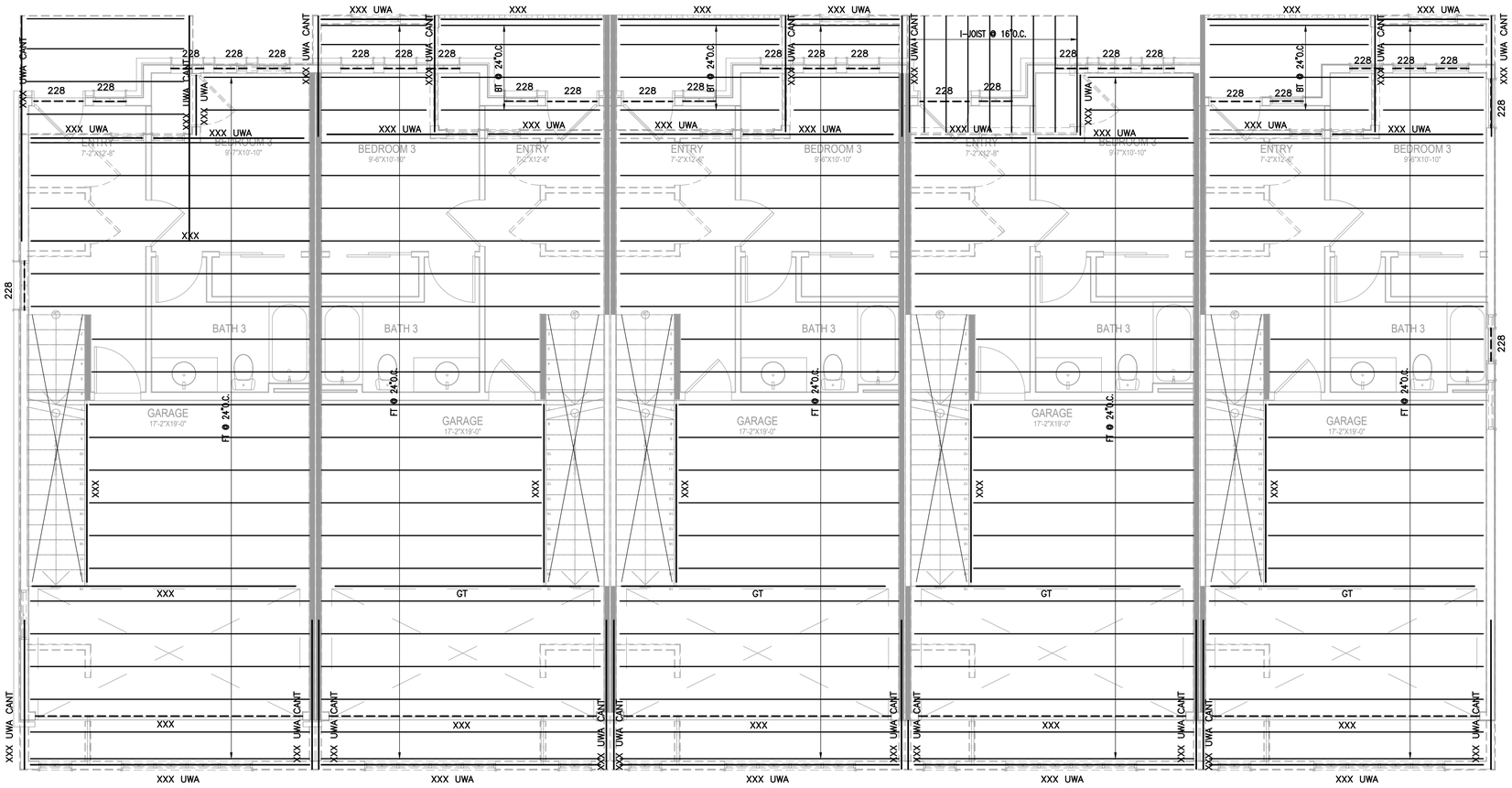
	REVISION/ISSUE	DATE
	HDRC PROGRESS SET	08/02/2019

KEY PLAN

Sheet Name:
BUILDING #1 - SLAB FORMING PLAN

Sheet No.:
S1-110s



1 BUILDING #1 - 2ND FLOOR FRAMING PLAN

Scale: 1/4" = 1'-0"

FLOOR FRAMING NOTES:

1. ALL FLOOR JOISTS ARE PREFABRICATED OPEN WEB TRUSSES @ 24" O.C. DESIGNED AND MANUFACTURED BY OTHERS (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED:
   TCLL = 40 PSF AT UNITS, BALCONIES, AND CORRIDORS SERVING THEM
   TCLL = 100 PSF AT PUBLIC SPACES AND CORRIDORS SERVING THEM
   TCLL = 100 PSF AT PUBLIC BALCONIES
   TCDL = 20 PSF
   BCLL = 0 PSF
   BCDL = 5 PSF
2. COMMON FLOOR TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE FLOOR DECKING, PERIMETER, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL. DROP HEADER MEMBERS SHALL HAVE ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
4. ALL NON-LOAD BEARING HEADER MEMBERS MAY BE CONSTRUCTED OF PONY WALL CONSTRUCTION WITH DOUBLE BOTTOM PLATES AND SINGLE JACK STUDS.
5. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS MINIMUM SPECIFICATIONS: Fb=3,000psi, Fv=300psi, E=2.1x10^6psi FOR 3 1/2" AND 5 1/2" WIDE BEAMS, Fb =2,800 psi, Fv=300psi, E=2.1x10^6psi FOR 7" WIDE BEAMS.
6. BEAM SUPPORT DETAILS OR BEAM CONNECTION HANGERS SHALL BE PER THE HANGER MANUFACTURER'S REQUIREMENTS.
7. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS, FLOOR TOP OF PLATE ELEVATIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPENCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
8. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. PROVIDE CB TRUSSES UNDER ALL STACKING WALLS TO MATCH STUD SIZE AND SPACING REQUIREMENTS.
11. FLOOR DRAG TRUSSES (SHEAR PANELS) SHALL BE PROVIDED DIRECTLY OVER TOPS OF INTERIOR SHEARWALLS AND SHALL BE DESIGNED FOR A TOTAL LOAD EQUAL TO THE LENGTH OF THE SHEARWALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEARWALL SCHEDULE.
12. THE FOLLOWING LEGEND REGARDING FLOOR FRAMING IS USED TO DETAIL THIS SHEET:

ABBREVIATION	DESCRIPTION
BLK	BLOCKING
DBL	DOUBLE
CONT	CONTINUOUS
PSL	PARALLEL STRAND LUMBER
GLB	GLULAM BEAM
FRB	FOR ROOF BRACING
UWA	UNDER WALL ABOVE
RSDF	ROUGH SAWN DOUGLAS FIR
CANT	CANTILEVER, SEE NOTE 1
UPL	UNDER POINT LOAD
CB	CONTINUOUS BEARING

SYMBOL	DESCRIPTION
F.T.	FLOOR TRUSS
B.T.	BALCONY TRUSS
C.T.	CORRIDOR TRUSS
G.T.	GIRDER TRUSS
DBL	DOUBLE
TPL	TRIPLE
	DROP BEAM
	FLUSH BEAM
	BEARING WALL
	WALL ABOVE (10 PSF U.N.O.)

NOTES:
1. BACKSPANS FOR CANTILEVERS MUST BE GREATER THAN OR EQUAL TO THE LENGTH OF THE CANTILEVER, UNO.

WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.

KEY PLAN

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LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

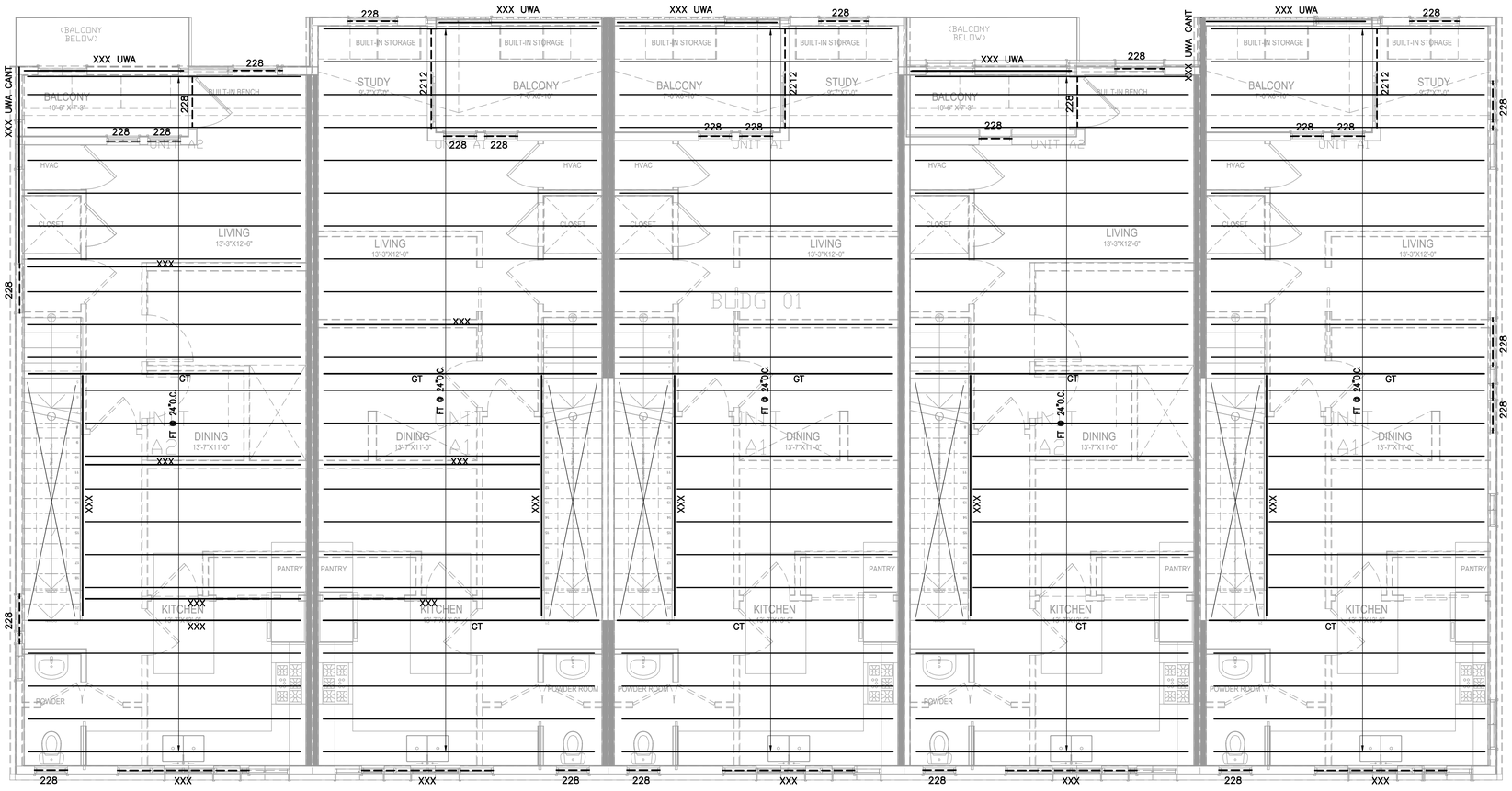
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #1 - 2ND FLOOR FRAMING PLAN

Sheet No.:
S1-120



1 BUILDING #1 - 3RD FLOOR FRAMING PLAN

Scale: 1/4" = 1'-0"

FLOOR FRAMING NOTES:

1. ALL FLOOR JOISTS ARE PREFABRICATED OPEN WEB TRUSSES @ 24" O.C. DESIGNED AND MANUFACTURED BY OTHERS (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED:
   TCLL = 40 PSF AT UNITS, BALCONIES, AND CORRIDORS SERVING THEM
   TCLL = 100 PSF AT PUBLIC SPACES AND CORRIDORS SERVING THEM
   TCLL = 100 PSF AT PUBLIC BALCONIES
   TCDL = 20 PSF
   BCLL = 0 PSF
   BCDL = 5 PSF
2. COMMON TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE FLOOR DECKING, PERIMETER, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL. DROP HEADER MEMBERS SHALL HAVE ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
4. ALL NON-LOAD BEARING HEADER MEMBERS MAY BE CONSTRUCTED OF PONY WALL CONSTRUCTION WITH DOUBLE BOTTOM PLATES AND SINGLE JACK STUDS.
5. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS MINIMUM SPECIFICATIONS: Fb=3,000psi, Fv=300psi, E=2.1x10^6psi FOR 3 1/2" AND 5 1/2" WIDE BEAMS, Fb =2,800 psi, Fv=300psi, E=2.1x10^6psi FOR 7" WIDE BEAMS.
6. BEAM SUPPORT DETAILS OR BEAM CONNECTION HANGERS SHALL BE PER THE HANGER MANUFACTURER'S REQUIREMENTS.
7. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS, FLOOR TOP OF PLATE ELEVATIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPENCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
8. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. PROVIDE CB TRUSSES UNDER ALL STACKING WALLS TO MATCH STUD SIZE AND SPACING REQUIREMENTS.
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12. THE FOLLOWING LEGEND REGARDING FLOOR FRAMING IS USED TO DETAIL THIS SHEET:

ABREVIATION	DESCRIPTION
BLK	BLOCKING
DBL	DOUBLE
CONT	CONTINUOUS
PSL	PARALLEL STRAND LUMBER
GLB	GLULAM BEAM
FRB	FOR ROOF BRACING
UWA	UNDER WALL ABOVE
RSDF	ROUGH SAWN DOUGLAS FIR
CANT	CANTILEVER, SEE NOTE 1
UPL	UNDER POINT LOAD
CB	CONTINUOUS BEARING

SYMBOL	DESCRIPTION
F.T.	FLOOR TRUSS
B.T.	BALCONY TRUSS
C.T.	CORRIDOR TRUSS
G.T.	GIRDER TRUSS
DBL	DOUBLE
TPL	TRIPLE
	DROP BEAM
	FLUSH BEAM
	BEARING WALL
	WALL ABOVE (10 PSF U.N.O.)

NOTES:
1. BACKSPANS FOR CANTILEVERS MUST BE GREATER THAN OR EQUAL TO THE LENGTH OF THE CANTILEVER, UNO.

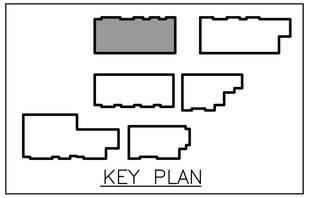
WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.



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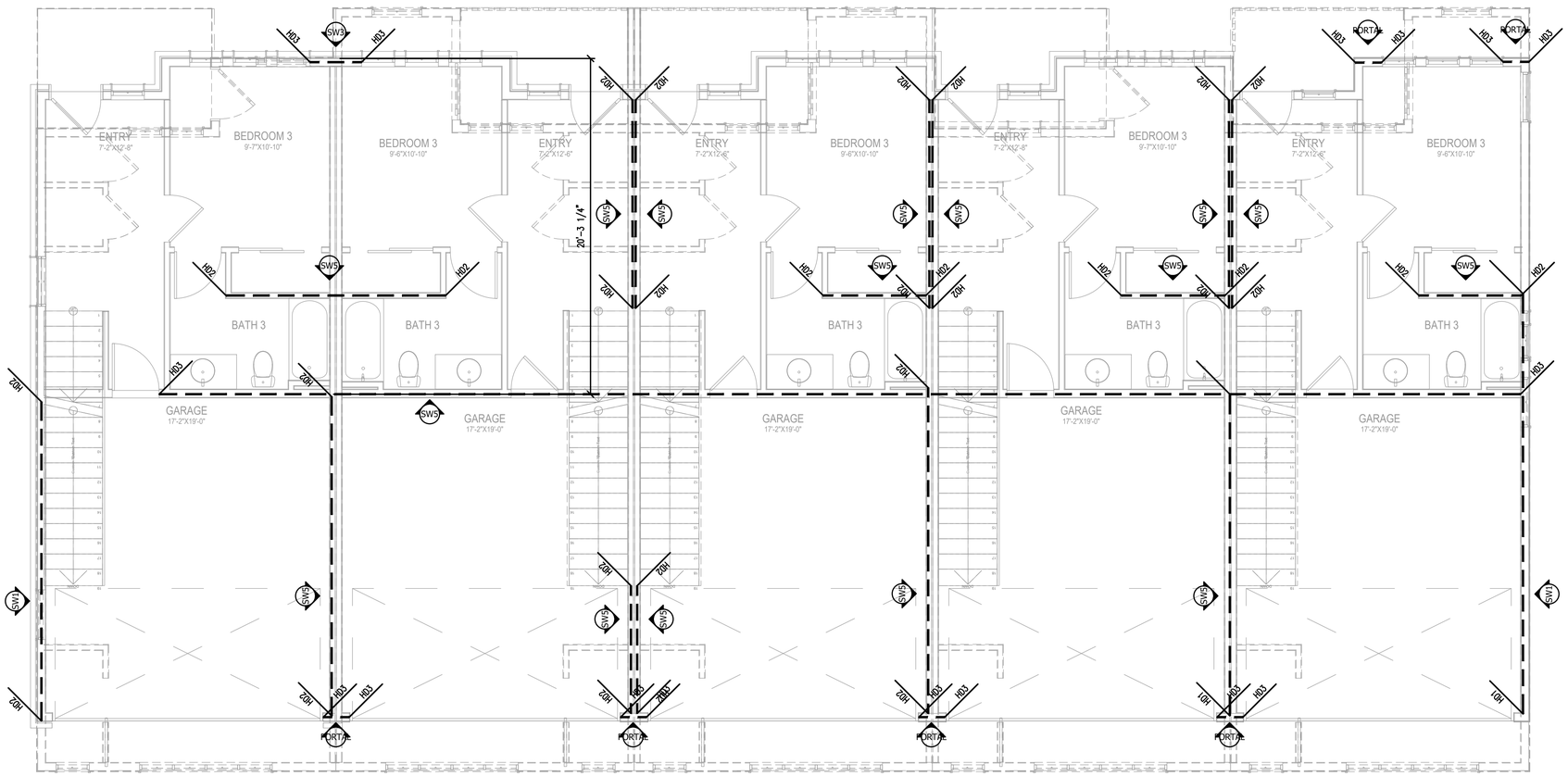
Sheet Name:
BUILDING #1 - 3RD FLOOR FRAMING PLAN

Sheet No.:
S1-121



1 BUILDING #1 - 1ST FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,,8,10

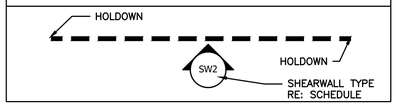
NOTES:
1. ALL SHEARWALLS MUST BE BLOCKED AT ALL EDGES. PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
2. FULL SIZED PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY. PANELS SHALL NOT BE LESS THAN 24" IN WIDTH.
3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
4. ALL WOOD STRUCTURAL PANEL SHEATHING SHALL BE MIN. 15/32" 5-PLY PLYWOOD OR 7/16" ORIENTED STRAND BOARD.
5. ALL SHEARWALLS ARE BLOCKED AT ALL EDGES.
6. THE SILL FASTENING MUST BE DOUBLED FOR TWO-SIDED SHEARWALLS.
7. ALTERNATE SILL FASTENING INTO CONCRETE (SEE NOTES):
   - 7.1. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
   - 7.2. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 4" O.C. (495 PLF)
   - 7.3. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 3" O.C. (660 PLF)
8. ALL SHEARWALLS SHALL BE FRAMED WITH END (WIND) POST AT EACH END PER THE HOLD DOWN SCHEDULE. HOLDOWNS AND END POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE WALL WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE STRUCTURE.
9. (4) FOOT WIDE GYPSUM SHEATHING BOARDS CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE STUDS. (2) FOOT WIDE PIECES OF GYPSUM SHEATHING BOARDS SHALL BE APPLIED PERPENDICULAR TO THE STUDS. GYPSUM SHEATHING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
10. GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER, WATER-RESISTANT GYPSUM BACKING BOARD CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE WALL STUDS. GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 844. WATER-RESISTANT GYPSUM BACKING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
9. F = UNTREATED LUMBER WITH NO MOISTURE EXPOSURE
10. P = PRESSURE TREATED LUMBER WITH NO MOISTURE EXPOSURE
11. R-L = ALL WOOD TYPES IN HEAVY INDUSTRIAL OR COASTAL AREAS (BUT WITH NO DIRECT EXPOSURE TO CHLORIDES)

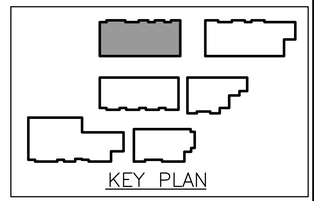
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	ANCHOR BOLT	EMBEDMENT	NOTES
HD1	SIMPSON LTTI31	1350	18-10d (0.148" DIA. X 1-1/2") GALV BOX NAIL	2-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	3 1/2"	1,2,5
HD2	SIMPSON HTT4 ZMAX	4235	18-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	3-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	5"	1,2,5
	SIMPSON STHD14	5345	30-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	3-2X4	EMBEDED	WET SET	3,5
HD3	SIMPSON HTT5 ZMAX	5090	26-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	4-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	6"	1,3,5
	SIMPSON STHD14	5345	30-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	4-2X4	EMBEDED	WET SET	3,5
HD4	SIMPSON HDQ8-SDS3	7630	20-1/4" DIA. X 3" SDS SCREWS	4X4	7/8" DIA. A307 HAS ROD DRILL & EPOXY	10"	1,4,5
HD5	SIMPSON HD9B	9920	3-7/8" STUD BOLTS	6X6	7/8" DIA. A307 HAS ROD DRILL & EPOXY	10"	1,4,5
HD6	SIMPSON HD12	15510	4-1" STUD BOLTS	6X6	1 1/8" WET SET	18"	1,4,5

NOTES:
1. EPOXY SHALL BE HILTI HIT-HY 150 MAX-SD OR EQUAL AND INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. FASTEN HD1 & HD2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
3. FASTEN HD3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
4. FASTEN END MEMBERS TOGETHER WITH HARDWARE BOLTS SPECIFIED.
5. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





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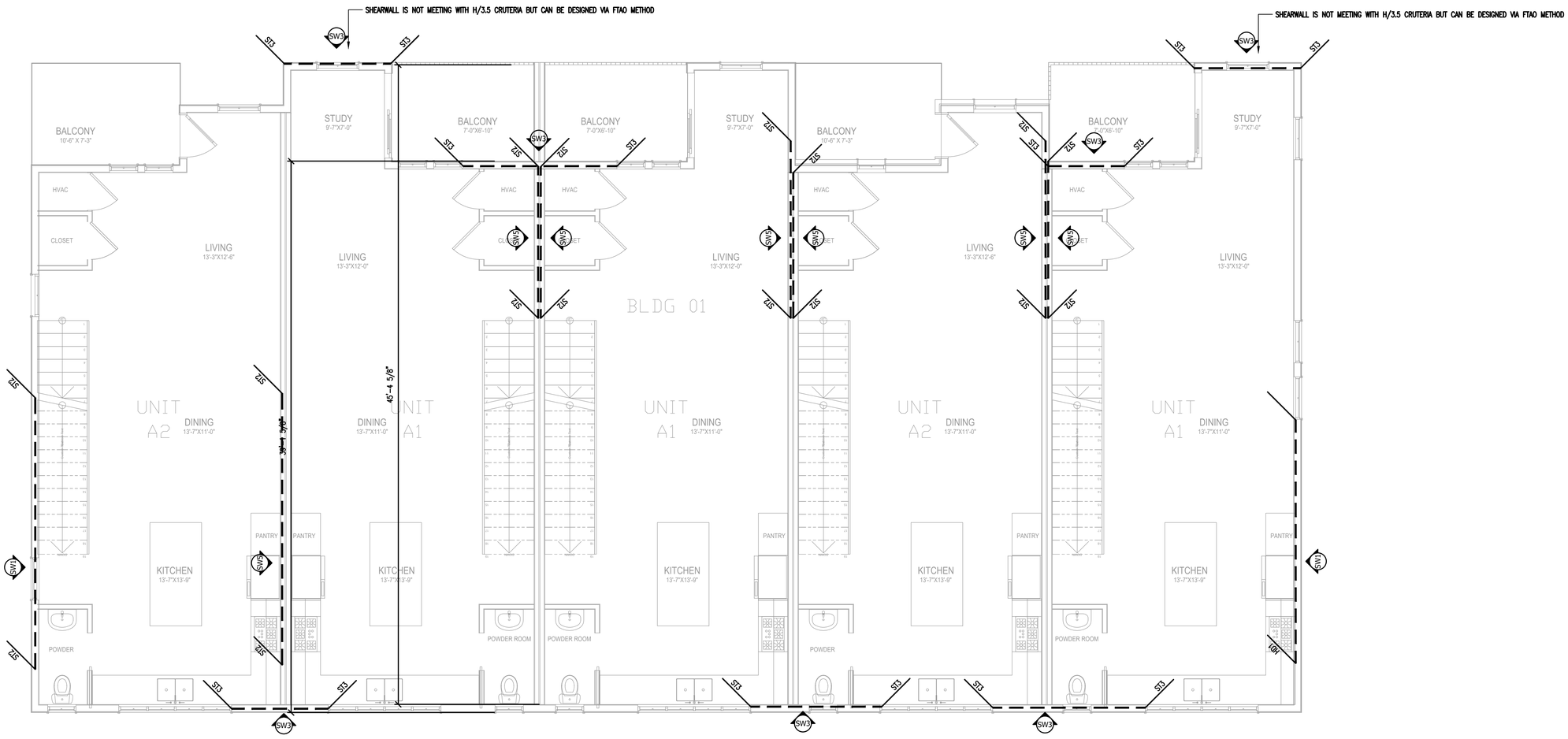
Sheet Name:
BUILDING #1 - 1ST FLOOR SHEARWALL PLAN

Sheet No.:
S1-130



SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS–2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2–1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J– BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2–1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J–BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2–1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J–BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1–3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER–RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1–7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1–7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1– 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1.,8,10

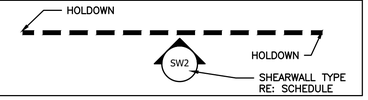
NOTES:
1. ALL SHEARWALLS MUST BE BLOCKED AT ALL EDGES. PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
2. FULL SIZED PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY. PANELS SHALL NOT BE LESS THAN 24" IN WIDTH.
3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
4. ALL WOOD STRUCTURAL PANEL SHEATHING SHALL BE MIN. 15/32" 5–PLY PLYWOOD OR 7/16" ORIENTED STRAND BOARD.
5. ALL SHEARWALLS ARE BLOCKED AT ALL EDGES.
6. THE SILL FASTENING MUST BE DOUBLED FOR TWO–SIDED SHEARWALLS.
7. ALTERNATE SILL FASTENING INTO CONCRETE (SEE NOTES):
   - 7.1. POWDER ACTUATED HILTI X–C(F,P,R–L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
   - 7.2. POWDER ACTUATED HILTI X–C(F,P,R–L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 4" O.C. (495 PLF)
   - 7.3. POWDER ACTUATED HILTI X–C(F,P,R–L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 3" O.C. (660 PLF)
8. ALL SHEARWALLS SHALL BE FRAMED WITH END (WIND) POST AT EACH END PER THE HOLD DOWN SCHEDULE. HOLDOWNS AND END POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE WALL WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE STRUCTURE.
9. (4) FOOT WIDE GYPSUM SHEATHING BOARDS CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE STUDS. (2) FOOT WIDE PIECES OF GYPSUM SHEATHING BOARDS SHALL BE APPLIED PERPENDICULAR TO THE STUDS. GYPSUM SHEATHING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
10. GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER, WATER–RESISTANT GYPSUM BACKING BOARD CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE WALL STUDS. GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 844. WATER–RESISTANT GYPSUM BACKING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
9. F = UNTREATED LUMBER WITH NO MOISTURE EXPOSURE
10. P = PRESSURE TREATED LUMBER WITH NO MOISTURE EXPOSURE
11. R–L = ALL WOOD TYPES IN HEAVY INDUSTRIAL OR COASTAL AREAS (BUT WITH NO DIRECT EXPOSURE TO CHLORIDES)

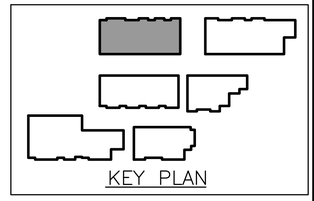
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	NOTES
ST1	(1) CS16X60	1705	8d – FILL ALL HOLES	2–2X4	1,3
ST2	(2) CS16X60	3410	8d – FILL ALL HOLES	3–2X4	1,3
ST3	(3) CS16X60	5115	8d – FILL ALL HOLES	4–2X4	2,3
ST4	(4) CS16X60	6820	8d – FILL ALL HOLES	4X4	1,3

NOTES:
1. FASTEN ST1 AND ST2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
2. FASTEN ST3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
3. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #1 - 2ND FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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Structural Engineering, Inc.
38027 Fm 1774, Suite A
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Principal Engineer:
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Direct: (832) 865–1429
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Christopher P. Hillman, P.E.
LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

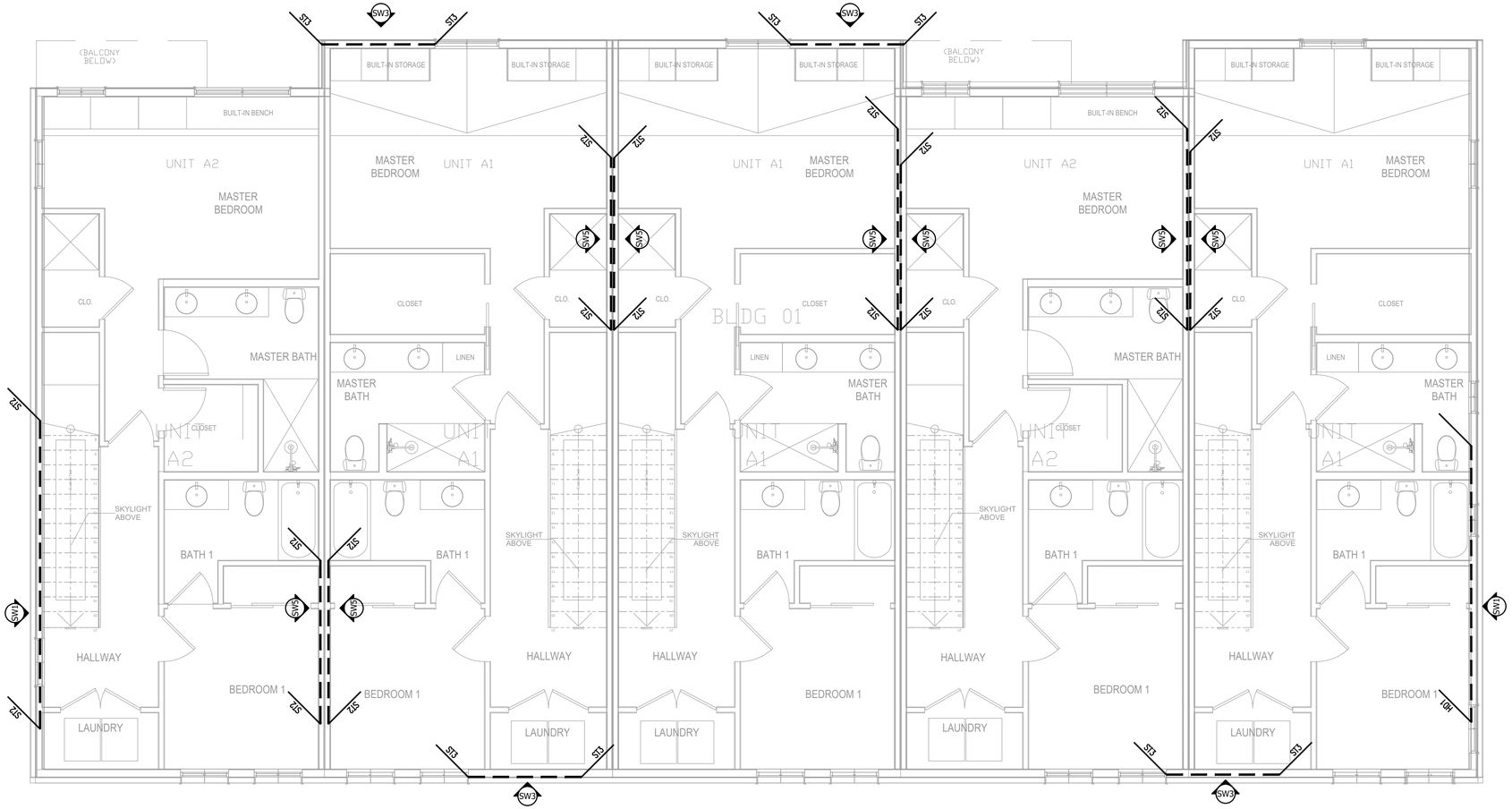
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #1 - 2ND FLOOR SHEARWALL PLAN

Sheet No.:
S1-131



SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1.,8,10

NOTES:
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HOLDOWN SCHEDULE

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NOTES:
1. FASTEN ST1 AND ST2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
2. FASTEN ST3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
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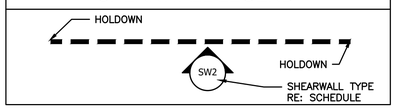
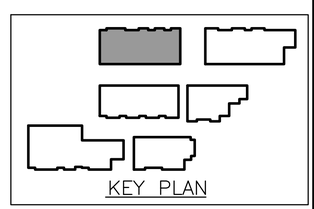
SHEARWALL LEGEND





1 BUILDING #1 - 3RD FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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LICENSED ENGINEER #
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TRAIL STREET TOWNHOMES

335 TRAIL STREET
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CPH 157-021

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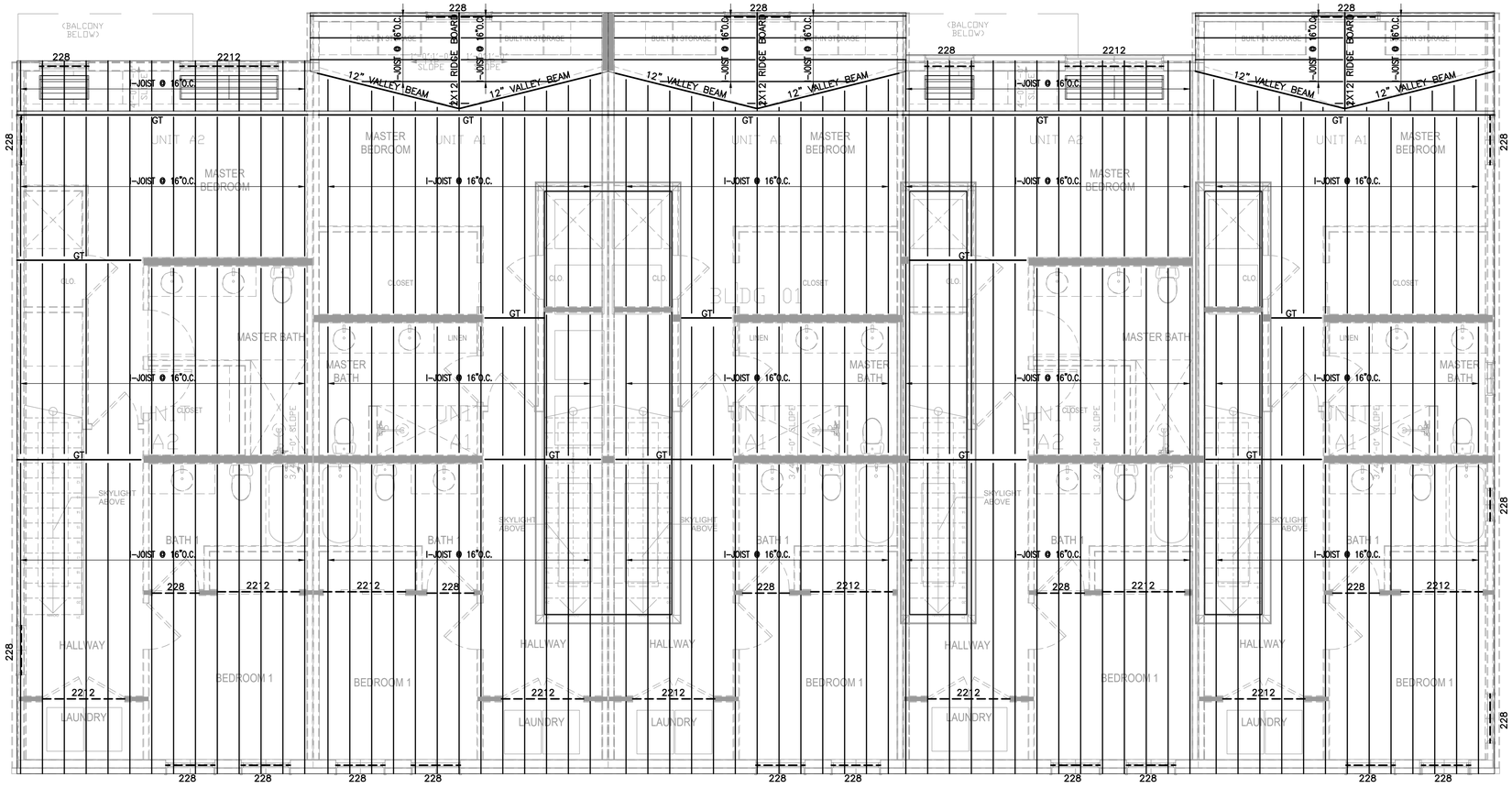
Sheet Name:
BUILDING #1 - 3RD FLOOR SHEARWALL PLAN

Sheet No.:
S1-132



ROOF FRAMING NOTES:

1. ROOF FRAMING SHALL CONSIST OF PREFABRICATED ROOF TRUSSES SPACED @ 24" O.C. UNLESS NOTED OTHERWISE (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED TO DESIGN TRUSSES:
   - TOP CHORD LIVE LOAD = 20 PSF
   - TOP CHORD DEAD LOAD = 20 PSF
   - BOTTOM CHORD LIVE LOAD = 10 PSF (UNINHABITED ATTIC WITHOUT STORAGE, ASSUMED NOT TO ACT CONCURRENTLY WITH ANY OTHER LIVE LOAD.)
   - BOTTOM CHORD DEAD LOAD = 5 PSF
   - ADDITIONAL LOADS DUE TO MECHANICAL UNITS, OVERHEAD DOORS, ROOF OVERBUILDS, ETC.
2. COMMON ROOF TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE ROOF DECKING, PERIMETER, PARAPETS, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. DRAG TRUSSES SHALL BE PROVIDED DIRECTLY OVER TOPS OF INTERIOR SHEARWALLS AND SHALL BE DESIGNED FOR A TOTAL LOAD EQUAL TO THE LENGTH OF THE SHEARWALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEARWALL SCHEDULE FOR THE WALL TYPE. SEE ROOF FRAMING DETAILS FOR ROOF SHEATHING NAILING REQUIREMENTS AT DRAG TRUSSES.
4. ROOF TRUSSES MAY ONLY BEAR UPON LOAD BEARING TOP PLATES OF WALLS OR BEAMS UNLESS NOTED OTHERWISE ON PLAN, DO NOT SUPPORT ANY CHIMNEY UPON TRUSSES. EXTEND WALLS OF CHIMNEY THROUGH THE TRUSSES TO BEAR UPON WALLS OR BEAMS BELOW.
5. RESULTING UPLIFT LOADS FROM TRUSS ANALYSIS SHALL BE LIMITED TO 600 LBS FOR COMMON TRUSSES, AND 3,500 LBS FOR GIRDER TRUSSES.
6. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL WITH ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
7. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS. MINIMUM SPECIFICATIONS: Fb=2,900psi, Fv=290psi, E=2x10^6psi.
8. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPANCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
9. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. THIS ROOF LAYOUT IS DESIGNED TO SUPPORT LIGHT ROOFING MATERIAL. PLEASE CONSULT ENGINEER IF ANY OTHER TYPE OF ROOF COVERING IS TO BE USED.

SYMBOL	DESCRIPTION		
RT	ROOF TRUSS		FLUSH BEAM
WT	WALL TRUSS		DROP BEAM
	OVER FRAME		
	BEARING WALL		
GT	GIRDER TRUSS		
DT	DRAG TRUSS		
DB	DRAG BRACE		

WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

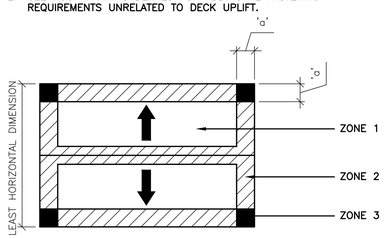
GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.

SHEATHING NAILING		
	AT DIAPHRAGM BOUNDARIES	FIELD (INTERMEDIATE SUPPORT MEMBERS)
ZONE 1	8D @ 6" OC	8D @ 6" OC
ZONE 2	8D @ 3" OC	8D @ 3" OC
ZONE 3	8D @ 3" OC	8D @ 3" OC

NOTES:
1. ALL NAILS FOR ROOF SHEATHING SHALL BE RING SHANK NAILS.
2. SEE ROOF FRAMING DETAILS FOR ADDITIONAL FASTENING REQUIREMENTS UNRELATED TO DECK UPLIFT.

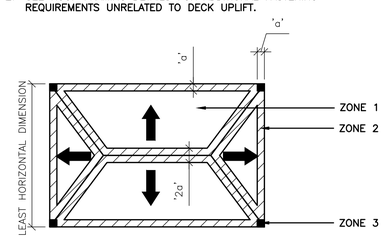


'a' = 10% OF LEAST HORIZONTAL DIMENSION OR 0.4H, WHICHEVER IS SMALLER , BUT NOT LESS THAN 4% OF LEAST HORIZONTAL DIMENSION OR 3FT.

ROOF PRESSURE ZONES (GABLE ROOF)

SHEATHING NAILING		
	AT DIAPHRAGM BOUNDARIES	FIELD (INTERMEDIATE SUPPORT MEMBERS)
ZONE 1	8D @ 6" OC	8D @ 6" OC
ZONE 2	8D @ 3" OC	8D @ 3" OC
ZONE 3	8D @ 3" OC	8D @ 3" OC

NOTES:
1. ALL NAILS FOR ROOF SHEATHING SHALL BE RING SHANK NAILS.
2. SEE ROOF FRAMING DETAILS FOR ADDITIONAL FASTENING REQUIREMENTS UNRELATED TO DECK UPLIFT.



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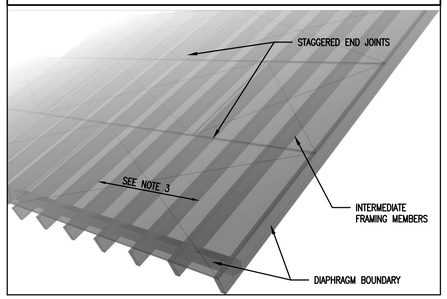
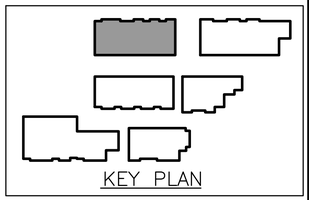
ROOF PRESSURE ZONES (HIP ROOF)

ROOF SHEATHING NOTES:

1. ROOF DECKING SHALL BE 1/2" NOMINAL EXPOSURE 1 (CDX) OR OSB APA RATED SHEATHING (24/16).
2. FASTENING SHALL BE PER ROOF PRESSURE ZONE DIAGRAM.
3. PANELS SHALL SPAN 3 OR MORE FLOOR JOISTS WITH THE LONG DIMENSION (FACE GRAIN) PERPENDICULAR TO THE FRAMING. STAGGER END JOINT OF PANELS. PROVIDE A 1/8" GAP AT ALL PANEL EDGES UNLESS RECOMMENDED OTHERWISE BY THE PANEL MFR.
4. ROOF SHEATHING PANELS ARE UNBLOCKED UNLESS NOTED OTHERWISE.
5. WHERE BLOCKING IS NOT SPECIFICALLY REQUIRED FOR ROOF SHEATHING, PLY CLIPS OR TONGUE AND GROOVE SHEATHING SHALL BE USED.





1 BUILDING #1 - ROOF FRAMING PLAN

Scale: 1/4" = 1'-0"

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ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

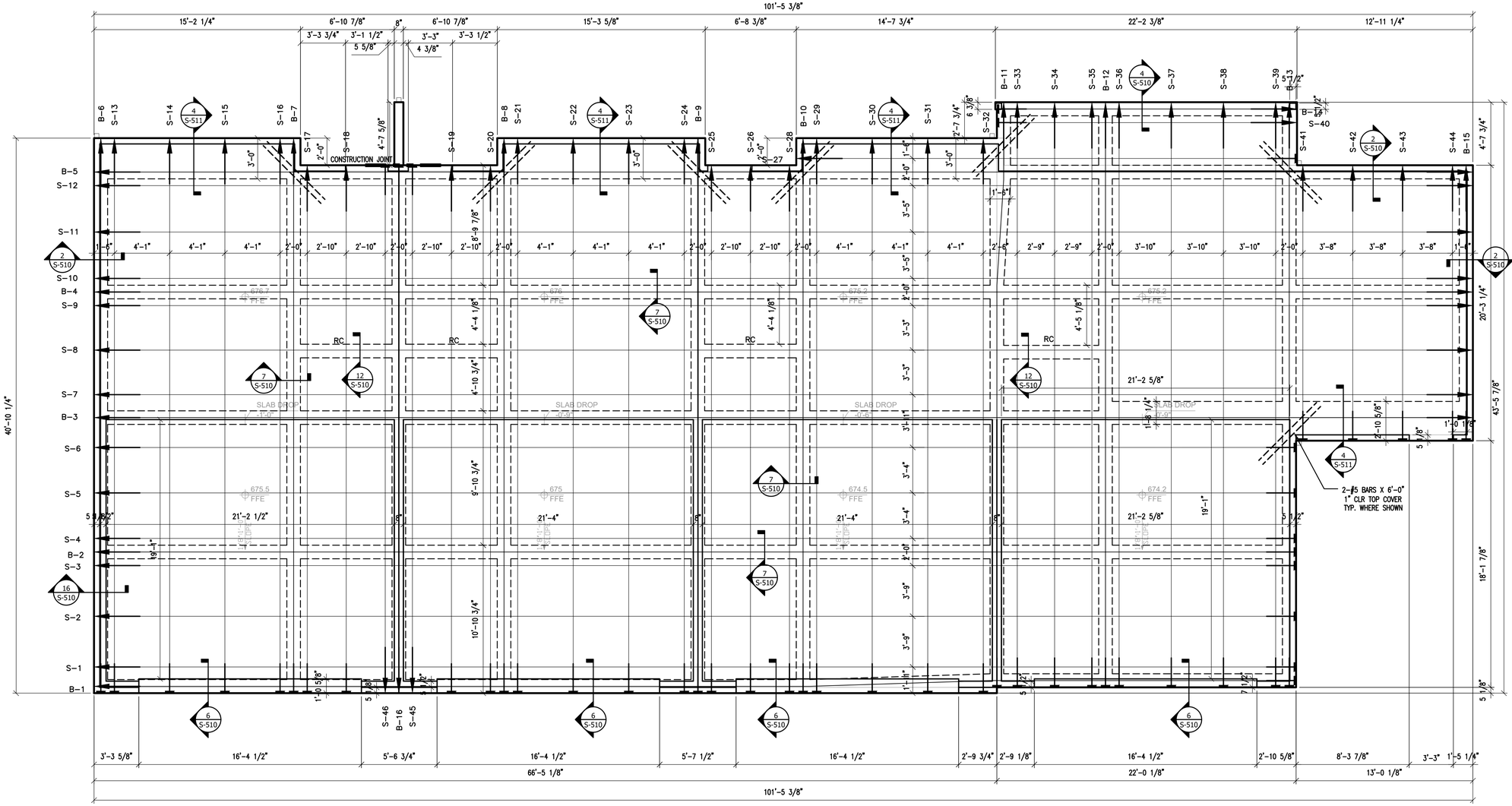
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #1 - ROOF FRAMING PLAN

Sheet No.:
S1-140



FOUNDATION NOTES

THIS SLAB TYPE IS BASED ON PTI DC10.5-12 (STANDARD REQUIREMENTS FOR DESIGN AND ANALYSIS OF SHALLOW POST-TENSIONED CONCRETE FOUNDATIONS ON EXPANSIVE SOIL)

SLAB TYPE:	BRAB TYPE I, BRAB TYPE II, BRAB TYPE III, BRAB TYPE IV	
DESCRIPTION:	UNREINFORCED, LIGHTLY REINFORCED AGAINST SHRINKAGE AND TEMPERATURE CRACKING, REINFORCED AND STIFFENED, STRUCTURAL (NOT DIRECTLY SUPPORTED ON THE GROUND)	
SLAB THICKNESS:	4 INCHES	
NOTES ON EXPANSIVE SOILS:		
THE DESIGN OF FOUNDATIONS SUPPORTED ON EXPANSIVE OR COMPRESSIBLE SOILS INCLUDES CONSIDERATION OF VARIOUS SITE CONDITIONS; THEREFORE, IT IS NECESSARY FOR OTHER MEMBERS OF THE PROJECT'S DESIGN AND CONSTRUCTION TEAM TO UNDERSTAND THE ASSUMPTIONS THAT HAVE BEEN MADE.		
THE FOLLOWING DESIGN CRITERIA IS CONTAINED IN THE PROJECT GEOTECHNICAL REPORT BY ??????, REPORT #?????, DATED ?????. REFER TO GEOTECHNICAL REPORT SOIL PREPARATION REQUIREMENTS FOR THIS DESIGN.		
SITE PREPARATION:	---	
EFFECTIVE PI:	---	
BEARING CAPACITY:	--- PSF (TOTAL DEAD PLUS LIVE LOAD)	
BEARING DEPTH:	-- FEET BELOW GRADE	
CENTER LIFT	Em = -.-- FT	Ym = -.-- INCHES
EDGE LIFT	Em = -.-- FT	Ym = -.-- INCHES

BEAM SCHEDULE

GRADE BEAM TYPE	DESCRIPTION	WIDTH	DEPTH	REINFORCEMENT
	POST TENSIONED BEAM (TYP. U.N.O.)	--"	--"	- TENDON BOTTOM
RC	REBAR BEAM	--"	--"	2-#5 BOTTOM
	POST TENSIONED DEEPENED BEAM	--"	--"	- TENDON BOTTOM
RC	REBAR DEEPENED BEAM	--"	--"	2-#5 BOTTOM
	THICKENED SLAB	12"	12"	2-#5 BOTTOM

DESIGN ASSUMPTIONS:
1. CONCRETE GRADE BEAMS SHALL EXTEND ABOVE THE FINISHED GRADE ADJACENT TO THE FOUNDATION AT ALL POINTS A MINIMUM OF 6 INCHES.
2. SITE SLOPE SHALL CAUSE WATER TO FLOW AWAY FROM THE BUILDING FOUNDATION FOR A MINIMUM DISTANCE OF 10 FEET AT A MINIMUM SLOPE OF 5%
3. NO TREES OR OTHER VEGETATION OVER SIX FEET IN HEIGHT SHALL BE PLANTED WITHIN 20 FEET OF BUILDING PERIMETER UNLESS SPECIALLY ACCOUNTED FOR IN THE DESIGN OF THE FOUNDATION
4. NO SIGNIFICANT DISCHARGE OF WATER SHALL OCCUR ADJACENT TO THE FOUNDATION. THIS MAY INCLUDE ROOF DRAINAGE AND AIR CONDITIONING CONDENSATE, BOTH OF WHICH CAN BE DIRECTED TO A SUBGRADE DRAINAGE SYSTEM.
5. THE BUILDER, CONTRACTOR, OR ENGINEER HAS PROVIDED THE OWNER WITH INFORMATION RELATED TO SLAB-ON-GROUND FOUNDATION LONG-TERM MAINTENANCE RECOMMENDATIONS.
6. THE FOUNDATION IS NOT CONSTRUCTED OVER AN AREA COVERING PARTIAL CUT AND/OR PARTIAL FILL OF EXPANSIVE OR COMPRESSIBLE SOILS (TRANSITION LOTS). SPECIAL CONSIDERATION SHALL BE GIVEN FOR ADDITIONAL DIFFERENTIAL MOVEMENT IN THE DESIGN OF FOUNDATIONS CONSTRUCTED ON THESE CONDITIONS.
7. UNLESS OTHERWISE NOTED ON THE PLANS: STOOPS, ELECTRICAL/MECHANICAL PADS, PORCHES AND PATIOS, OR OTHER FOUNDATION EXTENSIONS OUTSIDE OF THE MAIN FOUNDATION ARE DESIGNED AND CAST INDEPENDENTLY OF THE FOUNDATION.

COMPATIBILITY NOTES:
1. SHALLOW FOUNDATION SYSTEMS CONSTRUCTED ON ACTIVE SOILS ARE EXPECTED TO DEFORM. THE FOUNDATION FLEXIBILITY DISTRIBUTES LOCALIZED SOIL MOVEMENTS TO A MORE UNIFORM SLAB SHAPE. IT IS IMPORTANT THAT OTHER CONSULTANTS AND SUPPLIERS CONSIDER COMPATIBLE DESIGNS OR PRODUCTS FOR FLEXIBLE FOUNDATION SYSTEM. DEFORMATION COMPATIBILITY SHOULD BE ADDRESSED FOR NON-FLEXIBLE EXTERIOR FINISHES, BRITTLE FLOOR FINISHES, AND AREAS THAT SLOPE TO DRAIN OR WHERE UTILITY CONNECTIONS MAY BE LOCATED.
2. RESTRAINT-TO-SHORTENING CRACKS ARE NOT CONSIDERED TO BE A STRUCTURAL PROBLEM. EFFORTS HAVE BEEN MADE TO LOCATE REINFORCING STEEL, CONTROL JOINTS, CONSTRUCTION JOINTS, OR KEYWAYS IN SUCH AREAS SUBJECT TO SUCH CRACKING.

DIMENSIONAL TOLERANCES:

1. GRADE BEAM DEPTH:	+/-1 INCH
2. GRADE BEAM WIDTH:	+/-1 INCH
3. SLAB THICKNESS:	-1/2 INCH, +1 INCH

PLACEMENT TOLERANCES:

1. CLEAR COVER:	ZERO TOLERANCE
2. SLAB TENDONS/VERTICAL:	WITHIN MIDDLE 1/3 OF SLAB
3. SLAB TENDONS/HORIZONTAL:	+/-1 FOOT; 1:6 DEFLECTION
4. BEAM TENDON ANCHORS/VERTICAL:	+/-1 INCH
5. BEAM TENDON ANCHORS LOW POINT:	-1 INCH, +3 IN.
6. BEAM TENDON HORIZONTAL:	+/-2 INCH FROM BEAM CENTERLINE
7. SLAB REBAR/VERTICAL:	+/-3/4 INCH
8. SLAB REBAR/HORIZONTAL:	+/-3 INCH

SLAB LEVELNESS:
1. SLAB LEVELNESS TOLERANCES SHOULD CONFORM TO ACI 117R-90 SECTION 4.5.6 WITH A MINIMUM LOCAL FL NUMBER OF 10. FOR TYPICAL RESIDENTIAL CONSTRUCTION ACI 117 TOLERANCES WOULD PERMIT A MAXIMUM DIFFERENCE IN ELEVATION OF 1.25 INCHES BETWEEN ANY TWO POINTS ON THE SLAB SURFACE 10 FEET APART. IT IS ADVISABLE TO RECORD SLAB ELEVATION MEASUREMENTS ON NEWLY CONSTRUCTED SLABS.

ARCHITECT/ENGINEER COORDINATION:
1. WHERE FEATURES SUCH AS SLAB DROPS, BLOCKOUTS, RECESSES, SLOPES, DRAINS AND DIMENSIONS ARE PROVIDED ON THESE DRAWINGS, THEY SHALL BE VERIFIED ON THE ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION. IF ANY SUCH INFORMATION IS MISSING OR A DISCREPANCY OCCURS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER TO RESOLVE.

HOLDOWN LEGEND

HOLDOWN LOCATION RE:S2-130

TENDON ELONGATION SCHEDULE

NUMBER	LENGTH	ELONGATION (P=26600 LBS) (-10%)	CALCULATED	(+10%)	MEASURED
B-1	88'-7"	5 13/16"	6 1/2"	7 1/8"	
B-2	88'-7"	5 13/16"	6 1/2"	7 1/8"	
B-3	101'-7"	6 11/16"	7 7/16"	8 3/16"	
B-4	101'-7"	6 11/16"	7 7/16"	8 3/16"	
B-5	101'-7"	6 11/16"	7 7/16"	8 3/16"	
B-6	41'-0"	2 11/16"	3"	3 5/16"	
B-7	41'-0"	2 11/16"	3"	3 5/16"	
B-8	41'-0"	2 11/16"	3"	3 5/16"	
B-9	41'-0"	2 11/16"	3"	3 5/16"	
B-10	41'-0"	2 11/16"	3"	3 5/16"	
B-11	43'-3"	2 7/8"	3 3/16"	3 1/2"	
B-12	43'-2"	2 7/8"	3 3/16"	3 1/2"	
B-13	43'-2"	2 7/8"	3 3/16"	3 1/2"	
B-14	22'-2"	1 7/16"	1 5/8"	1 13/16"	
B-15	20'-5"	1 3/8"	1 1/2"	1 5/8"	
B-16	39'-0"	2 9/16"	2 7/8"	3 1/8"	
S-1	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-2	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-3	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-4	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-5	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-6	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-7	101'-7"	6 11/16"	7 7/16"	8 3/16"	
S-8	101'-7"	6 11/16"	7 7/16"	8 3/16"	
S-9	101'-7"	6 11/16"	7 7/16"	8 3/16"	
S-10	101'-7"	6 11/16"	7 7/16"	8 3/16"	
S-11	101'-7"	6 11/16"	7 7/16"	8 3/16"	
S-12	101'-7"	6 11/16"	7 7/16"	8 3/16"	
S-13	41'-0"	2 11/16"	3"	3 5/16"	
S-14	41'-0"	2 11/16"	3"	3 5/16"	
S-15	41'-0"	2 11/16"	3"	3 5/16"	
S-16	41'-0"	2 11/16"	3"	3 5/16"	
S-17	39'-0"	2 9/16"	2 7/8"	3 1/8"	
S-18	39'-0"	2 9/16"	2 7/8"	3 1/8"	
S-19	39'-0"	2 9/16"	2 7/8"	3 1/8"	
S-20	39'-0"	2 9/16"	2 7/8"	3 1/8"	
S-21	41'-0"	2 11/16"	3"	3 5/16"	
S-22	41'-0"	2 11/16"	3"	3 5/16"	
S-23	41'-0"	2 11/16"	3"	3 5/16"	
S-24	41'-0"	2 11/16"	3"	3 5/16"	
S-25	39'-0"	2 9/16"	2 7/8"	3 1/8"	
S-26	39'-0"	2 9/16"	2 7/8"	3 1/8"	
S-27	37'-0"	2 7/16"	2 11/16"	3"	
S-28	39'-0"	2 9/16"	2 7/8"	3 1/8"	
S-29	41'-0"	2 11/16"	3"	3 5/16"	
S-30	41'-0"	2 11/16"	3"	3 5/16"	
S-31	41'-0"	2 11/16"	3"	3 5/16"	
S-32	41'-0"	2 11/16"	3"	3 5/16"	
S-33	43'-2"	2 7/8"	3 3/16"	3 1/2"	
S-34	43'-2"	2 7/8"	3 3/16"	3 1/2"	
S-35	43'-2"	2 7/8"	3 3/16"	3 1/2"	
S-36	43'-2"	2 7/8"	3 3/16"	3 1/2"	
S-37	43'-2"	2 7/8"	3 3/16"	3 1/2"	
S-38	43'-2"	2 7/8"	3 3/16"	3 1/2"	
S-39	43'-2"	2 7/8"	3 3/16"	3 1/2"	
S-40	22'-2"	1 7/16"	1 5/8"	1 13/16"	
S-41	20'-5"	1 3/8"	1 1/2"	1 5/8"	
S-42	20'-5"	1 3/8"	1 1/2"	1 5/8"	
S-43	20'-5"	1 3/8"	1 1/2"	1 5/8"	
S-44	20'-5"	1 3/8"	1 1/2"	1 5/8"	
S-45	39'-0"	2 9/16"	2 7/8"	3 1/8"	
S-46	39'-0"	2 9/16"	2 7/8"	3 1/8"	

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TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

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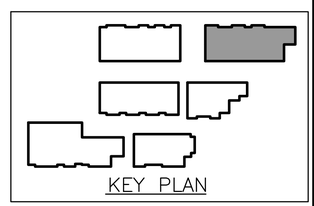
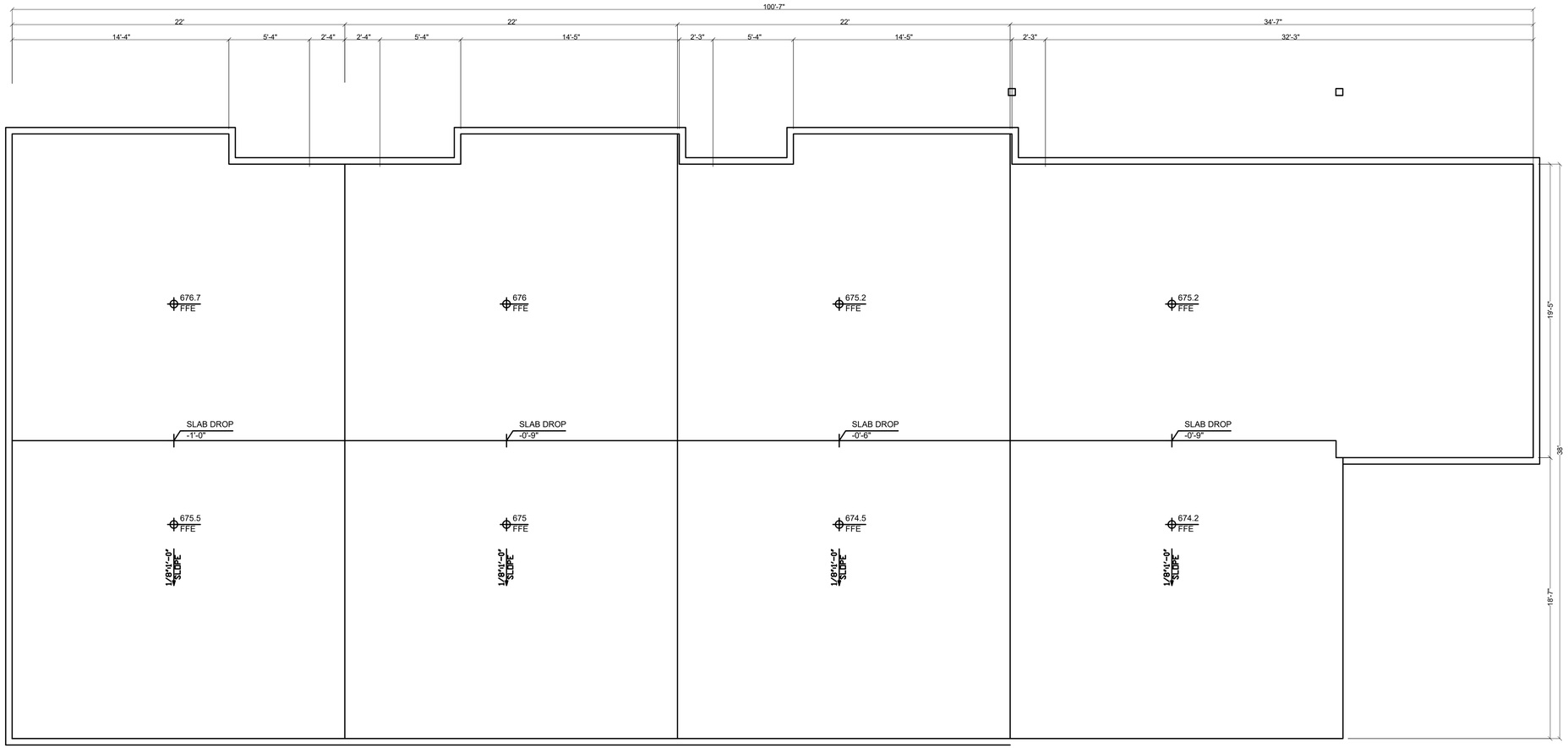


Sheet Name:
BUILDING #2 - FOUNDATION PLAN

Sheet No.:
S2-110

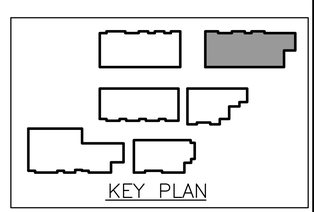
1 BUILDING #2 - FOUNDATION PLAN

Scale: 1/4" = 1'-0"



1 BUILDING #2 - SLAB FORMING PLAN

Scale: 1/4" = 1'-0"



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Sheet Name:
BUILDING #2 - SLAB FORMING PLAN

Sheet No.:
S2-110s

WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.

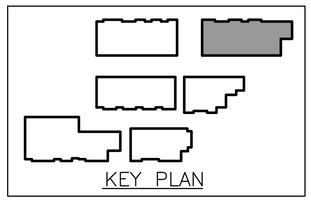
FLOOR FRAMING NOTES:

1. ALL FLOOR JOISTS ARE PREFABRICATED OPEN WEB TRUSSES @ 24" O.C. DESIGNED AND MANUFACTURED BY OTHERS (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED:
   - TCLL = 40 PSF AT UNITS, BALCONIES, AND CORRIDORS SERVING THEM
   - TCLL = 100 PSF AT PUBLIC SPACES AND CORRIDORS SERVING THEM
   - TCLL = 100 PSF AT PUBLIC BALCONIES
   - TCDL = 20 PSF
   - BCLL = 0 PSF
   - BCDL = 5 PSF
2. COMMON FLOOR TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE FLOOR DECKING, PERIMETER, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL. DROP HEADER MEMBERS SHALL HAVE ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
4. ALL NON-LOAD BEARING HEADER MEMBERS MAY BE CONSTRUCTED OF PONY WALL CONSTRUCTION WITH DOUBLE BOTTOM PLATES AND SINGLE JACK STUDS.
5. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS MINIMUM SPECIFICATIONS: Fb=3,000psi, Fv=300psi, E=2.1x10^6psi FOR 3 1/2" AND 5 1/2" WIDE BEAMS, Fb =2,800 psi, Fv=300psi, E=2.1x10^6psi FOR 7" WIDE BEAMS.
6. BEAM SUPPORT DETAILS OR BEAM CONNECTION HANGERS SHALL BE PER THE HANGER MANUFACTURER'S REQUIREMENTS.
7. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS, FLOOR TOP OF PLATE ELEVATIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPENCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
8. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. PROVIDE CB TRUSSES UNDER ALL STACKING WALLS TO MATCH STUD SIZE AND SPACING REQUIREMENTS.
11. FLOOR DRAG TRUSSES (SHEAR PANELS) SHALL BE PROVIDED DIRECTLY OVER TOPS OF INTERIOR SHEARWALLS AND SHALL BE DESIGNED FOR A TOTAL LOAD EQUAL TO THE LENGTH OF THE SHEARWALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEARWALL SCHEDULE.
12. THE FOLLOWING LEGEND REGARDING FLOOR FRAMING IS USED TO DETAIL THIS SHEET:

ABREVIATION	DESCRIPTION
BLK	BLOCKING
DBL	DOUBLE
CONT	CONTINUOUS
PSL	PARALLEL STRAND LUMBER
GLB	GLULAM BEAM
FRB	FOR ROOF BRACING
UWA	UNDER WALL ABOVE
RSDF	ROUGH SAWN DOUGLAS FIR
CANT	CANTILEVER, SEE NOTE 1
UPL	UNDER POINT LOAD
CB	CONTINUOUS BEARING

SYMBOL	DESCRIPTION
F.T.	FLOOR TRUSS
B.T.	BALCONY TRUSS
C.T.	CORRIDOR TRUSS
G.T.	GIRDER TRUSS
DBL	DOUBLE
TPL	TRIPLE
	DROP BEAM
	FLUSH BEAM
	BEARING WALL
	WALL ABOVE (10 PSF U.N.O.)

NOTES:
1. BACKSPANS FOR CANTILEVERS MUST BE GREATER THAN OR EQUAL TO THE LENGTH OF THE CANTILEVER, UNO.



1 BUILDING #2 - 2ND FLOOR FRAMING PLAN

Scale: 1/4" = 1'-0"

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BUILDING #2 - 2ND FLOOR FRAMING PLAN

Sheet No.:
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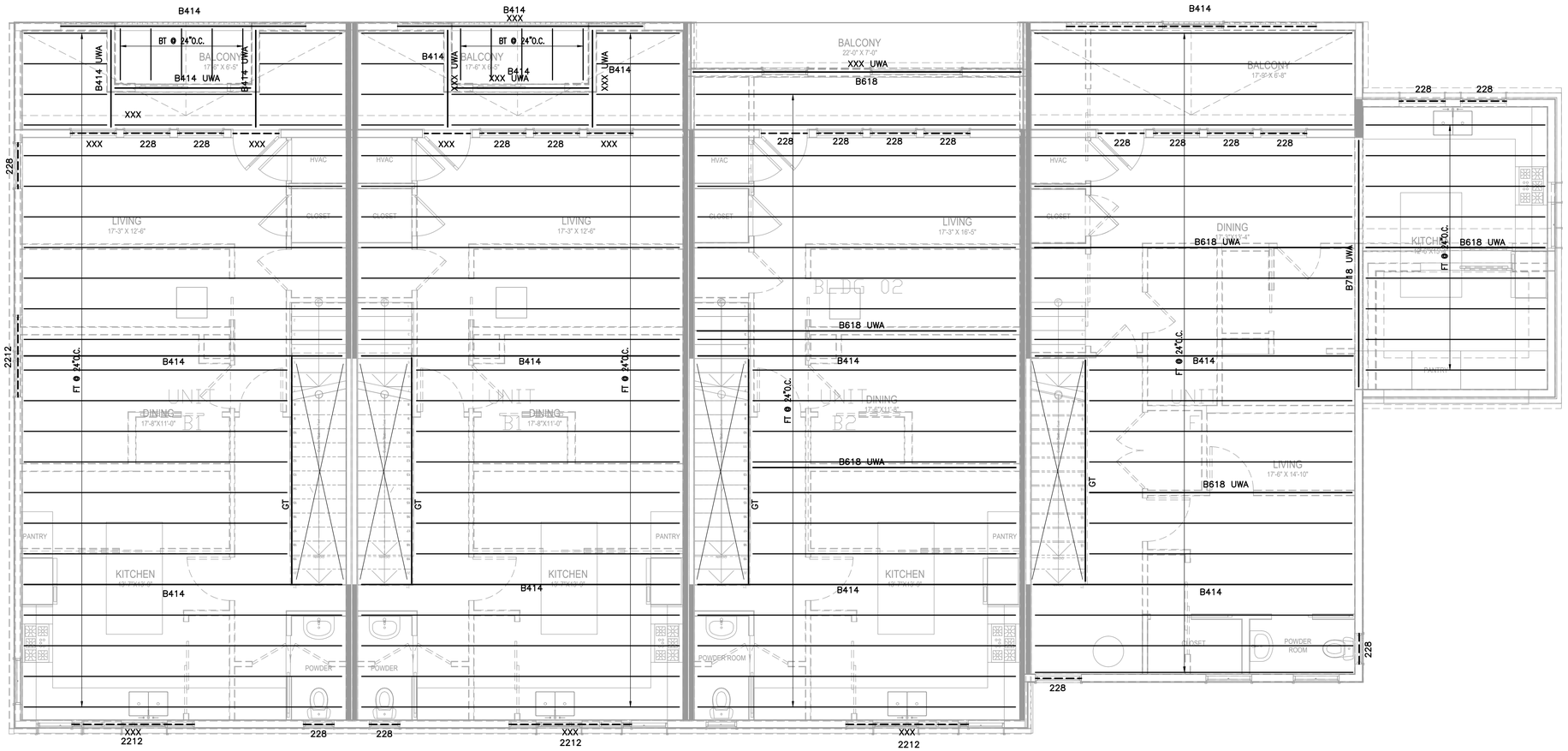


WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.

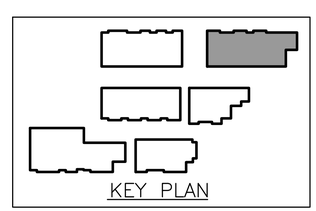
FLOOR FRAMING NOTES:

1. ALL FLOOR JOISTS ARE PREFABRICATED OPEN WEB TRUSSES @ 24" O.C. DESIGNED AND MANUFACTURED BY OTHERS (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED:
   - TCLL = 40 PSF AT UNITS, BALCONIES, AND CORRIDORS SERVING THEM
   - TCLL = 100 PSF AT PUBLIC SPACES AND CORRIDORS SERVING THEM
   - TCLL = 100 PSF AT PUBLIC BALCONIES
   - TCDL = 20 PSF
   - BCLL = 0 PSF
   - BCDL = 5 PSF
2. COMMON FLOOR TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE FLOOR DECKING, PERIMETER, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL. DROP HEADER MEMBERS SHALL HAVE ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
4. ALL NON-LOAD BEARING HEADER MEMBERS MAY BE CONSTRUCTED OF PONY WALL CONSTRUCTION WITH DOUBLE BOTTOM PLATES AND SINGLE JACK STUDS.
5. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS MINIMUM SPECIFICATIONS: Fb=3,000psi, Fv=300psi, E=2.1x10^6psi FOR 3 1/2" AND 5 1/2" WIDE BEAMS, Fb =2,800 psi, Fv=300psi, E=2.1x10^6psi FOR 7" WIDE BEAMS.
6. BEAM SUPPORT DETAILS OR BEAM CONNECTION HANGERS SHALL BE PER THE HANGER MANUFACTURER'S REQUIREMENTS.
7. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS, FLOOR TOP OF PLATE ELEVATIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPENCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
8. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. PROVIDE CB TRUSSES UNDER ALL STACKING WALLS TO MATCH STUD SIZE AND SPACING REQUIREMENTS.
11. FLOOR DRAG TRUSSES (SHEAR PANELS) SHALL BE PROVIDED DIRECTLY OVER TOPS OF INTERIOR SHEARWALLS AND SHALL BE DESIGNED FOR A TOTAL LOAD EQUAL TO THE LENGTH OF THE SHEARWALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEARWALL SCHEDULE.
12. THE FOLLOWING LEGEND REGARDING FLOOR FRAMING IS USED TO DETAIL THIS SHEET:

ABREVIATION	DESCRIPTION
BLK	BLOCKING
DBL	DOUBLE
CONT	CONTINUOUS
PSL	PARALLEL STRAND LUMBER
GLB	GLULAM BEAM
FRB	FOR ROOF BRACING
UWA	UNDER WALL ABOVE
RSDF	ROUGH SAWN DOUGLAS FIR
CANT	CANTILEVER, SEE NOTE 1
UPL	UNDER POINT LOAD
CB	CONTINUOUS BEARING

SYMBOL	DESCRIPTION
F.T.	FLOOR TRUSS
B.T.	BALCONY TRUSS
C.T.	CORRIDOR TRUSS
G.T.	GIRDER TRUSS
DBL	DOUBLE
TPL	TRIPLE
	DROP BEAM
	FLUSH BEAM
	BEARING WALL
	WALL ABOVE (10 PSF U.N.O.)

NOTES:
1. BACKSPANS FOR CANTILEVERS MUST BE GREATER THAN OR EQUAL TO THE LENGTH OF THE CANTILEVER, UNO.



1 BUILDING #2 - 3RD FLOOR FRAMING PLAN

Scale: 1/4" = 1'-0"

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LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

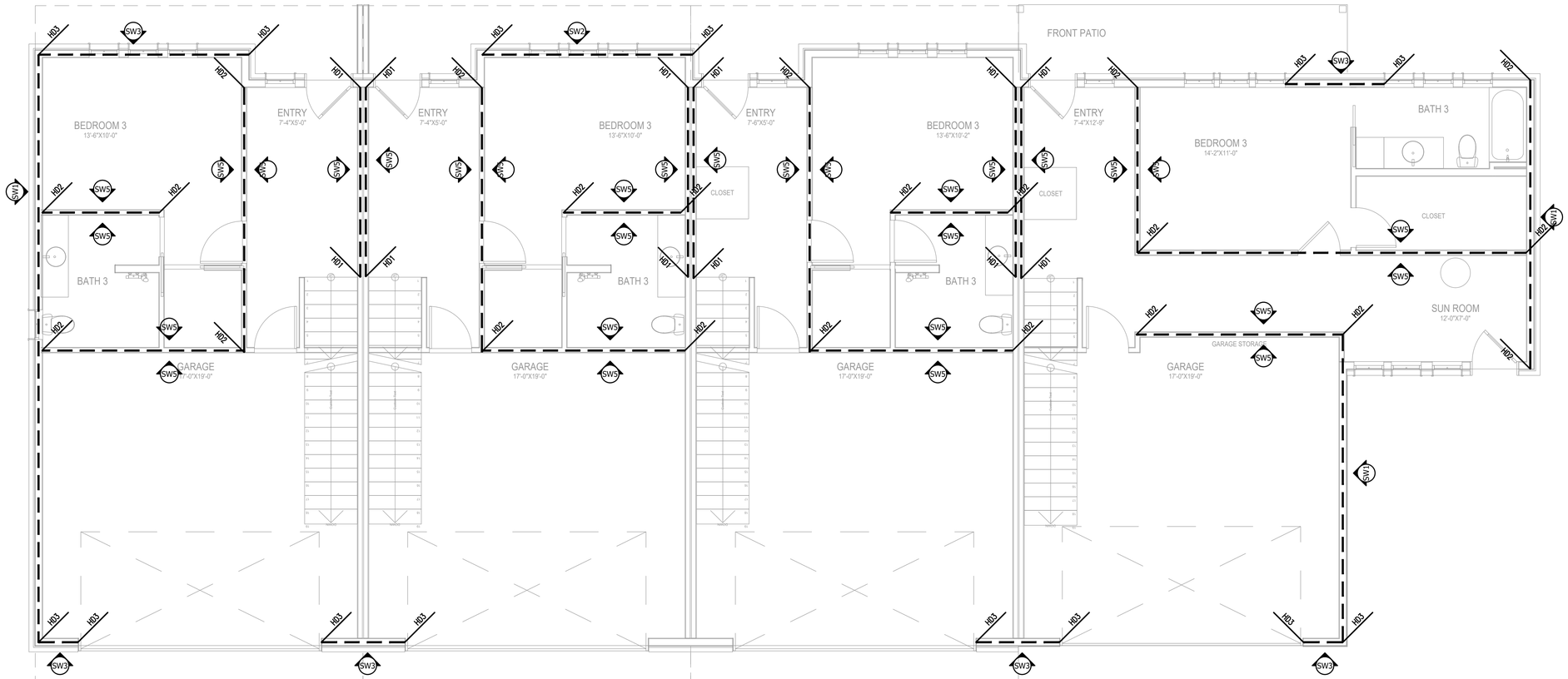
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #2 - 3RD FLOOR FRAMING PLAN

Sheet No.:
S2-121



SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,,8,10

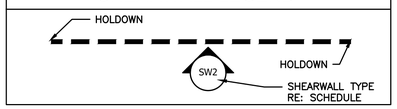
NOTES:
1. ALL SHEARWALLS MUST BE BLOCKED AT ALL EDGES. PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
2. FULL SIZED PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY. PANELS SHALL NOT BE LESS THAN 24" IN WIDTH.
3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
4. ALL WOOD STRUCTURAL PANEL SHEATHING SHALL BE MIN. 15/32" 5-PLY PLYWOOD OR 7/16" ORIENTED STRAND BOARD.
5. ALL SHEARWALLS ARE BLOCKED AT ALL EDGES.
6. THE SILL FASTENING MUST BE DOUBLED FOR TWO-SIDED SHEARWALLS.
7. ALTERNATE SILL FASTENING INTO CONCRETE (SEE NOTES):
   - 7.1. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
   - 7.2. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 4" O.C. (495 PLF)
   - 7.3. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 3" O.C. (660 PLF)
8. ALL SHEARWALLS SHALL BE FRAMED WITH END (WIND) POST AT EACH END PER THE HOLD DOWN SCHEDULE. HOLDOWNS AND END POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE WALL WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE STRUCTURE.
9. (4) FOOT WIDE GYPSUM SHEATHING BOARDS CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE STUDS. (2) FOOT WIDE PIECES OF GYPSUM SHEATHING BOARDS SHALL BE APPLIED PERPENDICULAR TO THE STUDS. GYPSUM SHEATHING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
10. GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER, WATER-RESISTANT GYPSUM BACKING BOARD CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE WALL STUDS. GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 844. WATER-RESISTANT GYPSUM BACKING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
9. F = UNTREATED LUMBER WITH NO MOISTURE EXPOSURE
10. P = PRESSURE TREATED LUMBER WITH NO MOISTURE EXPOSURE
11. R-L = ALL WOOD TYPES IN HEAVY INDUSTRIAL OR COASTAL AREAS (BUT WITH NO DIRECT EXPOSURE TO CHLORIDES)

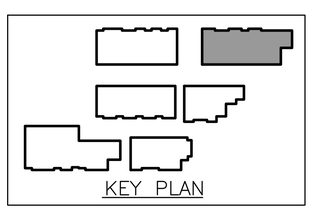
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	ANCHOR BOLT	EMBEDMENT	NOTES
HD1	SIMPSON LTTI31	1350	18-10d (0.148" DIA. X 1-1/2") GALV BOX NAIL	2-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	3 1/2"	1,2,5
HD2	SIMPSON HTT4 ZMAX	4235	18-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	3-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	5"	1,2,5
	SIMPSON STHD14	5345	30-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	3-2X4	EMBEDED	WET SET	3,5
HD3	SIMPSON HTT5 ZMAX	5090	26-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	4-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	6"	1,3,5
	SIMPSON STHD14	5345	30-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	4-2X4	EMBEDED	WET SET	3,5
HD4	SIMPSON HDQ8-SDS3	7630	20-1/4" DIA. X 3" SDS SCREWS	4X4	7/8" DIA. A307 HAS ROD DRILL & EPOXY	10"	1,4,5
HD5	SIMPSON HD9B	9920	3-7/8" STUD BOLTS	6X6	7/8" DIA. A307 HAS ROD DRILL & EPOXY	10"	1,4,5
HD6	SIMPSON HD12	15510	4-1" STUD BOLTS	6X6	1 1/8" WET SET	18"	1,4,5

NOTES:
1. EPOXY SHALL BE HILTI HIT-HY 150 MAX-SD OR EQUAL AND INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. FASTEN HD1 & HD2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
3. FASTEN HD3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
4. FASTEN END MEMBERS TOGETHER WITH HARDWARE BOLTS SPECIFIED.
5. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #2 - 1ST FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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ON
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TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

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Sheet No.:
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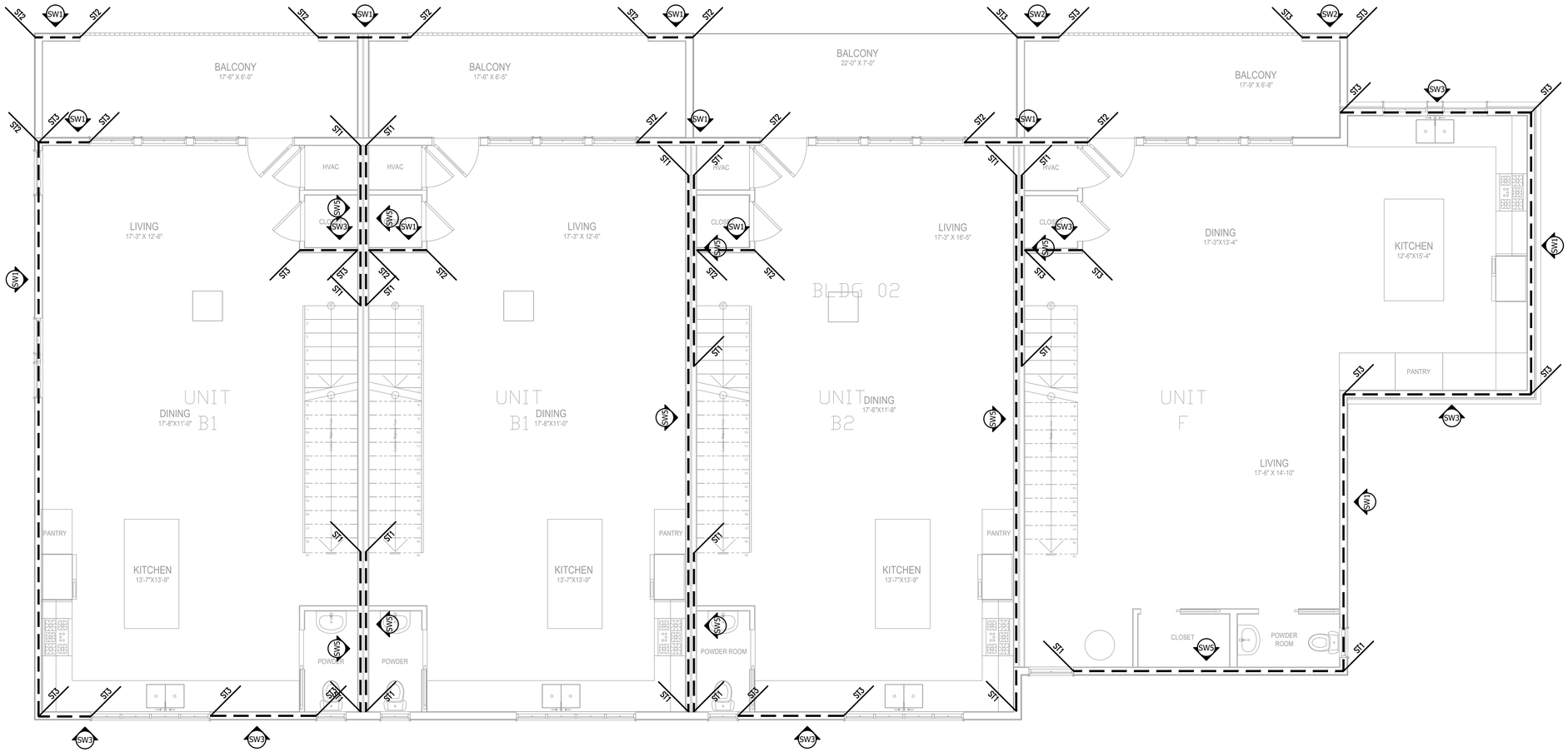

SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,,8,10

NOTES:
1. ALL SHEARWALLS MUST BE BLOCKED AT ALL EDGES. PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
2. FULL SIZED PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY. PANELS SHALL NOT BE LESS THAN 24" IN WIDTH.
3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
4. ALL WOOD STRUCTURAL PANEL SHEATHING SHALL BE MIN. 15/32" 5-PLY PLYWOOD OR 7/16" ORIENTED STRAND BOARD.
5. ALL SHEARWALLS ARE BLOCKED AT ALL EDGES.
6. THE SILL FASTENING MUST BE DOUBLED FOR TWO-SIDED SHEARWALLS.
7. ALTERNATE SILL FASTENING INTO CONCRETE (SEE NOTES):
   - 7.1. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
   - 7.2. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 4" O.C. (495 PLF)
   - 7.3. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 3" O.C. (660 PLF)
8. ALL SHEARWALLS SHALL BE FRAMED WITH END (WIND) POST AT EACH END PER THE HOLD DOWN SCHEDULE. HOLDOWNS AND END POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE WALL WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE STRUCTURE.
9. (4) FOOT WIDE GYPSUM SHEATHING BOARDS CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE STUDS. (2) FOOT WIDE PIECES OF GYPSUM SHEATHING BOARDS SHALL BE APPLIED PERPENDICULAR TO THE STUDS. GYPSUM SHEATHING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
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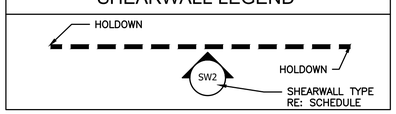
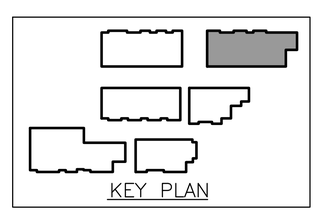
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	NOTES
ST1	(1) CS16X60	1705	8d - FILL ALL HOLES	2-2X4	1,3
ST2	(2) CS16X60	3410	8d - FILL ALL HOLES	3-2X4	1,3
ST3	(3) CS16X60	5115	8d - FILL ALL HOLES	4-2X4	2,3
ST4	(4) CS16X60	6820	8d - FILL ALL HOLES	4X4	1,3

NOTES:
1. FASTEN ST1 AND ST2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
2. FASTEN ST3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
3. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #2 - 2ND FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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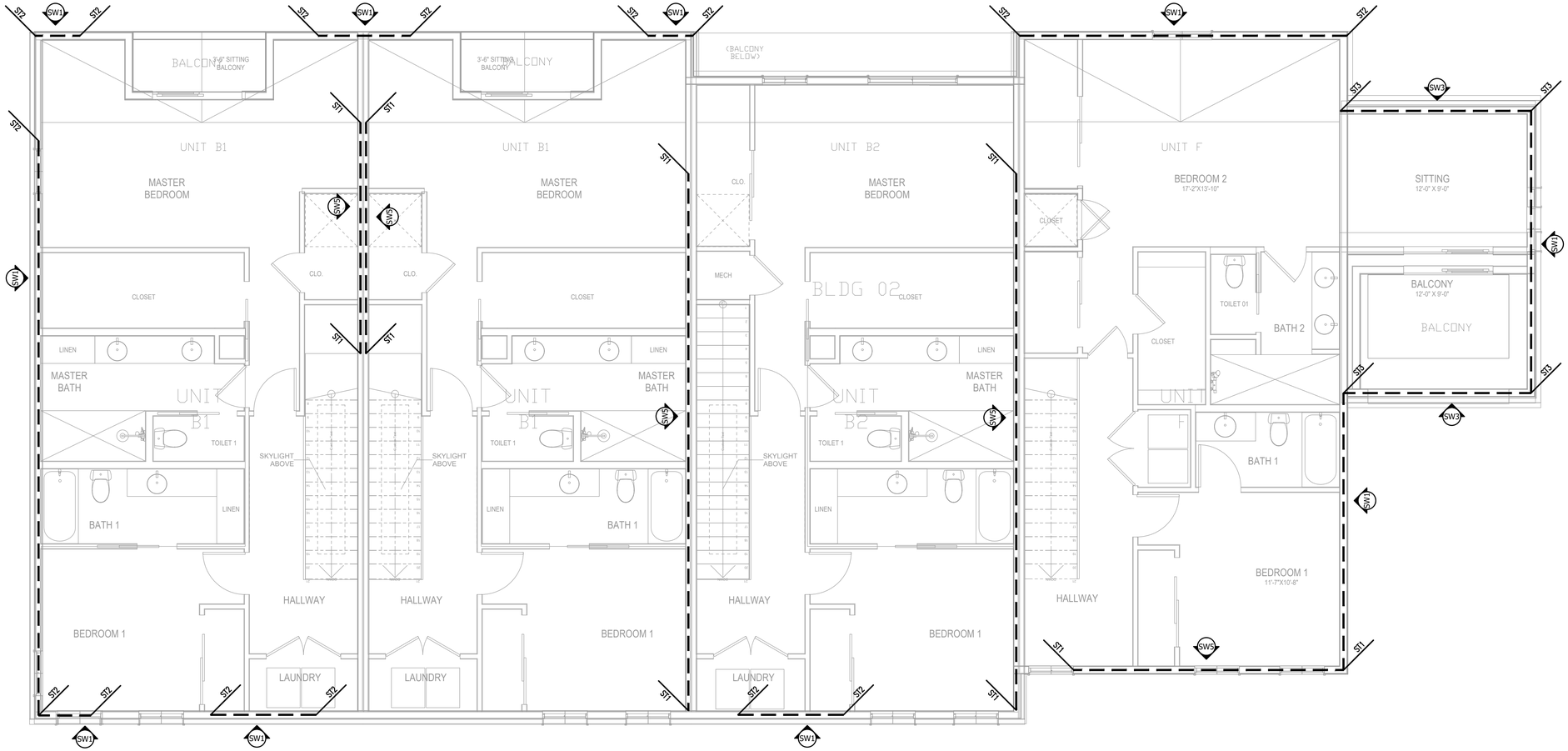
Sheet No.:
S2-131



SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1.,8,10

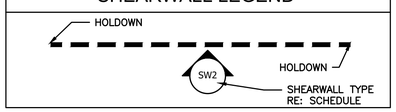
NOTES:
1. ALL SHEARWALLS MUST BE BLOCKED AT ALL EDGES. PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
2. FULL SIZED PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY. PANELS SHALL NOT BE LESS THAN 24" IN WIDTH.
3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
4. ALL WOOD STRUCTURAL PANEL SHEATHING SHALL BE MIN. 15/32" 5-PLY PLYWOOD OR 7/16" ORIENTED STRAND BOARD.
5. ALL SHEARWALLS ARE BLOCKED AT ALL EDGES.
6. THE SILL FASTENING MUST BE DOUBLED FOR TWO-SIDED SHEARWALLS.
7. ALTERNATE SILL FASTENING INTO CONCRETE (SEE NOTES):
   - 7.1. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
   - 7.2. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 4" O.C. (495 PLF)
   - 7.3. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 3" O.C. (660 PLF)
8. ALL SHEARWALLS SHALL BE FRAMED WITH END (WIND) POST AT EACH END PER THE HOLD DOWN SCHEDULE. HOLDOWNS AND END POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE WALL WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE STRUCTURE.
9. (4) FOOT WIDE GYPSUM SHEATHING BOARDS CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE STUDS. (2) FOOT WIDE PIECES OF GYPSUM SHEATHING BOARDS SHALL BE APPLIED PERPENDICULAR TO THE STUDS. GYPSUM SHEATHING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
10. GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER, WATER-RESISTANT GYPSUM BACKING BOARD CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE WALL STUDS. GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 844. WATER-RESISTANT GYPSUM BACKING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
9. F = UNTREATED LUMBER WITH NO MOISTURE EXPOSURE
10. P = PRESSURE TREATED LUMBER WITH NO MOISTURE EXPOSURE
11. R-L = ALL WOOD TYPES IN HEAVY INDUSTRIAL OR COASTAL AREAS (BUT WITH NO DIRECT EXPOSURE TO CHLORIDES)

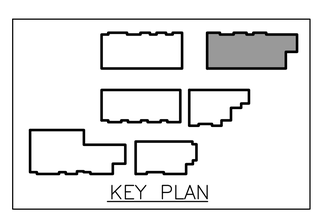
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	NOTES
ST1	(1) CS16X60	1705	8d - FILL ALL HOLES	2-2X4	1,3
ST2	(2) CS16X60	3410	8d - FILL ALL HOLES	3-2X4	1,3
ST3	(3) CS16X60	5115	8d - FILL ALL HOLES	4-2X4	2,3
ST4	(4) CS16X60	6820	8d - FILL ALL HOLES	4X4	1,3

NOTES:
1. FASTEN ST1 AND ST2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
2. FASTEN ST3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
3. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #2 - 3RD FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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THIS DRAWING HAS BEEN AUTHORIZED FOR RELEASE BY
Christopher P. Hillman, P.E.
LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

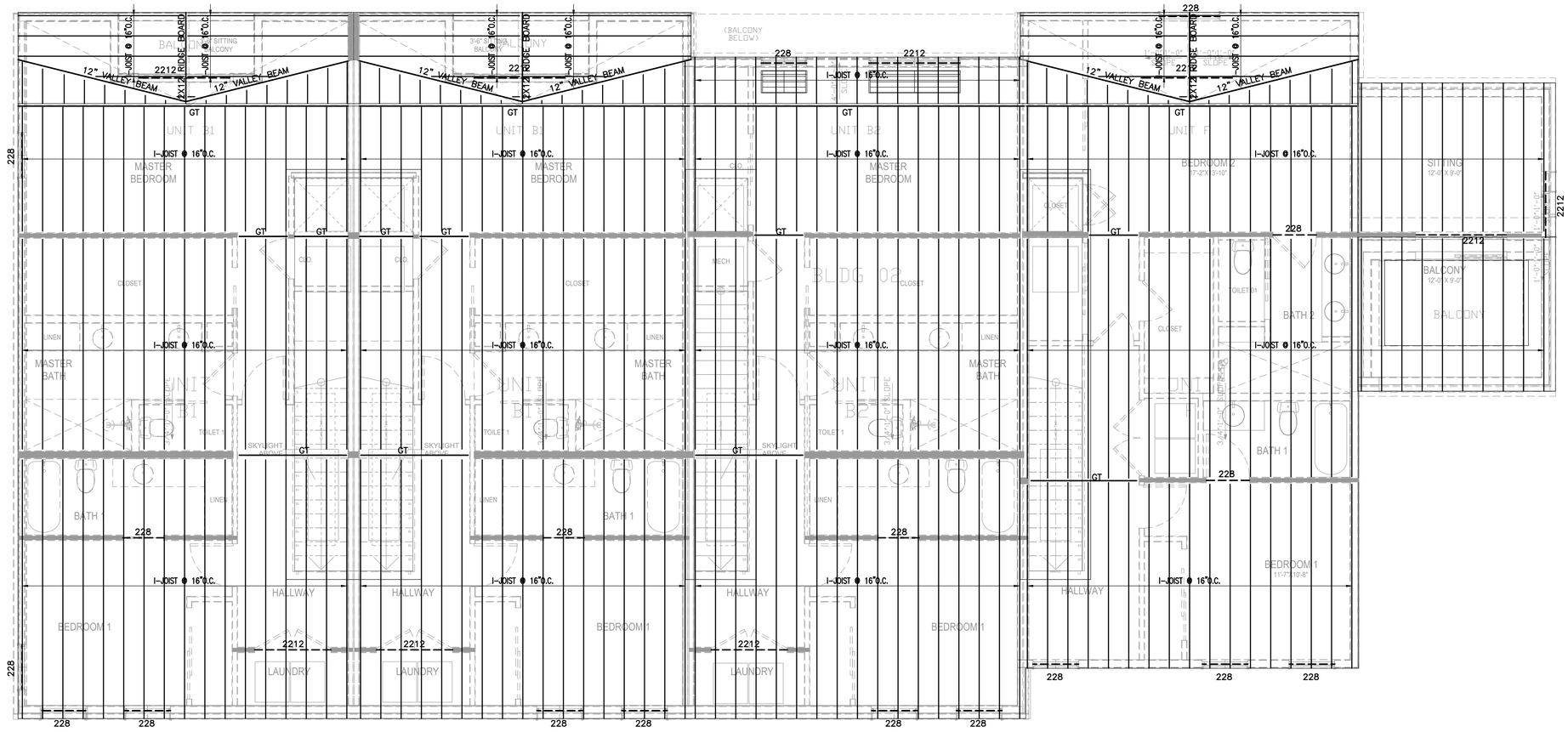
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????. These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #2 - 3RD FLOOR SHEARWALL PLAN

Sheet No.:
S2-132



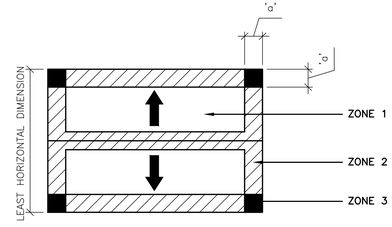
ROOF FRAMING NOTES:

1. ROOF FRAMING SHALL CONSIST OF PREFABRICATED ROOF TRUSSES SPACED @ 24" O.C. UNLESS NOTED OTHERWISE (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED TO DESIGN TRUSSES:
   - TOP CHORD LIVE LOAD = 20 PSF
   - TOP CHORD DEAD LOAD = 20 PSF
   - BOTTOM CHORD LIVE LOAD = 10 PSF (UNINHABITED ATTIC WITHOUT STORAGE, ASSUMED NOT TO ACT CONCURRENLTY WITH ANY OTHER LIVE LOAD.)
   - BOTTOM CHORD DEAD LOAD = 5 PSF
   - ADDITIONAL LOADS DUE TO MECHANICAL UNITS, OVERHEAD DOORS, ROOF OVERBUILDS, ETC.
2. COMMON ROOF TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE ROOF DECKING, PERIMETER, PARAPETS, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. DRAG TRUSSES SHALL BE PROVIDED DIRECTLY OVER TOPS OF INTERIOR SHEARWALLS AND SHALL BE DESIGNED FOR A TOTAL LOAD EQUAL TO THE LENGTH OF THE SHEARWALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEARWALL SCHEDULE FOR THE WALL TYPE. SEE ROOF FRAMING DETAILS FOR ROOF SHEATHING NAILING REQUIREMENTS AT DRAG TRUSSES.
4. ROOF TRUSSES MAY ONLY BEAR UPON LOAD BEARING TOP PLATES OF WALLS OR BEAMS UNLESS NOTED OTHERWISE ON PLAN, DO NOT SUPPORT ANY CHIMNEY UPON TRUSSES. EXTEND WALLS OF CHIMNEY THROUGH THE TRUSSES TO BEAR UPON WALLS OR BEAMS BELOW.
5. RESULTING UPLIFT LOADS FROM TRUSS ANALYSIS SHALL BE LIMITED TO 600 LBS FOR COMMON TRUSSES, AND 3,500 LBS FOR GIRDER TRUSSES.
6. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL WITH ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
7. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS. MINIMUM SPECIFICATIONS: Fb=2,900psi, Fv=290psi, E=2x10^6psi.
8. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPANCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
9. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. THIS ROOF LAYOUT IS DESIGNED TO SUPPORT LIGHT ROOFING MATERIAL. PLEASE CONSULT ENGINEER IF ANY OTHER TYPE OF ROOF COVERING IS TO BE USED.

SYMBOL	DESCRIPTION		
RT	ROOF TRUSS	———	FLUSH BEAM
WT	WALL TRUSS	– – – –	DROP BEAM
	OVER FRAME		
	BEARING WALL		
GT	GIRDER TRUSS		
DT	DRAG TRUSS		
DB	DRAG BRACE		

SHEATHING NAILING		
	AT DIAPHRAGM BOUNDARIES	FIELD (INTERMEDIATE SUPPORT MEMBERS)
ZONE 1	8D @ 6" OC	8D @ 6" OC
ZONE 2	8D @ 3" OC	8D @ 3" OC
ZONE 3	8D @ 3" OC	8D @ 3" OC

NOTES:
1. ALL NAILS FOR ROOF SHEATHING SHALL BE RING SHANK NAILS.
2. SEE ROOF FRAMING DETAILS FOR ADDITIONAL FASTENING REQUIREMENTS UNRELATED TO DECK UPLIFT.

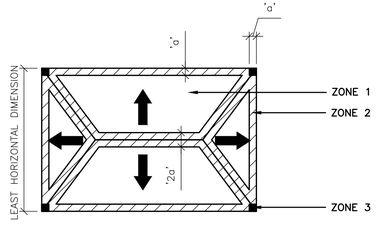


'a' = 10% OF LEAST HORIZONTAL DIMENSION OR 0.4H, WHICHEVER IS SMALLER , BUT NOT LESS THAN 4% OF LEAST HORIZONTAL DIMENSION OR 3FT.

ROOF PRESSURE ZONES (GABLE ROOF)

SHEATHING NAILING		
	AT DIAPHRAGM BOUNDARIES	FIELD (INTERMEDIATE SUPPORT MEMBERS)
ZONE 1	8D @ 6" OC	8D @ 6" OC
ZONE 2	8D @ 3" OC	8D @ 3" OC
ZONE 3	8D @ 3" OC	8D @ 3" OC

NOTES:
1. ALL NAILS FOR ROOF SHEATHING SHALL BE RING SHANK NAILS.
2. SEE ROOF FRAMING DETAILS FOR ADDITIONAL FASTENING REQUIREMENTS UNRELATED TO DECK UPLIFT.

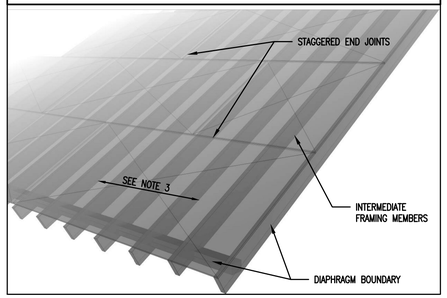


'a' = 10% OF LEAST HORIZONTAL DIMENSION OR 0.4H, WHICHEVER IS SMALLER , BUT NOT LESS THAN 4% OF LEAST HORIZONTAL DIMENSION OR 3FT.

ROOF PRESSURE ZONES (HIP ROOF)

ROOF SHEATHING NOTES:

1. ROOF DECKING SHALL BE 1/2" NOMINAL EXPOSURE 1 (CDX) OR OSB APA RATED SHEATHING (24/16).
2. FASTENING SHALL BE PER ROOF PRESSURE ZONE DIAGRAM.
3. PANELS SHALL SPAN 3 OR MORE FLOOR JOISTS WITH THE LONG DIMENSION (FACE GRAIN) PERPENDICULAR TO THE FRAMING. STAGGER END JOINT OF PANELS. PROVIDE A 1/8" GAP AT ALL PANEL EDGES UNLESS RECOMMENDED OTHERWISE BY THE PANEL MFR.
4. ROOF SHEATHING PANELS ARE UNBLOCKED UNLESS NOTED OTHERWISE.
5. WHERE BLOCKING IS NOT SPECIFICALLY REQUIRED FOR ROOF SHEATHING, PLY CLIPS OR TONGUE AND GROOVE SHEATHING SHALL BE USED.



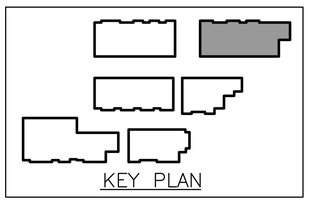
WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.



1 BUILDING #2 - ROOF FRAMING PLAN

Scale: 1/4" = 1'-0"

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Christopher P. Hillman, P.E.
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TRAIL STREET TOWNHOMES

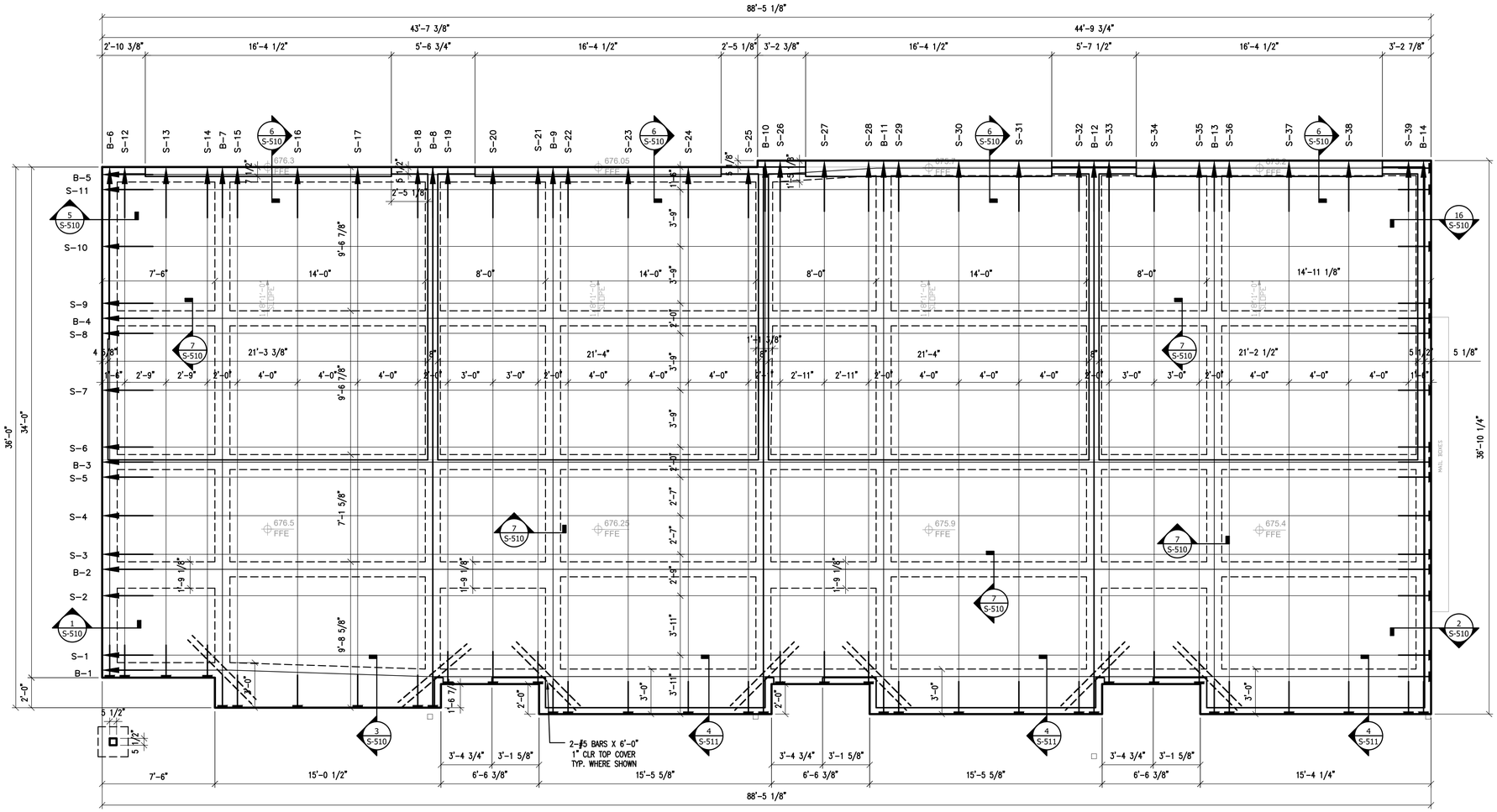
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #2 - ROOF FRAMING PLAN

Sheet No.:
S2-140



FOUNDATION NOTES

THIS SLAB TYPE IS BASED ON PTI DC10.5-12 (STANDARD REQUIREMENTS FOR DESIGN AND ANALYSIS OF SHALLOW POST-TENSIONED CONCRETE FOUNDATIONS ON EXPANSIVE SOIL)

SLAB TYPE:	BRAB TYPE I, BRAB TYPE II, BRAB TYPE III, BRAB TYPE IV
DESCRIPTION:	UNREINFORCED, LIGHTLY REINFORCED AGAINST SHRINKAGE AND TEMPERATURE CRACKING, REINFORCED AND STIFFENED, STRUCTURAL (NOT DIRECTLY SUPPORTED ON THE GROUND)
SLAB THICKNESS:	4 INCHES

NOTES ON EXPANSIVE SOILS:

THE DESIGN OF FOUNDATIONS SUPPORTED ON EXPANSIVE OR COMPRESSIBLE SOILS INCLUDES CONSIDERATION OF VARIOUS SITE CONDITIONS; THEREFORE, IT IS NECESSARY FOR OTHER MEMBERS OF THE PROJECT'S DESIGN AND CONSTRUCTION TEAM TO UNDERSTAND THE ASSUMPTIONS THAT HAVE BEEN MADE.

THE FOLLOWING DESIGN CRITERIA IS CONTAINED IN THE PROJECT GEOTECHNICAL REPORT BY ??????, REPORT #?????, DATED ?????. REFER TO GEOTECHNICAL REPORT SOIL PREPARATION REQUIREMENTS FOR THIS DESIGN.

SITE PREPARATION:	---	
EFFECTIVE PI:	---	
BEARING CAPACITY:	--- PSF (TOTAL DEAD PLUS LIVE LOAD)	
BEARING DEPTH:	-- FEET BELOW GRADE	
CENTER LIFT	Em = -.- FT	Ym = -.-- INCHES
EDGE LIFT	Em = -.- FT	Ym = -.-- INCHES

BEAM SCHEDULE

GRADE BEAM TYPE	DESCRIPTION	WIDTH	DEPTH	REINFORCEMENT
	POST TENSIONED BEAM (TYP. U.N.O.)	--"	--"	- TENDON BOTTOM
RC	REBAR BEAM	--"	--"	2-#5 BOTTOM
	POST TENSIONED DEEPENED BEAM	--"	--"	- TENDON BOTTOM
RC	REBAR DEEPENED BEAM	--"	--"	2-#5 BOTTOM
	THICKENED SLAB	12"	12"	2-#5 BOTTOM

DESIGN ASSUMPTIONS:
1. CONCRETE GRADE BEAMS SHALL EXTEND ABOVE THE FINISHED GRADE ADJACENT TO THE FOUNDATION AT ALL POINTS A MINIMUM OF 6 INCHES.
2. SITE SLOPE SHALL CAUSE WATER TO FLOW AWAY FROM THE BUILDING FOUNDATION FOR A MINIMUM DISTANCE OF 10 FEET AT A MINIMUM SLOPE OF 5%
3. NO TREES OR OTHER VEGETATION OVER SIX FEET IN HEIGHT SHALL BE PLANTED WITHIN 20 FEET OF BUILDING PERIMETER UNLESS SPECIALLY ACCOUNTED FOR IN THE DESIGN OF THE FOUNDATION
4. NO SIGNIFICANT DISCHARGE OF WATER SHALL OCCUR ADJACENT TO THE FOUNDATION. THIS MAY INCLUDE ROOF DRAINAGE AND AIR CONDITIONING CONDENSATE, BOTH OF WHICH CAN BE DIRECTED TO A SUBGRADE DRAINAGE SYSTEM.
5. THE BUILDER, CONTRACTOR, OR ENGINEER HAS PROVIDED THE OWNER WITH INFORMATION RELATED TO SLAB-ON-GROUND FOUNDATION LONG-TERM MAINTENANCE RECOMMENDATIONS.
6. THE FOUNDATION IS NOT CONSTRUCTED OVER AN AREA COVERING PARTIAL CUT AND/OR PARTIAL FILL OF EXPANSIVE OR COMPRESSIBLE SOILS (TRANSITION LOTS). SPECIAL CONSIDERATION SHALL BE GIVEN FOR ADDITIONAL DIFFERENTIAL MOVEMENT IN THE DESIGN OF FOUNDATIONS CONSTRUCTED ON THESE CONDITIONS.
7. UNLESS OTHERWISE NOTED ON THE PLANS: STOOPS, ELECTRICAL/MECHANICAL PADS, PORCHES AND PATIOS, OR OTHER FOUNDATION EXTENSIONS OUTSIDE OF THE MAIN FOUNDATION ARE DESIGNED AND CAST INDEPENDENTLY OF THE FOUNDATION.

COMPATIBILITY NOTES:
1. SHALLOW FOUNDATION SYSTEMS CONSTRUCTED ON ACTIVE SOILS ARE EXPECTED TO DEFORM. THE FOUNDATION FLEXIBILITY DISTRIBUTES LOCALIZED SOIL MOVEMENTS TO A MORE UNIFORM SLAB SHAPE. IT IS IMPORTANT THAT OTHER CONSULTANTS AND SUPPLIERS CONSIDER COMPATIBLE DESIGNS OR PRODUCTS FOR FLEXIBLE FOUNDATION SYSTEM. DEFORMATION COMPATIBILITY SHOULD BE ADDRESSED FOR NON-FLEXIBLE EXTERIOR FINISHES, BRITTLE FLOOR FINISHES, AND AREAS THAT SLOPE TO DRAIN OR WHERE UTILITY CONNECTIONS MAY BE LOCATED.
2. RESTRAINT-TO-SHORTENING CRACKS ARE NOT CONSIDERED TO BE A STRUCTURAL PROBLEM. EFFORTS HAVE BEEN MADE TO LOCATE REINFORCING STEEL, CONTROL JOINTS, CONSTRUCTION JOINTS, OR KEYWAYS IN SUCH AREAS SUBJECT TO SUCH CRACKING.

DIMENSIONAL TOLERANCES:

1. GRADE BEAM DEPTH:	+/-1 INCH
2. GRADE BEAM WIDTH:	+/-1 INCH
3. SLAB THICKNESS:	-1/2 INCH, +1 INCH

PLACEMENT TOLERANCES:

1. CLEAR COVER:	ZERO TOLERANCE
2. SLAB TENDONS/VERTICAL:	WITHIN MIDDLE 1/3 OF SLAB
3. SLAB TENDONS/HORIZONTAL:	+/-1 FOOT; 1:6 DEFLECTION
4. BEAM TENDON ANCHORS/VERTICAL:	+/-1 INCH
5. BEAM TENDON ANCHORS LOW POINT:	-1 INCH, +3 IN.
6. BEAM TENDON HORIZONTAL:	+/-2 INCH FROM BEAM CENTERLINE
7. SLAB REBAR/VERTICAL:	+/-3/4 INCH
8. SLAB REBAR/HORIZONTAL:	+/-3 INCH

SLAB LEVELNESS:
1. SLAB LEVELNESS TOLERANCES SHOULD CONFORM TO ACI 117R-90 SECTION 4.5.6 WITH A MINIMUM LOCAL FL NUMBER OF 10. FOR TYPICAL RESIDENTIAL CONSTRUCTION ACI 117 TOLERANCES WOULD PERMIT A MAXIMUM DIFFERENCE IN ELEVATION OF 1.25 INCHES BETWEEN ANY TWO POINTS ON THE SLAB SURFACE 10 FEET APART. IT IS ADVISABLE TO RECORD SLAB ELEVATION MEASUREMENTS ON NEWLY CONSTRUCTED SLABS.

ARCHITECT/ENGINEER COORDINATION:
1. WHERE FEATURES SUCH AS SLAB DROPS, BLOCKOUTS, RECESSES, SLOPES, DRAINS AND DIMENSIONS ARE PROVIDED ON THESE DRAWINGS, THEY SHALL BE VERIFIED ON THE ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION. IF ANY SUCH INFORMATION IS MISSING OR A DISCREPANCY OCCURS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER TO RESOLVE.

TENDON ELONGATION SCHEDULE

NUMBER	LENGTH	ELONGATION (P=26600 LBS) (-10%)	CALCULATED	(+10%)	MEASURED
B-1	88'-7"	5 13/16"	6 1/2"	7 1/8"	
B-2	88'-7"	5 13/16"	6 1/2"	7 1/8"	
B-3	88'-7"	5 13/16"	6 1/2"	7 1/8"	
B-4	88'-7"	5 13/16"	6 1/2"	7 1/8"	
B-5	88'-7"	5 13/16"	6 1/2"	7 1/8"	
B-6	34'-1"	2 1/4"	2 1/2"	2 3/4"	
B-7	36'-2"	2 3/8"	2 5/8"	2 15/16"	
B-8	36'-2"	2 3/8"	2 5/8"	2 15/16"	
B-9	36'-7"	2 7/16"	2 11/16"	2 15/16"	
B-10	37'-0"	2 7/16"	2 11/16"	3"	
B-11	37'-0"	2 7/16"	2 11/16"	3"	
B-12	37'-0"	2 7/16"	2 11/16"	3"	
B-13	37'-0"	2 7/16"	2 11/16"	3"	
B-14	37'-0"	2 7/16"	2 11/16"	3"	
S-1	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-2	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-3	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-4	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-5	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-6	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-7	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-8	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-9	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-10	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-11	88'-7"	5 13/16"	6 1/2"	7 1/8"	
S-12	34'-1"	2 1/4"	2 1/2"	2 3/4"	
S-13	34'-1"	2 1/4"	2 1/2"	2 3/4"	

TENDON ELONGATION SCHEDULE

NUMBER	LENGTH	ELONGATION (P=26600 LBS) (-10%)	CALCULATED	(+10%)	MEASURED
S-14	34'-1"	2 1/4"	2 1/2"	2 3/4"	
S-15	36'-2"	2 3/8"	2 5/8"	2 15/16"	
S-16	36'-2"	2 3/8"	2 5/8"	2 15/16"	
S-17	36'-2"	2 3/8"	2 5/8"	2 15/16"	
S-18	36'-2"	2 3/8"	2 5/8"	2 15/16"	
S-19	34'-7"	2 1/4"	2 9/16"	2 13/16"	
S-20	34'-7"	2 1/4"	2 9/16"	2 13/16"	
S-21	34'-7"	2 1/4"	2 9/16"	2 13/16"	
S-22	36'-7"	2 7/16"	2 11/16"	2 15/16"	
S-23	36'-7"	2 7/16"	2 11/16"	2 15/16"	
S-24	36'-7"	2 7/16"	2 11/16"	2 15/16"	
S-25	36'-7"	2 7/16"	2 11/16"	2 15/16"	
S-26	35'-0"	2 5/16"	2 9/16"	2 13/16"	
S-27	35'-0"	2 5/16"	2 9/16"	2 13/16"	
S-28	35'-0"	2 5/16"	2 9/16"	2 13/16"	
S-29	37'-0"	2 7/16"	2 11/16"	3"	
S-30	37'-0"	2 7/16"	2 11/16"	3"	
S-31	37'-0"	2 7/16"	2 11/16"	3"	
S-32	37'-0"	2 7/16"	2 11/16"	3"	
S-33	35'-0"	2 5/16"	2 9/16"	2 13/16"	
S-34	35'-0"	2 5/16"	2 9/16"	2 13/16"	
S-35	35'-0"	2 5/16"	2 9/16"	2 13/16"	
S-36	37'-0"	2 7/16"	2 11/16"	3"	
S-37	37'-0"	2 7/16"	2 11/16"	3"	
S-38	37'-0"	2 7/16"	2 11/16"	3"	
S-39	37'-0"	2 7/16"	2 11/16"	3"	

HOLDOWN LEGEND

HOLDOWN LOCATION RE:S3-130

KEY PLAN

1 BUILDING #3 - FOUNDATION PLAN

Scale: 1/4" = 1'-0"

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Texas Registered Eng Firm #14038

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Principal Engineer:
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ON
08/02/2019
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TRAIL STREET TOWNHOMES

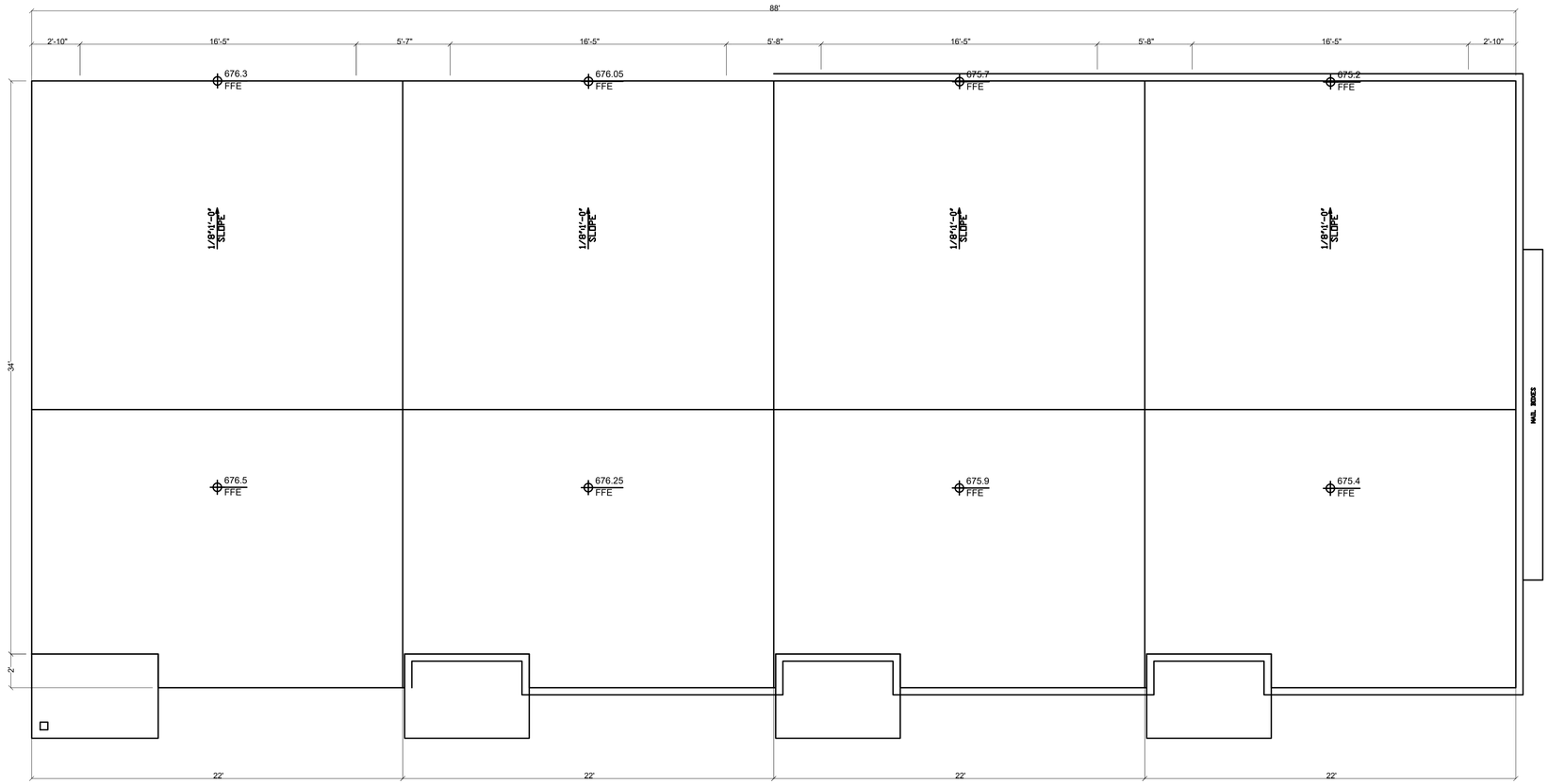
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #3 - FOUNDATION PLAN

Sheet No.:
S3-110



1 BUILDING #3 - SLAB FORMING PLAN

Scale: 1/4" = 1'-0"

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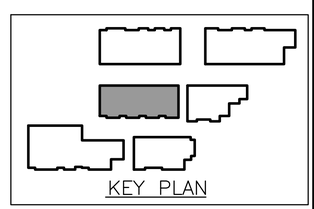
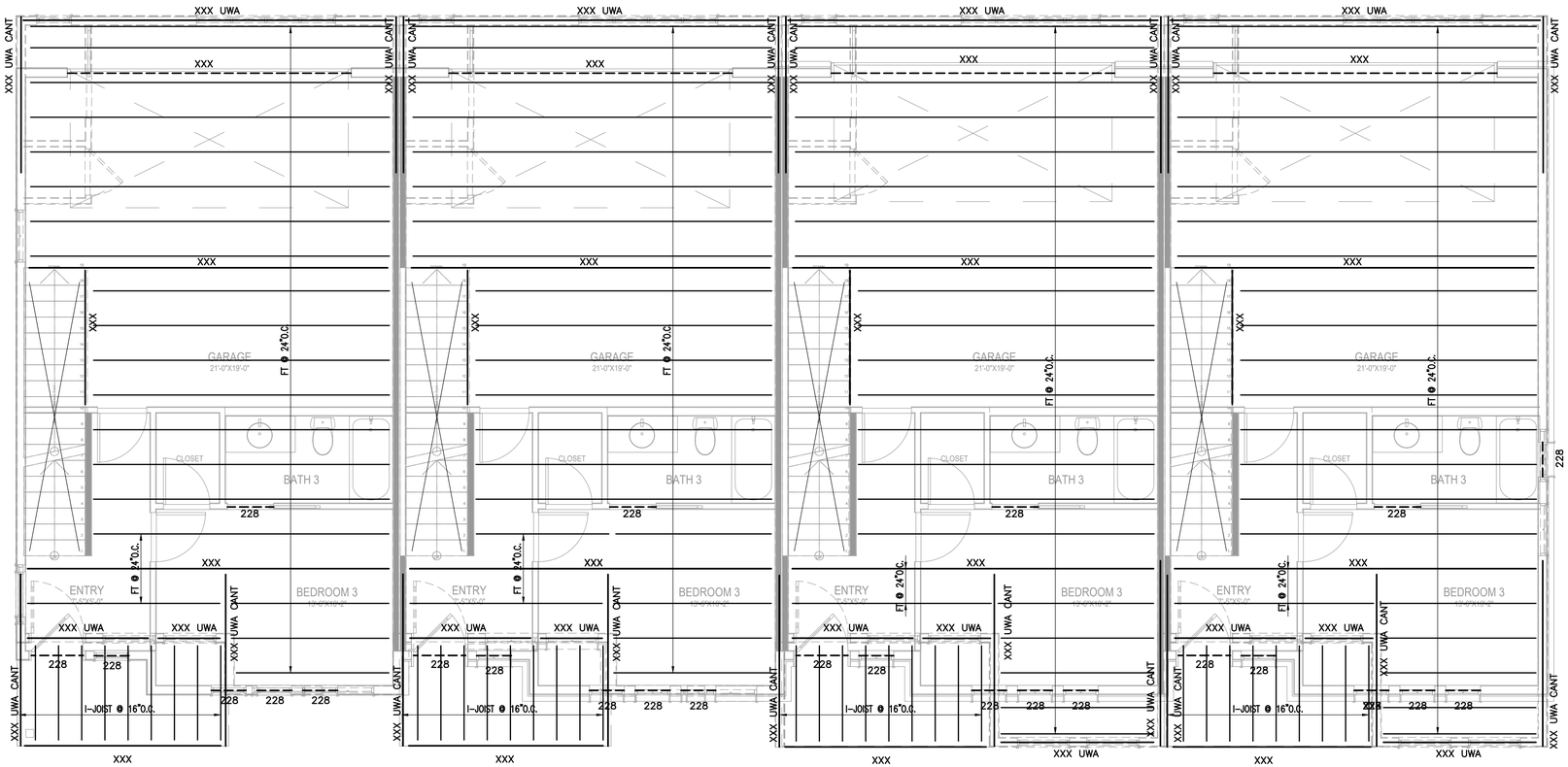


Sheet Name:
BUILDING #3 - SLAB FORMING PLAN

Sheet No.:
S3-110s



1 BUILDING #3 - 2ND FLOOR FRAMING PLAN

Scale: 1/4" = 1'-0"

FLOOR FRAMING NOTES:

1. ALL FLOOR JOISTS ARE PREFABRICATED OPEN WEB TRUSSES @ 24" O.C. DESIGNED AND MANUFACTURED BY OTHERS (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED:
   TCLL = 40 PSF AT UNITS, BALCONIES, AND CORRIDORS SERVING THEM
   TCLL = 100 PSF AT PUBLIC SPACES AND CORRIDORS SERVING THEM
   TCLL = 100 PSF AT PUBLIC BALCONIES
   TCDL = 20 PSF
   BCLL = 0 PSF
   BCDL = 5 PSF
2. COMMON FLOOR TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE FLOOR DECKING, PERIMETER, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL. DROP HEADER MEMBERS SHALL HAVE ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
4. ALL NON-LOAD BEARING HEADER MEMBERS MAY BE CONSTRUCTED OF PONY WALL CONSTRUCTION WITH DOUBLE BOTTOM PLATES AND SINGLE JACK STUDS.
5. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS MINIMUM SPECIFICATIONS: Fb=3,000psi, Fv=300psi, E=2.1x10^6psi FOR 3 1/2" AND 5 1/2" WIDE BEAMS, Fb =2,800 psi, Fv=300psi, E=2.1x10^6psi FOR 7" WIDE BEAMS.
6. BEAM SUPPORT DETAILS OR BEAM CONNECTION HANGERS SHALL BE PER THE HANGER MANUFACTURER'S REQUIREMENTS.
7. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS, FLOOR TOP OF PLATE ELEVATIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPENCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
8. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. PROVIDE CB TRUSSES UNDER ALL STACKING WALLS TO MATCH STUD SIZE AND SPACING REQUIREMENTS.
11. FLOOR DRAG TRUSSES (SHEAR PANELS) SHALL BE PROVIDED DIRECTLY OVER TOPS OF INTERIOR SHEARWALLS AND SHALL BE DESIGNED FOR A TOTAL LOAD EQUAL TO THE LENGTH OF THE SHEARWALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEARWALL SCHEDULE.
12. THE FOLLOWING LEGEND REGARDING FLOOR FRAMING IS USED TO DETAIL THIS SHEET:

ABBREVIATION	DESCRIPTION
BLK	BLOCKING
DBL	DOUBLE
CONT	CONTINUOUS
PSL	PARALLEL STRAND LUMBER
GLB	GLULAM BEAM
FRB	FOR ROOF BRACING
UWA	UNDER WALL ABOVE
RSDF	ROUGH SAWN DOUGLAS FIR
CANT	CANTILEVER, SEE NOTE 1
UPL	UNDER POINT LOAD
CB	CONTINUOUS BEARING

NOTES:
1. BACKSPANS FOR CANTILEVERS MUST BE GREATER THAN OR EQUAL TO THE LENGTH OF THE CANTILEVER, UNO.

SYMBOL	DESCRIPTION
F.T.	FLOOR TRUSS
B.T.	BALCONY TRUSS
C.T.	CORRIDOR TRUSS
G.T.	GIRDER TRUSS
DBL	DOUBLE
TPL	TRIPLE
	DROP BEAM
	FLUSH BEAM
	BEARING WALL
	WALL ABOVE (10 PSF U.N.O.)

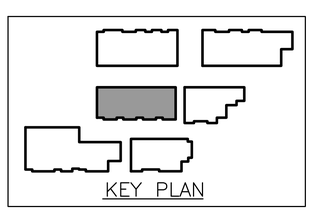
WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.



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08/02/2019
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TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

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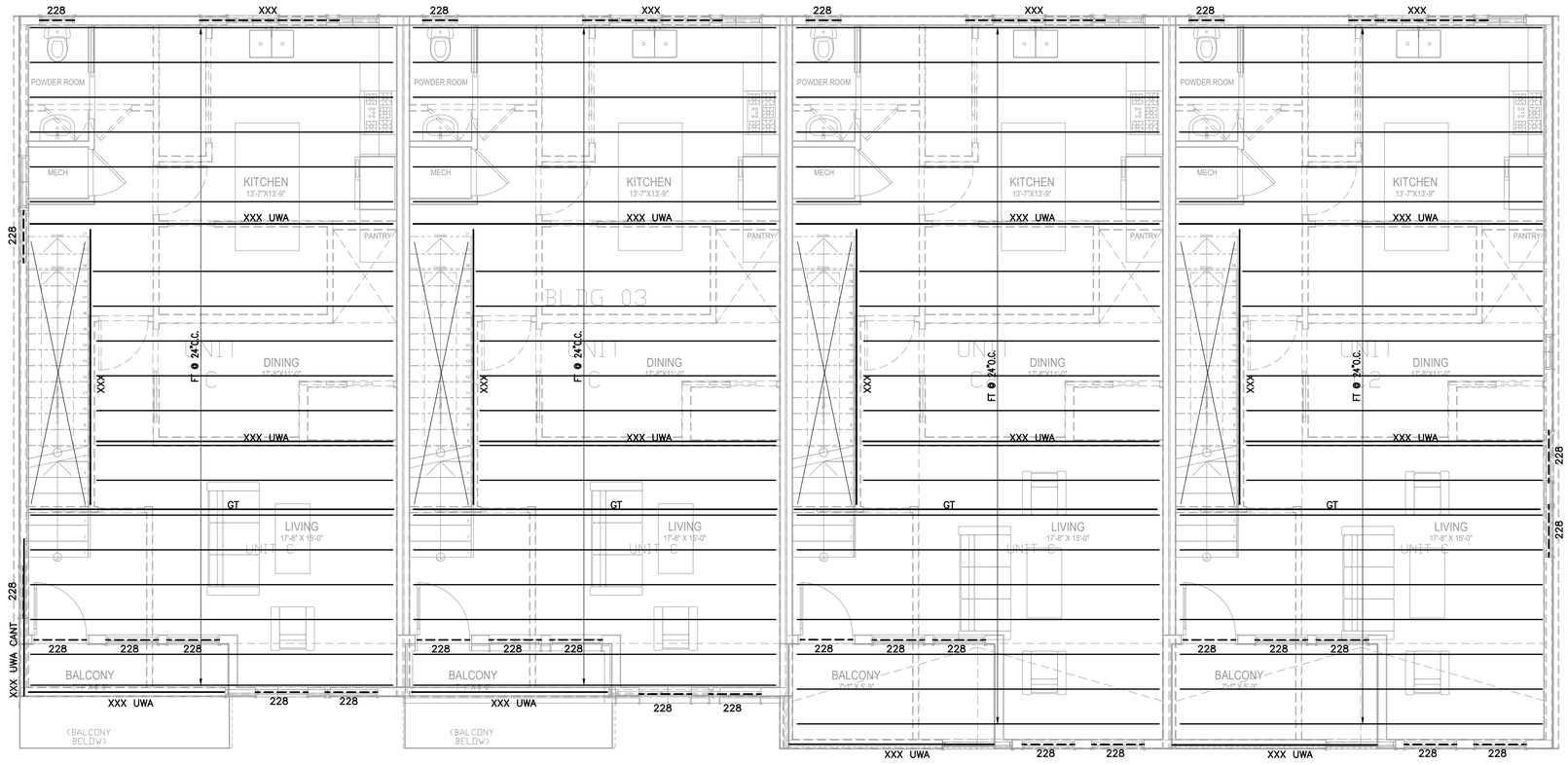
REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #3 - 2ND FLOOR FRAMING PLAN

Sheet No.:
S3-120



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DBL	DOUBLE
CONT	CONTINUOUS
PSL	PARALLEL STRAND LUMBER
GLB	GLULAM BEAM
FRB	FOR ROOF BRACING
UWA	UNDER WALL ABOVE
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CANT	CANTILEVER, SEE NOTE 1
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B.T.	BALCONY TRUSS
C.T.	CORRIDOR TRUSS
G.T.	GIRDER TRUSS
DBL	DOUBLE
TPL	TRIPLE
	DROP BEAM
	FLUSH BEAM
	BEARING WALL
	WALL ABOVE (10 PSF U.N.O.)

WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
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B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
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B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
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B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
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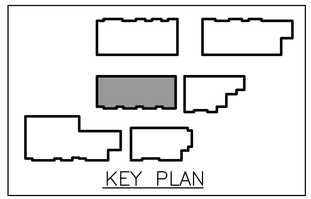
4. STUD PACKS TO MATCH BEAM WIDTH.



1 BUILDING #3 - 3RD FLOOR FRAMING PLAN

Scale: 1/4" = 1'-0"

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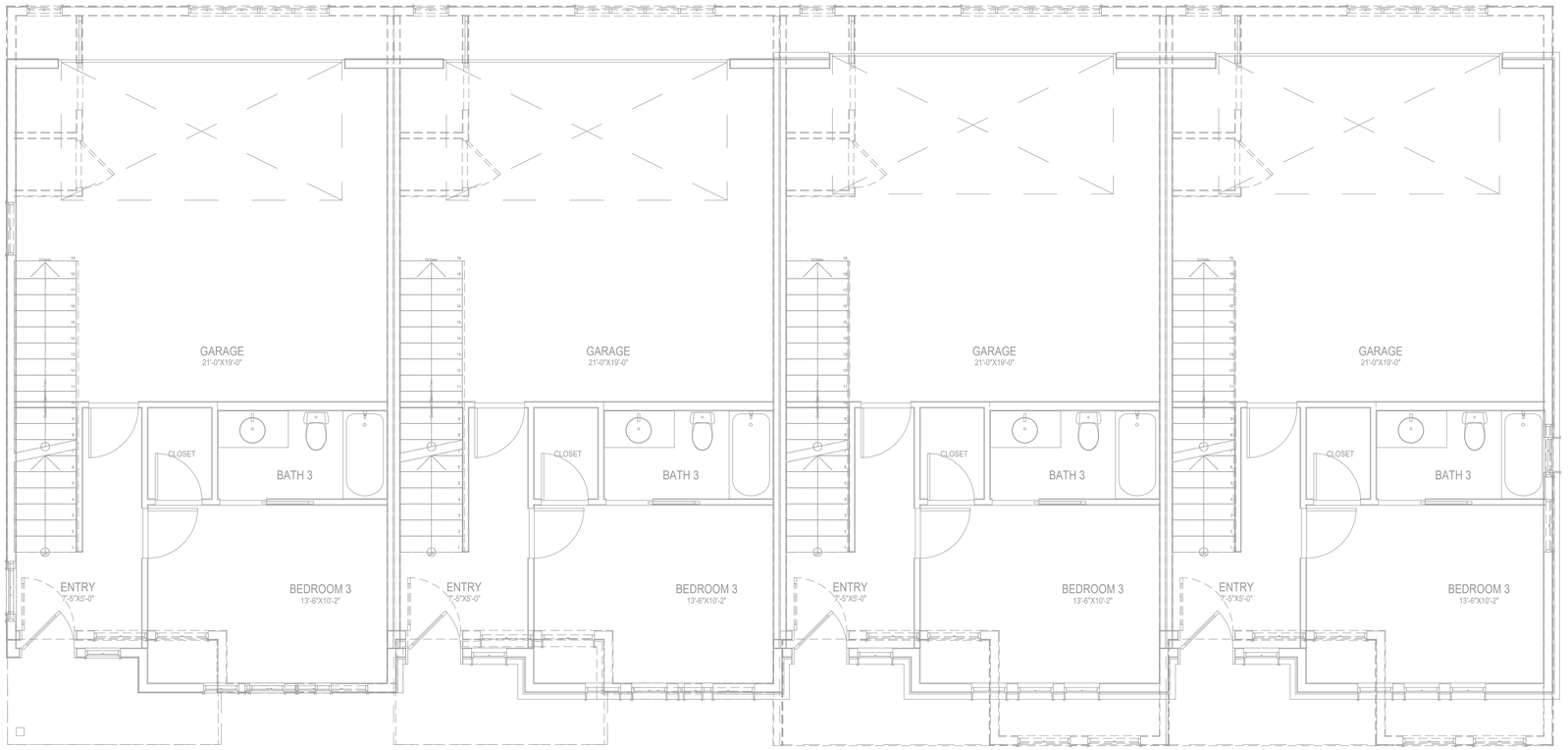
Sheet Name:
BUILDING #3 - 3RD FLOOR FRAMING PLAN

Sheet No.:
S3-121



SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1.,8,10

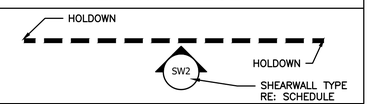
NOTES:
1. ALL SHEARWALLS MUST BE BLOCKED AT ALL EDGES. PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
2. FULL SIZED PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY. PANELS SHALL NOT BE LESS THAN 24" IN WIDTH.
3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
4. ALL WOOD STRUCTURAL PANEL SHEATHING SHALL BE MIN. 15/32" 5-PLY PLYWOOD OR 7/16" ORIENTED STRAND BOARD.
5. ALL SHEARWALLS ARE BLOCKED AT ALL EDGES.
6. THE SILL FASTENING MUST BE DOUBLED FOR TWO-SIDED SHEARWALLS.
7. ALTERNATE SILL FASTENING INTO CONCRETE (SEE NOTES):
   - 7.1. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
   - 7.2. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 4" O.C. (495 PLF)
   - 7.3. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 3" O.C. (660 PLF)
8. ALL SHEARWALLS SHALL BE FRAMED WITH END (WIND) POST AT EACH END PER THE HOLD DOWN SCHEDULE. HOLDOWNS AND END POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE WALL WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE STRUCTURE.
9. (4) FOOT WIDE GYPSUM SHEATHING BOARDS CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE STUDS. (2) FOOT WIDE PIECES OF GYPSUM SHEATHING BOARDS SHALL BE APPLIED PERPENDICULAR TO THE STUDS. GYPSUM SHEATHING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
10. GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER, WATER-RESISTANT GYPSUM BACKING BOARD CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE WALL STUDS. GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 844. WATER-RESISTANT GYPSUM BACKING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
9. F = UNTREATED LUMBER WITH NO MOISTURE EXPOSURE
10. P = PRESSURE TREATED LUMBER WITH NO MOISTURE EXPOSURE
11. R-L = ALL WOOD TYPES IN HEAVY INDUSTRIAL OR COASTAL AREAS (BUT WITH NO DIRECT EXPOSURE TO CHLORIDES)

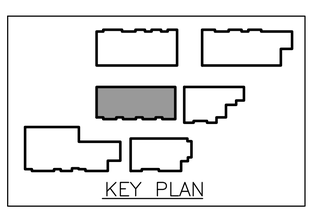
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	ANCHOR BOLT	EMBEDMENT	NOTES
HD1	SIMPSON LTTI31	1350	18-10d (0.148" DIA. X 1-1/2") GALV BOX NAIL	2-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	3 1/2"	1,2,5
HD2	SIMPSON HTT4 ZMAX	4235	18-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	3-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	5"	1,2,5
	SIMPSON STHD14	5345	30-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	3-2X4	EMBEDED	WET SET	3,5
HD3	SIMPSON HTT5 ZMAX	5090	26-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	4-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	6"	1,3,5
	SIMPSON STHD14	5345	30-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	4-2X4	EMBEDED	WET SET	3,5
HD4	SIMPSON HDQ8-SDS3	7630	20-1/4" DIA. X 3" SDS SCREWS	4X4	7/8" DIA. A307 HAS ROD DRILL & EPOXY	10"	1,4,5
HD5	SIMPSON HD9B	9920	3-7/8" STUD BOLTS	6X6	7/8" DIA. A307 HAS ROD DRILL & EPOXY	10"	1,4,5
HD6	SIMPSON HD12	15510	4-1" STUD BOLTS	6X6	1 1/8" WET SET	18"	1,4,5

NOTES:
1. EPOXY SHALL BE HILTI HIT-HY 150 MAX-SD OR EQUAL AND INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. FASTEN HD1 & HD2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
3. FASTEN HD3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
4. FASTEN END MEMBERS TOGETHER WITH HARDWARE BOLTS SPECIFIED.
5. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #3 - 1ST FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

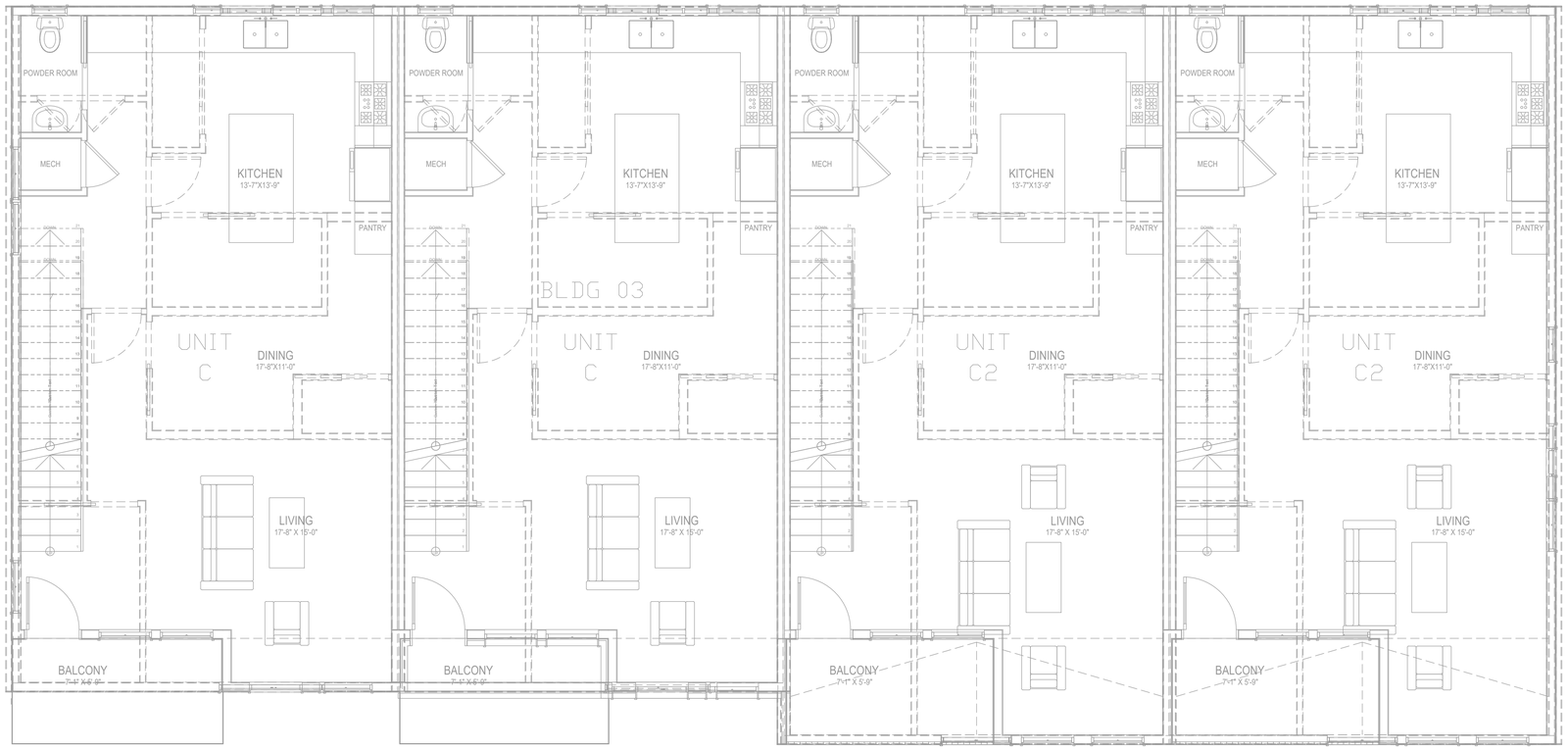
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

HDRC PROGRESS SET	08/02/2019
REVISION/ISSUE	DATE

Sheet Name:
BUILDING #3 - 1ST FLOOR SHEARWALL PLAN

Sheet No.:
S3-130



SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1.,8,10

NOTES:
1. ALL SHEARWALLS MUST BE BLOCKED AT ALL EDGES. PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
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3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
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5. ALL SHEARWALLS ARE BLOCKED AT ALL EDGES.
6. THE SILL FASTENING MUST BE DOUBLED FOR TWO-SIDED SHEARWALLS.
7. ALTERNATE SILL FASTENING INTO CONCRETE (SEE NOTES):
   - 7.1. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
   - 7.2. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 4" O.C. (495 PLF)
   - 7.3. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 3" O.C. (660 PLF)
8. ALL SHEARWALLS SHALL BE FRAMED WITH END (WIND) POST AT EACH END PER THE HOLD DOWN SCHEDULE. HOLDOWNS AND END POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE WALL WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE STRUCTURE.
9. (4) FOOT WIDE GYPSUM SHEATHING BOARDS CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE STUDS. (2) FOOT WIDE PIECES OF GYPSUM SHEATHING BOARDS SHALL BE APPLIED PERPENDICULAR TO THE STUDS. GYPSUM SHEATHING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
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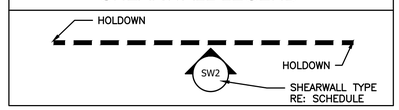
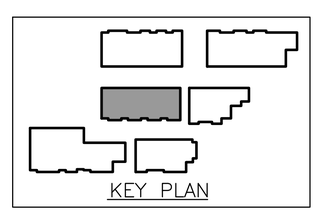
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	NOTES
ST1	(1) CS16X60	1705	8d - FILL ALL HOLES	2-2X4	1,3
ST2	(2) CS16X60	3410	8d - FILL ALL HOLES	3-2X4	1,3
ST3	(3) CS16X60	5115	8d - FILL ALL HOLES	4-2X4	2,3
ST4	(4) CS16X60	6820	8d - FILL ALL HOLES	4X4	1,3

NOTES:
1. FASTEN ST1 AND ST2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
2. FASTEN ST3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
3. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #3 - 2ND FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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LICENSED ENGINEER #
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ON
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TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

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REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #3 - 2ND FLOOR SHEARWALL PLAN

Sheet No.:
S3-131

SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,,8,10

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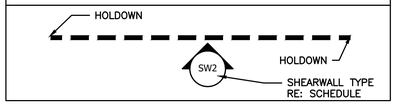
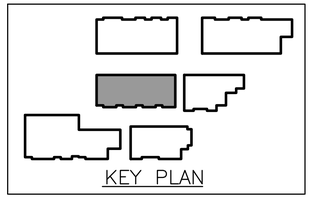
ST4	(4) CS16X60	6820	8d - FILL ALL HOLES	4X4	1,3

NOTES:
1. FASTEN ST1 AND ST2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
2. FASTEN ST3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
3. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #3 - 3RD FLOOR SHEARWALL PLAN

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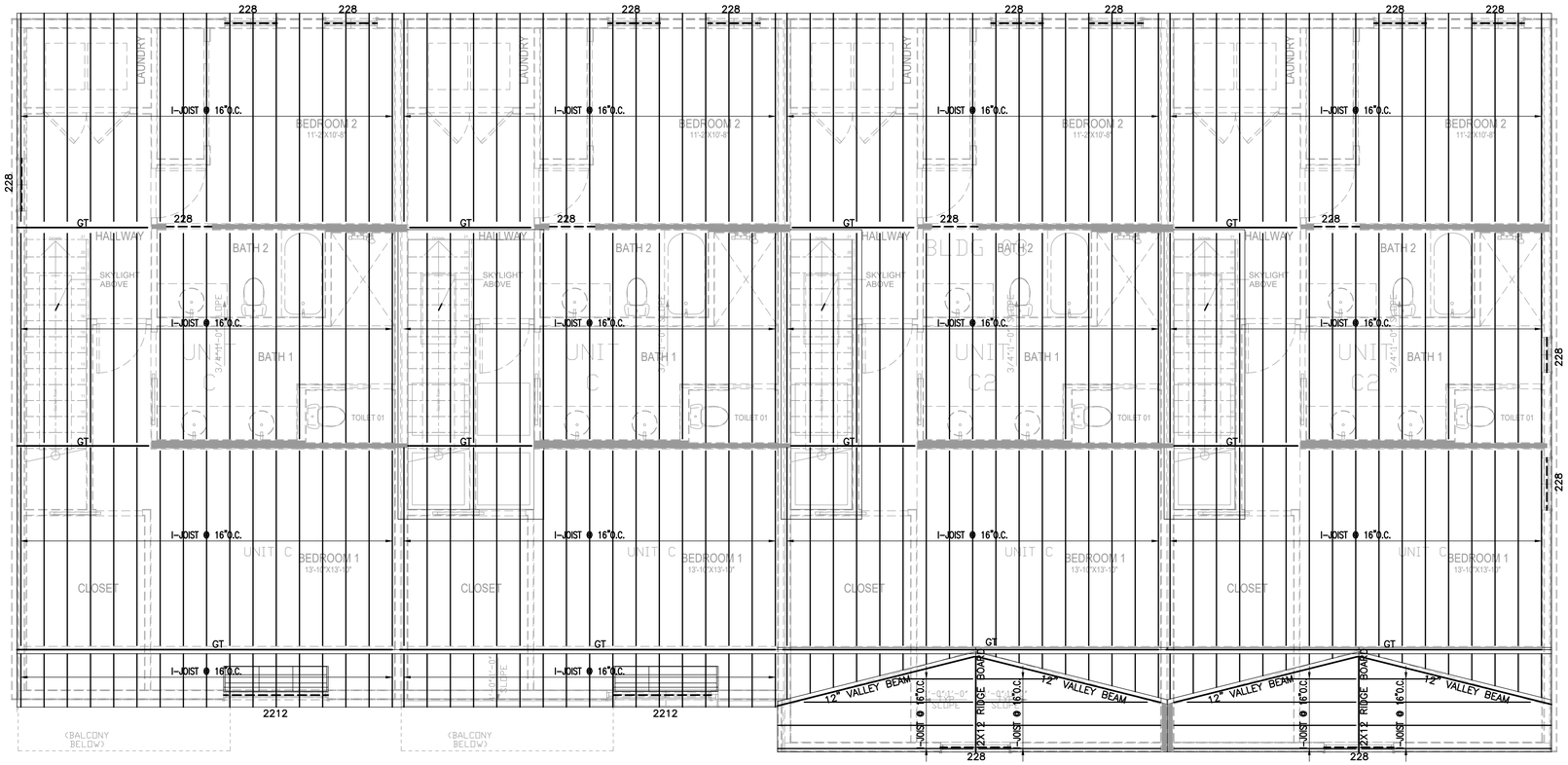
Sheet No.:
S3-132



ROOF FRAMING NOTES:

1. ROOF FRAMING SHALL CONSIST OF PREFABRICATED ROOF TRUSSES SPACED @ 24" O.C. UNLESS NOTED OTHERWISE (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED TO DESIGN TRUSSES:
   - TOP CHORD LIVE LOAD = 20 PSF
   - TOP CHORD DEAD LOAD = 20 PSF
   - BOTTOM CHORD LIVE LOAD = 10 PSF (UNINHABITED ATTIC WITHOUT STORAGE, ASSUMED NOT TO ACT CONCURRENTLY WITH ANY OTHER LIVE LOAD.)
   - BOTTOM CHORD DEAD LOAD = 5 PSF
   - ADDITIONAL LOADS DUE TO MECHANICAL UNITS, OVERHEAD DOORS, ROOF OVERBUILDS, ETC.
2. COMMON ROOF TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE ROOF DECKING, PERIMETER, PARAPETS, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. DRAG TRUSSES SHALL BE PROVIDED DIRECTLY OVER TOPS OF INTERIOR SHEARWALLS AND SHALL BE DESIGNED FOR A TOTAL LOAD EQUAL TO THE LENGTH OF THE SHEARWALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEARWALL SCHEDULE FOR THE WALL TYPE. SEE ROOF FRAMING DETAILS FOR ROOF SHEATHING NAILING REQUIREMENTS AT DRAG TRUSSES.
4. ROOF TRUSSES MAY ONLY BEAR UPON LOAD BEARING TOP PLATES OF WALLS OR BEAMS UNLESS NOTED OTHERWISE ON PLAN, DO NOT SUPPORT ANY CHIMNEY UPON TRUSSES. EXTEND WALLS OF CHIMNEY THROUGH THE TRUSSES TO BEAR UPON WALLS OR BEAMS BELOW.
5. RESULTING UPLIFT LOADS FROM TRUSS ANALYSIS SHALL BE LIMITED TO 600 LBS FOR COMMON TRUSSES, AND 3,500 LBS FOR GIRDER TRUSSES.
6. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL WITH ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
7. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS. MINIMUM SPECIFICATIONS: Fb=2,900psi, Fv=290psi, E=2x10^6psi.
8. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPANCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
9. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. THIS ROOF LAYOUT IS DESIGNED TO SUPPORT LIGHT ROOFING MATERIAL. PLEASE CONSULT ENGINEER IF ANY OTHER TYPE OF ROOF COVERING IS TO BE USED.

SYMBOL	DESCRIPTION		
RT	ROOF TRUSS		FLUSH BEAM
WT	WALL TRUSS		DROP BEAM
	OVER FRAME		
	BEARING WALL		
GT	GIRDER TRUSS		
DT	DRAG TRUSS		
DB	DRAG BRACE		

WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

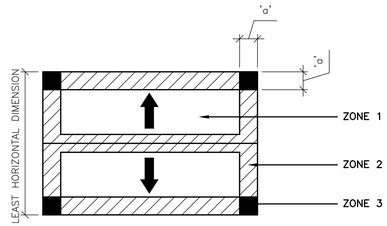
GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.

SHEATHING NAILING		
	AT DIAPHRAGM BOUNDARIES	FIELD (INTERMEDIATE SUPPORT MEMBERS)
ZONE 1	8D @ 6" OC	8D @ 6" OC
ZONE 2	8D @ 3" OC	8D @ 3" OC
ZONE 3	8D @ 3" OC	8D @ 3" OC

NOTES:
1. ALL NAILS FOR ROOF SHEATHING SHALL BE RING SHANK NAILS.
2. SEE ROOF FRAMING DETAILS FOR ADDITIONAL FASTENING REQUIREMENTS UNRELATED TO DECK UPLIFT.

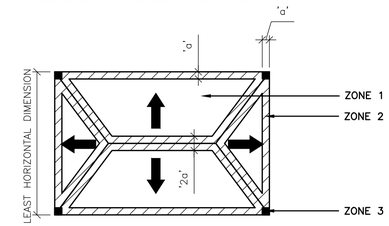


'a' = 10% OF LEAST HORIZONTAL DIMENSION OR 0.4H, WHICHEVER IS SMALLER , BUT NOT LESS THAN 4% OF LEAST HORIZONTAL DIMENSION OR 3FT.

ROOF PRESSURE ZONES (GABLE ROOF)

SHEATHING NAILING		
	AT DIAPHRAGM BOUNDARIES	FIELD (INTERMEDIATE SUPPORT MEMBERS)
ZONE 1	8D @ 6" OC	8D @ 6" OC
ZONE 2	8D @ 3" OC	8D @ 3" OC
ZONE 3	8D @ 3" OC	8D @ 3" OC

NOTES:
1. ALL NAILS FOR ROOF SHEATHING SHALL BE RING SHANK NAILS.
2. SEE ROOF FRAMING DETAILS FOR ADDITIONAL FASTENING REQUIREMENTS UNRELATED TO DECK UPLIFT.

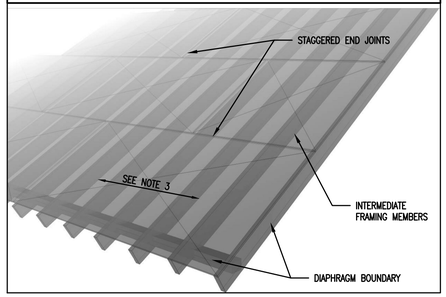


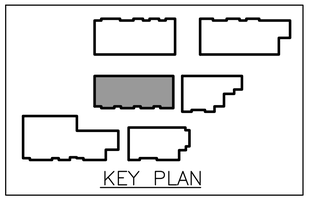
'a' = 10% OF LEAST HORIZONTAL DIMENSION OR 0.4H, WHICHEVER IS SMALLER , BUT NOT LESS THAN 4% OF LEAST HORIZONTAL DIMENSION OR 3FT.

ROOF PRESSURE ZONES (HIP ROOF)

ROOF SHEATHING NOTES:

1. ROOF DECKING SHALL BE 1/2" NOMINAL EXPOSURE 1 (CDX) OR OSB APA RATED SHEATHING (24/16).
2. FASTENING SHALL BE PER ROOF PRESSURE ZONE DIAGRAM.
3. PANELS SHALL SPAN 3 OR MORE FLOOR JOISTS WITH THE LONG DIMENSION (FACE GRAIN) PERPENDICULAR TO THE FRAMING. STAGGER END JOINT OF PANELS. PROVIDE A 1/8" GAP AT ALL PANEL EDGES UNLESS RECOMMENDED OTHERWISE BY THE PANEL MFR.
4. ROOF SHEATHING PANELS ARE UNBLOCKED UNLESS NOTED OTHERWISE.
5. WHERE BLOCKING IS NOT SPECIFICALLY REQUIRED FOR ROOF SHEATHING, PLY CLIPS OR TONGUE AND GROOVE SHEATHING SHALL BE USED.





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A member of Building Code Compliance Association #E00001

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Christopher P. Hillman, P.E.
LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

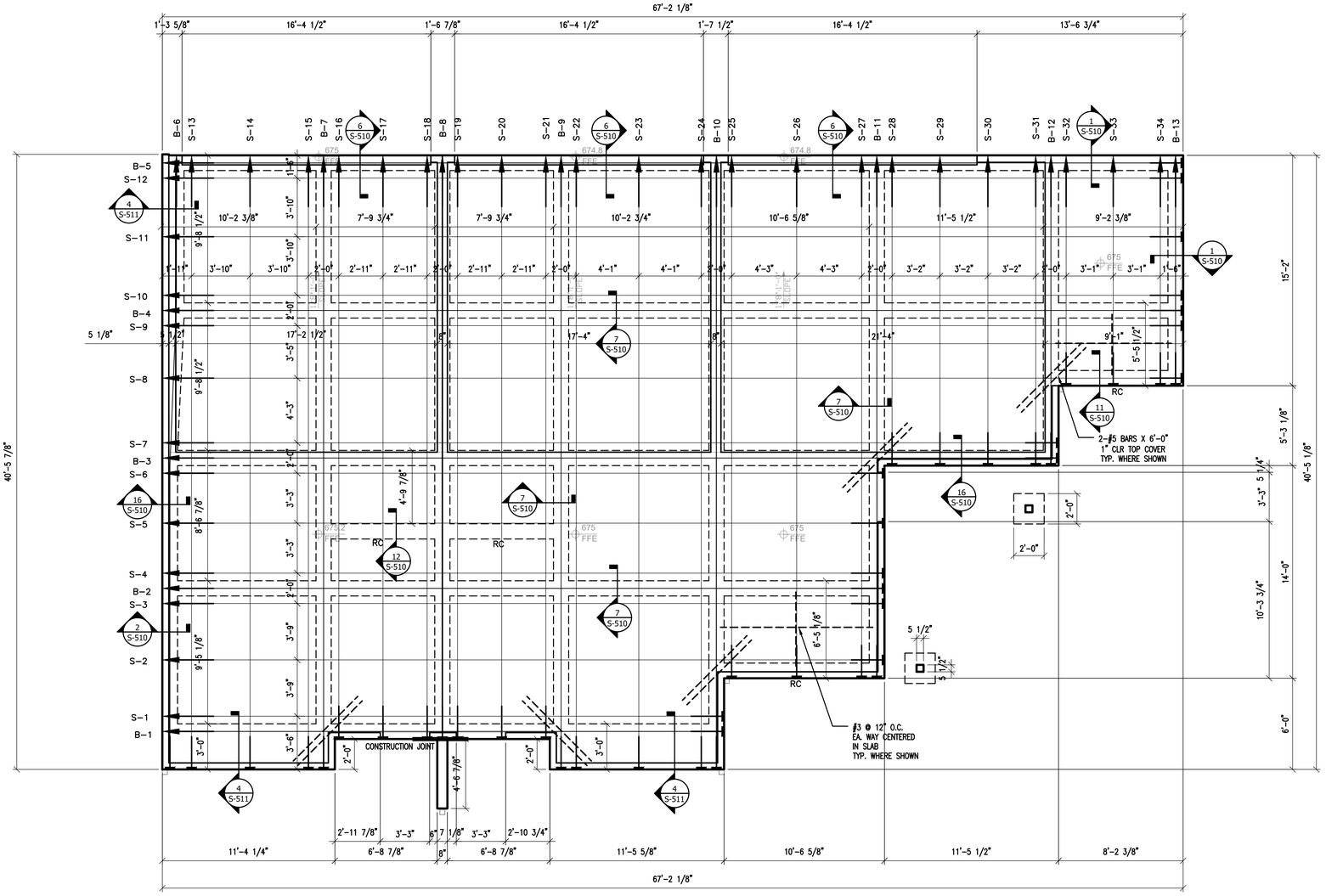
REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #3 - ROOF FRAMING PLAN

Sheet No.:
S3-140

1 BUILDING #3 - ROOF FRAMING PLAN

Scale: 1/4" = 1'-0"



TENDON ELONGATION SCHEDULE						TENDON ELONGATION SCHEDULE					
NUMBER	LENGTH	ELONGATION (P=26600 LBS) (−10%)	CALCULATED	(+10%)	MEASURED	NUMBER	LENGTH	ELONGATION (P=26600 LBS) (−10%)	CALCULATED	(+10%)	MEASURED
B-1	37'-1"	2 7/16"	2 11/16"	3"		S-12	67'-4"	4 7/16"	4 15/16"	5 7/16"	
B-2	47'-8"	3 1/8"	3 1/2"	3 13/16"		S-13	40'-7"	2 11/16"	3"	3 1/4"	
B-3	59'-1"	3 7/8"	4 5/16"	4 3/4"		S-14	40'-7"	2 11/16"	3"	3 1/4"	
B-4	67'-4"	4 7/16"	4 15/16"	5 7/16"		S-15	40'-7"	2 11/16"	3"	3 1/4"	
B-5	67'-4"	4 7/16"	4 15/16"	5 7/16"		S-16	38'-7"	2 9/16"	2 13/16"	3 1/8"	
B-6	40'-7"	2 11/16"	3"	3 1/4"		S-17	38'-7"	2 9/16"	2 13/16"	3 1/8"	
B-7	40'-7"	2 11/16"	3"	3 1/4"		S-18	38'-7"	2 9/16"	2 13/16"	3 1/8"	
B-8	38'-7"	2 9/16"	2 13/16"	3 1/8"		S-19	38'-7"	2 9/16"	2 13/16"	3 1/8"	
B-9	40'-7"	2 11/16"	3"	3 1/4"		S-20	38'-7"	2 9/16"	2 13/16"	3 1/8"	
B-10	40'-7"	2 11/16"	3"	3 1/4"		S-21	38'-7"	2 9/16"	2 13/16"	3 1/8"	
B-11	34'-7"	2 1/4"	2 9/16"	2 13/16"		S-22	40'-7"	2 11/16"	3"	3 1/4"	
B-12	20'-7"	1 3/8"	1 1/2"	1 11/16"		S-23	40'-7"	2 11/16"	3"	3 1/4"	
B-13	15'-3"	1"	1 1/8"	1 1/4"		S-24	40'-7"	2 11/16"	3"	3 1/4"	
S-1	37'-1"	2 7/16"	2 11/16"	3"		S-25	34'-7"	2 1/4"	2 9/16"	2 13/16"	
S-2	47'-8"	3 1/8"	3 1/2"	3 13/16"		S-26	34'-7"	2 1/4"	2 9/16"	2 13/16"	
S-3	47'-8"	3 1/8"	3 1/2"	3 13/16"		S-27	34'-7"	2 1/4"	2 9/16"	2 13/16"	
S-4	47'-8"	3 1/8"	3 1/2"	3 13/16"		S-28	20'-7"	1 3/8"	1 1/2"	1 11/16"	
S-5	47'-8"	3 1/8"	3 1/2"	3 13/16"		S-29	20'-7"	1 3/8"	1 1/2"	1 11/16"	
S-6	47'-8"	3 1/8"	3 1/2"	3 13/16"		S-30	20'-7"	1 3/8"	1 1/2"	1 11/16"	
S-7	59'-1"	3 7/8"	4 5/16"	4 3/4"		S-31	20'-7"	1 3/8"	1 1/2"	1 11/16"	
S-8	67'-4"	4 7/16"	4 15/16"	5 7/16"		S-32	15'-3"	1"	1 1/8"	1 1/4"	
S-9	67'-4"	4 7/16"	4 15/16"	5 7/16"		S-33	15'-3"	1"	1 1/8"	1 1/4"	
S-10	67'-4"	4 7/16"	4 15/16"	5 7/16"		S-34	15'-3"	1"	1 1/8"	1 1/4"	
S-11	67'-4"	4 7/16"	4 15/16"	5 7/16"							

1 BUILDING #4 - FOUNDATION PLAN

Scale: 1/4" = 1'-0"

FOUNDATION NOTES

THIS SLAB TYPE IS BASED ON PTI DC10.5-12 (STANDARD REQUIREMENTS FOR DESIGN AND ANALYSIS OF SHALLOW POST-TENSIONED CONCRETE FOUNDATIONS ON EXPANSIVE SOIL)

SLAB TYPE:	BRAB TYPE I, BRAB TYPE II, BRAB TYPE III, BRAB TYPE IV
DESCRIPTION:	UNREINFORCED, LIGHTLY REINFORCED AGAINST SHRINKAGE AND TEMPERATURE CRACKING, REINFORCED AND STIFFENED, STRUCTURAL (NOT DIRECTLY SUPPORTED ON THE GROUND)
SLAB THICKNESS:	4 INCHES

NOTES ON EXPANSIVE SOILS:

THE DESIGN OF FOUNDATIONS SUPPORTED ON EXPANSIVE OR COMPRESSIBLE SOILS INCLUDES CONSIDERATION OF VARIOUS SITE CONDITIONS; THEREFORE, IT IS NECESSARY FOR OTHER MEMBERS OF THE PROJECT'S DESIGN AND CONSTRUCTION TEAM TO UNDERSTAND THE ASSUMPTIONS THAT HAVE BEEN MADE.

THE FOLLOWING DESIGN CRITERIA IS CONTAINED IN THE PROJECT GEOTECHNICAL REPORT BY ??????, REPORT #?????, DATED ?????. REFER TO GEOTECHNICAL REPORT SOIL PREPARATION REQUIREMENTS FOR THIS DESIGN.

SITE PREPARATION:	---		
EFFECTIVE PI:	---		
BEARING CAPACITY:	--- PSF (TOTAL DEAD PLUS LIVE LOAD)		
BEARING DEPTH:	-- FEET BELOW GRADE		
CENTER LIFT	Em = -.- FT	Ym = -.-- INCHES	
EDGE LIFT	Em = -.- FT	Ym = -.-- INCHES	

BEAM SCHEDULE

GRADE BEAM TYPE	DESCRIPTION	WIDTH	DEPTH	REINFORCEMENT
	POST TENSIONED BEAM (TYP. U.N.O.)	--"	--"	- TENDON BOTTOM
RC	REBAR BEAM	--"	--"	2-#5 BOTTOM
	POST TENSIONED DEEPENED BEAM	--"	--"	- TENDON BOTTOM
RC	REBAR DEEPENED BEAM	--"	--"	2-#5 BOTTOM
	THICKENED SLAB	12"	12"	2-#5 BOTTOM

DESIGN ASSUMPTIONS:
1. CONCRETE GRADE BEAMS SHALL EXTEND ABOVE THE FINISHED GRADE ADJACENT TO THE FOUNDATION AT ALL POINTS A MINIMUM OF 6 INCHES.
2. SITE SLOPE SHALL CAUSE WATER TO FLOW AWAY FROM THE BUILDING FOUNDATION FOR A MINIMUM DISTANCE OF 10 FEET AT A MINIMUM SLOPE OF 5%
3. NO TREES OR OTHER VEGETATION OVER SIX FEET IN HEIGHT SHALL BE PLANTED WITHIN 20 FEET OF BUILDING PERIMETER UNLESS SPECIALLY ACCOUNTED FOR IN THE DESIGN OF THE FOUNDATION
4. NO SIGNIFICANT DISCHARGE OF WATER SHALL OCCUR ADJACENT TO THE FOUNDATION. THIS MAY INCLUDE ROOF DRAINAGE AND AIR CONDITIONING CONDENSATE, BOTH OF WHICH CAN BE DIRECTED TO A SUBGRADE DRAINAGE SYSTEM.
5. THE BUILDER, CONTRACTOR, OR ENGINEER HAS PROVIDED THE OWNER WITH INFORMATION RELATED TO SLAB-ON-GROUND FOUNDATION LONG-TERM MAINTENANCE RECOMMENDATIONS.
6. THE FOUNDATION IS NOT CONSTRUCTED OVER AN AREA COVERING PARTIAL CUT AND/OR PARTIAL FILL OF EXPANSIVE OR COMPRESSIBLE SOILS (TRANSITION LOTS). SPECIAL CONSIDERATION SHALL BE GIVEN FOR ADDITIONAL DIFFERENTIAL MOVEMENT IN THE DESIGN OF FOUNDATIONS CONSTRUCTED ON THESE CONDITIONS.
7. UNLESS OTHERWISE NOTED ON THE PLANS: STOOPS, ELECTRICAL/MECHANICAL PADS, PORCHES AND PATIOS, OR OTHER FOUNDATION EXTENSIONS OUTSIDE OF THE MAIN FOUNDATION ARE DESIGNED AND CAST INDEPENDENTLY OF THE FOUNDATION.

COMPATIBILITY NOTES:
1. SHALLOW FOUNDATION SYSTEMS CONSTRUCTED ON ACTIVE SOILS ARE EXPECTED TO DEFORM. THE FOUNDATION FLEXIBILITY DISTRIBUTES LOCALIZED SOIL MOVEMENTS TO A MORE UNIFORM SLAB SHAPE. IT IS IMPORTANT THAT OTHER CONSULTANTS AND SUPPLIERS CONSIDER COMPATIBLE DESIGNS OR PRODUCTS FOR FLEXIBLE FOUNDATION SYSTEM. DEFORMATION COMPATIBILITY SHOULD BE ADDRESSED FOR NON-FLEXIBLE EXTERIOR FINISHES, BRITTLE FLOOR FINISHES, AND AREAS THAT SLOPE TO DRAIN OR WHERE UTILITY CONNECTIONS MAY BE LOCATED.
2. RESTRAINT-TO-SHORTENING CRACKS ARE NOT CONSIDERED TO BE A STRUCTURAL PROBLEM. EFFORTS HAVE BEEN MADE TO LOCATE REINFORCING STEEL, CONTROL JOINTS, CONSTRUCTION JOINTS, OR KEYWAYS IN SUCH AREAS SUBJECT TO SUCH CRACKING.

DIMENSIONAL TOLERANCES:

1. GRADE BEAM DEPTH:	+/-1 INCH
2. GRADE BEAM WIDTH:	+/-1 INCH
3. SLAB THICKNESS:	-1/2 INCH, +1 INCH

PLACEMENT TOLERANCES:

1. CLEAR COVER:	ZERO TOLERANCE
2. SLAB TENDONS/VERTICAL:	WITHIN MIDDLE 1/3 OF SLAB
3. SLAB TENDONS/HORIZONTAL:	+/-1 FOOT; 1:6 DEFLECTION
4. BEAM TENDON ANCHORS/VERTICAL:	+/-1 INCH
5. BEAM TENDON ANCHORS LOW POINT:	-1 INCH, +3 IN.
6. BEAM TENDON HORIZONTAL:	+/-2 INCH FROM BEAM CENTERLINE
7. SLAB REBAR/VERTICAL:	+/-3/4 INCH
8. SLAB REBAR/HORIZONTAL:	+/-3 INCH

SLAB LEVELNESS:
1. SLAB LEVELNESS TOLERANCES SHOULD CONFORM TO ACI 117R-90 SECTION 4.5.6 WITH A MINIMUM LOCAL FL NUMBER OF 10. FOR TYPICAL RESIDENTIAL CONSTRUCTION ACI 117 TOLERANCES WOULD PERMIT A MAXIMUM DIFFERENCE IN ELEVATION OF 1.25 INCHES BETWEEN ANY TWO POINTS ON THE SLAB SURFACE 10 FEET APART. IT IS ADVISABLE TO RECORD SLAB ELEVATION MEASUREMENTS ON NEWLY CONSTRUCTED SLABS.

ARCHITECT/ENGINEER COORDINATION:
1. WHERE FEATURES SUCH AS SLAB DROPS, BLOCKOUTS, RECESSES, SLOPES, DRAINS AND DIMENSIONS ARE PROVIDED ON THESE DRAWINGS, THEY SHALL BE VERIFIED ON THE ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION. IF ANY SUCH INFORMATION IS MISSING OR A DISCREPANCY OCCURS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER TO RESOLVE.

HOLDOWN LEGEND

HOLDOWN LOCATION RE:S4-130

KEY PLAN

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ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

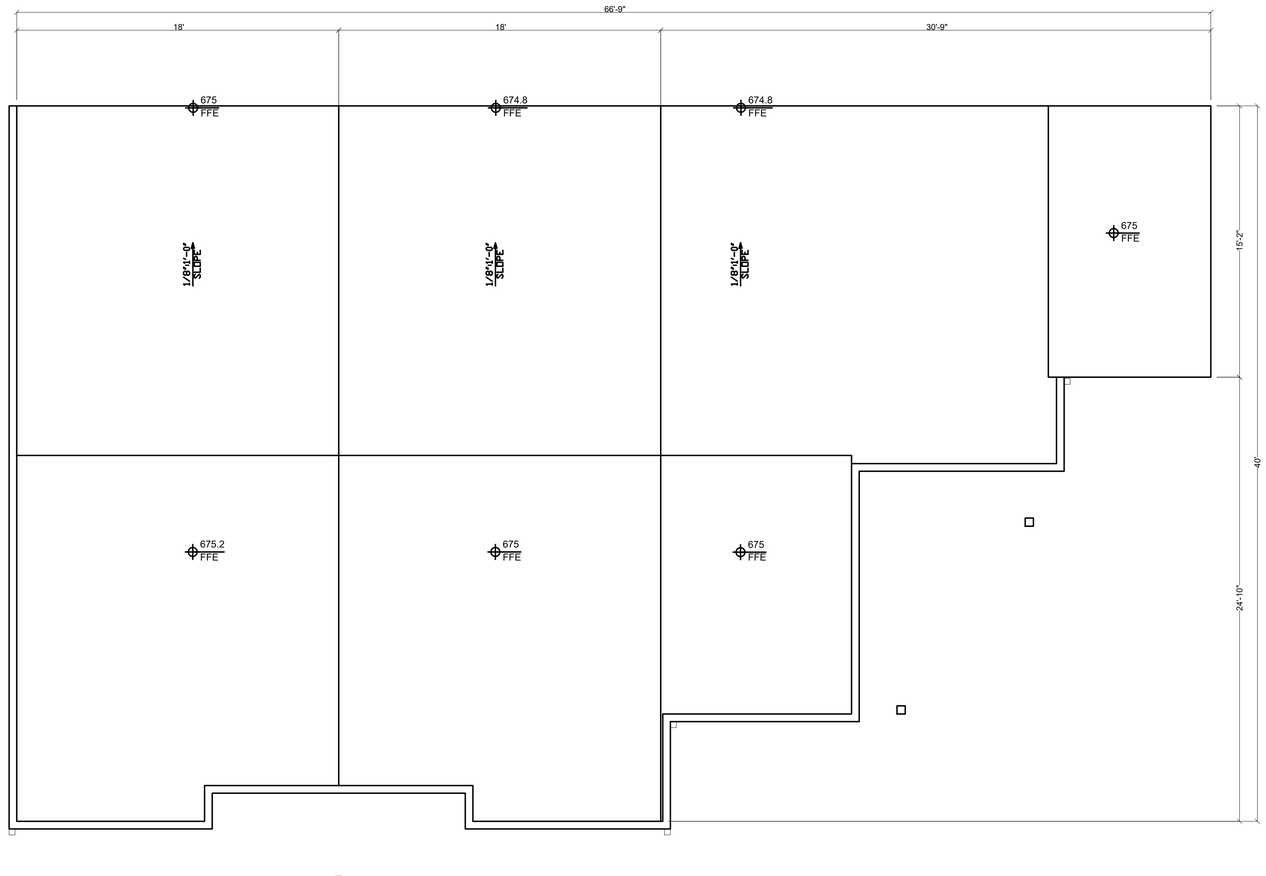
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

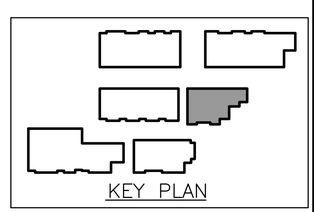
Sheet Name:
BUILDING #4 - FOUNDATION PLAN

Sheet No.:
S4-110



1 BUILDING #4 - SLAB FORMING PLAN

Scale: 1/4" = 1'-0"



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TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
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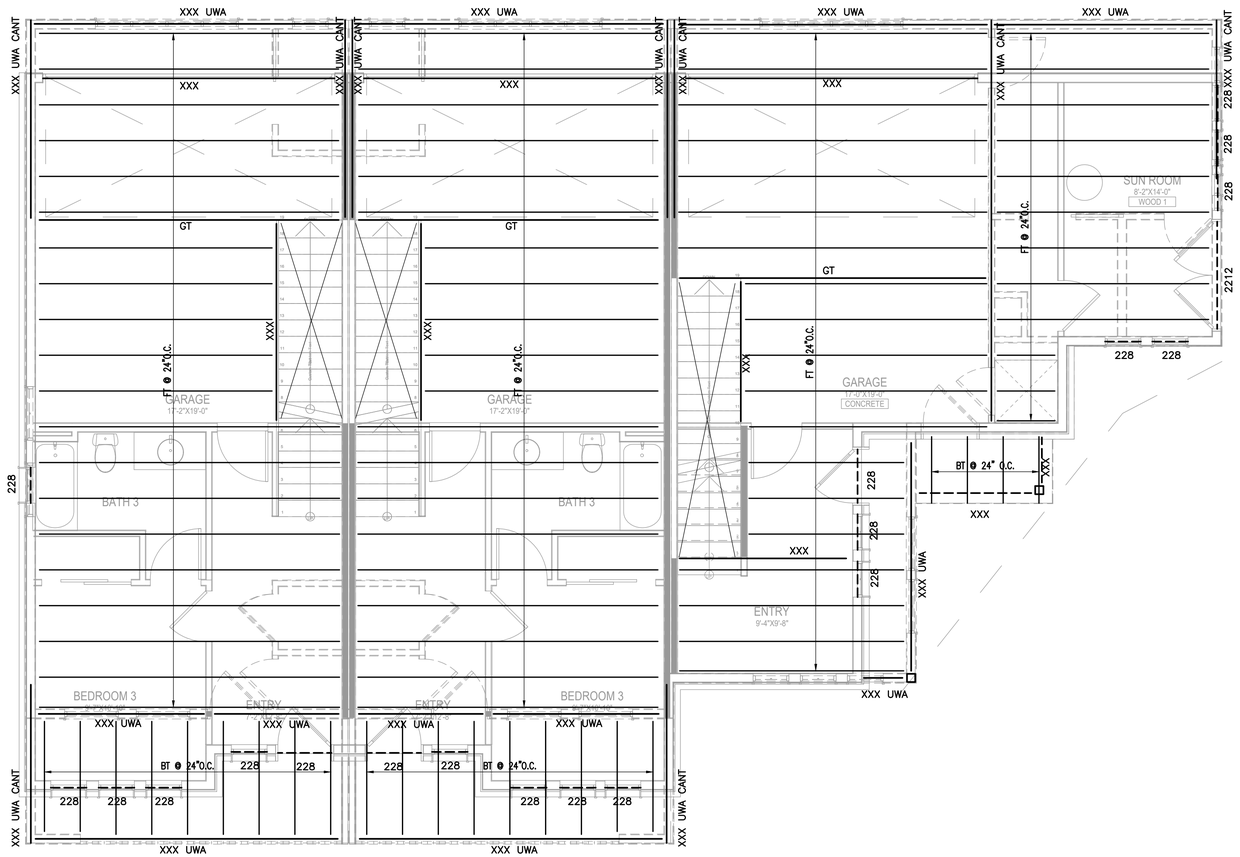
REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #4 - SLAB FORMING PLAN

Sheet No.:
S4-110s



1 BUILDING #4 - 2ND FLOOR FRAMING PLAN

Scale: 1/4" = 1'-0"

FLOOR FRAMING NOTES:

1. ALL FLOOR JOISTS ARE PREFABRICATED OPEN WEB TRUSSES @ 24" O.C. DESIGNED AND MANUFACTURED BY OTHERS (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED:
   TCLL = 40 PSF AT UNITS, BALCONIES, AND CORRIDORS SERVING THEM
   TCLL = 100 PSF AT PUBLIC SPACES AND CORRIDORS SERVING THEM
   TCLL = 100 PSF AT PUBLIC BALCONIES
   TCDL = 20 PSF
   BCLL = 0 PSF
   BCDL = 5 PSF
2. COMMON FLOOR TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE FLOOR DECKING, PERIMETER, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL. DROP HEADER MEMBERS SHALL HAVE ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
4. ALL NON-LOAD BEARING HEADER MEMBERS MAY BE CONSTRUCTED OF PONY WALL CONSTRUCTION WITH DOUBLE BOTTOM PLATES AND SINGLE JACK STUDS.
5. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS MINIMUM SPECIFICATIONS: Fb=3,000psi, Fv=300psi, E=2.1x10^6psi FOR 3 1/2" AND 5 1/2" WIDE BEAMS, Fb =2,800 psi, Fv=300psi, E=2.1x10^6psi FOR 7" WIDE BEAMS.
6. BEAM SUPPORT DETAILS OR BEAM CONNECTION HANGERS SHALL BE PER THE HANGER MANUFACTURER'S REQUIREMENTS.
7. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS, FLOOR TOP OF PLATE ELEVATIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPENCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
8. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. PROVIDE CB TRUSSES UNDER ALL STACKING WALLS TO MATCH STUD SIZE AND SPACING REQUIREMENTS.
11. FLOOR DRAG TRUSSES (SHEAR PANELS) SHALL BE PROVIDED DIRECTLY OVER TOPS OF INTERIOR SHEARWALLS AND SHALL BE DESIGNED FOR A TOTAL LOAD EQUAL TO THE LENGTH OF THE SHEARWALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEARWALL SCHEDULE.
12. THE FOLLOWING LEGEND REGARDING FLOOR FRAMING IS USED TO DETAIL THIS SHEET:

ABREVIATION	DESCRIPTION
BLK	BLOCKING
DBL	DOUBLE
CONT	CONTINUOUS
PSL	PARALLEL STRAND LUMBER
GLB	GLULAM BEAM
FRB	FOR ROOF BRACING
UWA	UNDER WALL ABOVE
RSDF	ROUGH SAWN DOUGLAS FIR
CANT	CANTILEVER, SEE NOTE 1
UPL	UNDER POINT LOAD
CB	CONTINUOUS BEARING

SYMBOL	DESCRIPTION
F.T.	FLOOR TRUSS
B.T.	BALCONY TRUSS
C.T.	CORRIDOR TRUSS
G.T.	GIRDER TRUSS
DBL	DOUBLE
TPL	TRIPLE
	DROP BEAM
	FLUSH BEAM
	BEARING WALL
	WALL ABOVE (10 PSF U.N.O.)

NOTES:
1. BACKSPANS FOR CANTILEVERS MUST BE GREATER THAN OR EQUAL TO THE LENGTH OF THE CANTILEVER, UNO.

WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.

KEY PLAN

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LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

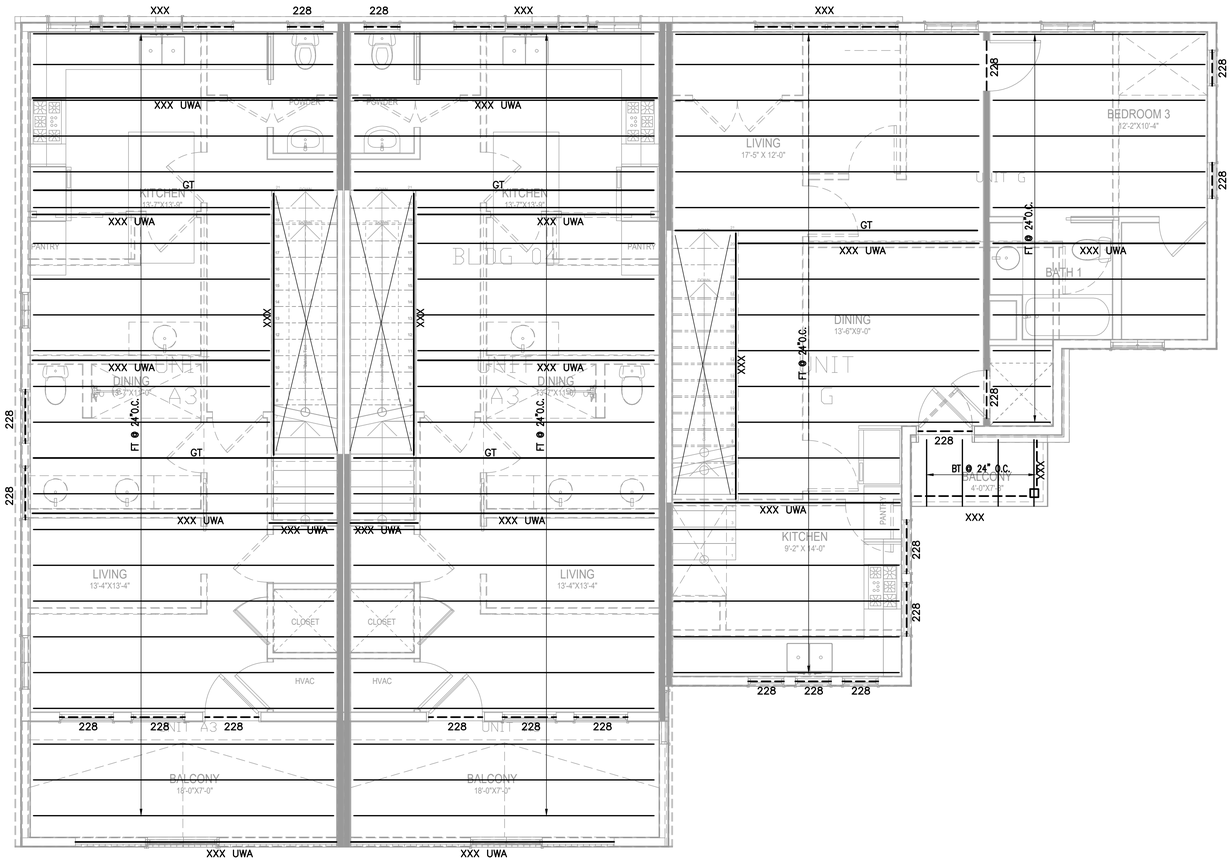
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #4 - 2ND FLOOR FRAMING PLAN

Sheet No.:
S4-120



1 BUILDING #4 - 3RD FLOOR FRAMING PLAN

Scale: 1/4" = 1'-0"

FLOOR FRAMING NOTES:

1. ALL FLOOR JOISTS ARE PREFABRICATED OPEN WEB TRUSSES @ 24" O.C. DESIGNED AND MANUFACTURED BY OTHERS (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED:
   TCLL = 40 PSF AT UNITS, BALCONIES, AND CORRIDORS SERVING THEM
   TCLL = 100 PSF AT PUBLIC SPACES AND CORRIDORS SERVING THEM
   TCLL = 100 PSF AT PUBLIC BALCONIES
   TCDL = 20 PSF
   BCLL = 0 PSF
   BCDL = 5 PSF
2. COMMON FLOOR TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE FLOOR DECKING, PERIMETER, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL. DROP HEADER MEMBERS SHALL HAVE ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
4. ALL NON-LOAD BEARING HEADER MEMBERS MAY BE CONSTRUCTED OF PONY WALL CONSTRUCTION WITH DOUBLE BOTTOM PLATES AND SINGLE JACK STUDS.
5. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS MINIMUM SPECIFICATIONS: Fb=3,000psi, Fv=300psi, E=2.1x10^6psi FOR 3 1/2" AND 5 1/2" WIDE BEAMS, Fb =2,800 psi, Fv=300psi, E=2.1x10^6psi FOR 7" WIDE BEAMS.
6. BEAM SUPPORT DETAILS OR BEAM CONNECTION HANGERS SHALL BE PER THE HANGER MANUFACTURER'S REQUIREMENTS.
7. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS, FLOOR TOP OF PLATE ELEVATIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPENCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
8. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. PROVIDE CB TRUSSES UNDER ALL STACKING WALLS TO MATCH STUD SIZE AND SPACING REQUIREMENTS.
11. FLOOR DRAG TRUSSES (SHEAR PANELS) SHALL BE PROVIDED DIRECTLY OVER TOPS OF INTERIOR SHEARWALLS AND SHALL BE DESIGNED FOR A TOTAL LOAD EQUAL TO THE LENGTH OF THE SHEARWALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEARWALL SCHEDULE.
12. THE FOLLOWING LEGEND REGARDING FLOOR FRAMING IS USED TO DETAIL THIS SHEET:

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BLK	BLOCKING
DBL	DOUBLE
CONT	CONTINUOUS
PSL	PARALLEL STRAND LUMBER
GLB	GLULAM BEAM
FRB	FOR ROOF BRACING
UWA	UNDER WALL ABOVE
RSDF	ROUGH SAWN DOUGLAS FIR
CANT	CANTILEVER, SEE NOTE 1
UPL	UNDER POINT LOAD
CB	CONTINUOUS BEARING

SYMBOL	DESCRIPTION
F.T.	FLOOR TRUSS
B.T.	BALCONY TRUSS
C.T.	CORRIDOR TRUSS
G.T.	GIRDER TRUSS
DBL	DOUBLE
TPL	TRIPLE
	DROP BEAM
	FLUSH BEAM
	BEARING WALL
	WALL ABOVE (10 PSF U.N.O.)

NOTES:
1. BACKSPANS FOR CANTILEVERS MUST BE GREATER THAN OR EQUAL TO THE LENGTH OF THE CANTILEVER, UNO.

WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.

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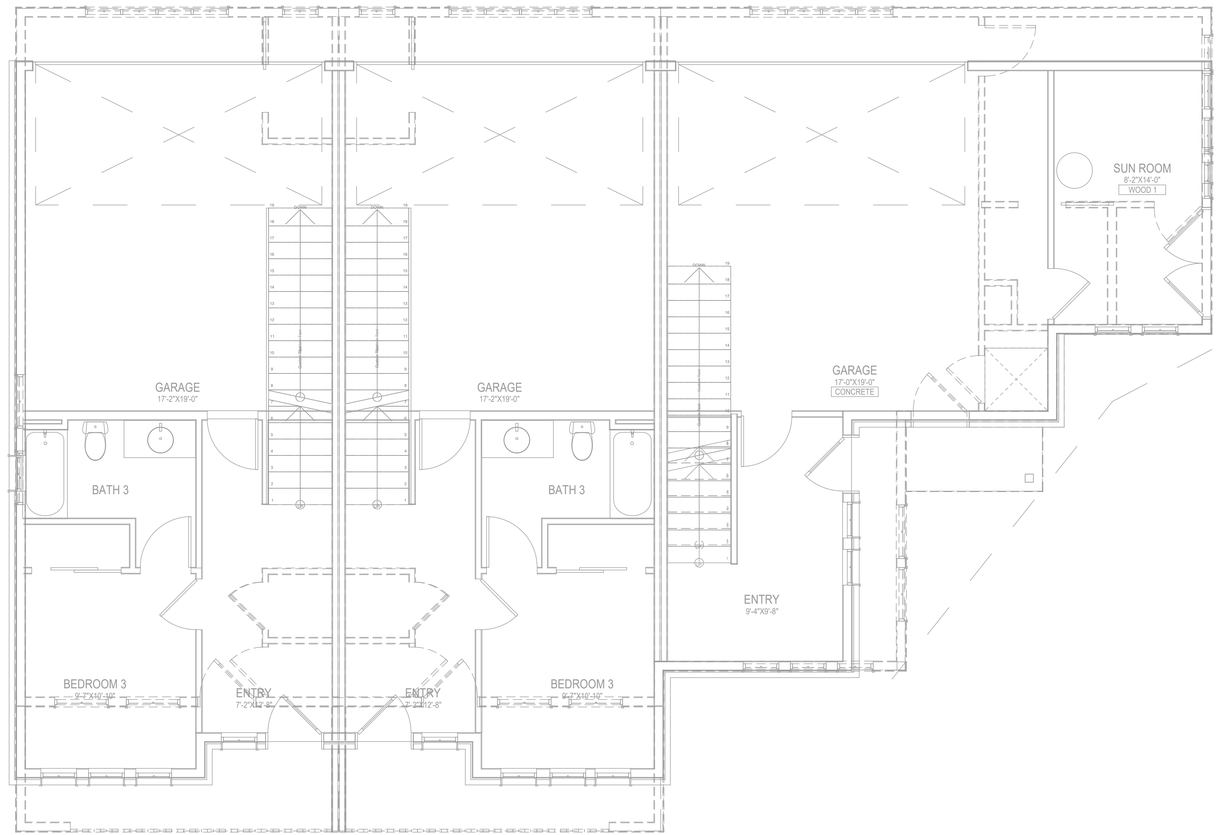
Sheet Name:
BUILDING #4 - 3RD FLOOR FRAMING PLAN

Sheet No.:
S4-121



1 BUILDING #4 - 1ST FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1.,8,10

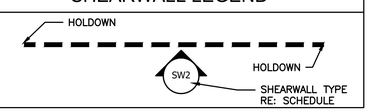
NOTES:
1. ALL SHEARWALLS MUST BE BLOCKED AT ALL EDGES. PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
2. FULL SIZED PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY. PANELS SHALL NOT BE LESS THAN 24" IN WIDTH.
3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
4. ALL WOOD STRUCTURAL PANEL SHEATHING SHALL BE MIN. 15/32" 5-PLY PLYWOOD OR 7/16" ORIENTED STRAND BOARD.
5. ALL SHEARWALLS ARE BLOCKED AT ALL EDGES.
6. THE SILL FASTENING MUST BE DOUBLED FOR TWO-SIDED SHEARWALLS.
7. ALTERNATE SILL FASTENING INTO CONCRETE (SEE NOTES):
   - 7.1. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
   - 7.2. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 4" O.C. (495 PLF)
   - 7.3. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 3" O.C. (660 PLF)
8. ALL SHEARWALLS SHALL BE FRAMED WITH END (WIND) POST AT EACH END PER THE HOLD DOWN SCHEDULE. HOLDOWNS AND END POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE WALL WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE STRUCTURE.
9. (4) FOOT WIDE GYPSUM SHEATHING BOARDS CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE STUDS. (2) FOOT WIDE PIECES OF GYPSUM SHEATHING BOARDS SHALL BE APPLIED PERPENDICULAR TO THE STUDS. GYPSUM SHEATHING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
10. GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER, WATER-RESISTANT GYPSUM BACKING BOARD CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE WALL STUDS. GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 844. WATER-RESISTANT GYPSUM BACKING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
9. F = UNTREATED LUMBER WITH NO MOISTURE EXPOSURE
10. P = PRESSURE TREATED LUMBER WITH NO MOISTURE EXPOSURE
11. R-L = ALL WOOD TYPES IN HEAVY INDUSTRIAL OR COASTAL AREAS (BUT WITH NO DIRECT EXPOSURE TO CHLORIDES)

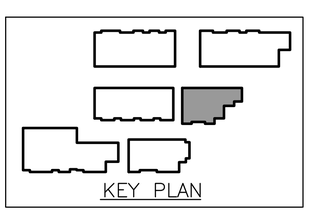
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	ANCHOR BOLT	EMBEDMENT	NOTES
HD1	SIMPSON LTT1311	1350	18-10d (0.148" DIA. X 1-1/2") GALV BOX NAIL	2-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	3 1/2"	1,2,5
HD2	SIMPSON HTT4 ZMAX	4235	18-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	3-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	5"	1,2,5
	SIMPSON STHD14	5345	30-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	3-2X4	EMBEDED	WET SET	3,5
HD3	SIMPSON HTT5 ZMAX	5090	26-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	4-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	6"	1,3,5
	SIMPSON STHD14	5345	30-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	4-2X4	EMBEDED	WET SET	3,5
HD4	SIMPSON HDQ8-SDS3	7630	20-1/4" DIA. X 3" SDS SCREWS	4X4	7/8" DIA. A307 HAS ROD DRILL & EPOXY	10"	1,4,5
HD5	SIMPSON HD9B	9920	3-7/8" STUD BOLTS	6X6	7/8" DIA. A307 HAS ROD DRILL & EPOXY	10"	1,4,5
HD6	SIMPSON HD12	15510	4-1" STUD BOLTS	6X6	1 1/8" WET SET	18"	1,4,5

NOTES:
1. EPOXY SHALL BE HILTI HIT-HY 150 MAX-SD OR EQUAL AND INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. FASTEN HD1 & HD2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
3. FASTEN HD3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
4. FASTEN END MEMBERS TOGETHER WITH HARDWARE BOLTS SPECIFIED.
5. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





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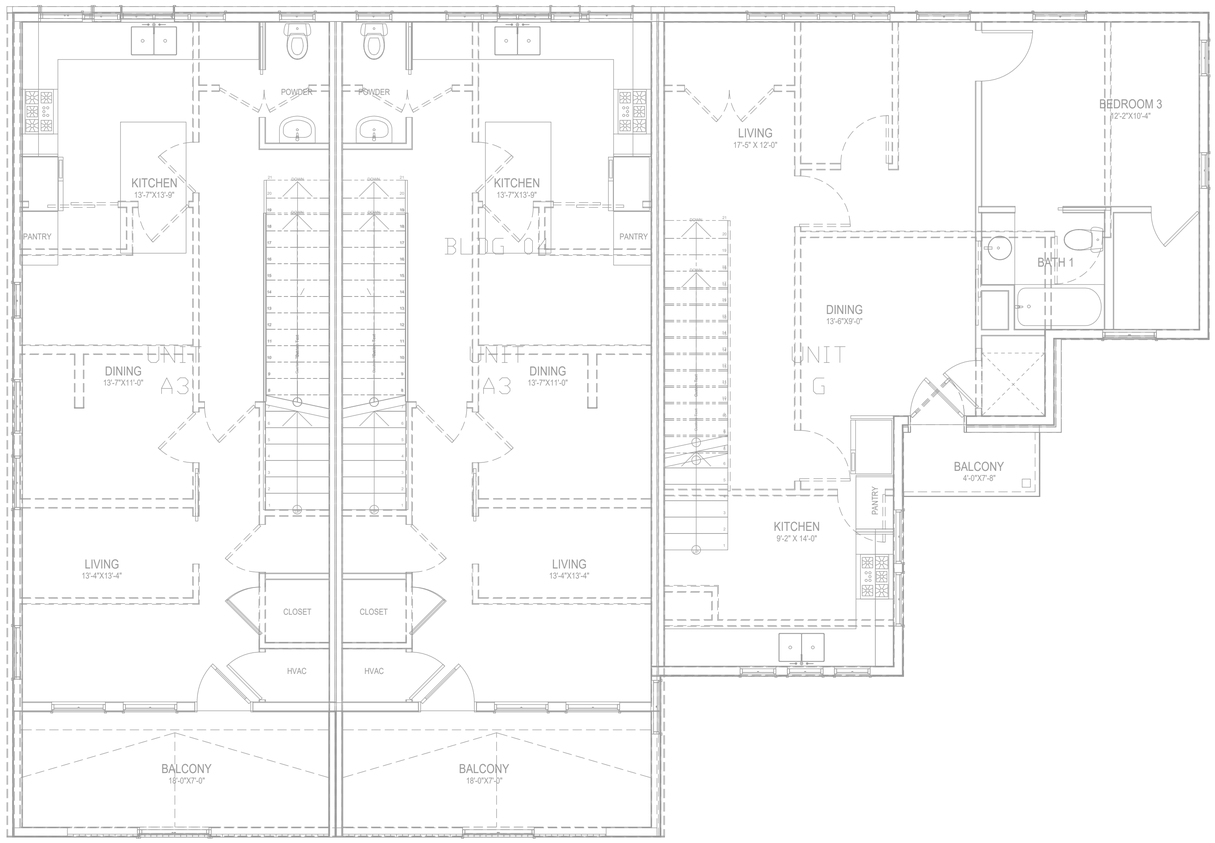
Sheet Name:
BUILDING #4 - 1ST FLOOR SHEARWALL PLAN

Sheet No.:
S4-130



SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1.,8,10

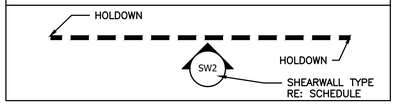
NOTES:
1. ALL SHEARWALLS MUST BE BLOCKED AT ALL EDGES. PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
2. FULL SIZED PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY. PANELS SHALL NOT BE LESS THAN 24" IN WIDTH.
3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
4. ALL WOOD STRUCTURAL PANEL SHEATHING SHALL BE MIN. 15/32" 5-PLY PLYWOOD OR 7/16" ORIENTED STRAND BOARD.
5. ALL SHEARWALLS ARE BLOCKED AT ALL EDGES.
6. THE SILL FASTENING MUST BE DOUBLED FOR TWO-SIDED SHEARWALLS.
7. ALTERNATE SILL FASTENING INTO CONCRETE (SEE NOTES):
   - 7.1. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
   - 7.2. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 4" O.C. (495 PLF)
   - 7.3. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 3" O.C. (660 PLF)
8. ALL SHEARWALLS SHALL BE FRAMED WITH END (WIND) POST AT EACH END PER THE HOLD DOWN SCHEDULE. HOLDOWNS AND END POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE WALL WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE STRUCTURE.
9. (4) FOOT WIDE GYPSUM SHEATHING BOARDS CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE STUDS. (2) FOOT WIDE PIECES OF GYPSUM SHEATHING BOARDS SHALL BE APPLIED PERPENDICULAR TO THE STUDS. GYPSUM SHEATHING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
10. GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER, WATER-RESISTANT GYPSUM BACKING BOARD CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE WALL STUDS. GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 844. WATER-RESISTANT GYPSUM BACKING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
9. F = UNTREATED LUMBER WITH NO MOISTURE EXPOSURE
10. P = PRESSURE TREATED LUMBER WITH NO MOISTURE EXPOSURE
11. R-L = ALL WOOD TYPES IN HEAVY INDUSTRIAL OR COASTAL AREAS (BUT WITH NO DIRECT EXPOSURE TO CHLORIDES)

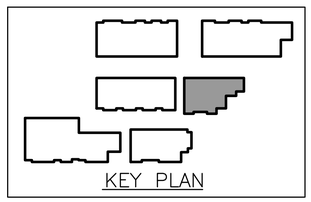
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	NOTES
ST1	(1) CS16X60	1705	8d - FILL ALL HOLES	2-2X4	1,3
ST2	(2) CS16X60	3410	8d - FILL ALL HOLES	3-2X4	1,3
ST3	(3) CS16X60	5115	8d - FILL ALL HOLES	4-2X4	2,3
ST4	(4) CS16X60	6820	8d - FILL ALL HOLES	4X4	1,3

NOTES:
1. FASTEN ST1 AND ST2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
2. FASTEN ST3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
3. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #4 - 2ND FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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A member of Building Code Compliance Association #E00001

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Christopher P. Hillman, P.E.
LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

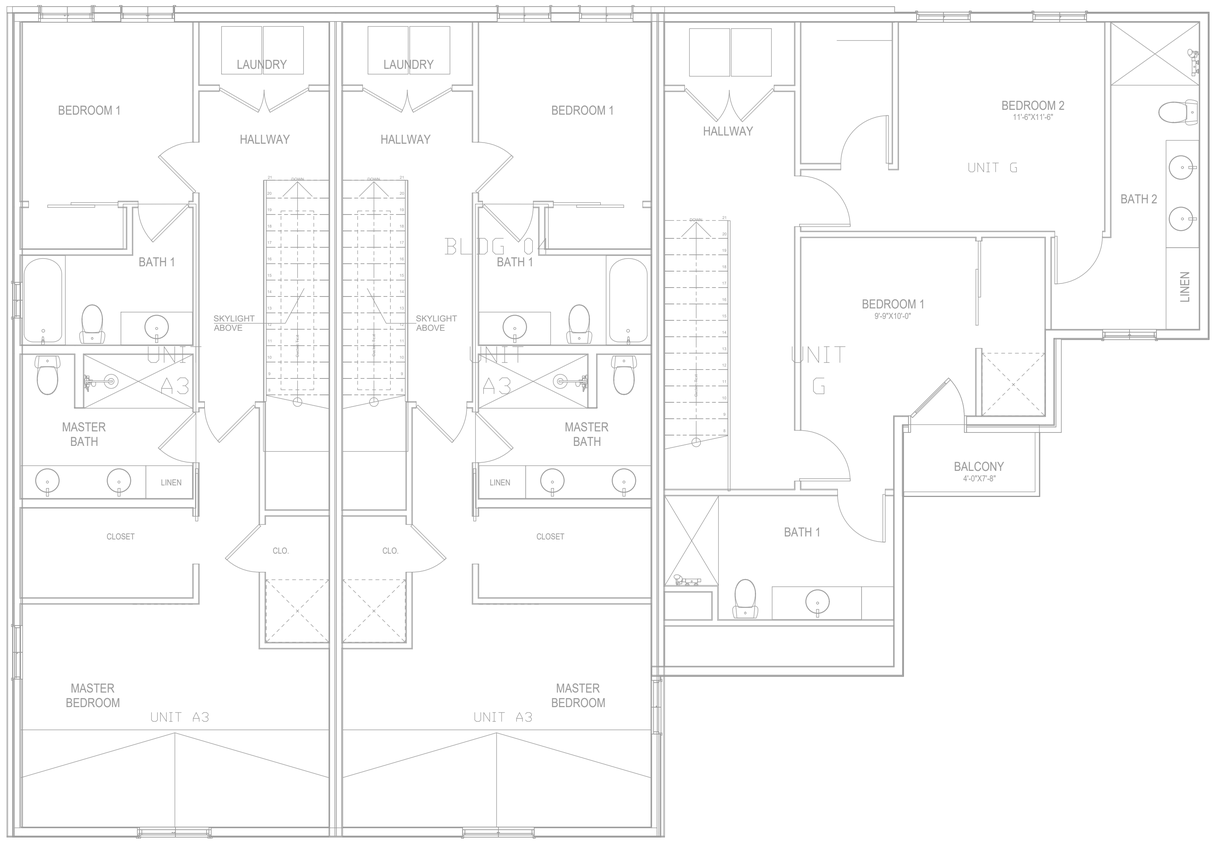
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

HDRC PROGRESS SET	08/02/2019
REVISION/ISSUE	DATE

Sheet Name:
BUILDING #4 - 2ND FLOOR SHEARWALL PLAN

Sheet No.:
S4-131



SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1.,8,10

NOTES:
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HOLDOWN SCHEDULE

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ST4	(4) CS16X60	6820	8d - FILL ALL HOLES	4X4	1,3

NOTES:
1. FASTEN ST1 AND ST2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
2. FASTEN ST3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
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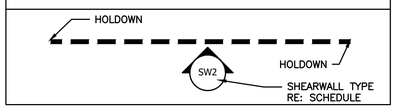
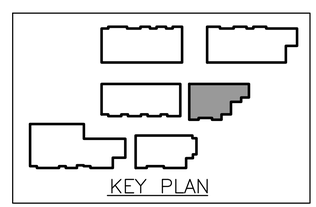
SHEARWALL LEGEND





1 BUILDING #4 - 3RD FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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TRAIL STREET TOWNHOMES

335 TRAIL STREET
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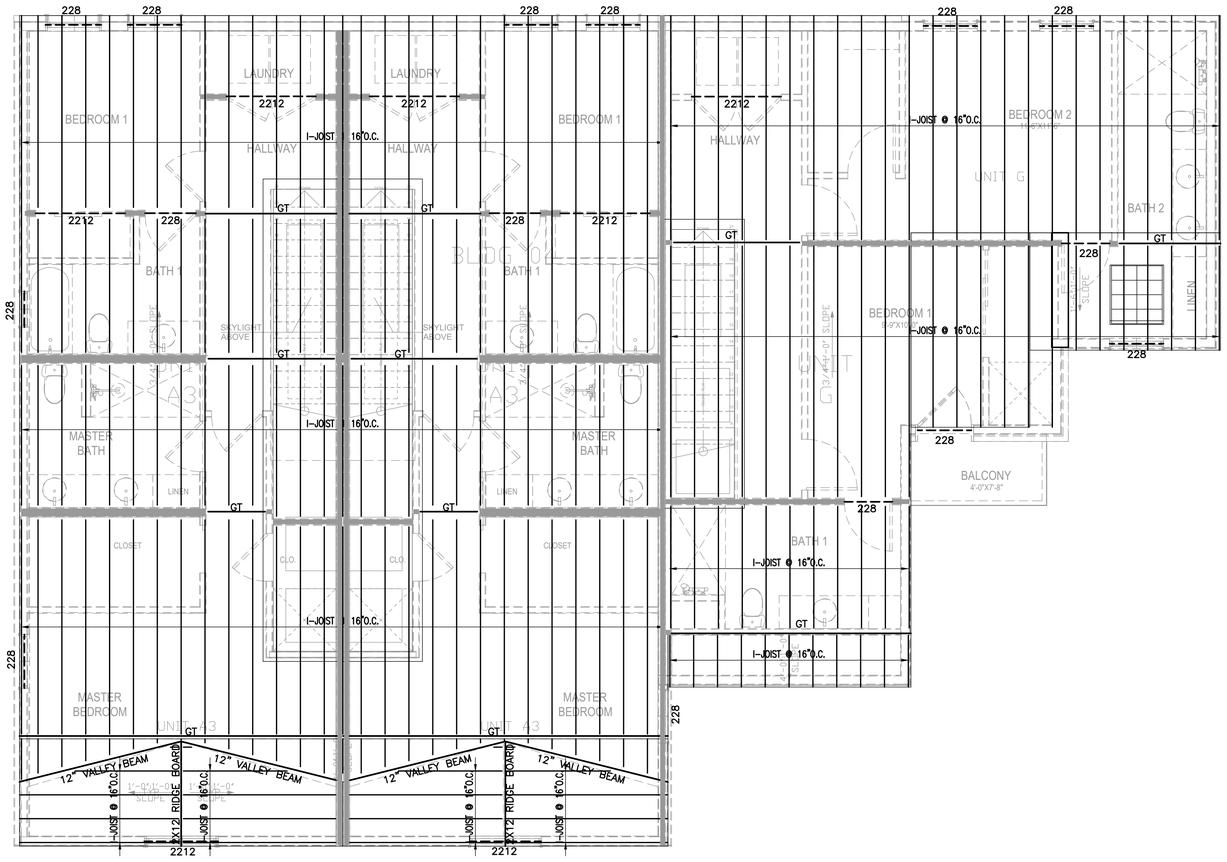
REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #4 - 3RD FLOOR SHEARWALL PLAN

Sheet No.:
S4-132



ROOF FRAMING NOTES:

1. ROOF FRAMING SHALL CONSIST OF PREFABRICATED ROOF TRUSSES SPACED @ 24" O.C. UNLESS NOTED OTHERWISE (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED TO DESIGN TRUSSES:
   - TOP CHORD LIVE LOAD = 20 PSF
   - TOP CHORD DEAD LOAD = 20 PSF
   - BOTTOM CHORD LIVE LOAD = 10 PSF (UNINHABITED ATTIC WITHOUT STORAGE, ASSUMED NOT TO ACT CONCURRENLTY WITH ANY OTHER LIVE LOAD.)
   - BOTTOM CHORD DEAD LOAD = 5 PSF
   - ADDITIONAL LOADS DUE TO MECHANICAL UNITS, OVERHEAD DOORS, ROOF OVERBUILDS, ETC.
2. COMMON ROOF TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE ROOF DECKING, PERIMETER, PARAPETS, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. DRAG TRUSSES SHALL BE PROVIDED DIRECTLY OVER TOPS OF INTERIOR SHEARWALLS AND SHALL BE DESIGNED FOR A TOTAL LOAD EQUAL TO THE LENGTH OF THE SHEARWALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEARWALL SCHEDULE FOR THE WALL TYPE. SEE ROOF FRAMING DETAILS FOR ROOF SHEATHING NAILING REQUIREMENTS AT DRAG TRUSSES.
4. ROOF TRUSSES MAY ONLY BEAR UPON LOAD BEARING TOP PLATES OF WALLS OR BEAMS UNLESS NOTED OTHERWISE ON PLAN, DO NOT SUPPORT ANY CHIMNEY UPON TRUSSES. EXTEND WALLS OF CHIMNEY THROUGH THE TRUSSES TO BEAR UPON WALLS OR BEAMS BELOW.
5. RESULTING UPLIFT LOADS FROM TRUSS ANALYSIS SHALL BE LIMITED TO 600 LBS FOR COMMON TRUSSES, AND 3,500 LBS FOR GIRDER TRUSSES.
6. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL WITH ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
7. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS. MINIMUM SPECIFICATIONS: Fb=2,900psi, Fv=290psi, E=2x10^6psi.
8. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPANCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
9. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. THIS ROOF LAYOUT IS DESIGNED TO SUPPORT LIGHT ROOFING MATERIAL. PLEASE CONSULT ENGINEER IF ANY OTHER TYPE OF ROOF COVERING IS TO BE USED.

SYMBOL	DESCRIPTION		
RT	ROOF TRUSS		FLUSH BEAM
WT	WALL TRUSS		DROP BEAM
	OVER FRAME		
	BEARING WALL		
GT	GIRDER TRUSS		
DT	DRAG TRUSS		
DB	DRAG BRACE		

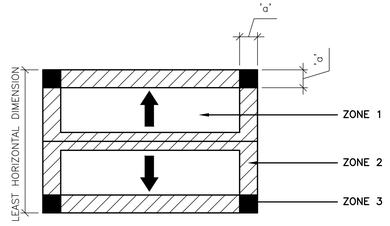
WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2
GLULAM BEAM SCHEDULE		
B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.

SHEATHING NAILING		
	AT DIAPHRAGM BOUNDARIES	FIELD (INTERMEDIATE SUPPORT MEMBERS)
ZONE 1	8D @ 6" OC	8D @ 6" OC
ZONE 2	8D @ 3" OC	8D @ 3" OC
ZONE 3	8D @ 3" OC	8D @ 3" OC

NOTES:
1. ALL NAILS FOR ROOF SHEATHING SHALL BE RING SHANK NAILS.
2. SEE ROOF FRAMING DETAILS FOR ADDITIONAL FASTENING REQUIREMENTS UNRELATED TO DECK UPLIFT.

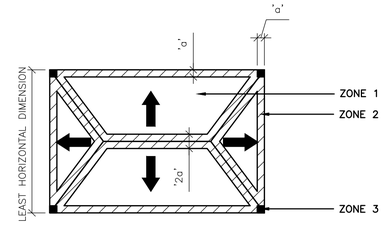


'a' = 10% OF LEAST HORIZONTAL DIMENSION OR 0.4H, WHICHEVER IS SMALLER , BUT NOT LESS THAN 4% OF LEAST HORIZONTAL DIMENSION OR 3FT.

ROOF PRESSURE ZONES (GABLE ROOF)

SHEATHING NAILING		
	AT DIAPHRAGM BOUNDARIES	FIELD (INTERMEDIATE SUPPORT MEMBERS)
ZONE 1	8D @ 6" OC	8D @ 6" OC
ZONE 2	8D @ 3" OC	8D @ 3" OC
ZONE 3	8D @ 3" OC	8D @ 3" OC

NOTES:
1. ALL NAILS FOR ROOF SHEATHING SHALL BE RING SHANK NAILS.
2. SEE ROOF FRAMING DETAILS FOR ADDITIONAL FASTENING REQUIREMENTS UNRELATED TO DECK UPLIFT.



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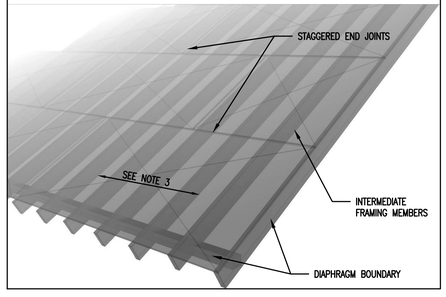
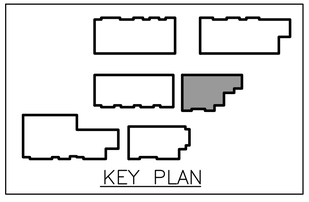
ROOF PRESSURE ZONES (HIP ROOF)

ROOF SHEATHING NOTES:

1. ROOF DECKING SHALL BE 1/2" NOMINAL EXPOSURE 1 (CDX) OR OSB APA RATED SHEATHING (24/16).
2. FASTENING SHALL BE PER ROOF PRESSURE ZONE DIAGRAM.
3. PANELS SHALL SPAN 3 OR MORE FLOOR JOISTS WITH THE LONG DIMENSION (FACE GRAIN) PERPENDICULAR TO THE FRAMING. STAGGER END JOINT OF PANELS. PROVIDE A 1/8" GAP AT ALL PANEL EDGES UNLESS RECOMMENDED OTHERWISE BY THE PANEL MFR.
4. ROOF SHEATHING PANELS ARE UNBLOCKED UNLESS NOTED OTHERWISE.
5. WHERE BLOCKING IS NOT SPECIFICALLY REQUIRED FOR ROOF SHEATHING, PLY CLIPS OR TONGUE AND GROOVE SHEATHING SHALL BE USED.





1 BUILDING #4 - ROOF FRAMING PLAN

Scale: 1/4" = 1'-0"

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Structural Engineering, Inc.
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Magnolia, Texas 77355
Texas Registered Eng Firm #14038

Ph: (281) 826-1848
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Principal Engineer:
Christopher P. Hillman, P.E.
Direct: (832) 865-1429
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A member of Building Code Compliance Association #E00001

THIS DRAWING HAS BEEN AUTHORIZED FOR RELEASE BY
Christopher P. Hillman, P.E.
LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

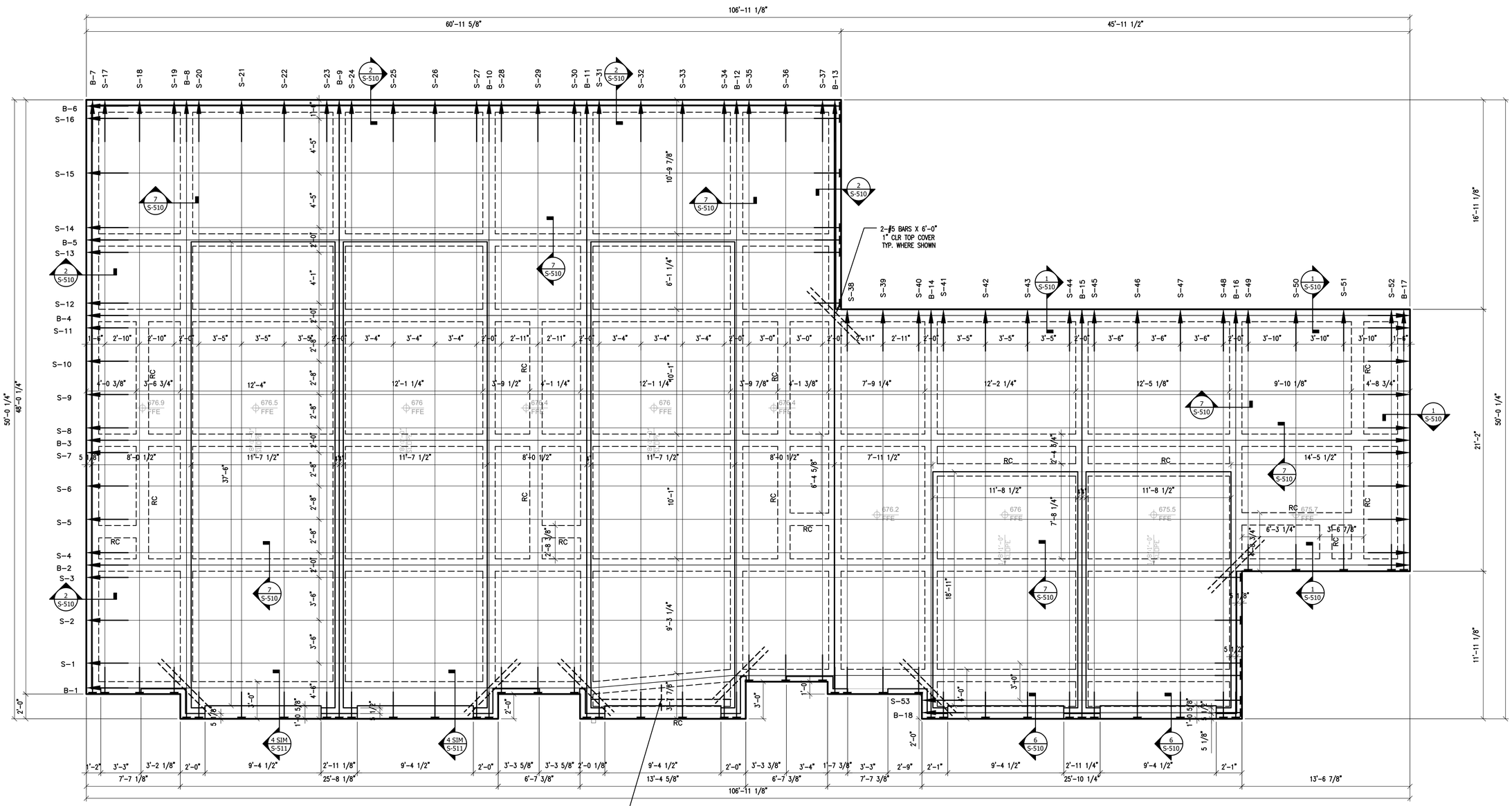
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #4 - ROOF FRAMING PLAN

Sheet No.:
S4-140



TENDON ELONGATION SCHEDULE						TENDON ELONGATION SCHEDULE						TENDON ELONGATION SCHEDULE					
NUMBER	LENGTH	ELONGATION (P=26600 LBS)			MEASURED	NUMBER	LENGTH	ELONGATION (P=26600 LBS)			MEASURED	NUMBER	LENGTH	ELONGATION (P=26600 LBS)			MEASURED
		(−10%)	CALCULATED	(+10%)				(−10%)	CALCULATED	(+10%)				(−10%)	CALCULATED	(+10%)	
B−1	93'−6"	6 3/16"	6 7/8"	7 1/2"		S−7	107'−1"	7 1/16"	7 13/16"	8 5/8"		S−31	50'−2"	3 5/16"	3 11/16"	4 1/16"	
B−2	107'−1"	7 1/16"	7 13/16"	8 5/8"		S−8	107'−1"	7 1/16"	7 13/16"	8 5/8"		S−32	50'−2"	3 5/16"	3 11/16"	4 1/16"	
B−3	107'−1"	7 1/16"	7 13/16"	8 5/8"		S−9	107'−1"	7 1/16"	7 13/16"	8 5/8"		S−33	50'−2"	3 5/16"	3 11/16"	4 1/16"	
B−4	107'−1"	7 1/16"	7 13/16"	8 5/8"		S−10	107'−1"	7 1/16"	7 13/16"	8 5/8"		S−34	50'−2"	3 5/16"	3 11/16"	4 1/16"	
B−5	61'−1"	4"	4 1/2"	4 15/16"		S−11	107'−1"	7 1/16"	7 13/16"	8 5/8"		S−35	47'−2"	3 1/8"	3 7/16"	3 13/16"	
B−6	61'−1"	4"	4 1/2"	4 15/16"		S−12	61'−1"	4"	4 1/2"	4 15/16"		S−36	47'−2"	3 1/8"	3 7/16"	3 13/16"	
B−7	48'−2"	3 3/16"	3 1/2"	3 7/8"		S−13	61'−1"	4"	4 1/2"	4 15/16"		S−37	47'−2"	3 1/8"	3 7/16"	3 13/16"	
B−8	50'−2"	3 5/16"	3 11/16"	4 1/16"		S−14	61'−1"	4"	4 1/2"	4 15/16"		S−38	31'−3"	2 1/16"	2 5/16"	2 1/2"	
B−9	50'−2"	3 5/16"	3 11/16"	4 1/16"		S−15	61'−1"	4"	4 1/2"	4 15/16"		S−39	31'−3"	2 1/16"	2 5/16"	2 1/2"	
B−10	50'−2"	3 5/16"	3 11/16"	4 1/16"		S−16	61'−1"	4"	4 1/2"	4 15/16"		S−40	31'−3"	2 1/16"	2 5/16"	2 1/2"	
B−11	50'−2"	3 5/16"	3 11/16"	4 1/16"		S−17	48'−2"	3 3/16"	3 1/2"	3 7/8"		S−41	33'−3"	2 3/16"	2 7/16"	2 11/16"	
B−12	50'−2"	3 5/16"	3 11/16"	4 1/16"		S−18	48'−2"	3 3/16"	3 1/2"	3 7/8"		S−42	33'−3"	2 3/16"	2 7/16"	2 11/16"	
B−13	48'−2"	3 3/16"	3 1/2"	3 7/8"		S−19	48'−2"	3 3/16"	3 1/2"	3 7/8"		S−43	33'−3"	2 3/16"	2 7/16"	2 11/16"	
B−14	33'−3"	2 3/16"	2 7/16"	2 11/16"		S−20	50'−2"	3 5/16"	3 11/16"	4 1/16"		S−44	33'−3"	2 3/16"	2 7/16"	2 11/16"	
B−15	33'−3"	2 3/16"	2 7/16"	2 11/16"		S−21	50'−2"	3 5/16"	3 11/16"	4 1/16"		S−45	33'−3"	2 3/16"	2 7/16"	2 11/16"	
B−16	33'−3"	2 3/16"	2 7/16"	2 11/16"		S−22	50'−2"	3 5/16"	3 11/16"	4 1/16"		S−46	33'−3"	2 3/16"	2 7/16"	2 11/16"	
B−17	21'−4"	1 3/8"	1 9/16"	1 11/16"		S−23	50'−2"	3 5/16"	3 11/16"	4 1/16"		S−47	33'−3"	2 3/16"	2 7/16"	2 11/16"	
B−18	26'−0"	1 11/16"	1 7/8"	2 1/16"		S−24	50'−2"	3 5/16"	3 11/16"	4 1/16"		S−48	33'−3"	2 3/16"	2 7/16"	2 11/16"	
S−1	93'−6"	6 3/16"	6 7/8"	7 1/2"		S−25	50'−2"	3 5/16"	3 11/16"	4 1/16"		S−49	21'−4"	1 3/8"	1 9/16"	1 11/16"	
S−2	93'−6"	6 3/16"	6 7/8"	7 1/2"		S−26	50'−2"	3 5/16"	3 11/16"	4 1/16"		S−50	21'−4"	1 3/8"	1 9/16"	1 11/16"	
S−3	93'−6"	6 3/16"	6 7/8"	7 1/2"		S−27	50'−2"	3 5/16"	3 11/16"	4 1/16"		S−51	21'−4"	1 3/8"	1 9/16"	1 11/16"	
S−4	107'−1"	7 1/16"	7 13/16"	8 5/8"		S−28	48'−2"	3 3/16"	3 1/2"	3 7/8"		S−52	21'−4"	1 3/8"	1 9/16"	1 11/16"	
S−5	107'−1"	7 1/16"	7 13/16"	8 5/8"		S−29	48'−2"	3 3/16"	3 1/2"	3 7/8"		S−53	26'−0"	1 11/16"	1 7/8"	2 1/16"	
S−6	107'−1"	7 1/16"	7 13/16"	8 5/8"		S−30	48'−2"	3 3/16"	3 1/2"	3 7/8"							

RE:S1-110 FOR FOUNDATION NOTES

HOLDOWN LEGEND

HOLDOWN LOCATION RE:S5-130

KEY PLAN

1 BUILDING #5 - FOUNDATION PLAN

Scale: 1/4" = 1'-0"

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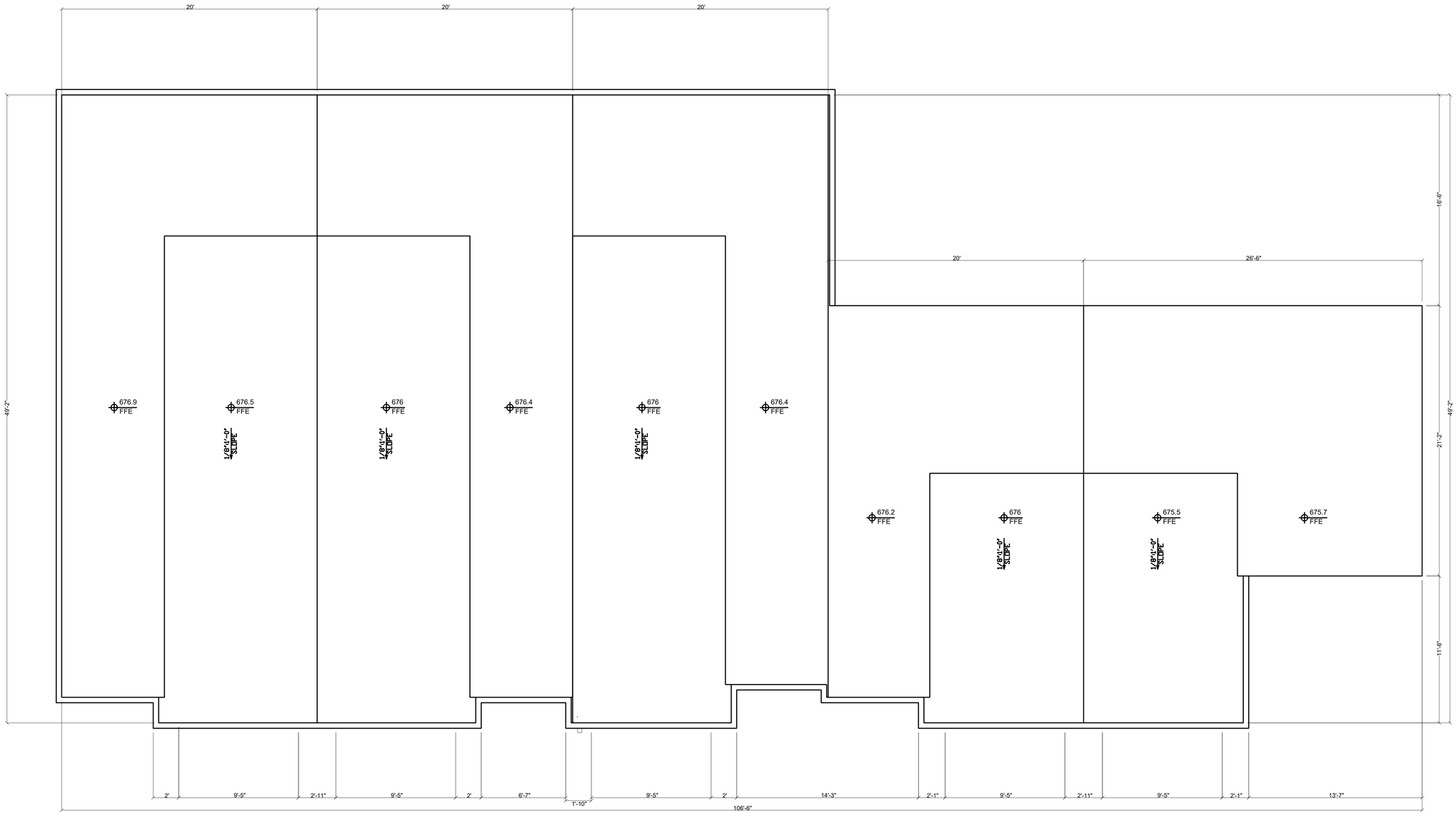
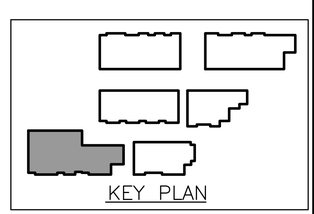
Sheet Name:
BUILDING #5 - FOUNDATION PLAN

Sheet No.:
S5-110



1 BUILDING #5 - SLAB FORMING PLAN

Scale: 1/4" = 1'-0"



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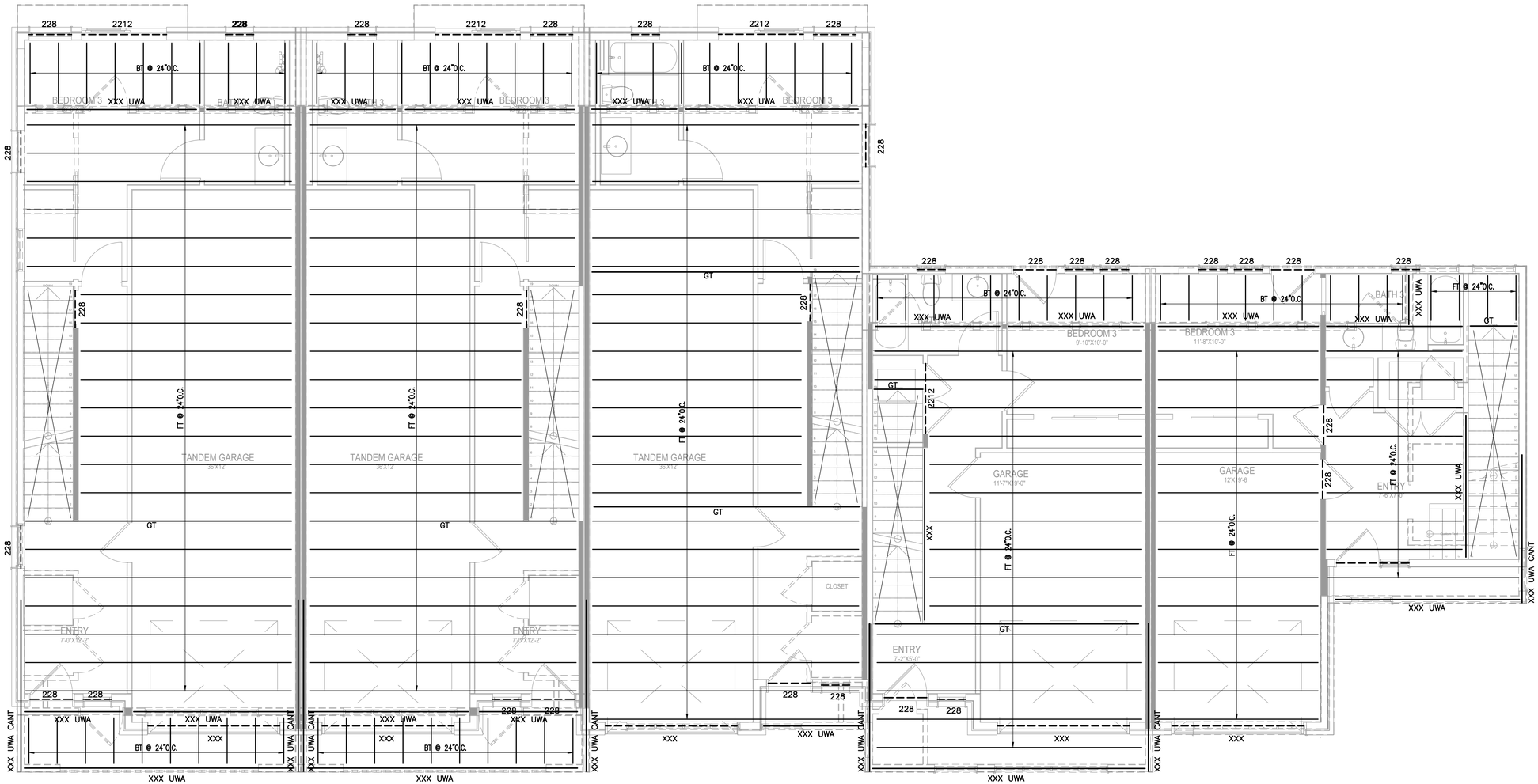
Sheet Name:
BUILDING #5 - SLAB FORMING PLAN

Sheet No.:
S5-110s



FLOOR FRAMING NOTES:

1. ALL FLOOR JOISTS ARE PREFABRICATED OPEN WEB TRUSSES @ 24" O.C. DESIGNED AND MANUFACTURED BY OTHERS (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED:
   - TCLL = 40 PSF AT UNITS, BALCONIES, AND CORRIDORS SERVING THEM
   - TCLL = 100 PSF AT PUBLIC SPACES AND CORRIDORS SERVING THEM
   - TCLL = 100 PSF AT PUBLIC BALCONIES
   - TCDL = 20 PSF
   - BCLL = 0 PSF
   - BCDL = 5 PSF
2. COMMON FLOOR TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE FLOOR DECKING, PERIMETER, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL. DROP HEADER MEMBERS SHALL HAVE ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
4. ALL NON-LOAD BEARING HEADER MEMBERS MAY BE CONSTRUCTED OF PONY WALL CONSTRUCTION WITH DOUBLE BOTTOM PLATES AND SINGLE JACK STUDS.
5. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS MINIMUM SPECIFICATIONS: Fb=3,000psi, Fv=300psi, E=2.1x10^6psi FOR 3 1/2" AND 5 1/2" WIDE BEAMS, Fb =2,800 psi, Fv=300psi, E=2.1x10^6psi FOR 7" WIDE BEAMS.
6. BEAM SUPPORT DETAILS OR BEAM CONNECTION HANGERS SHALL BE PER THE HANGER MANUFACTURER'S REQUIREMENTS.
7. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS, FLOOR TOP OF PLATE ELEVATIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPENCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
8. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. PROVIDE CB TRUSSES UNDER ALL STACKING WALLS TO MATCH STUD SIZE AND SPACING REQUIREMENTS.
11. FLOOR DRAG TRUSSES (SHEAR PANELS) SHALL BE PROVIDED DIRECTLY OVER TOPS OF INTERIOR SHEARWALLS AND SHALL BE DESIGNED FOR A TOTAL LOAD EQUAL TO THE LENGTH OF THE SHEARWALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEARWALL SCHEDULE.
12. THE FOLLOWING LEGEND REGARDING FLOOR FRAMING IS USED TO DETAIL THIS SHEET:

ABREVIATION	DESCRIPTION
BLK	BLOCKING
DBL	DOUBLE
CONT	CONTINUOUS
PSL	PARALLEL STRAND LUMBER
GLB	GLULAM BEAM
FRB	FOR ROOF BRACING
UWA	UNDER WALL ABOVE
RSDF	ROUGH SAWN DOUGLAS FIR
CANT	CANTILEVER, SEE NOTE 1
UPL	UNDER POINT LOAD
CB	CONTINUOUS BEARING

SYMBOL	DESCRIPTION
F.T.	FLOOR TRUSS
B.T.	BALCONY TRUSS
C.T.	CORRIDOR TRUSS
G.T.	GIRDER TRUSS
DBL	DOUBLE
TPL	TRIPLE
	DROP BEAM
	FLUSH BEAM
	BEARING WALL
	WALL ABOVE (10 PSF U.N.O.)

NOTES:
1. BACKSPANS FOR CANTILEVERS MUST BE GREATER THAN OR EQUAL TO THE LENGTH OF THE CANTILEVER, UNO.

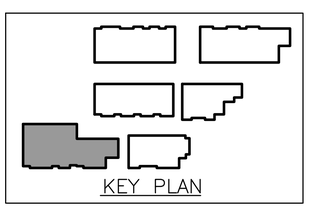
WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.



1 BUILDING #5 - 2ND FLOOR FRAMING PLAN

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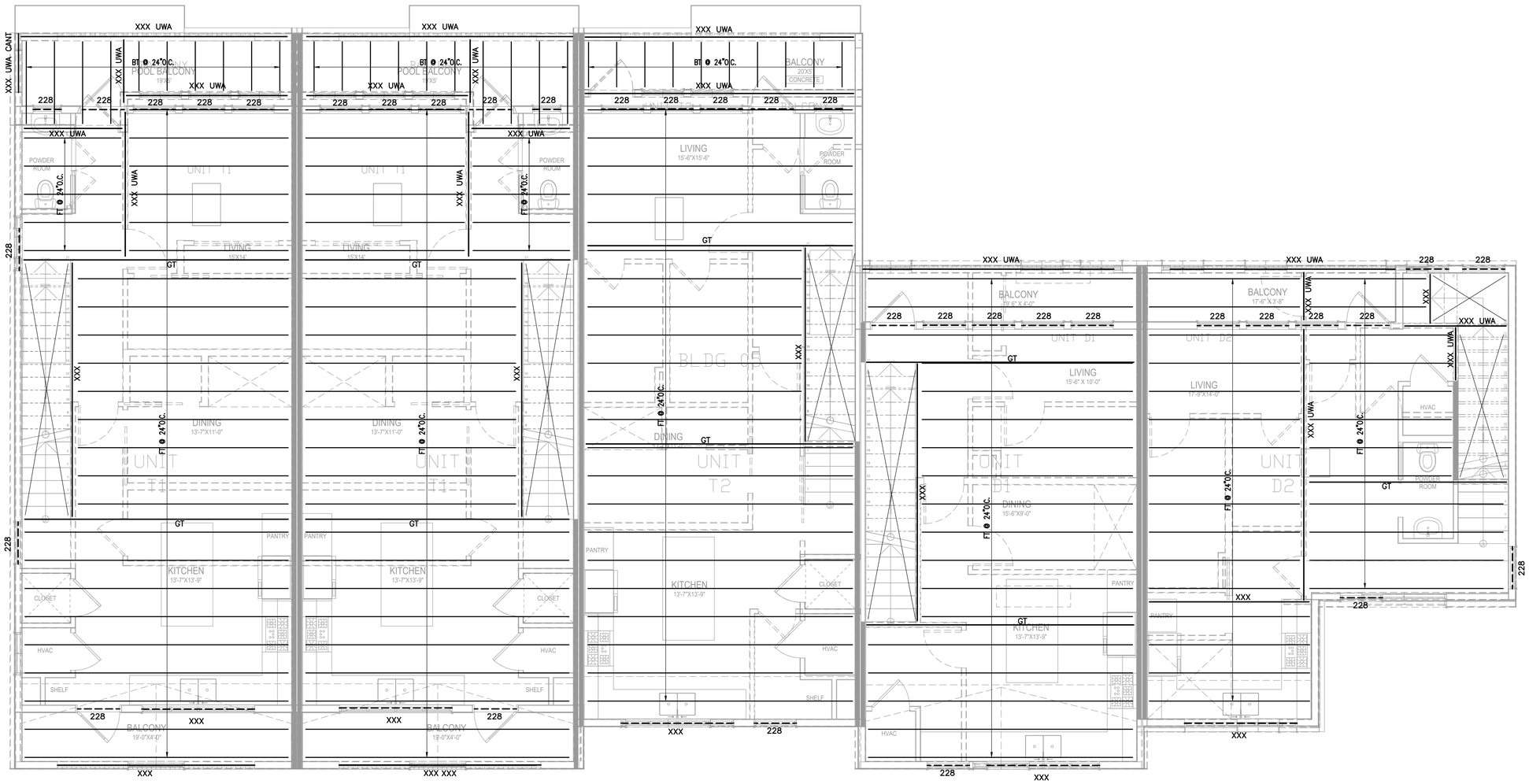
BUILDING #5 - 2ND FLOOR FRAMING PLAN

Sheet No.:
S5-120



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ABREVIATION	DESCRIPTION
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DBL	DOUBLE
CONT	CONTINUOUS
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GLB	GLULAM BEAM
FRB	FOR ROOF BRACING
UWA	UNDER WALL ABOVE
RSDF	ROUGH SAWN DOUGLAS FIR
CANT	CANTILEVER, SEE NOTE 1
UPL	UNDER POINT LOAD
CB	CONTINUOUS BEARING

SYMBOL	DESCRIPTION
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DBL	DOUBLE
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	DROP BEAM
	FLUSH BEAM
	BEARING WALL
	WALL ABOVE (10 PSF U.N.O.)

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2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

GLULAM BEAM SCHEDULE

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B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
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B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
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B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
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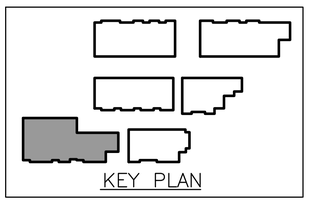
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.



1 BUILDING #5 - 3RD FLOOR FRAMING PLAN

Scale: 1/4" = 1'-0"

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A member of Building Code Compliance Association #E00001

THIS DRAWING HAS BEEN AUTHORIZED FOR RELEASE BY
Christopher P. Hillman, P.E.
LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

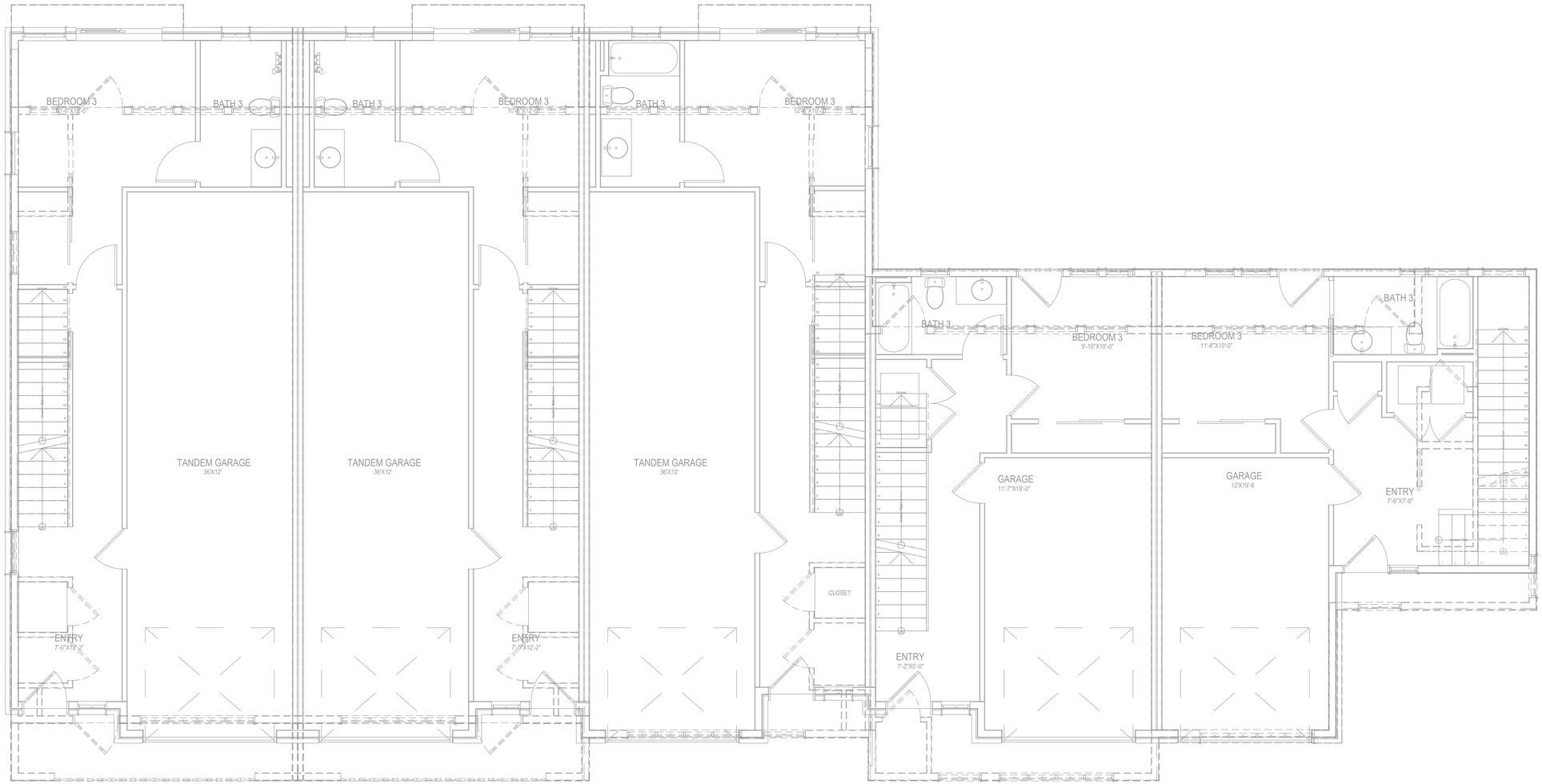
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #5 - 3RD FLOOR FRAMING PLAN

Sheet No.:
S5-121



SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,,8,10

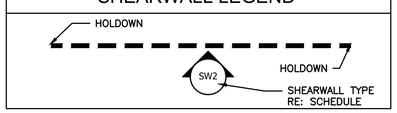
NOTES:
1. ALL SHEARWALLS MUST BE BLOCKED AT ALL EDGES. PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
2. FULL SIZED PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY. PANELS SHALL NOT BE LESS THAN 24" IN WIDTH.
3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
4. ALL WOOD STRUCTURAL PANEL SHEATHING SHALL BE MIN. 15/32" 5-PLY PLYWOOD OR 7/16" ORIENTED STRAND BOARD.
5. ALL SHEARWALLS ARE BLOCKED AT ALL EDGES.
6. THE SILL FASTENING MUST BE DOUBLED FOR TWO-SIDED SHEARWALLS.
7. ALTERNATE SILL FASTENING INTO CONCRETE (SEE NOTES):
   - 7.1. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
   - 7.2. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 4" O.C. (495 PLF)
   - 7.3. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 3" O.C. (660 PLF)
8. ALL SHEARWALLS SHALL BE FRAMED WITH END (WIND) POST AT EACH END PER THE HOLD DOWN SCHEDULE. HOLDOWNS AND END POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE WALL WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE STRUCTURE.
9. (4) FOOT WIDE GYPSUM SHEATHING BOARDS CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE STUDS. (2) FOOT WIDE PIECES OF GYPSUM SHEATHING BOARDS SHALL BE APPLIED PERPENDICULAR TO THE STUDS. GYPSUM SHEATHING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
10. GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER, WATER-RESISTANT GYPSUM BACKING BOARD CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE WALL STUDS. GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 844. WATER-RESISTANT GYPSUM BACKING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
9. F = UNTREATED LUMBER WITH NO MOISTURE EXPOSURE
10. P = PRESSURE TREATED LUMBER WITH NO MOISTURE EXPOSURE
11. R-L = ALL WOOD TYPES IN HEAVY INDUSTRIAL OR COASTAL AREAS (BUT WITH NO DIRECT EXPOSURE TO CHLORIDES)

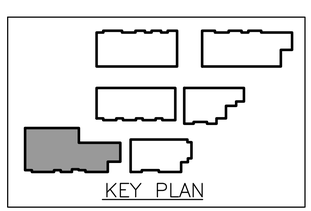
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	ANCHOR BOLT	EMBEDMENT	NOTES
HD1	SIMPSON LTTI31	1350	18-10d (0.148" DIA. X 1-1/2") GALV BOX NAIL	2-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	3 1/2"	1,2,5
HD2	SIMPSON HTT4 ZMAX	4235	18-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	3-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	5"	1,2,5
	SIMPSON STHD14	5345	30-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	3-2X4	EMBEDED	WET SET	3,5
HD3	SIMPSON HTT5 ZMAX	5090	26-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	4-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	6"	1,3,5
	SIMPSON STHD14	5345	30-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	4-2X4	EMBEDED	WET SET	3,5
HD4	SIMPSON HDQ8-SDS3	7630	20-1/4" DIA. X 3" SDS SCREWS	4X4	7/8" DIA. A307 HAS ROD DRILL & EPOXY	10"	1,4,5
HD5	SIMPSON HD9B	9920	3-7/8" STUD BOLTS	6X6	7/8" DIA. A307 HAS ROD DRILL & EPOXY	10"	1,4,5
HD6	SIMPSON HD12	15510	4-1" STUD BOLTS	6X6	1 1/8" WET SET	18"	1,4,5

NOTES:
1. EPOXY SHALL BE HILTI HIT-HY 150 MAX-SD OR EQUAL AND INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. FASTEN HD1 & HD2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
3. FASTEN HD3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
4. FASTEN END MEMBERS TOGETHER WITH HARDWARE BOLTS SPECIFIED.
5. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #5 - 1ST FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

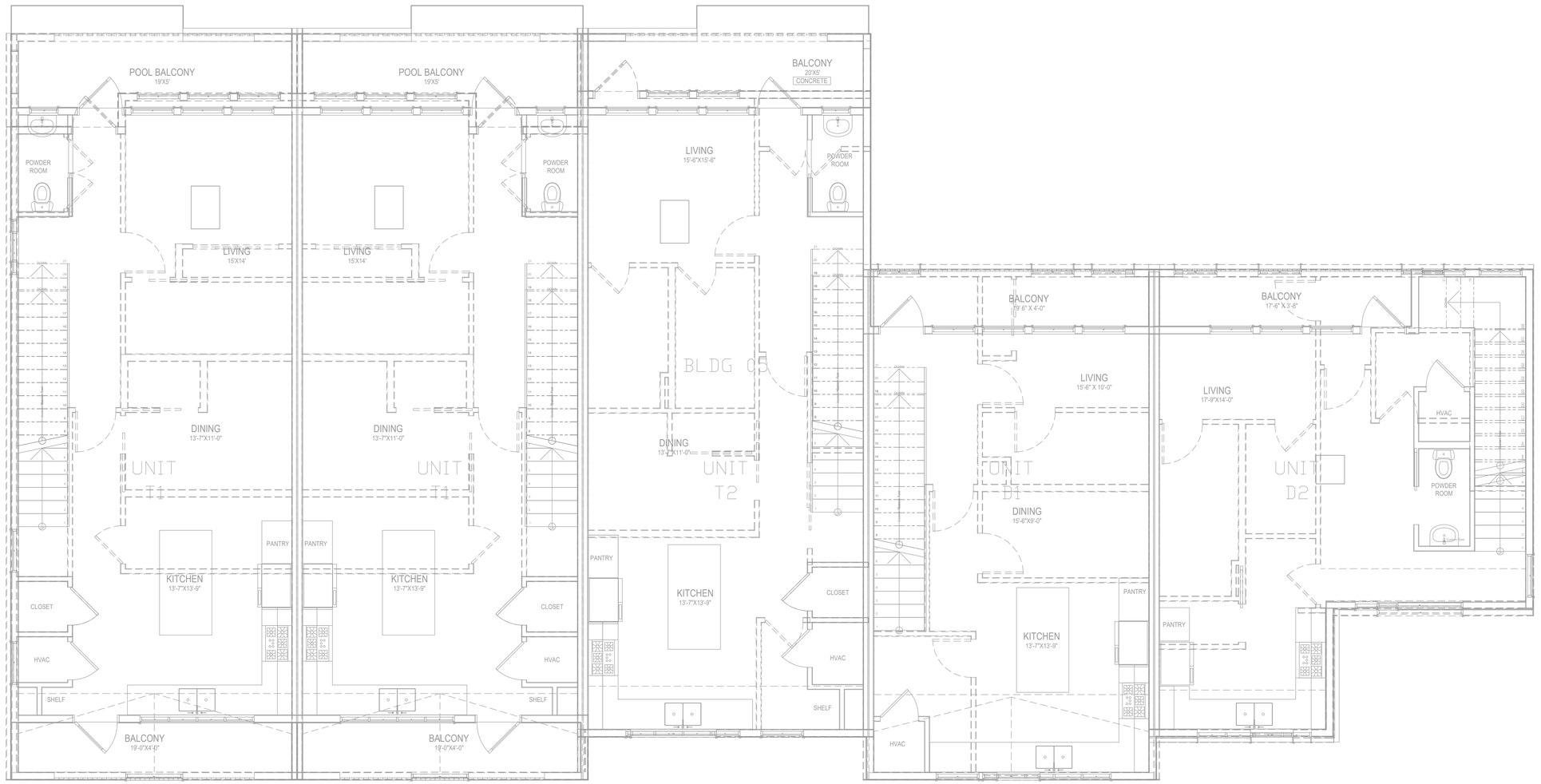
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #2 - 1ST FLOOR SHEARWALL PLAN

Sheet No.:
S5-130



SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1.,8,10

NOTES:
1. ALL SHEARWALLS MUST BE BLOCKED AT ALL EDGES. PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
2. FULL SIZED PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY. PANELS SHALL NOT BE LESS THAN 24" IN WIDTH.
3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
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6. THE SILL FASTENING MUST BE DOUBLED FOR TWO-SIDED SHEARWALLS.
7. ALTERNATE SILL FASTENING INTO CONCRETE (SEE NOTES):
   - 7.1. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
   - 7.2. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 4" O.C. (495 PLF)
   - 7.3. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 3" O.C. (660 PLF)
8. ALL SHEARWALLS SHALL BE FRAMED WITH END (WIND) POST AT EACH END PER THE HOLD DOWN SCHEDULE. HOLDOWNS AND END POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE WALL WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE STRUCTURE.
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10. GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER, WATER-RESISTANT GYPSUM BACKING BOARD CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE WALL STUDS. GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 844. WATER-RESISTANT GYPSUM BACKING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
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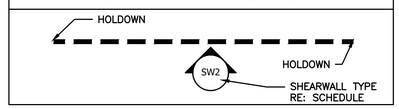
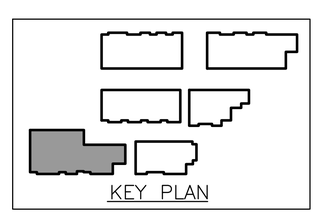
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	NOTES
ST1	(1) CS16X60	1705	8d - FILL ALL HOLES	2-2X4	1,3
ST2	(2) CS16X60	3410	8d - FILL ALL HOLES	3-2X4	1,3
ST3	(3) CS16X60	5115	8d - FILL ALL HOLES	4-2X4	2,3
ST4	(4) CS16X60	6820	8d - FILL ALL HOLES	4X4	1,3

NOTES:
1. FASTEN ST1 AND ST2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
2. FASTEN ST3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
3. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #5 - 2ND FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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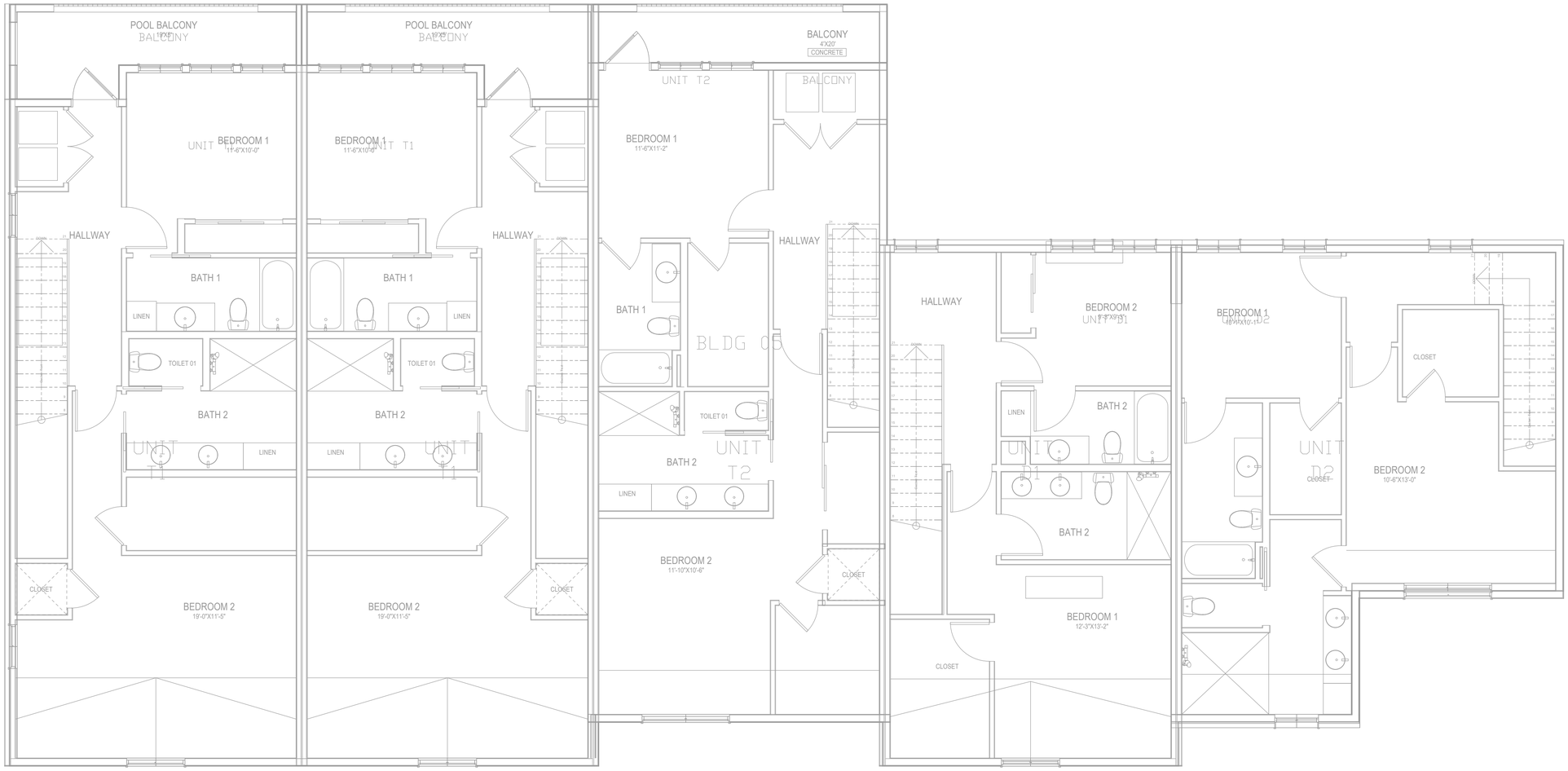
REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #5 - 2ND FLOOR SHEARWALL PLAN

Sheet No.:
S5-131



SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
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SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1.,8,10

NOTES:
1. ALL SHEARWALLS MUST BE BLOCKED AT ALL EDGES. PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
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3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
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   - 7.1. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
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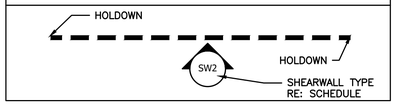
10. GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER, WATER-RESISTANT GYPSUM BACKING BOARD CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE WALL STUDS. GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 844. WATER-RESISTANT GYPSUM BACKING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
9. F = UNTREATED LUMBER WITH NO MOISTURE EXPOSURE
10. P = PRESSURE TREATED LUMBER WITH NO MOISTURE EXPOSURE
11. R-L = ALL WOOD TYPES IN HEAVY INDUSTRIAL OR COASTAL AREAS (BUT WITH NO DIRECT EXPOSURE TO CHLORIDES)

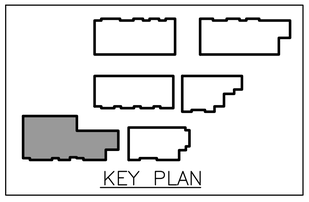
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	NOTES
ST1	(1) CS16X60	1705	8d - FILL ALL HOLES	2-2X4	1,3
ST2	(2) CS16X60	3410	8d - FILL ALL HOLES	3-2X4	1,3
ST3	(3) CS16X60	5115	8d - FILL ALL HOLES	4-2X4	2,3
ST4	(4) CS16X60	6820	8d - FILL ALL HOLES	4X4	1,3

NOTES:
1. FASTEN ST1 AND ST2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
2. FASTEN ST3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
3. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #5 - 3RD FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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Christopher P. Hillman, P.E.
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ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

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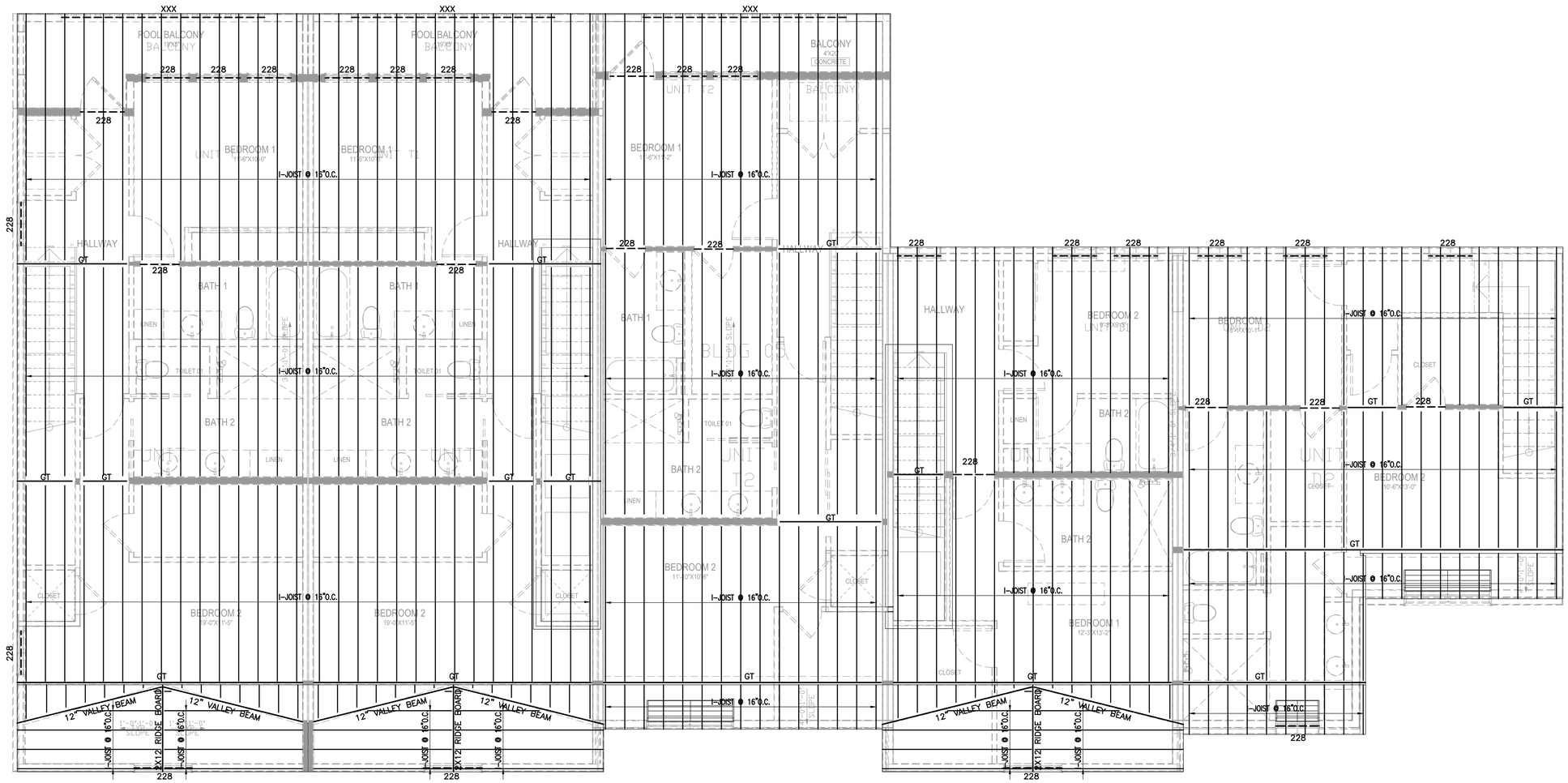
REVISION/ISSUE	DATE

Sheet Name:
BUILDING #5 - 3RD FLOOR SHEARWALL PLAN

Sheet No.:
S5-132



1 BUILDING #5 - ROOF FRAMING PLAN

Scale: 1/4" = 1'-0"

RE: S1-140 FOR ROOF FRAMING NOTES

KEY PLAN

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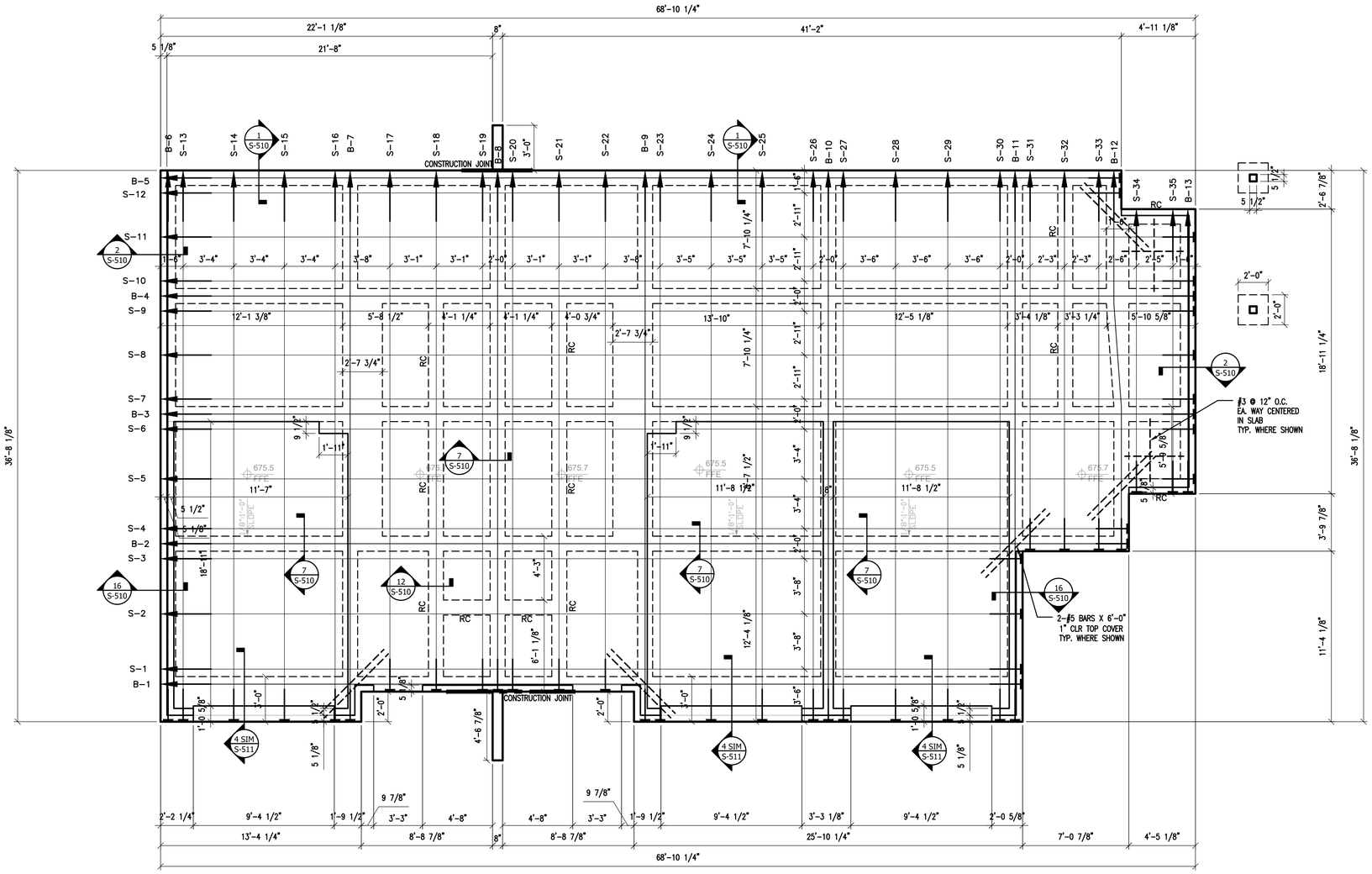
Sheet Name:
BUILDING #5 - ROOF FRAMING PLAN

Sheet No.:
S5-140



TENDON ELONGATION SCHEDULE						TENDON ELONGATION SCHEDULE					
NUMBER	LENGTH	ELONGATION (P=26600 LBS)			MEASURED	NUMBER	LENGTH	ELONGATION (P=26600 LBS)			MEASURED
		(-10%)	CALCULATED	(+10%)				(-10%)	CALCULATED	(+10%)	
B-1	57'-6"	3 13/16"	4 3/16"	4 5/8"		S-12	64'-1"	4 1/4"	4 11/16"	5 3/16"	
B-2	64'-7"	4 1/4"	4 3/4"	5 3/16"		S-13	36'-10"	2 7/16"	2 11/16"	2 15/16"	
B-3	69'-0"	4 9/16"	5 1/16"	5 9/16"		S-14	36'-10"	2 7/16"	2 11/16"	2 15/16"	
B-4	69'-0"	4 9/16"	5 1/16"	5 9/16"		S-15	36'-10"	2 7/16"	2 11/16"	2 15/16"	
B-5	64'-1"	4 1/4"	4 11/16"	5 3/16"		S-16	36'-10"	2 7/16"	2 11/16"	2 15/16"	
B-6	36'-10"	2 7/16"	2 11/16"	2 15/16"		S-17	34'-10"	2 5/16"	2 9/16"	2 13/16"	
B-7	36'-10"	2 7/16"	2 11/16"	2 15/16"		S-18	34'-10"	2 5/16"	2 9/16"	2 13/16"	
B-8	34'-10"	2 5/16"	2 9/16"	2 13/16"		S-19	34'-10"	2 5/16"	2 9/16"	2 13/16"	
B-9	36'-10"	2 7/16"	2 11/16"	2 15/16"		S-20	34'-10"	2 5/16"	2 9/16"	2 13/16"	
B-10	36'-10"	2 7/16"	2 11/16"	2 15/16"		S-21	34'-10"	2 5/16"	2 9/16"	2 13/16"	
B-11	36'-10"	2 7/16"	2 11/16"	2 15/16"		S-22	34'-10"	2 5/16"	2 9/16"	2 13/16"	
B-12	25'-6"	1 11/16"	1 7/8"	2 1/16"		S-23	36'-10"	2 7/16"	2 11/16"	2 15/16"	
B-13	19'-1"	1 1/4"	1 3/8"	1 9/16"		S-24	36'-10"	2 7/16"	2 11/16"	2 15/16"	
S-1	57'-6"	3 13/16"	4 3/16"	4 5/8"		S-25	36'-10"	2 7/16"	2 11/16"	2 15/16"	
S-2	57'-6"	3 13/16"	4 3/16"	4 5/8"		S-26	36'-10"	2 7/16"	2 11/16"	2 15/16"	
S-3	57'-6"	3 13/16"	4 3/16"	4 5/8"		S-27	36'-10"	2 7/16"	2 11/16"	2 15/16"	
S-4	64'-7"	4 1/4"	4 3/4"	5 3/16"		S-28	36'-10"	2 7/16"	2 11/16"	2 15/16"	
S-5	69'-0"	4 9/16"	5 1/16"	5 9/16"		S-29	36'-10"	2 7/16"	2 11/16"	2 15/16"	
S-6	69'-0"	4 9/16"	5 1/16"	5 9/16"		S-30	36'-10"	2 7/16"	2 11/16"	2 15/16"	
S-7	69'-0"	4 9/16"	5 1/16"	5 9/16"		S-31	25'-6"	1 11/16"	1 7/8"	2 1/16"	
S-8	69'-0"	4 9/16"	5 1/16"	5 9/16"		S-32	25'-6"	1 11/16"	1 7/8"	2 1/16"	
S-9	69'-0"	4 9/16"	5 1/16"	5 9/16"		S-33	25'-6"	1 11/16"	1 7/8"	2 1/16"	
S-10	69'-0"	4 9/16"	5 1/16"	5 9/16"		S-34	19'-1"	1 1/4"	1 3/8"	1 9/16"	
S-11	69'-0"	4 9/16"	5 1/16"	5 9/16"		S-35	19'-1"	1 1/4"	1 3/8"	1 9/16"	

1 BUILDING #6 - FOUNDATION PLAN

Scale: 1/4" = 1'-0"

FOUNDATION NOTES

THIS SLAB TYPE IS BASED ON PTI DC10.5-12 (STANDARD REQUIREMENTS FOR DESIGN AND ANALYSIS OF SHALLOW POST-TENSIONED CONCRETE FOUNDATIONS ON EXPANSIVE SOIL)

SLAB TYPE:	BRAB TYPE I, BRAB TYPE II, BRAB TYPE III, BRAB TYPE IV
DESCRIPTION:	UNREINFORCED, LIGHTLY REINFORCED AGAINST SHRINKAGE AND TEMPERATURE CRACKING, REINFORCED AND STIFFENED, STRUCTURAL (NOT DIRECTLY SUPPORTED ON THE GROUND)
SLAB THICKNESS:	4 INCHES

NOTES ON EXPANSIVE SOILS:

THE DESIGN OF FOUNDATIONS SUPPORTED ON EXPANSIVE OR COMPRESSIBLE SOILS INCLUDES CONSIDERATION OF VARIOUS SITE CONDITIONS; THEREFORE, IT IS NECESSARY FOR OTHER MEMBERS OF THE PROJECT'S DESIGN AND CONSTRUCTION TEAM TO UNDERSTAND THE ASSUMPTIONS THAT HAVE BEEN MADE.

THE FOLLOWING DESIGN CRITERIA IS CONTAINED IN THE PROJECT GEOTECHNICAL REPORT BY ??????, REPORT #?????, DATED ?????. REFER TO GEOTECHNICAL REPORT SOIL PREPARATION REQUIREMENTS FOR THIS DESIGN.

SITE PREPARATION:	---	
EFFECTIVE PI:	---	
BEARING CAPACITY:	--- PSF (TOTAL DEAD PLUS LIVE LOAD)	
BEARING DEPTH:	-- FEET BELOW GRADE	
CENTER LIFT	Em = -.-- FT	Ym = -.-- INCHES
EDGE LIFT	Em = -.-- FT	Ym = -.-- INCHES

BEAM SCHEDULE

GRADE BEAM TYPE	DESCRIPTION	WIDTH	DEPTH	REINFORCEMENT
	POST TENSIONED BEAM (TYP. U.N.O.)	--"	--"	- TENDON BOTTOM
RC	REBAR BEAM	--"	--"	2-#5 BOTTOM
	POST TENSIONED DEEPENED BEAM	--"	--"	- TENDON BOTTOM
RC	REBAR DEEPENED BEAM	--"	--"	2-#5 BOTTOM
	THICKENED SLAB	12"	12"	2-#5 BOTTOM

DESIGN ASSUMPTIONS:
1. CONCRETE GRADE BEAMS SHALL EXTEND ABOVE THE FINISHED GRADE ADJACENT TO THE FOUNDATION AT ALL POINTS A MINIMUM OF 6 INCHES.
2. SITE SLOPE SHALL CAUSE WATER TO FLOW AWAY FROM THE BUILDING FOUNDATION FOR A MINIMUM DISTANCE OF 10 FEET AT A MINIMUM SLOPE OF 5%
3. NO TREES OR OTHER VEGETATION OVER SIX FEET IN HEIGHT SHALL BE PLANTED WITHIN 20 FEET OF BUILDING PERIMETER UNLESS SPECIALLY ACCOUNTED FOR IN THE DESIGN OF THE FOUNDATION
4. NO SIGNIFICANT DISCHARGE OF WATER SHALL OCCUR ADJACENT TO THE FOUNDATION. THIS MAY INCLUDE ROOF DRAINAGE AND AIR CONDITIONING CONDENSATE, BOTH OF WHICH CAN BE DIRECTED TO A SUBGRADE DRAINAGE SYSTEM.
5. THE BUILDER, CONTRACTOR, OR ENGINEER HAS PROVIDED THE OWNER WITH INFORMATION RELATED TO SLAB-ON-GROUND FOUNDATION LONG-TERM MAINTENANCE RECOMMENDATIONS.
6. THE FOUNDATION IS NOT CONSTRUCTED OVER AN AREA COVERING PARTIAL CUT AND/OR PARTIAL FILL OF EXPANSIVE OR COMPRESSIBLE SOILS (TRANSITION LOTS). SPECIAL CONSIDERATION SHALL BE GIVEN FOR ADDITIONAL DIFFERENTIAL MOVEMENT IN THE DESIGN OF FOUNDATIONS CONSTRUCTED ON THESE CONDITIONS.
7. UNLESS OTHERWISE NOTED ON THE PLANS: STOOPS, ELECTRICAL/MECHANICAL PADS, PORCHES AND PATIOS, OR OTHER FOUNDATION EXTENSIONS OUTSIDE OF THE MAIN FOUNDATION ARE DESIGNED AND CAST INDEPENDENTLY OF THE FOUNDATION.

COMPATIBILITY NOTES:
1. SHALLOW FOUNDATION SYSTEMS CONSTRUCTED ON ACTIVE SOILS ARE EXPECTED TO DEFORM. THE FOUNDATION FLEXIBILITY DISTRIBUTES LOCALIZED SOIL MOVEMENTS TO A MORE UNIFORM SLAB SHAPE. IT IS IMPORTANT THAT OTHER CONSULTANTS AND SUPPLIERS CONSIDER COMPATIBLE DESIGNS OR PRODUCTS FOR FLEXIBLE FOUNDATION SYSTEM. DEFORMATION COMPATIBILITY SHOULD BE ADDRESSED FOR NON-FLEXIBLE EXTERIOR FINISHES, BRITTLE FLOOR FINISHES, AND AREAS THAT SLOPE TO DRAIN OR WHERE UTILITY CONNECTIONS MAY BE LOCATED.
2. RESTRAINT-TO-SHORTENING CRACKS ARE NOT CONSIDERED TO BE A STRUCTURAL PROBLEM. EFFORTS HAVE BEEN MADE TO LOCATE REINFORCING STEEL, CONTROL JOINTS, CONSTRUCTION JOINTS, OR KEYWAYS IN SUCH AREAS SUBJECT TO SUCH CRACKING.

DIMENSIONAL TOLERANCES:

1. GRADE BEAM DEPTH:	+/-1 INCH
2. GRADE BEAM WIDTH:	+/-1 INCH
3. SLAB THICKNESS:	-1/2 INCH, +1 INCH

PLACEMENT TOLERANCES:

1. CLEAR COVER:	ZERO TOLERANCE
2. SLAB TENDONS/VERTICAL:	WITHIN MIDDLE 1/3 OF SLAB
3. SLAB TENDONS/HORIZONTAL:	+/-1 FOOT; 1:6 DEFLECTION
4. BEAM TENDON ANCHORS/VERTICAL:	+/-1 INCH
5. BEAM TENDON ANCHORS LOW POINT:	-1 INCH, +3 IN.
6. BEAM TENDON HORIZONTAL:	+/-2 INCH FROM BEAM CENTERLINE
7. SLAB REBAR/VERTICAL:	+/-3/4 INCH
8. SLAB REBAR/HORIZONTAL:	+/-3 INCH

SLAB LEVELNESS:
1. SLAB LEVELNESS TOLERANCES SHOULD CONFORM TO ACI 117R-90 SECTION 4.5.6 WITH A MINIMUM LOCAL FL NUMBER OF 10. FOR TYPICAL RESIDENTIAL CONSTRUCTION ACI 117 TOLERANCES WOULD PERMIT A MAXIMUM DIFFERENCE IN ELEVATION OF 1.25 INCHES BETWEEN ANY TWO POINTS ON THE SLAB SURFACE 10 FEET APART. IT IS ADVISABLE TO RECORD SLAB ELEVATION MEASUREMENTS ON NEWLY CONSTRUCTED SLABS.

ARCHITECT/ENGINEER COORDINATION:
1. WHERE FEATURES SUCH AS SLAB DROPS, BLOCKOUTS, RECESSES, SLOPES, DRAINS AND DIMENSIONS ARE PROVIDED ON THESE DRAWINGS, THEY SHALL BE VERIFIED ON THE ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION. IF ANY SUCH INFORMATION IS MISSING OR A DISCREPANCY OCCURS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER TO RESOLVE.

HOLDOWN LEGEND

HOLDOWN LOCATION RE:S6-130

KEY PLAN

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SAN ANTONIO, TX 78212
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REVISION/ISSUE	DATE
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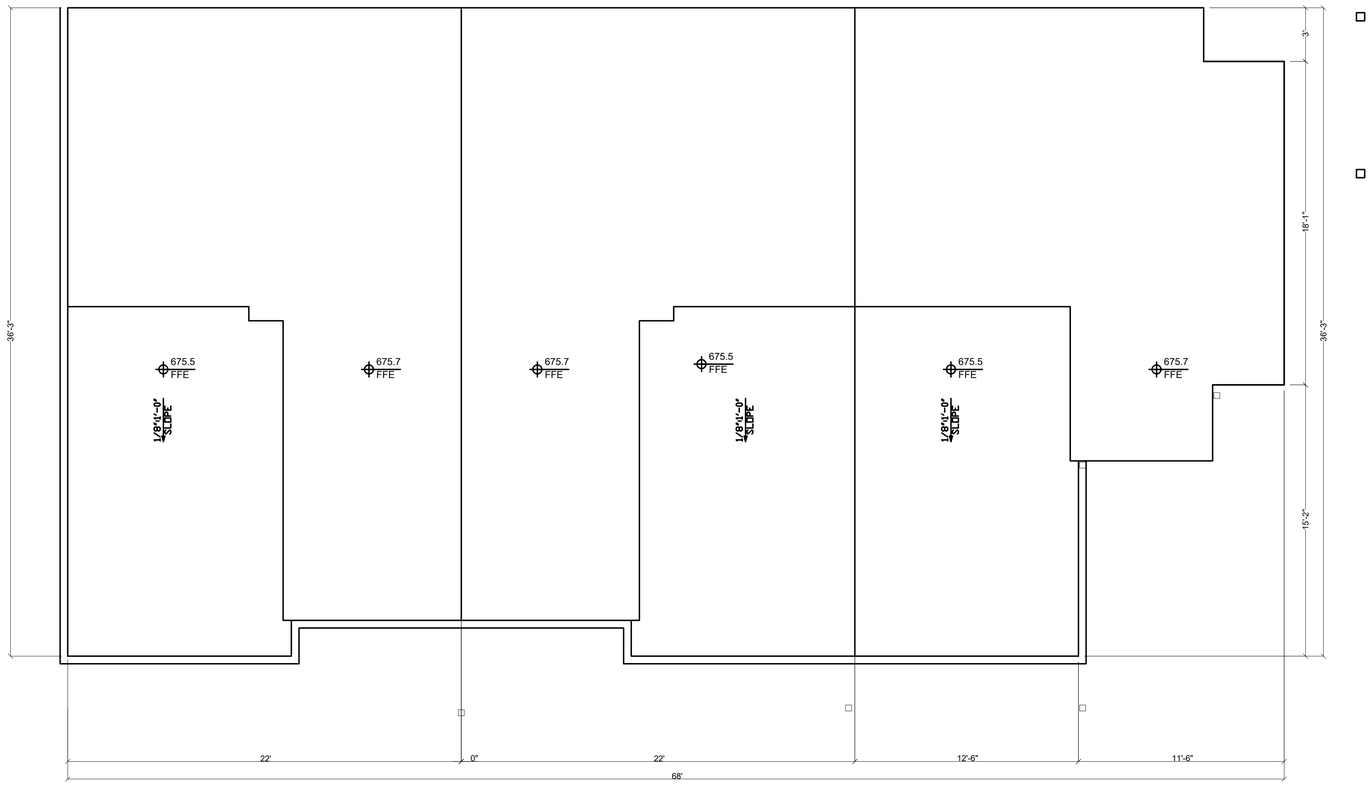
Sheet Name:
BUILDING #6 - FOUNDATION PLAN

Sheet No.:
S6-110



1 BUILDING #6 - SLAB FORMING PLAN

Scale: 1/4" = 1'-0"

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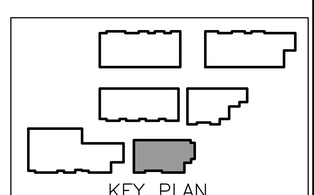
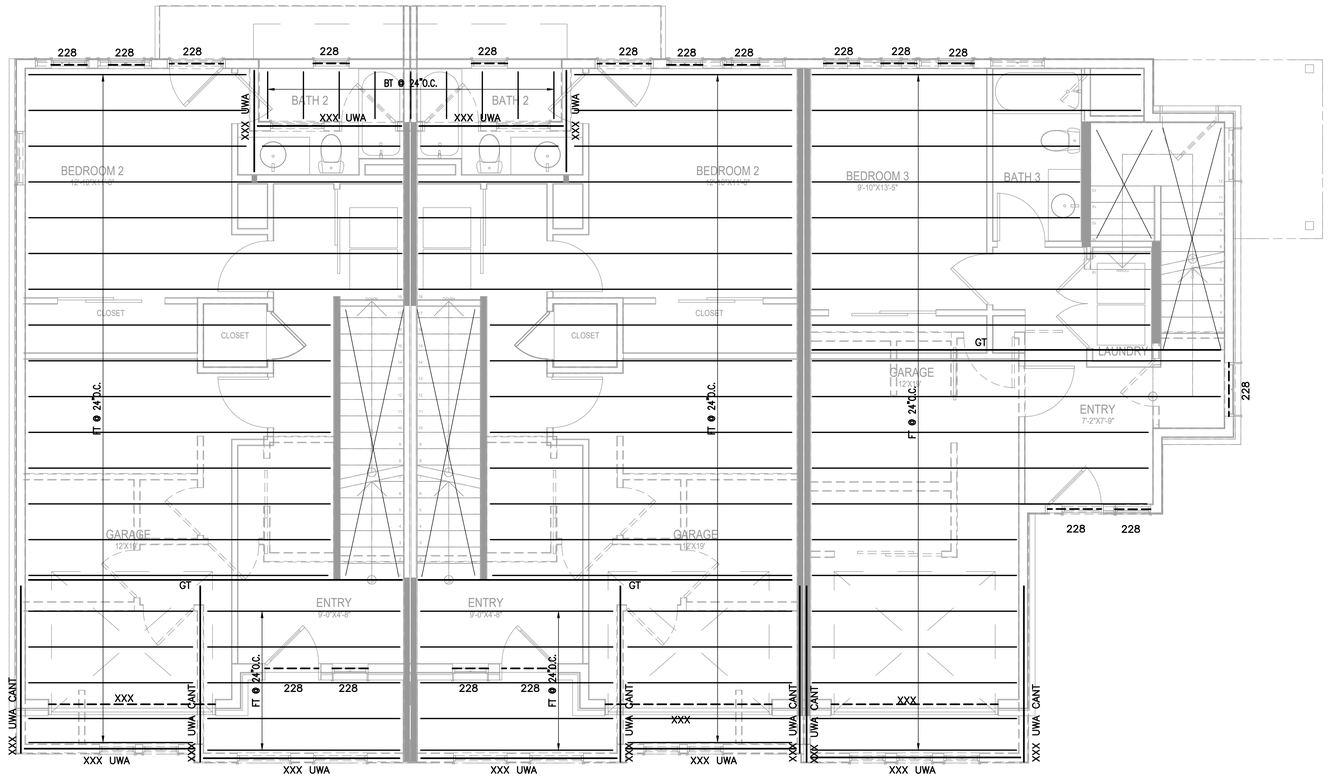


Sheet Name:
BUILDING #6 - SLAB FORMING PLAN

Sheet No.:
S6-110s



1 BUILDING #6 - 2ND FLOOR FRAMING PLAN

Scale: 1/4" = 1'-0"

FLOOR FRAMING NOTES:

1. ALL FLOOR JOISTS ARE PREFABRICATED OPEN WEB TRUSSES @ 24" O.C. DESIGNED AND MANUFACTURED BY OTHERS (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED:
   TCLL = 40 PSF AT UNITS, BALCONIES, AND CORRIDORS SERVING THEM
   TCLL = 100 PSF AT PUBLIC SPACES AND CORRIDORS SERVING THEM
   TCLL = 100 PSF AT PUBLIC BALCONIES
   TCDL = 20 PSF
   BCLL = 0 PSF
   BCDL = 5 PSF
2. COMMON FLOOR TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE FLOOR DECKING, PERIMETER, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL. DROP HEADER MEMBERS SHALL HAVE ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
4. ALL NON-LOAD BEARING HEADER MEMBERS MAY BE CONSTRUCTED OF PONY WALL CONSTRUCTION WITH DOUBLE BOTTOM PLATES AND SINGLE JACK STUDS.
5. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS MINIMUM SPECIFICATIONS: Fb=3,000psi, Fv=300psi, E=2.1x10^6psi FOR 3 1/2" AND 5 1/2" WIDE BEAMS, Fb =2,800 psi, Fv=300psi, E=2.1x10^6psi FOR 7" WIDE BEAMS.
6. BEAM SUPPORT DETAILS OR BEAM CONNECTION HANGERS SHALL BE PER THE HANGER MANUFACTURER'S REQUIREMENTS.
7. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS, FLOOR TOP OF PLATE ELEVATIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPENCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
8. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. PROVIDE CB TRUSSES UNDER ALL STACKING WALLS TO MATCH STUD SIZE AND SPACING REQUIREMENTS.
11. FLOOR DRAG TRUSSES (SHEAR PANELS) SHALL BE PROVIDED DIRECTLY OVER TOPS OF INTERIOR SHEARWALLS AND SHALL BE DESIGNED FOR A TOTAL LOAD EQUAL TO THE LENGTH OF THE SHEARWALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEARWALL SCHEDULE.
12. THE FOLLOWING LEGEND REGARDING FLOOR FRAMING IS USED TO DETAIL THIS SHEET:

ABREVIATION	DESCRIPTION
BLK	BLOCKING
DBL	DOUBLE
CONT	CONTINUOUS
PSL	PARALLEL STRAND LUMBER
GLB	GLULAM BEAM
FRB	FOR ROOF BRACING
UWA	UNDER WALL ABOVE
RSDF	ROUGH SAWN DOUGLAS FIR
CANT	CANTILEVER, SEE NOTE 1
UPL	UNDER POINT LOAD
CB	CONTINUOUS BEARING

SYMBOL	DESCRIPTION
F.T.	FLOOR TRUSS
B.T.	BALCONY TRUSS
C.T.	CORRIDOR TRUSS
G.T.	GIRDER TRUSS
DBL	DOUBLE
TPL	TRIPLE
	DROP BEAM
	FLUSH BEAM
	BEARING WALL
	WALL ABOVE (10 PSF U.N.O.)

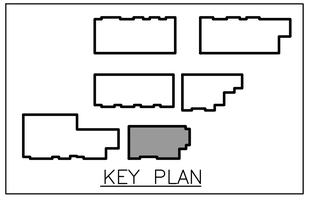
NOTES:
1. BACKSPANS FOR CANTILEVERS MUST BE GREATER THAN OR EQUAL TO THE LENGTH OF THE CANTILEVER, UNO.

WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3



NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.

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A member of Building Code Compliance Association #E00001

THIS DRAWING HAS BEEN AUTHORIZED FOR RELEASE BY
Christopher P. Hillman, P.E.
LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

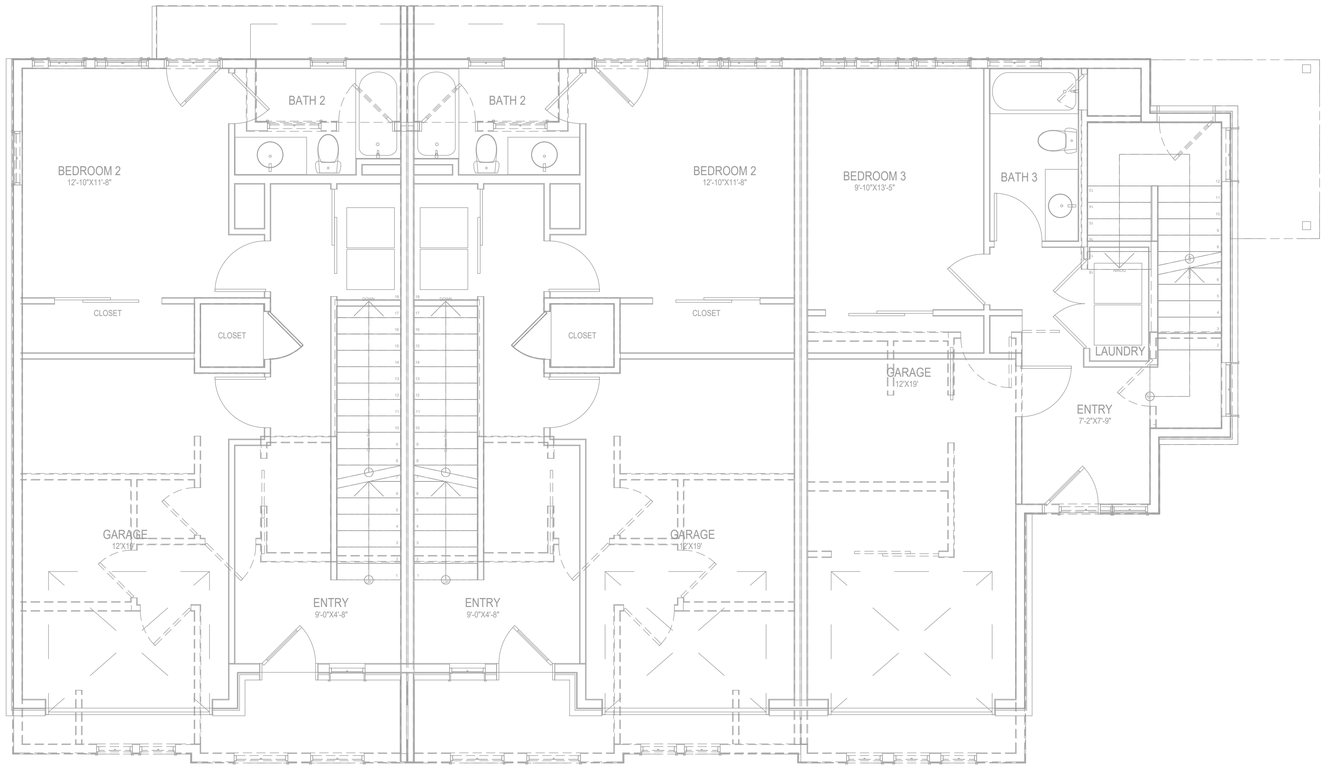
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #6 - 2ND FLOOR FRAMING PLAN

Sheet No.:
S6-120



SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1.,8,10

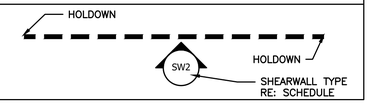
NOTES:
1. ALL SHEARWALLS MUST BE BLOCKED AT ALL EDGES. PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
2. FULL SIZED PANELS MAY BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY. PANELS SHALL NOT BE LESS THAN 24" IN WIDTH.
3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
4. ALL WOOD STRUCTURAL PANEL SHEATHING SHALL BE MIN. 15/32" 5-PLY PLYWOOD OR 7/16" ORIENTED STRAND BOARD.
5. ALL SHEARWALLS ARE BLOCKED AT ALL EDGES.
6. THE SILL FASTENING MUST BE DOUBLED FOR TWO-SIDED SHEARWALLS.
7. ALTERNATE SILL FASTENING INTO CONCRETE (SEE NOTES):
   - 7.1. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
   - 7.2. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 4" O.C. (495 PLF)
   - 7.3. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 3" O.C. (660 PLF)
8. ALL SHEARWALLS SHALL BE FRAMED WITH END (WIND) POST AT EACH END PER THE HOLD DOWN SCHEDULE. HOLDOWNS AND END POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE WALL WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE STRUCTURE.
9. (4) FOOT WIDE GYPSUM SHEATHING BOARDS CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE STUDS. (2) FOOT WIDE PIECES OF GYPSUM SHEATHING BOARDS SHALL BE APPLIED PERPENDICULAR TO THE STUDS. GYPSUM SHEATHING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
10. GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER, WATER-RESISTANT GYPSUM BACKING BOARD CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE WALL STUDS. GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 844. WATER-RESISTANT GYPSUM BACKING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
9. F = UNTREATED LUMBER WITH NO MOISTURE EXPOSURE
10. P = PRESSURE TREATED LUMBER WITH NO MOISTURE EXPOSURE
11. R-L = ALL WOOD TYPES IN HEAVY INDUSTRIAL OR COASTAL AREAS (BUT WITH NO DIRECT EXPOSURE TO CHLORIDES)

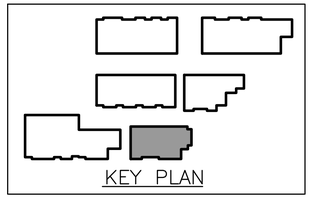
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	ANCHOR BOLT	EMBEDMENT	NOTES
HD1	SIMPSON LTTI31	1350	18-10d (0.148" DIA. X 1-1/2") GALV BOX NAIL	2-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	3 1/2"	1,2,5
HD2	SIMPSON HTT4 ZMAX	4235	18-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	3-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	5"	1,2,5
	SIMPSON STHD14	5345	30-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	3-2X4	EMBEDED	WET SET	3,5
HD3	SIMPSON HTT5 ZMAX	5090	26-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	4-2X4	5/8" DIA. A307 HAS ROD DRILL & EPOXY	6"	1,3,5
	SIMPSON STHD14	5345	30-16d (0.162" DIA. X 2-1/2") GALV BOX NAIL	4-2X4	EMBEDED	WET SET	3,5
HD4	SIMPSON HDQ8-SDS3	7630	20-1/4" DIA. X 3" SDS SCREWS	4X4	7/8" DIA. A307 HAS ROD DRILL & EPOXY	10"	1,4,5
HD5	SIMPSON HD9B	9920	3-7/8" STUD BOLTS	6X6	7/8" DIA. A307 HAS ROD DRILL & EPOXY	10"	1,4,5
HD6	SIMPSON HD12	15510	4-1" STUD BOLTS	6X6	1 1/8" WET SET	18"	1,4,5

NOTES:
1. EPOXY SHALL BE HILTI HIT-HY 150 MAX-SD OR EQUAL AND INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. FASTEN HD1 & HD2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
3. FASTEN HD3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
4. FASTEN END MEMBERS TOGETHER WITH HARDWARE BOLTS SPECIFIED.
5. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #6 - 1ST FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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CPH 157-021

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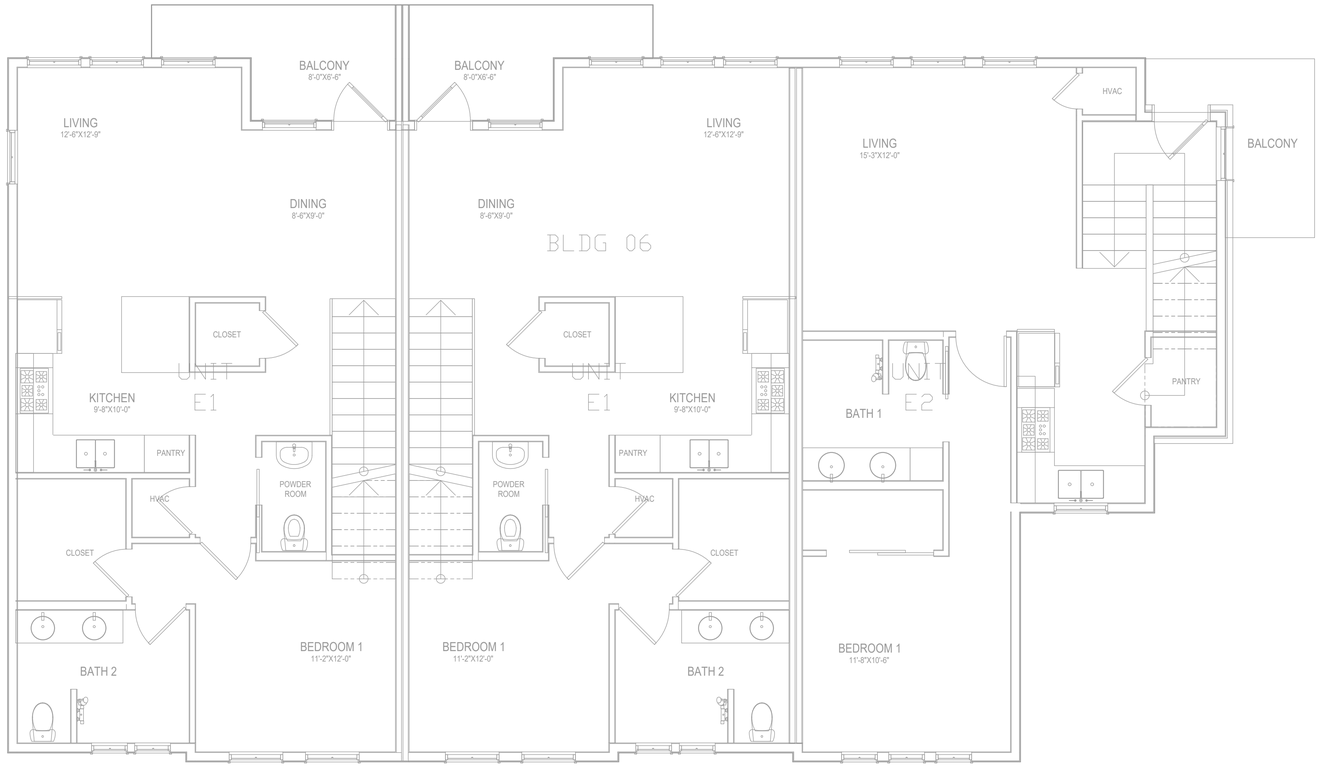
REVISION/ISSUE	DATE

Sheet Name:
BUILDING #6 - 1ST FLOOR SHEARWALL PLAN

Sheet No.:
S6-130



SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1.,8,10

NOTES:
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3. SPACE FASTENERS MAXIMUM 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD) OR PER FASTENING SCHEDULE IF MORE STRINGENT.
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6. THE SILL FASTENING MUST BE DOUBLED FOR TWO-SIDED SHEARWALLS.
7. ALTERNATE SILL FASTENING INTO CONCRETE (SEE NOTES):
   - 7.1. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 11" O.C. (180 PLF)
   - 7.2. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 4" O.C. (495 PLF)
   - 7.3. POWDER ACTUATED HILTI X-C(F,P,R-L) 72 P8 S23 0.138 X 2 7/8" SPACED AT 3" O.C. (660 PLF)
8. ALL SHEARWALLS SHALL BE FRAMED WITH END (WIND) POST AT EACH END PER THE HOLD DOWN SCHEDULE. HOLDOWNS AND END POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE WALL WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE STRUCTURE.
9. (4) FOOT WIDE GYPSUM SHEATHING BOARDS CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE STUDS. (2) FOOT WIDE PIECES OF GYPSUM SHEATHING BOARDS SHALL BE APPLIED PERPENDICULAR TO THE STUDS. GYPSUM SHEATHING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
10. GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER, WATER-RESISTANT GYPSUM BACKING BOARD CAN BE INSTALLED EITHER PARALLEL OR PERPENDICULAR TO THE WALL STUDS. GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 844. WATER-RESISTANT GYPSUM BACKING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
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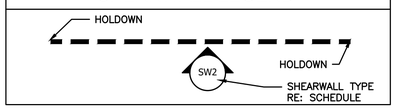
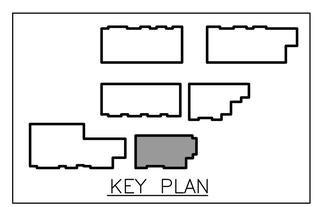
HOLDOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE LOAD	FASTENING	END (WIND) POST	NOTES
ST1	(1) CS16X60	1705	8d - FILL ALL HOLES	2-2X4	1,3
ST2	(2) CS16X60	3410	8d - FILL ALL HOLES	3-2X4	1,3
ST3	(3) CS16X60	5115	8d - FILL ALL HOLES	4-2X4	2,3
ST4	(4) CS16X60	6820	8d - FILL ALL HOLES	4X4	1,3

NOTES:
1. FASTEN ST1 AND ST2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
2. FASTEN ST3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
3. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #6 - 2ND FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

C|P|H
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REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #6 - 2ND FLOOR SHEARWALL PLAN

Sheet No.:
S6-131

NEED 3RD FLOOR PLAN

SHEARWALL SCHEDULE

TYPE	SHEATHING	ALLOWABLE SHEAR PER ANSI/AF&PA SDPWS-2008 TABLE 4.3A & 4.3C	PANEL EDGE FASTENING	SILL FASTENING	NOTES
SW1	WOOD STRUCTURAL PANEL SHEATHING	335 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 6" O.C.	5/8" DIA. X 8" J- BOLT SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C. / (2) 8d NAILS AT 6" O.C.	1,2,3,4,5,6,7.2,8
SW2	WOOD STRUCTURAL PANEL SHEATHING	490 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 4" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 32" O.C. U.N.O / (2) 16d NAILS @ 6" O.C. / (2) 8d NAILS @ 3" O.C.	1,2,3,4,5,6,7.3,8
SW3	WOOD STRUCTURAL PANEL SHEATHING	630 PLF	8d (0.131" DIA. X 2-1/2") COMMON NAIL @ 3" O.C.	5/8" DIA. X 8" J-BOLT SPACED @ 16" O.C. U.N.O / (2) 16d NAILS @ 4" O.C. / (2) 8D NAILS @ 2" O.C.	1,2,3,4,5,6,7.3,8
SW4	1/2" GYPSUM SHEATHING	175 PLF	0.120" NAIL X 1-3/4" LONG, 7/16" HEAD, DIAMOND POINT, GALVANIZED @ 4" O.C.	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1,8,9
SW5	5/8" GYPSUM WALLBOARD, GYPSUM BASE FOR VENEER PLASTER OR WATER-RESISTANT GYPSUM BACKING BOARD	175 PLF	6d (0.092" DIA. X 1-7/8") COOLER NAIL @ 4" O.C. OR WALLBOARD NAIL (0.0915" X 1-7/8" LONG, 19/64" HEAD) OR 0.120" NAIL X 1- 3/4" LONG, MIN. 3/8" HEAD	5/8" DIA. X 8" SPACED @ 36" O.C. U.N.O. / (2) 16d NAILS AT 12" O.C.	1,2,3,4,5,6,7.1.,8,10

NOTES:
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6. THE SILL FASTENING MUST BE DOUBLED FOR TWO-SIDED SHEARWALLS.
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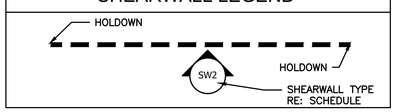
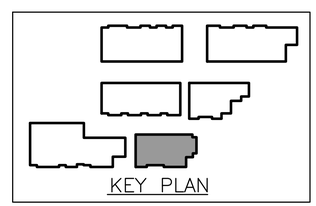
ST3	(3) CS16X60	5115	8d - FILL ALL HOLES	4-2X4	2,3
ST4	(4) CS16X60	6820	8d - FILL ALL HOLES	4X4	1,3

NOTES:
1. FASTEN ST1 AND ST2 2X END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 6" O.C.
2. FASTEN ST3 END MEMBERS TOGETHER WITH (2) ROWS OF 10d (0.120" X 3") NAILS @ 4" O.C.
3. END (WIND) POSTS SHALL ALIGN THROUGHOUT THE HEIGHT OF THE BUILDING WITH HOLDOWNS PLACED ON THE SAME SIDE OF THE HOLDOWN POST THROUGHOUT THE HEIGHT OF THE WALL.

SHEARWALL LEGEND





1 BUILDING #6 - 3RD FLOOR SHEARWALL PLAN

Scale: 1/4" = 1'-0"

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ON
08/02/2019
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TRAIL STREET TOWNHOMES

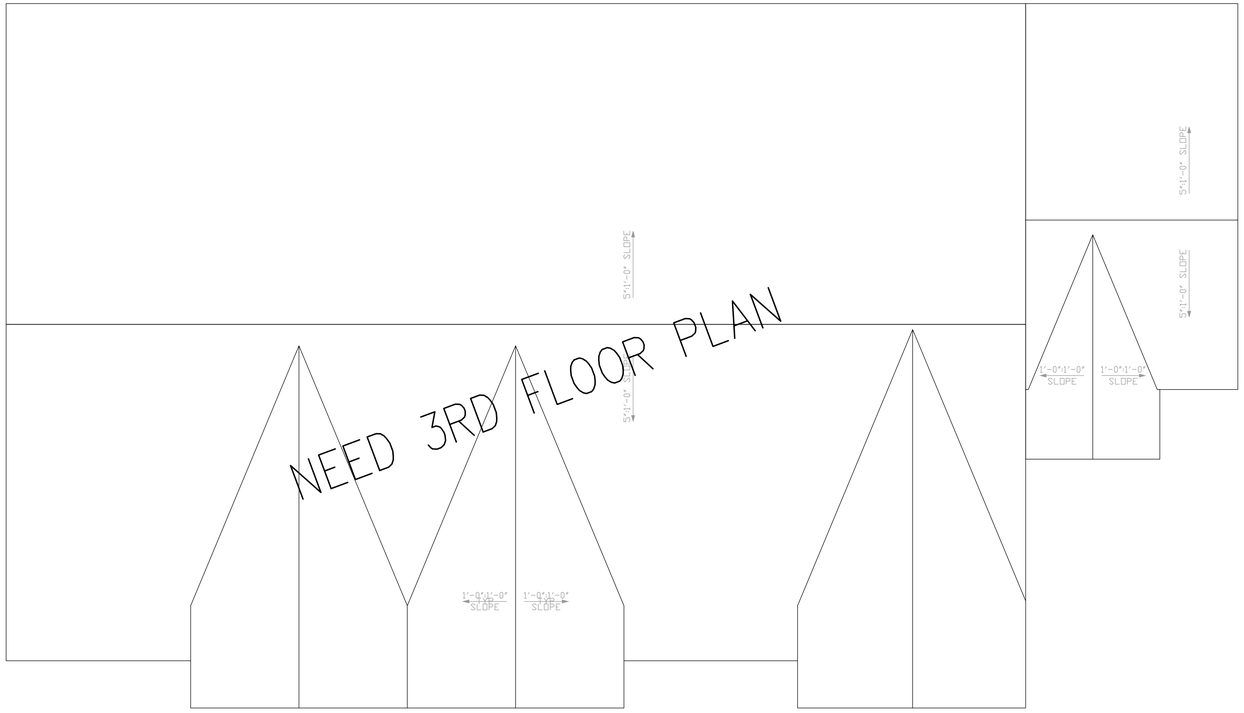
335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

HDRC PROGRESS SET	08/02/2019
REVISION/ISSUE	DATE

Sheet Name:
BUILDING #6 - 3RD FLOOR SHEARWALL PLAN

Sheet No.:
S6-132



ROOF FRAMING NOTES:

1. ROOF FRAMING SHALL CONSIST OF PREFABRICATED ROOF TRUSSES SPACED @ 24" O.C. UNLESS NOTED OTHERWISE (U.N.O.). LOADING CRITERIA BELOW IS TO BE USED TO DESIGN TRUSSES:
   - TOP CHORD LIVE LOAD = 20 PSF
   - TOP CHORD DEAD LOAD = 20 PSF
   - BOTTOM CHORD LIVE LOAD = 10 PSF (UNINHABITED ATTIC WITHOUT STORAGE, ASSUMED NOT TO ACT CONCURRENLTY WITH ANY OTHER LIVE LOAD.)
   - BOTTOM CHORD DEAD LOAD = 5 PSF
   - ADDITIONAL LOADS DUE TO MECHANICAL UNITS, OVERHEAD DOORS, ROOF OVERBUILDS, ETC.
2. COMMON ROOF TRUSS PLACEMENT SHOWN ON THIS PLAN IS APPROXIMATE AND IS ONLY INTENDED TO SHOW TRUSS SPAN DIRECTION, EXTENTS AND BEARING LOCATIONS OF THE COMMON TRUSSES. THE TRUSS DESIGNER SHALL PROVIDE ADEQUATE LAYOUT OF PLACEMENT TO SUPPORT THE ROOF DECKING, PERIMETER, PARAPETS, OR ANY OTHER FEATURES. GIRDER TRUSS PLACEMENT, HOWEVER, SHALL BE ADHERED TO WHERE SHOWN ON PLAN AND ANY DEVIATION BROUGHT TO THE ATTENTION OF THE EOR.
3. DRAG TRUSSES SHALL BE PROVIDED DIRECTLY OVER TOPS OF INTERIOR SHEARWALLS AND SHALL BE DESIGNED FOR A TOTAL LOAD EQUAL TO THE LENGTH OF THE SHEARWALL MULTIPLIED BY THE ALLOWABLE SHEAR VALUE PROVIDED IN THE SHEARWALL SCHEDULE FOR THE WALL TYPE. SEE ROOF FRAMING DETAILS FOR ROOF SHEATHING NAILING REQUIREMENTS AT DRAG TRUSSES.
4. ROOF TRUSSES MAY ONLY BEAR UPON LOAD BEARING TOP PLATES OF WALLS OR BEAMS UNLESS NOTED OTHERWISE ON PLAN, DO NOT SUPPORT ANY CHIMNEY UPON TRUSSES. EXTEND WALLS OF CHIMNEY THROUGH THE TRUSSES TO BEAR UPON WALLS OR BEAMS BELOW.
5. RESULTING UPLIFT LOADS FROM TRUSS ANALYSIS SHALL BE LIMITED TO 600 LBS FOR COMMON TRUSSES, AND 3,500 LBS FOR GIRDER TRUSSES.
6. ALL BEAM AND HEADER MEMBERS SHALL BE CONSTRUCTED OF #2 S.Y.P. MATERIAL WITH ½" OSB/PLYWOOD FILLER MATERIAL TO MATCH SUPPORTING WALL WIDTHS.
7. STRUCTURAL ENGINEERED WOOD BEAMS SHALL BE INSTALLED PER ENGINEER'S PLAN AND THE MANUFACTURER'S RECOMMENDATIONS. MINIMUM SPECIFICATIONS: Fb=2,900psi, Fv=290psi, E=2x10^6psi.
8. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS AND DETAILS. NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPANCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
9. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
10. THIS ROOF LAYOUT IS DESIGNED TO SUPPORT LIGHT ROOFING MATERIAL. PLEASE CONSULT ENGINEER IF ANY OTHER TYPE OF ROOF COVERING IS TO BE USED.

SYMBOL	DESCRIPTION		
RT	ROOF TRUSS	———	FLUSH BEAM
WT	WALL TRUSS	– – – – –	DROP BEAM
	OVER FRAME		
	BEARING WALL		
GT	GIRDER TRUSS		
DT	DRAG TRUSS		
DB	DRAG BRACE		

WOOD BEAM SCHEDULE

BEAM SIZE	SIMPSON HANGER	# OF TRIM STUDS (U.N.O.)
226 (2-2X6)	HH26-2	1
228 (2-2X8)	HU28-2	1
2210 (2-2X10)	HU210-2	2
2212 (2-2X12)	HU212-2	2
326 (3-2X6)	HU26-3	1
328 (3-2X8)	HU28-3	1
3210 (3-2X10)	HU210-3	2
3212 (3-2X12)	HU212-3	2
4212 (4-2X12)	HHUS210-4	2

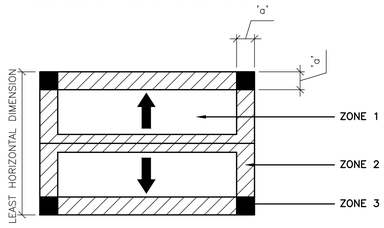
GLULAM BEAM SCHEDULE

B409 (3 1/2 X 9 1/4)	HHUS410	2
B411 (3 1/2 X 11 1/4)	HHUS410	2
B412 (3 1/2 X 11 7/8)	HHUS410	2
B414 (3 1/2 X 14)	HHUS410	3
B416 (3 1/2 X 16)	HGUS412	3
B418 (3 1/2 X 18)	HGUS412	3
B609 (5 1/2 X 9 1/4)	HHUS5.50/10	3
B610 (5 1/2 X 9 1/2")	HHUS5.5/10	3
B611 (5 1/2 X 11 1/4)	HHUS5.50/10	3
B612 (5 1/2 X 11 7/8)	HHUS5.50/10	3
B614 (5 1/2 X 14)	HHUS5.50/10	3
B616 (5 1/2 X 16)	HHUS5.50/10	3
B618 (5 1/2 X 18)	HHUS5.50/10	3
B709 (7 X 9 1/4)	HGUS7.25/10	3
B711 (7 X 11 1/4)	HGLTV411.25-2	3
B714 (7 X 14)	HGLTV414-2	3
B716 (7 X 16)	HGLTV416-2	3
B718 (7 X 18)	HGU7.25-SDS H=18	3

NOTES:
1. USE CONCEALED FLANGE OPTION AT CORNER CONDITIONS.
2. ALL STUD PACKS TO BE (3) 2Xs MIN. U.N.O.
3. STUD PACK DEPTH TO MATCH DEPTH OF WALL.
4. STUD PACKS TO MATCH BEAM WIDTH.

SHEATHING NAILING		
	AT DIAPHRAGM BOUNDARIES	FIELD (INTERMEDIATE SUPPORT MEMBERS)
ZONE 1	8D @ 6" OC	8D @ 6" OC
ZONE 2	8D @ 3" OC	8D @ 3" OC
ZONE 3	8D @ 3" OC	8D @ 3" OC

NOTES:
1. ALL NAILS FOR ROOF SHEATHING SHALL BE RING SHANK NAILS.
2. SEE ROOF FRAMING DETAILS FOR ADDITIONAL FASTENING REQUIREMENTS UNRELATED TO DECK UPLIFT.

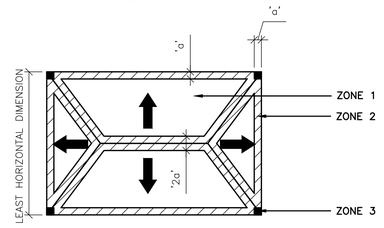


'a' = 10% OF LEAST HORIZONTAL DIMENSION OR 0.4H, WHICHEVER IS SMALLER , BUT NOT LESS THAN 4% OF LEAST HORIZONTAL DIMENSION OR 3FT.

ROOF PRESSURE ZONES (GABLE ROOF)

SHEATHING NAILING		
	AT DIAPHRAGM BOUNDARIES	FIELD (INTERMEDIATE SUPPORT MEMBERS)
ZONE 1	8D @ 6" OC	8D @ 6" OC
ZONE 2	8D @ 3" OC	8D @ 3" OC
ZONE 3	8D @ 3" OC	8D @ 3" OC

NOTES:
1. ALL NAILS FOR ROOF SHEATHING SHALL BE RING SHANK NAILS.
2. SEE ROOF FRAMING DETAILS FOR ADDITIONAL FASTENING REQUIREMENTS UNRELATED TO DECK UPLIFT.



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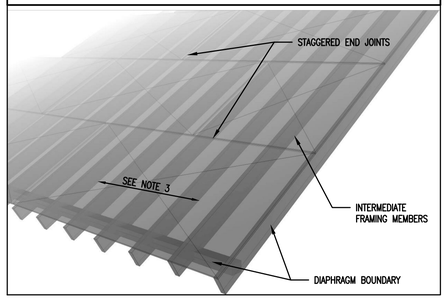
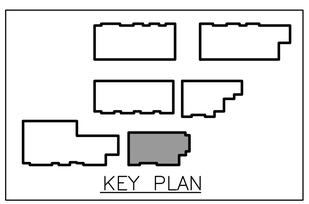
ROOF PRESSURE ZONES (HIP ROOF)

ROOF SHEATHING NOTES:

1. ROOF DECKING SHALL BE 1/2" NOMINAL EXPOSURE 1 (CDX) OR OSB APA RATED SHEATHING (24/16).
2. FASTENING SHALL BE PER ROOF PRESSURE ZONE DIAGRAM.
3. PANELS SHALL SPAN 3 OR MORE FLOOR JOISTS WITH THE LONG DIMENSION (FACE GRAIN) PERPENDICULAR TO THE FRAMING. STAGGER END JOINT OF PANELS. PROVIDE A 1/8" GAP AT ALL PANEL EDGES UNLESS RECOMMENDED OTHERWISE BY THE PANEL MFR.
4. ROOF SHEATHING PANELS ARE UNBLOCKED UNLESS NOTED OTHERWISE.
5. WHERE BLOCKING IS NOT SPECIFICALLY REQUIRED FOR ROOF SHEATHING, PLY CLIPS OR TONGUE AND GROOVE SHEATHING SHALL BE USED.





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TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

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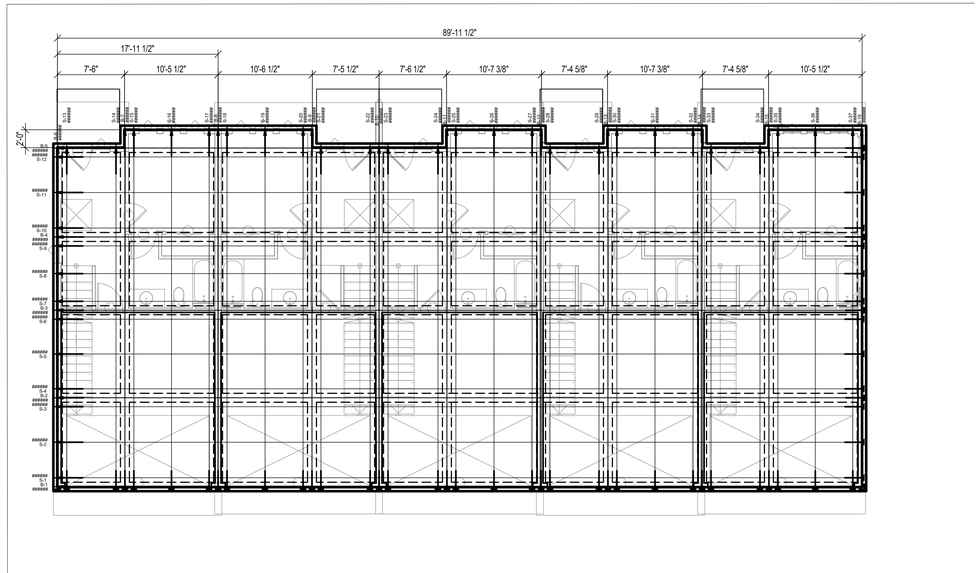
REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
BUILDING #6 - ROOF FRAMING PLAN

Sheet No.:
S6-140

1 BUILDING #6 - ROOF FRAMING PLAN

Scale: 1/4" = 1'-0"



1 BUILDING 1 FOUNDATION PLAN

Scale: 1/8" = 1'-0"

FOUNDATION NOTES

THIS SLAB TYPE IS BASED ON PTI DC10.5-12 (STANDARD REQUIREMENTS FOR DESIGN AND ANALYSIS OF SHALLOW POST-TENSIONED CONCRETE FOUNDATIONS ON EXPANSIVE SOIL)

SLAB TYPE:	BRAB TYPE I, BRAB TYPE II, BRAB TYPE III, BRAB TYPE IV	
DESCRIPTION:	UNREINFORCED, LIGHTLY REINFORCED AGAINST SHRINKAGE AND TEMPERATURE CRACKING, REINFORCED AND STIFFENED, STRUCTURAL (NOT DIRECTLY SUPPORTED ON THE GROUND)	
SLAB THICKNESS:	4 INCHES	
NOTES ON EXPANSIVE SOILS:		
THE DESIGN OF FOUNDATIONS SUPPORTED ON EXPANSIVE OR COMPRESSIBLE SOILS INCLUDES CONSIDERATION OF VARIOUS SITE CONDITIONS; THEREFORE, IT IS NECESSARY FOR OTHER MEMBERS OF THE PROJECT'S DESIGN AND CONSTRUCTION TEAM TO UNDERSTAND THE ASSUMPTIONS THAT HAVE BEEN MADE.		
THE FOLLOWING DESIGN CRITERIA IS CONTAINED IN THE PROJECT GEOTECHNICAL REPORT BY ??????, REPORT #?????, DATED ?????. REFER TO GEOTECHNICAL REPORT SOIL PREPARATION REQUIREMENTS FOR THIS DESIGN.		
SITE PREPARATION:	---	
EFFECTIVE PI:	---	
BEARING CAPACITY:	--- PSF (TOTAL DEAD PLUS LIVE LOAD)	
BEARING DEPTH:	-- FEET BELOW GRADE	
CENTER LIFT	Em = -.- FT	Ym = -.-- INCHES
EDGE LIFT	Em = -.- FT	Ym = -.-- INCHES

BEAM SCHEDULE

GRADE BEAM TYPE	DESCRIPTION	WIDTH	DEPTH	REINFORCEMENT
	POST TENSIONED BEAM (TYP. U.N.O.)	--"	--"	- TENDON BOTTOM
RC	REBAR BEAM	--"	--"	2-#5 BOTTOM
	POST TENSIONED DEEPENED BEAM	--"	--"	- TENDON BOTTOM
RC	REBAR DEEPENED BEAM	--"	--"	2-#5 BOTTOM
	THICKENED SLAB	12"	12"	2-#5 BOTTOM

DESIGN ASSUMPTIONS:
1. CONCRETE GRADE BEAMS SHALL EXTEND ABOVE THE FINISHED GRADE ADJACENT TO THE FOUNDATION AT ALL POINTS A MINIMUM OF 6 INCHES.
2. SITE SLOPE SHALL CAUSE WATER TO FLOW AWAY FROM THE BUILDING FOUNDATION FOR A MINIMUM DISTANCE OF 10 FEET AT A MINIMUM SLOPE OF 5%
3. NO TREES OR OTHER VEGETATION OVER SIX FEET IN HEIGHT SHALL BE PLANTED WITHIN 20 FEET OF BUILDING PERIMETER UNLESS SPECIALLY ACCOUNTED FOR IN THE DESIGN OF THE FOUNDATION
4. NO SIGNIFICANT DISCHARGE OF WATER SHALL OCCUR ADJACENT TO THE FOUNDATION. THIS MAY INCLUDE ROOF DRAINAGE AND AIR CONDITIONING CONDENSATE, BOTH OF WHICH CAN BE DIRECTED TO A SUBGRADE DRAINAGE SYSTEM.
5. THE BUILDER, CONTRACTOR, OR ENGINEER HAS PROVIDED THE OWNER WITH INFORMATION RELATED TO SLAB-ON-GROUND FOUNDATION LONG-TERM MAINTENANCE RECOMMENDATIONS.
6. THE FOUNDATION IS NOT CONSTRUCTED OVER AN AREA COVERING PARTIAL CUT AND/OR PARTIAL FILL OF EXPANSIVE OR COMPRESSIBLE SOILS (TRANSITION LOTS). SPECIAL CONSIDERATION SHALL BE GIVEN FOR ADDITIONAL DIFFERENTIAL MOVEMENT IN THE DESIGN OF FOUNDATIONS CONSTRUCTED ON THESE CONDITIONS.
7. UNLESS OTHERWISE NOTED ON THE PLANS: STOOPS, ELECTRICAL/MECHANICAL PADS, PORCHES AND PATIOS, OR OTHER FOUNDATION EXTENSIONS OUTSIDE OF THE MAIN FOUNDATION ARE DESIGNED AND CAST INDEPENDENTLY OF THE FOUNDATION.

COMPATIBILITY NOTES:
1. SHALLOW FOUNDATION SYSTEMS CONSTRUCTED ON ACTIVE SOILS ARE EXPECTED TO DEFORM. THE FOUNDATION FLEXIBILITY DISTRIBUTES LOCALIZED SOIL MOVEMENTS TO A MORE UNIFORM SLAB SHAPE. IT IS IMPORTANT THAT OTHER CONSULTANTS AND SUPPLIERS CONSIDER COMPATIBLE DESIGNS OR PRODUCTS FOR FLEXIBLE FOUNDATION SYSTEM. DEFORMATION COMPATIBILITY SHOULD BE ADDRESSED FOR NON-FLEXIBLE EXTERIOR FINISHES, BRITTLE FLOOR FINISHES, AND AREAS THAT SLOPE TO DRAIN OR WHERE UTILITY CONNECTIONS MAY BE LOCATED.
2. RESTRAINT-TO-SHORTENING CRACKS ARE NOT CONSIDERED TO BE A STRUCTURAL PROBLEM. EFFORTS HAVE BEEN MADE TO LOCATE REINFORCING STEEL, CONTROL JOINTS, CONSTRUCTION JOINTS, OR KEYWAYS IN SUCH AREAS SUBJECT TO SUCH CRACKING.

DIMENSIONAL TOLERANCES:

1.	GRADE BEAM DEPTH:	+/-1 INCH
2.	GRADE BEAM WIDTH:	+/-1 INCH
3.	SLAB THICKNESS:	-1/2 INCH, +1 INCH

PLACEMENT TOLERANCES:

1.	CLEAR COVER:	ZERO TOLERANCE
2.	SLAB TENDONS/VERTICAL:	WITHIN MIDDLE 1/3 OF SLAB
3.	SLAB TENDONS/HORIZONTAL:	+/-1 FOOT; 1:6 DEFLECTION
4.	BEAM TENDON ANCHORS/VERTICAL:	+/-1 INCH
5.	BEAM TENDON ANCHORS LOW POINT:	-1 INCH, +3 IN.
6.	BEAM TENDON HORIZONTAL:	+/-2 INCH FROM BEAM CENTERLINE
7.	SLAB REBAR/VERTICAL:	+/-3/4 INCH
8.	SLAB REBAR/HORIZONTAL:	+/-3 INCH

SLAB LEVELNESS:
1. SLAB LEVELNESS TOLERANCES SHOULD CONFORM TO ACI 117R-90 SECTION 4.5.6 WITH A MINIMUM LOCAL FL NUMBER OF 10. FOR TYPICAL RESIDENTIAL CONSTRUCTION ACI 117 TOLERANCES WOULD PERMIT A MAXIMUM DIFFERENCE IN ELEVATION OF 1.25 INCHES BETWEEN ANY TWO POINTS ON THE SLAB SURFACE 10 FEET APART. IT IS ADVISABLE TO RECORD SLAB ELEVATION MEASUREMENTS ON NEWLY CONSTRUCTED SLABS.

ARCHITECT/ENGINEER COORDINATION:
1. WHERE FEATURES SUCH AS SLAB DROPS, BLOCKOUTS, RECESSES, SLOPES, DRAINS AND DIMENSIONS ARE PROVIDED ON THESE DRAWINGS, THEY SHALL BE VERIFIED ON THE ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION. IF ANY SUCH INFORMATION IS MISSING OR A DISCREPANCY OCCURS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER TO RESOLVE.

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335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

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	REVISION/ISSUE	DATE

Sheet Name:

BUILDING 1 FOUNDATION PLAN

Sheet No.:

S-110

NEED ELEVATIONS PLAN

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	HDRC PROGRESS SET	08/02/2019

Sheet Name:
ELEVATIONS VIEWS

Sheet No.:
S-210

NEED ELEVATIONS PLAN

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ELEVATIONS VIEWS

Sheet No.:
S-211

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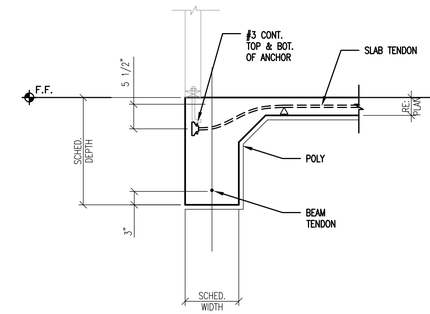
	HDRC PROGRESS SET	08/02/2019

Sheet Name:

SECTIONS

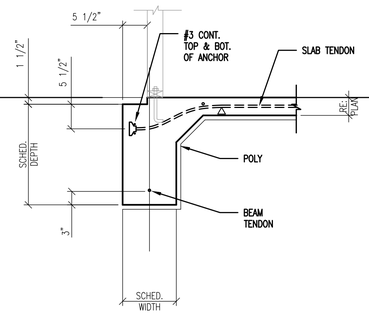
Sheet No.:

S-300



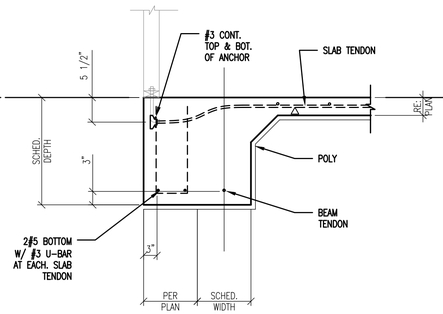
1 EXTERIOR GRADE BEAM

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



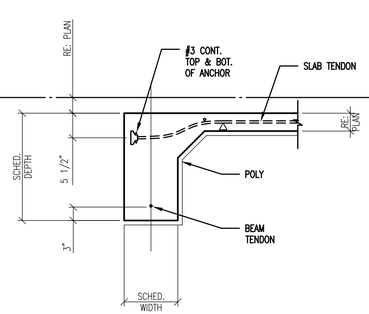
2 EXTERIOR GRADE BEAM W/ BRICK LEDGE

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



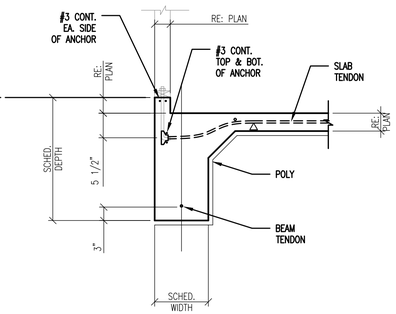
3 WIDENED EXTERIOR GRADE BEAM

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



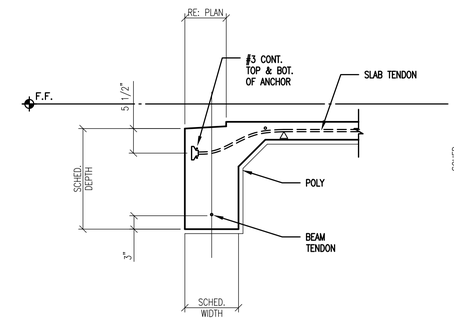
4 EXTERIOR GRADE BEAM AT DROP

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



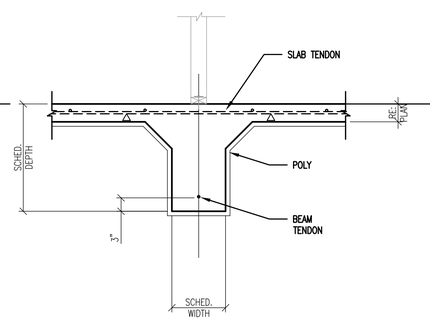
5 EXTERIOR GRADE BEAM AT STEM WALL

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



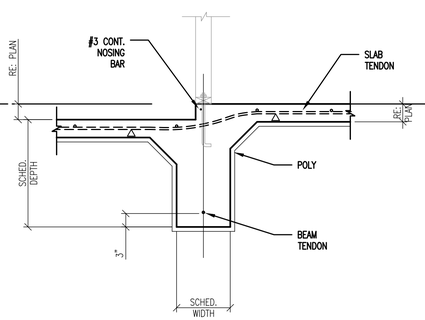
6 EXTERIOR GRADE BEAM AT GARAGE DOOR

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



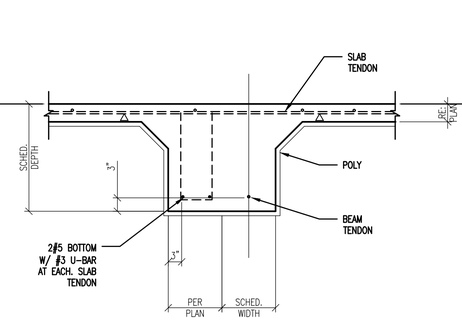
7 INTERIOR GRADE BEAM

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



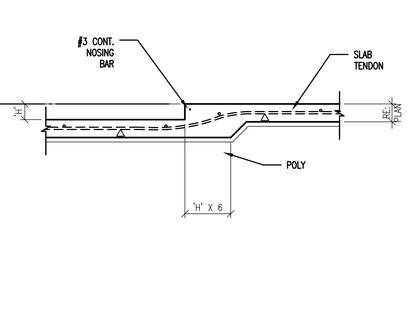
8 INTERIOR GRADE BEAM AT DROP

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



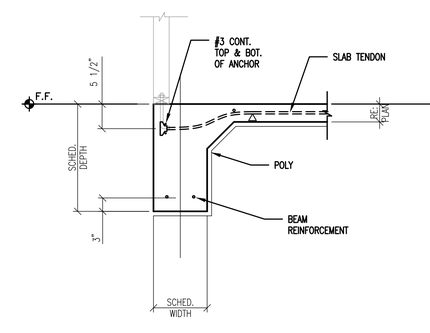
9 WIDENED INTERIOR GRADE BEAM

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



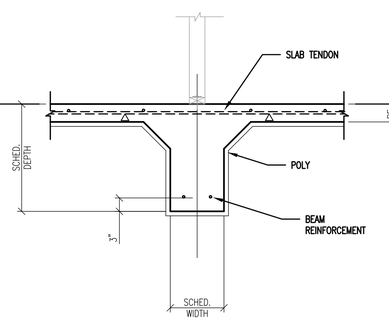
10 INTERIOR SLAB DROP

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



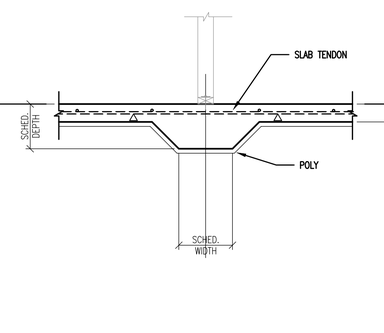
11 EXTERIOR RC GRADE BEAM

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



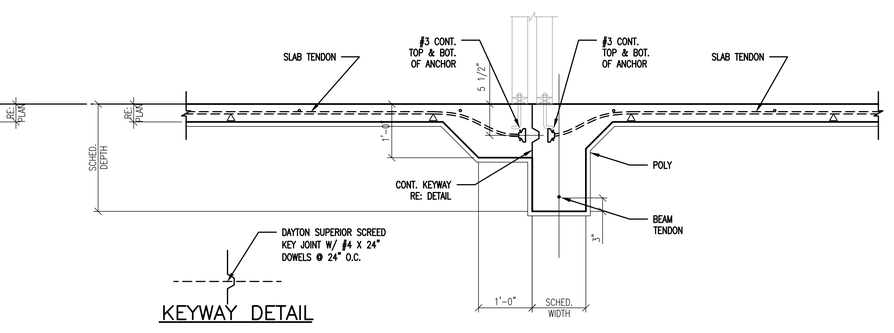
12 INTERIOR RC GRADE BEAM

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



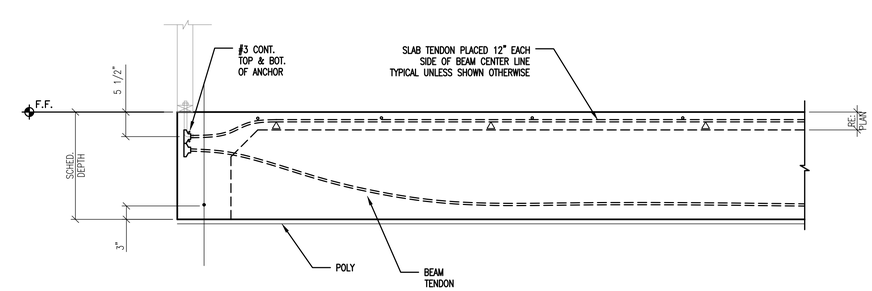
13 INTERIOR TS GRADE BEAM

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



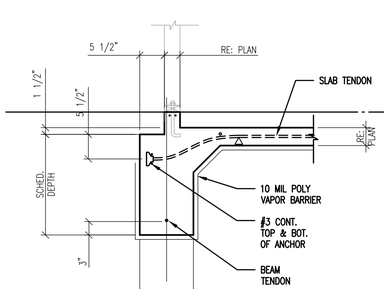
14 CONTRACTION JOINT

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



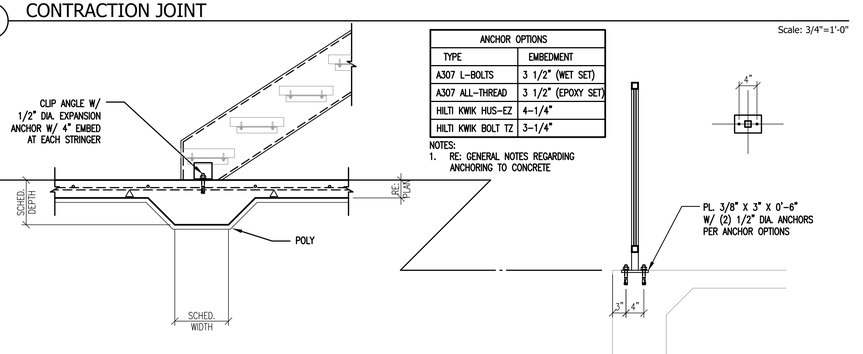
15 DRAPED TENDON DETAIL

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



16 EXT. GRADE BEAM W/ BRICK LEDGE & STEM

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



17 INTERIOR THICKENED SLAB AT STAIRS

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

18 GUARD RAIL POST ATTACHMENT DETAIL

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

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ON
08/02/2019
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TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

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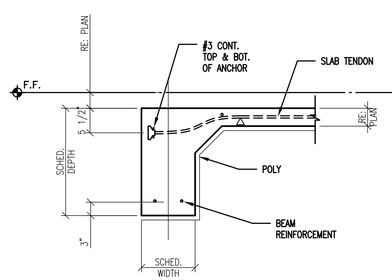
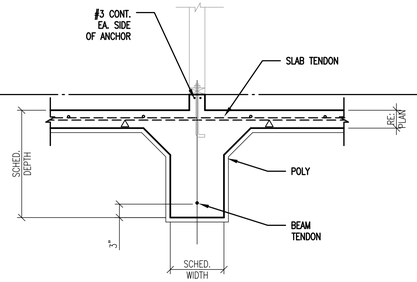
Sheet Name:
TYPICAL FOUNDATION DETAILS

Sheet No.:
S-510



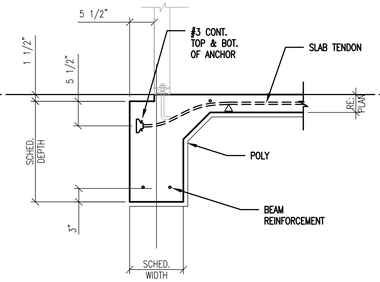
1 EXTERIOR RC GRADE BEAM AT DROP

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



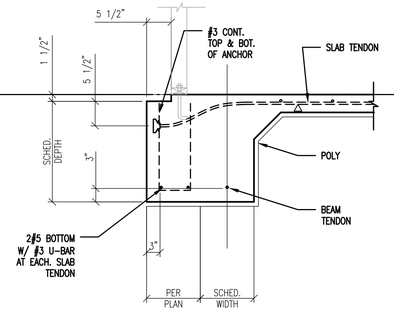
2 INTERIOR GRADE BEAM AT STEM WALL

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



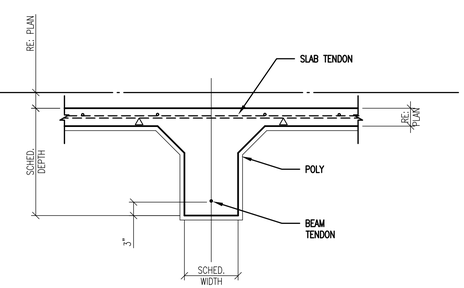
3 EXTERIOR RC GRADE BEAM W/ BRICK LEDGE

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



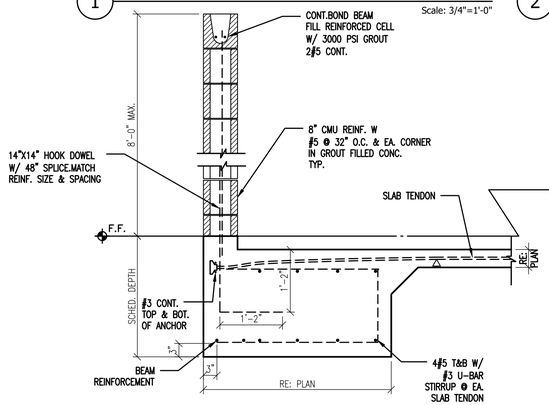
4 WIDENED EXT. GRADE BEAM W/ BRICK LEDGE

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



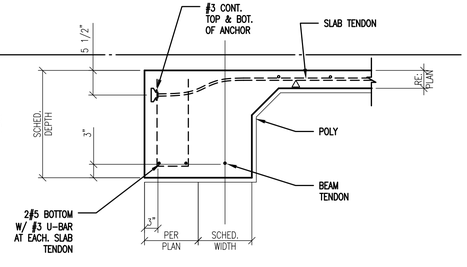
5 DETAIL

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



6 DETAIL AT CMU WALL

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



7 WIDENED EXTERIOR GRADE BEAM AT DROP

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

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335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

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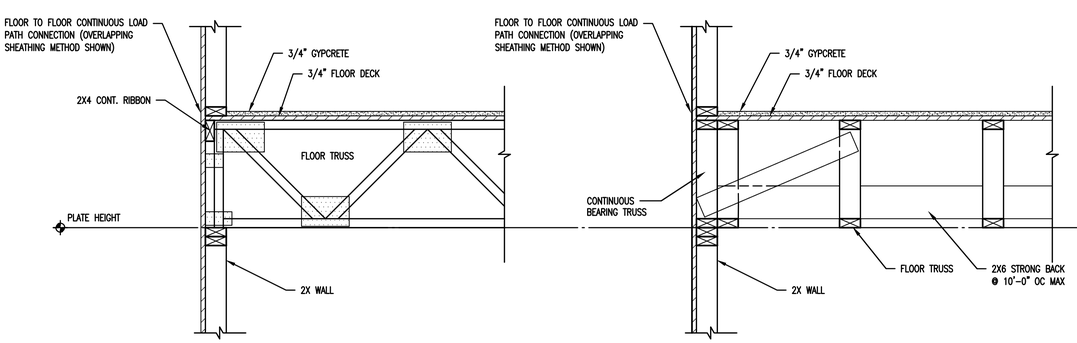
NON-TYPICAL FOUNDATION DETAILS

Sheet No.:

S-511

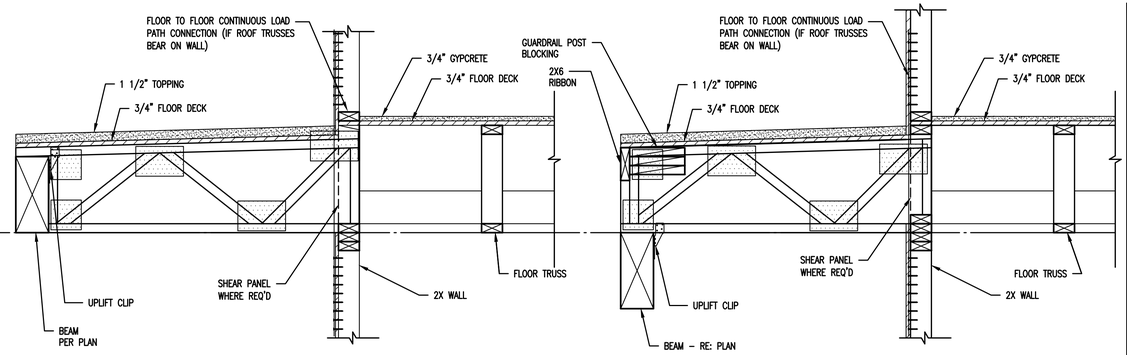


1 EXTERIOR WALL DETAIL AT TRUSSES PERP.

Scale: 1"=1'-0"

2 EXTERIOR WALL DETAIL AT TRUSSES PARALLEL

Scale: 1"=1'-0"

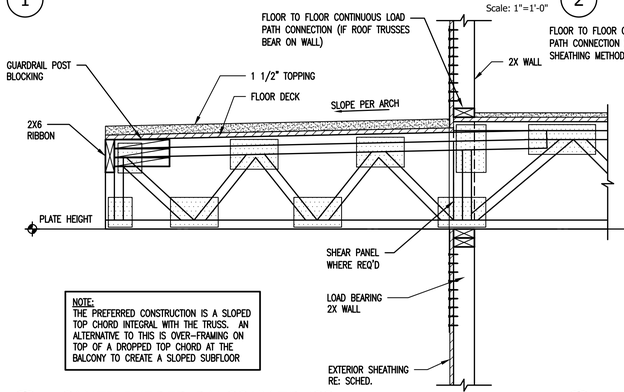


3 BALCONY TRUSS WITH FLUSH BEAM SUPPORT

Scale: 1"=1'-0"

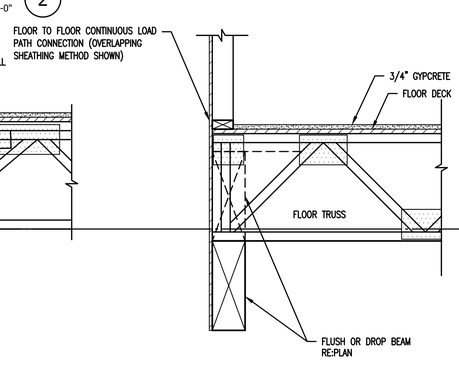
4 BALCONY WITH DROP BEAM SUPPORT

Scale: 1"=1'-0"



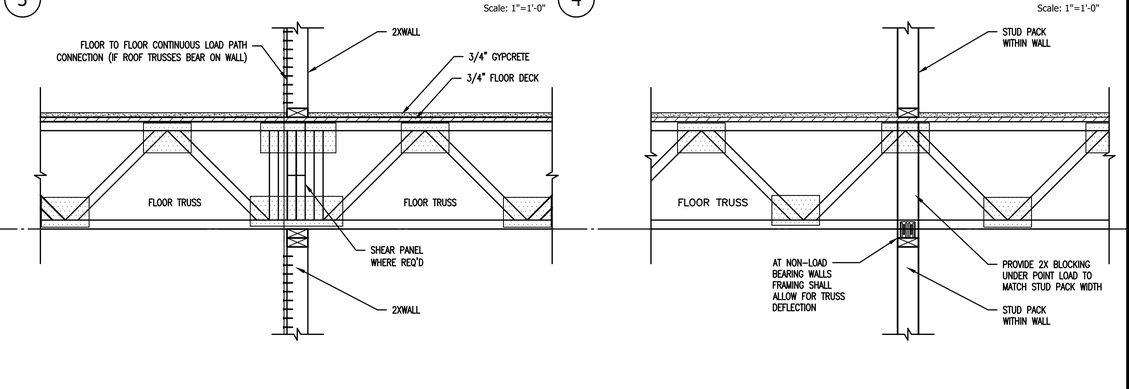
5 CANTILEVERED BALCONY TRUSS

Scale: 1"=1'-0"



6 EXTERIOR WALL DETAIL AT BEAM

Scale: 1"=1'-0"

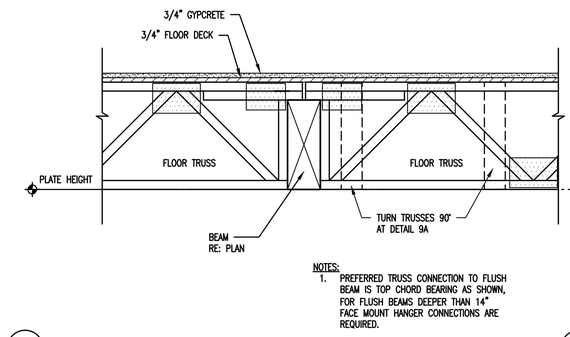


7 INTERIOR LOAD BEARING WALL WITH FLOOR PERPENDICULAR

Scale: 1"=1'-0"

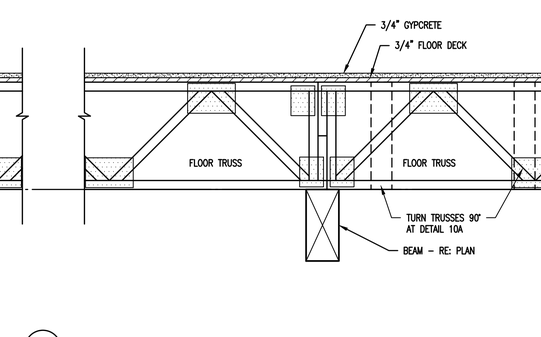
8 LOAD TRANSFER DETAIL AT POINT LOAD

Scale: 1"=1'-0"



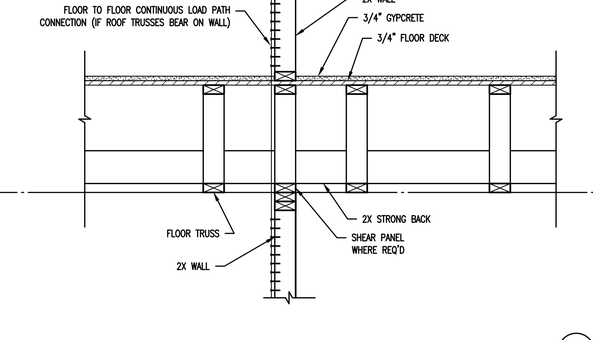
9
9A TOP CHORD BEARING TRUSSES AT FLUSH BEAM

Scale: 1"=1'-0"



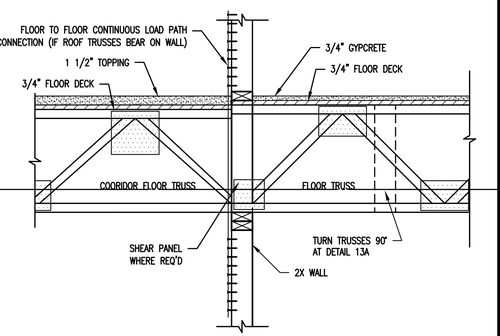
10A
10 BOTTOM CHORD BEARING TRUSSES AT DROP BEAM

Scale: 1"=1'-0"



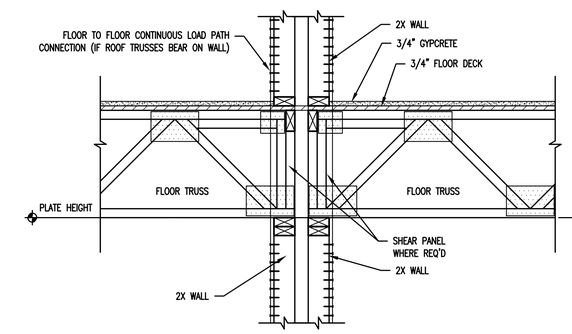
11 INTERIOR LOAD BEARING WALL WITH FLOOR PARALLEL

Scale: 1"=1'-0"



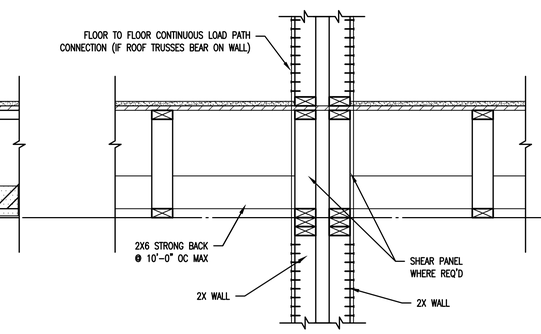
12
12A DETAIL AT CORRIDOR

Scale: 1"=1'-0"



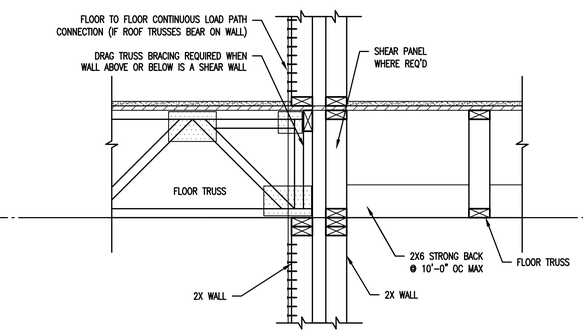
13 DEMISING WALL DETAIL (BOTH SIDES FLOOR BEARING)

Scale: 1"=1'-0"



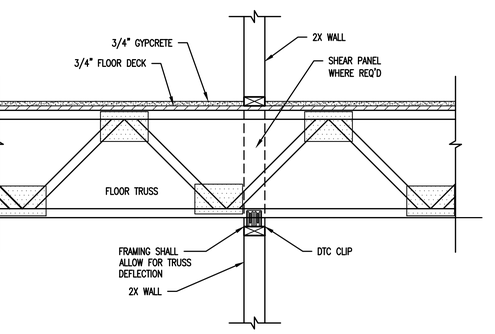
14 DEMISING WALL DETAIL (NEITHER SIDE FLOOR BEARING)

Scale: 1"=1'-0"



15 DEMISING WALL DETAIL (ONE SIDE FLOOR BEARING)

Scale: 1"=1'-0"



16 INTERIOR NON-LOAD BEARING WALL

Scale: 1"=1'-0"

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TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

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Sheet Name:
TYPICAL FLOOR FRAMING DETAILS

Sheet No.:
S-520

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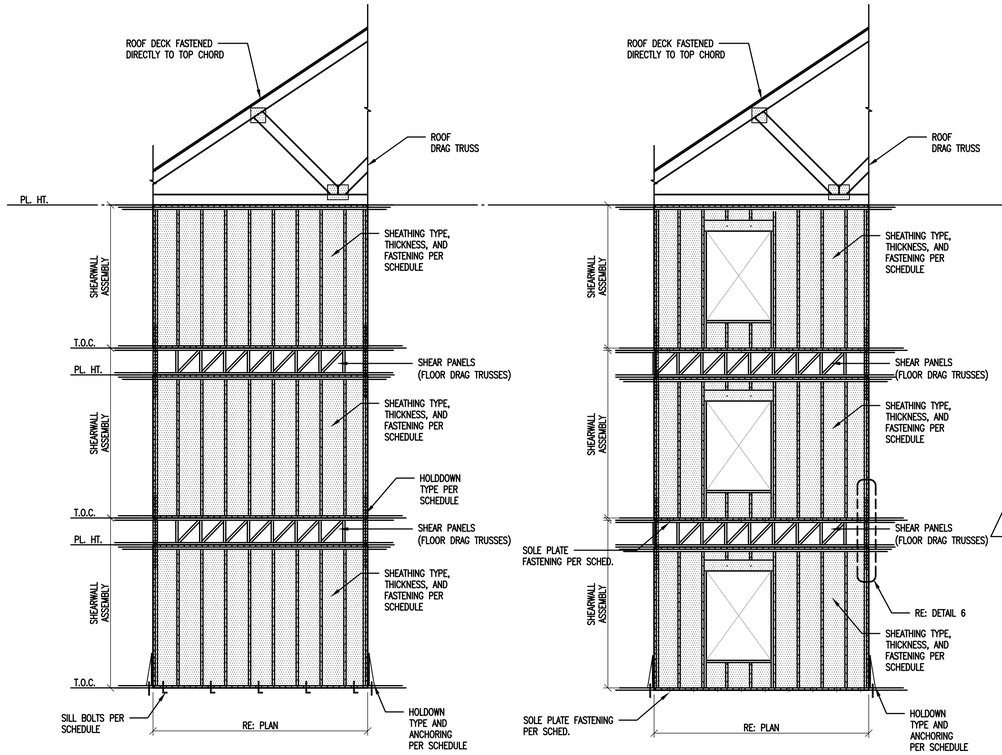
Sheet Name:

NON-TYPICAL FLOOR FRAMING DETAILS

Sheet No.:

S-521

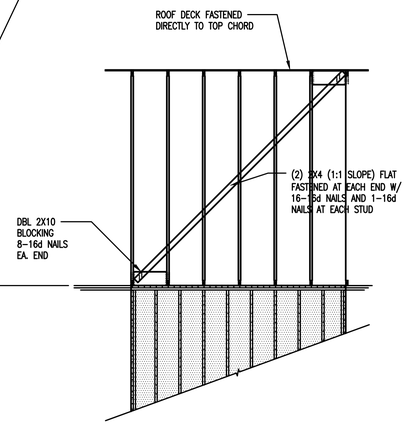


1 SHEARWALL

Scale: 1/4"=1'-0"

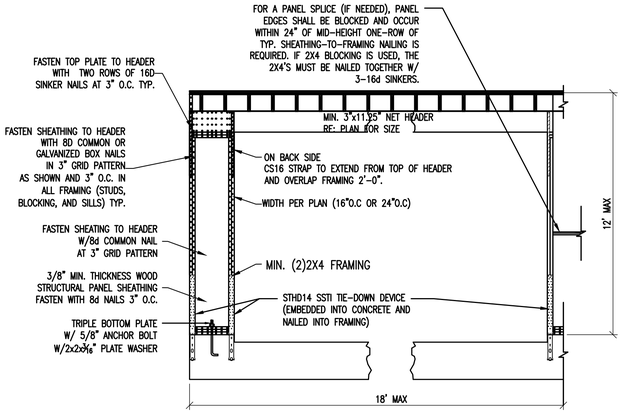
2 SHEARWALL WITH OPENINGS

Scale: 1/4"=1'-0"

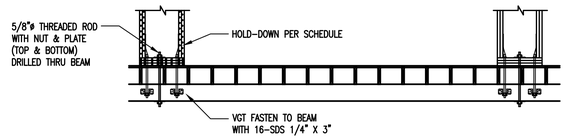


3 DRAG LOAD ROOF TRUSS BRACING (2,000 LBS)

Scale: 1/4"=1'-0"

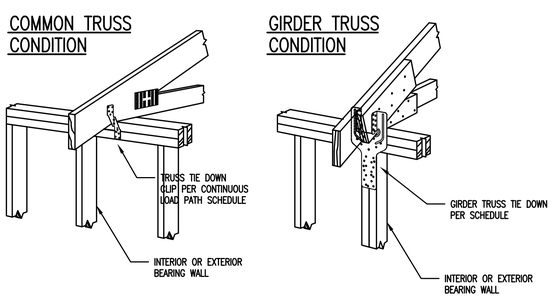


CONDITION AT CONCRETE FOUNDATION



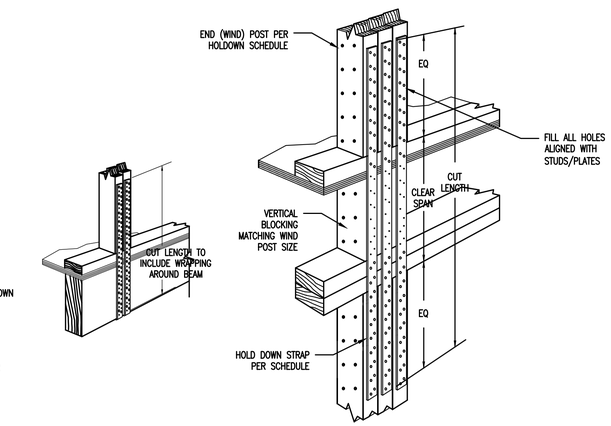
CONDITION AT WOOD FOUNDATION

PORTAL ASD ALLOWABLE DESIGN VALUES		
MINIMUM WIDTH (INCHES)	MAXIMUM HEIGHT (FEET)	SHEAR (POUNDS)
16	8	1,000
	10	600
24	8	1,700
	10	1,000



4 ROOF TRUSS CLIP/TIE DOWN DETAIL

Scale: 1"=1'-0"



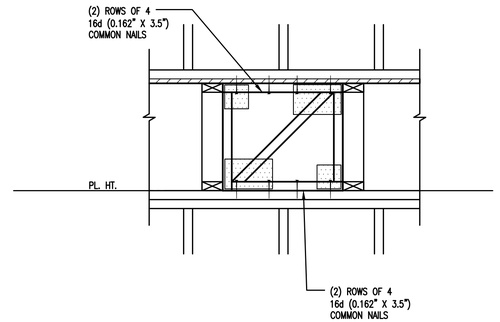
5 SHEARWALL END POST TIE DOWN DETAIL AT FLOOR

Scale: 1"=1'-0"

NUMBER OF DRAG BRACES (DB) PER LEGNTH OF SHEARWALL								
TYPE	1 DB	2 DB	3 DB	4 DB	5 DB	6 DB	7 DB	8 DB
SW1 (335 PLF)	6'-0"	12'-0"	18'-0"	24'-0"	30'-0"	36'-0"	42'-0"	48'-0"
SW2 (490 PLF)	4'-0"	8'-0"	12'-0"	16'-0"	20'-0"	24'-0"	28'-0"	32'-0"
SW3 (630 PLF)	3'-0"	6'-0"	9'-0"	12'-0"	15'-0"	18'-0"	21'-0"	24'-0"
SW4 (175 PLF)	12'-0"	24'-0"	36'-0"	48'-0"	60'-0"	72'-0"	84'-0"	96'-0"
SW5 (175 PLF)	12'-0"	24'-0"	36'-0"	48'-0"	60'-0"	72'-0"	84'-0"	96'-0"

6 DRAG LOAD TRUSS BRACE COUNT

Scale: 1/4"=1'-0"



7 FLOOR DRAG TRUSS (1,000 LBS SHEAR PANEL)

Scale: 1"=1'-0"

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Christopher P. Hillman, P.E.

LICENSED ENGINEER #

93952

ON

08/02/2019

FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

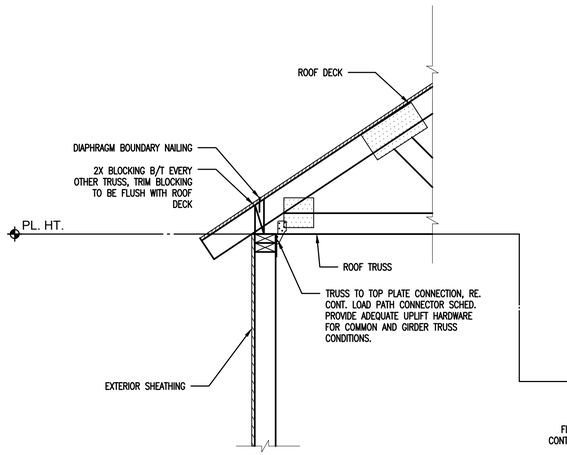
	REVISION/ISSUE	DATE
	HDRC PROGRESS SET	08/02/2019

Sheet Name:

NON - TYPICAL BRACING DETAILS

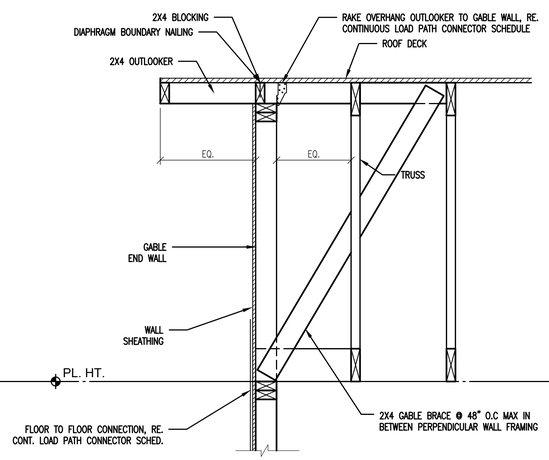
Sheet No.:

S-531



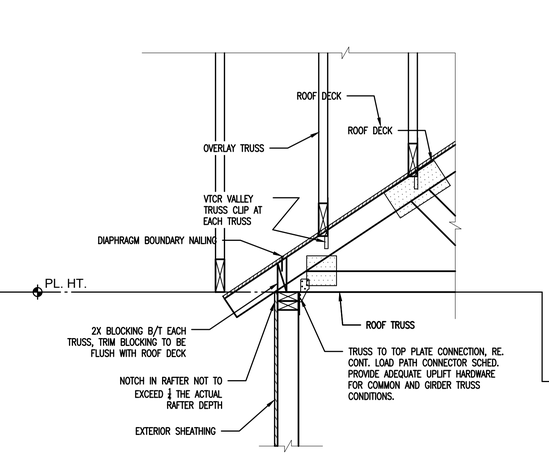
1 TYPICAL EXTERIOR ROOF TRUSS BEARING DETAIL

Scale: 1"=1'-0"



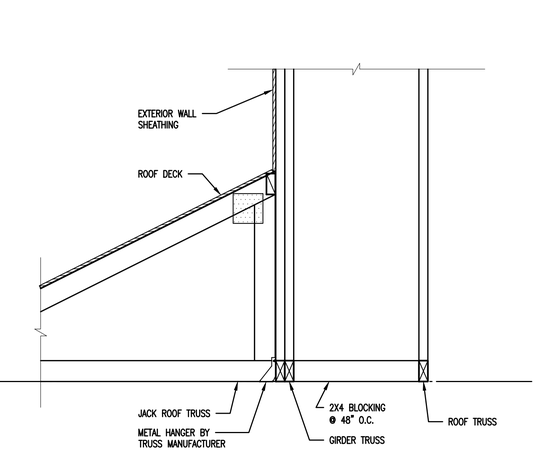
2 GABLE END ROOF TRUSS DETAIL

Scale: 1"=1'-0"



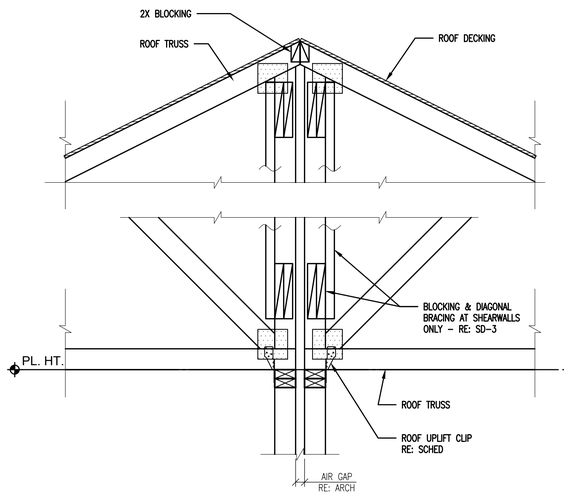
3 OVERLAY FRAMING DETAIL

Scale: 1"=1'-0"



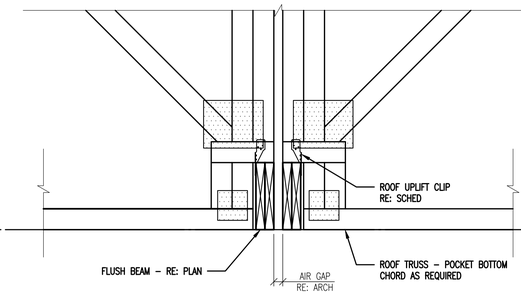
4 TYPICAL JACK TRUSS TO GIRDER TRUSS

Scale: 1"=1'-0"



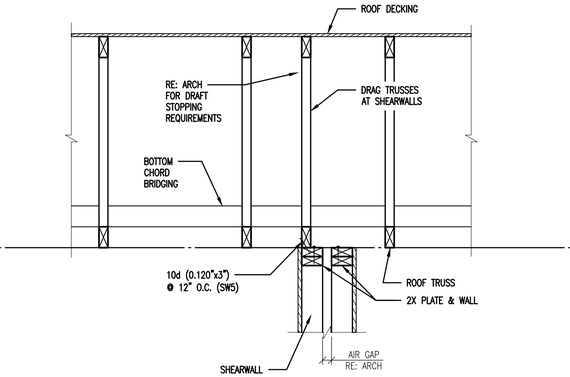
5 PARTY WALL TRUSS BEARING DETAIL

Scale: 1"=1'-0"



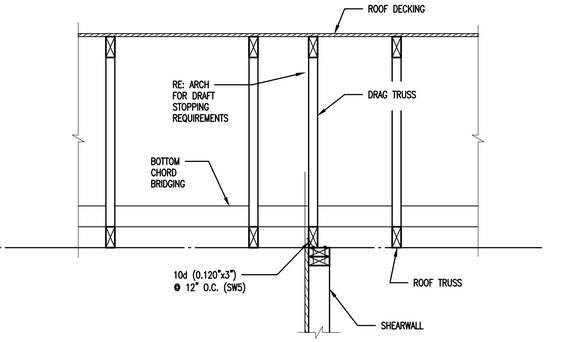
6 FLUSH BEAM DETAIL

Scale: 1"=1'-0"



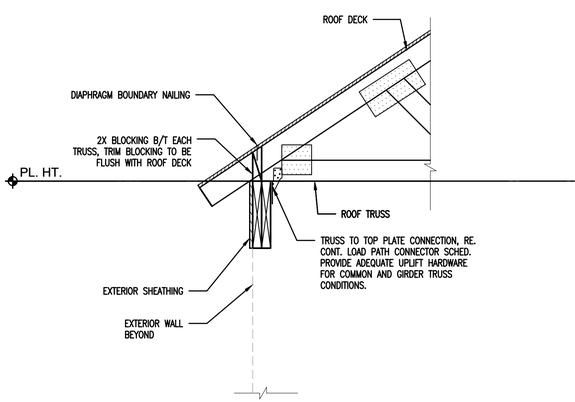
7 TYPICAL DRAG TRUSS CONNECTION DETAIL AT PARTY WALL

Scale: 1"=1'-0"



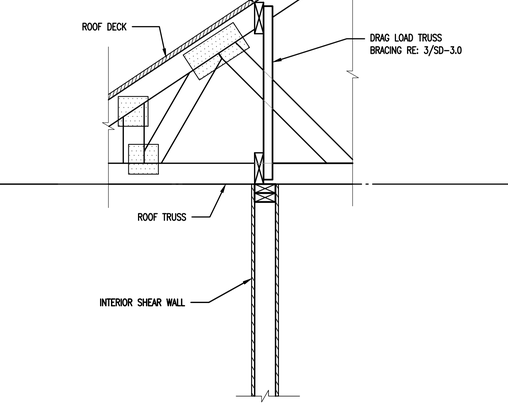
8 TYPICAL DRAG TRUSS CONNECTION DETAIL AT INTERIOR WALL

Scale: 1"=1'-0"



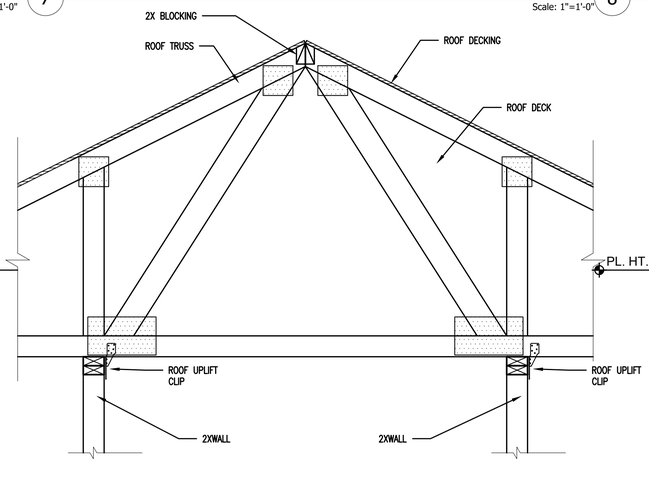
9 DROP BEAM AT ROOF DETAIL

Scale: 1"=1'-0"



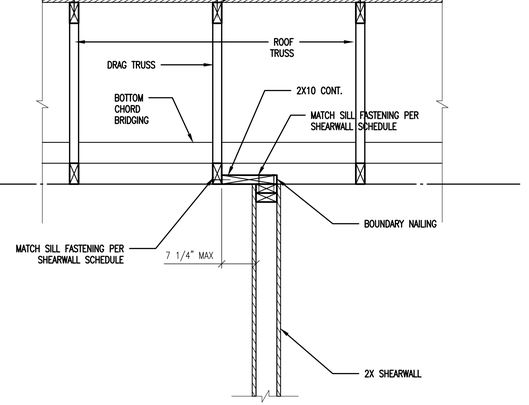
10 TYPICAL DRAG LOAD BRACING DETAIL

Scale: 1"=1'-0"



11 TYPICAL DETAIL AT CORRIDOR

Scale: 1"=1'-0"



12 TYPICAL OFFSET DRAG TRUSS CONNECTION DETAIL

Scale: 1"=1'-0"

C|P|H
Structural Engineering, Inc.
38027 Fm 1774, Suite A
Magnolia, Texas 77355
Texas Registered Eng Firm #14038

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Principal Engineer:
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Direct: (832) 865-1429
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A member of Building Code Compliance Association #E00001

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TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
TYPICAL ROOF FRAMING DETAILS

Sheet No.:
S-540

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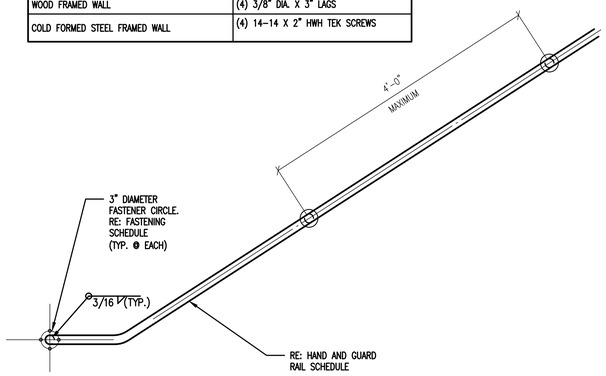
Sheet Name:

NON - TYPICAL ROOF FRAMING DETAILS

Sheet No.:

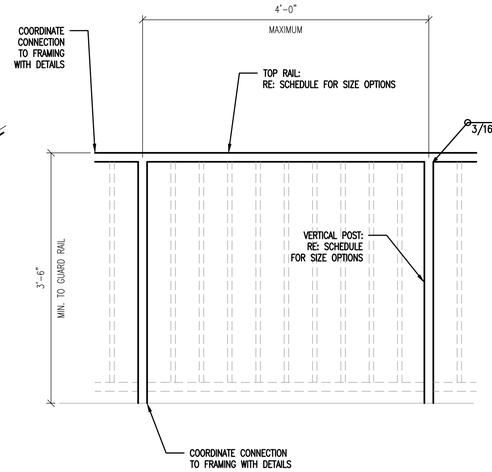
S-541

HAND RAIL CONNECTION SCHEDULE	
TYPE	CONNECTION
CONCRETE/MASONRY WALL	(4) 3/8" DIA. X 3" EXPANSION ANCHORS
WOOD FRAMED WALL	(4) 3/8" DIA. X 3" LAGS
COLD FORMED STEEL FRAMED WALL	(4) 14-14 X 2" HWH TEK SCREWS



1 TYPICAL WALL MOUNTED HANDRAIL

Scale: 1"=1'-0"



2 TYPICAL BALCONY GUARD RAIL

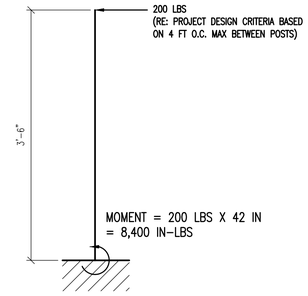
Scale: 1"=1'-0"

HAND AND GUARD RAIL SCHEDULE				
SIZE OPTIONS	HAND RAIL	TOP RAIL	VERTICAL POST	S (IN^3)
1	1-1/2" SCHED. 40 STEEL PIPE (36 KSI)	1-1/2" SCHED. 40 STEEL PIPE (36 KSI)	1-1/2" SCHED. 40 STEEL PIPE (36 KSI)	0.413
2	HSS 1X1X14GA (46 KSI)	HSS 1X1X14GA (46 KSI)	HSS 1-1/2 X 1-1/2 X 11GA (46 KSI)	0.282

1. CALCULATIONS ARE BASED ON DETERMINATION OF DEMAND SECTION MODULUS (S = M / 0.66 x fy) FOR STRENGTH REQUIREMENTS ONLY. DEFLECTIONS ARE NOT CONSIDERED.

MATERIAL STRENGTH	VERTICAL POST DEMAND SECTION MODULUS
36 KSI	0.354 IN^3
46 KSI	0.277 IN^3

2. INTERMEDIATE RAILS, BALUSTERS, PANEL FILLERS, ETC. SHALL BE SUBMITTED FOR REVIEW AND SHALL BE CAPABLE OF RESISTING A CONCENTRATED LOAD OF 50 LBS.
3. REFER TO ARCHITECTURAL DRAWINGS WHERE HANDRAILS ARE REQUIRED.
4. FOR HANDRAIL GRASPABILITY, A MINIMUM ROUND DIAMETER OF 1-1/4", AND FOR NON-ROUND, A PERIMETER BETWEEN 4"-6-1/4", WITH A MAXIMUM CROSS-SECTIONAL DIMENSION OF 2-1/4" IS REQUIRED PER IBC.
5. ANY SIZE OR SHAPE DISCREPANCIES BETWEEN THIS SCHEDULE AND THE ARCHITECTURAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO FABRICATION.

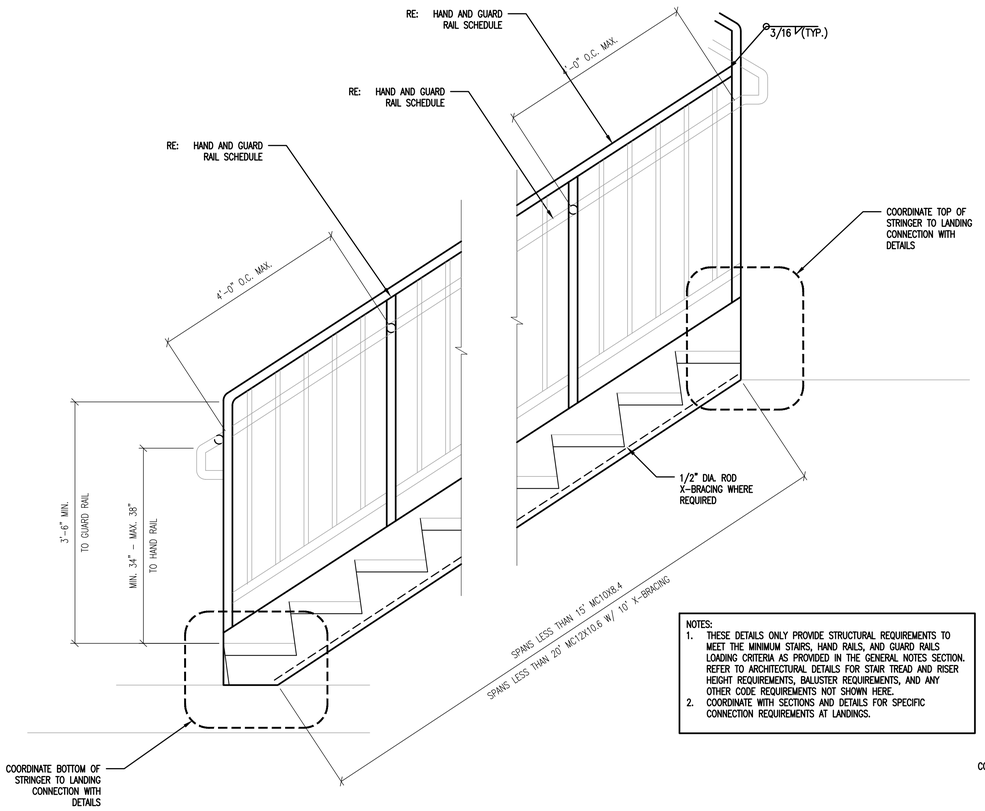


EXAMPLE GUARD POST CALCULATION:
REQ'D GUARD POST PROPERTIES (S)
(Fy=46 KSI):
8,400 IN-LBS / 0.66 X 46,000 PSI = 0.277 IN^3

ACCEPTABLE SHAPE:
HSS 1-1/2" X 1-1/2" X 11 GA (S=0.282 IN^3)

3 HAND AND GUARD RAIL SCHEDULE

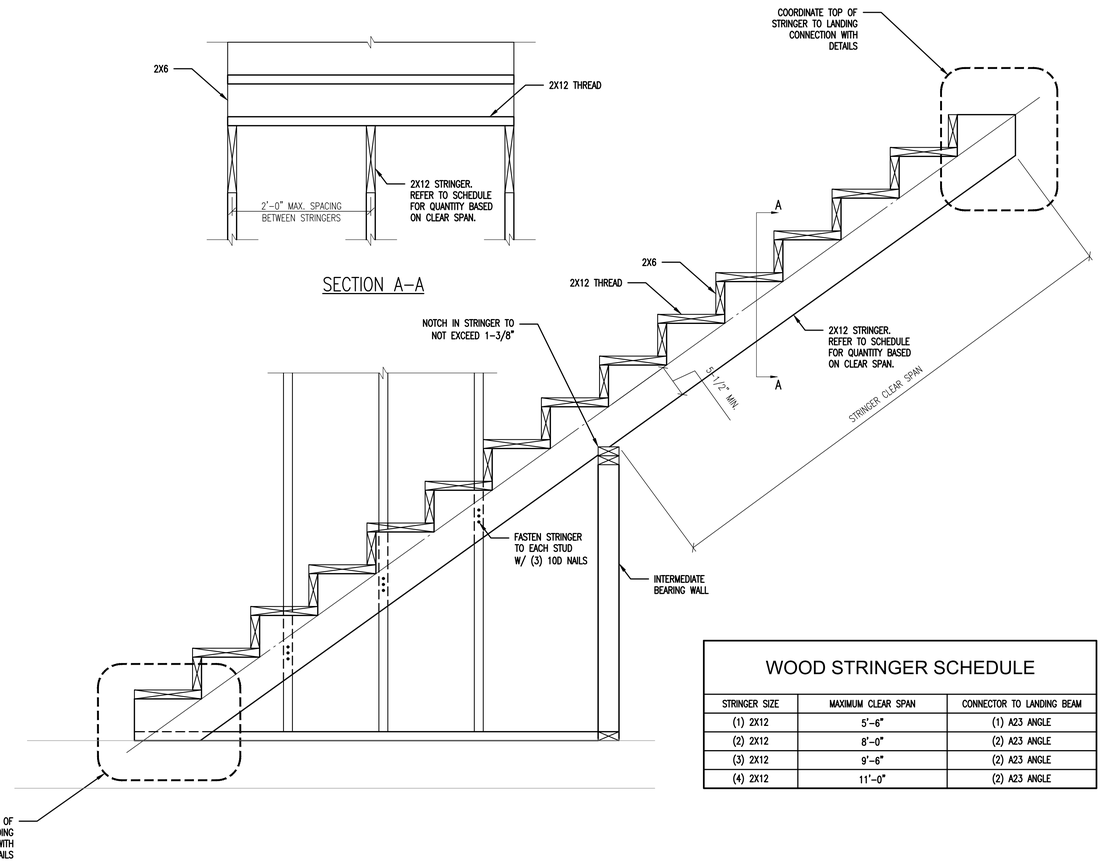
Scale: 1"=1'-0"



NOTES:
1. THESE DETAILS ONLY PROVIDE STRUCTURAL REQUIREMENTS TO MEET THE MINIMUM STAIRS, HAND RAILS, AND GUARD RAILS LOADING CRITERIA AS PROVIDED IN THE GENERAL NOTES SECTION. REFER TO ARCHITECTURAL DETAILS FOR STAIR TREAD AND RISER HEIGHT REQUIREMENTS, BALUSTER REQUIREMENTS, AND ANY OTHER CODE REQUIREMENTS NOT SHOWN HERE.
2. COORDINATE WITH SECTIONS AND DETAILS FOR SPECIFIC CONNECTION REQUIREMENTS AT LANDINGS.

4 TYPICAL STAIR DETAIL

Scale: 1"=1'-0"



WOOD STRINGER SCHEDULE		
STRINGER SIZE	MAXIMUM CLEAR SPAN	CONNECTOR TO LANDING BEAM
(1) 2X12	5'-6"	(1) A23 ANGLE
(2) 2X12	8'-0"	(2) A23 ANGLE
(3) 2X12	9'-6"	(2) A23 ANGLE
(4) 2X12	11'-0"	(2) A23 ANGLE

5 TYPICAL STAIR DETAIL

Scale: 1"=1'-0"

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Sheet Name:
TYPICAL STAIR DETAILS

Sheet No.:
S-550

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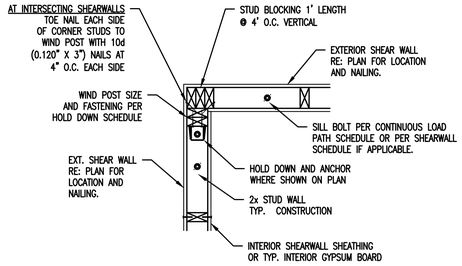
Sheet Name:

NON - TYPICAL STAIR DETAILS

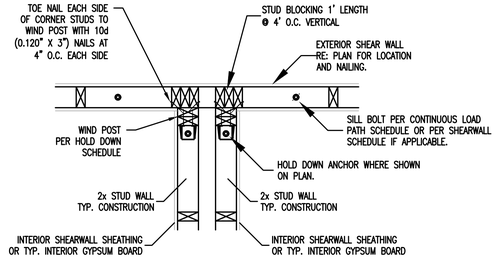
Sheet No.:

S-551



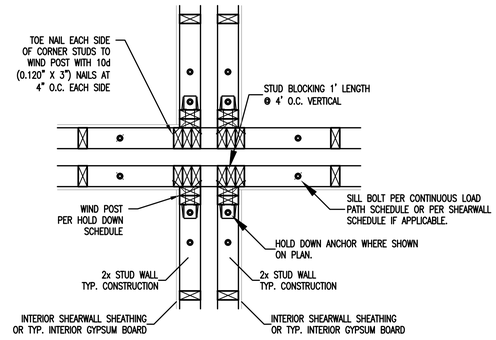
1 CORNER FRAMING AT SHEARWALLS

Scale: 1"=1'-0"



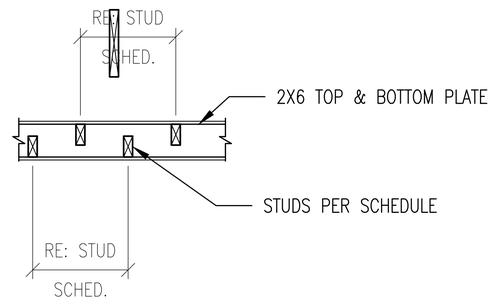
2 CORNER FRAMING AT PARTY WALL SHEARWALLS

Scale: 1"=1'-0"



3 INTERSECTION FRAMING AT PARTY WALL SHEARWALLS

Scale: 1"=1'-0"

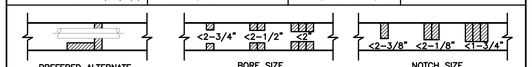


4 STAGGERED STUD WALL DETAIL

Scale: 1"=1'-0"

2X4 STUD SHOE SCHEDULE

2X4 WALL TYPE	BORE SIZE	NOTCH SIZE	STUD SHOE
NON-LOAD BEARING WALL (NLB.)	2" OR LESS	1-3/8" OR LESS	NOT REQUIRED
NON-LOAD BEARING WALL (NLB.)	2" TO 2-1/2" *	2" TO 2-1/8"	SIMPSON SS1.5
LOAD BEARING WALL (LB.)	1-1/2" OR LESS	7/8" OR LESS	NOT REQUIRED
LOAD BEARING WALL (LB.) (1) 2X4	1-1/2" TO 2-3/4" *	1-1/2" TO 2-3/8"	SIMPSON HSS2-SDS1.5
LOAD BEARING WALL (LB.) (2) 2X4	1-1/2" TO 2-1/2"	1-1/2" TO 2-1/8	SIMPSON HSS2-2-SDS3
LOAD BEARING WALL (LB.) (3) 2X4	1-1/2" TO 2"	1-1/2" TO 1-3/4"	SIMPSON HSS2-3-SDS3

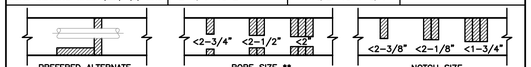


* SIZE IS LIMITED TO MAX. SIZE OF SIMPSON STUD SHOE

NOTES:
1. NO STUD REINFORCEMENT IS REQUIRED IF THE BORE SIZE IS LESS THAN 60% NLB, 40% LB.
2. NOTCHING SHALL BE LIMITED TO 25% OF WIDTH LB AND 40% NLB.
3. DO NOT LOCATE BORE HOLES IN SAME SECTION AS NOTCH.
4. NO MORE THAN 2 SUCCESSIVE STUDS MAY BE BORED OR NOTCHED.

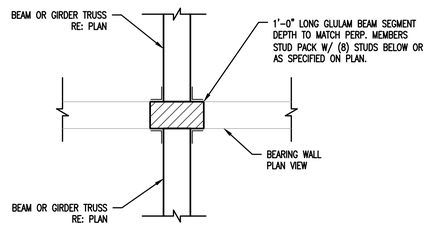
2X6 STUD SHOE SCHEDULE

2X6 WALL TYPE	BORE SIZE	NOTCH SIZE	STUD SHOE
NON-LOAD BEARING WALL (NLB.)	3-3/8" OR LESS	2-1/4" OR LESS	NOT REQUIRED
NON-LOAD BEARING WALL (NLB.)	2" TO 2-1/2" *	2" TO 2-1/8"	SIMPSON SS1.5
LOAD BEARING WALL (LB.)	2-1/4" OR LESS	1-3/8" OR LESS	NOT REQUIRED
LOAD BEARING WALL (LB.) (1) 2X6	2-1/4" TO 2-3/4" *	1-1/2" TO 2-3/8"	SIMPSON HSS2-SDS1.5
LOAD BEARING WALL (LB.) (2) 2X6	2-1/4" TO 2-1/2"	1-1/2" TO 2-1/8	SIMPSON HSS2-2-SDS3
LOAD BEARING WALL (LB.) (3) 2X6	2-1/4" TO 2"	1-1/2" TO 1-3/4"	SIMPSON HSS2-3-SDS3



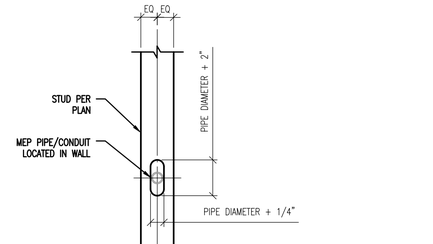
* SIZE IS LIMITED TO MAX. SIZE OF SIMPSON STUD SHOE
** BORE MUST BE OFFSET ON A 2X6 FOR SIMPSOM STUD SHOE

NOTES:
1. NO STUD REINFORCEMENT IS REQUIRED IF THE BORE SIZE IS LESS THAN 60% NLB, 40% LB.
2. NOTCHING SHALL BE LIMITED TO 25% OF WIDTH LB AND 40% NLB.
3. DO NOT LOCATE BORE HOLES IN SAME SECTION AS NOTCH.
4. NO MORE THAN 2 SUCCESSIVE STUDS MAY BE BORED OR NOTCHED.



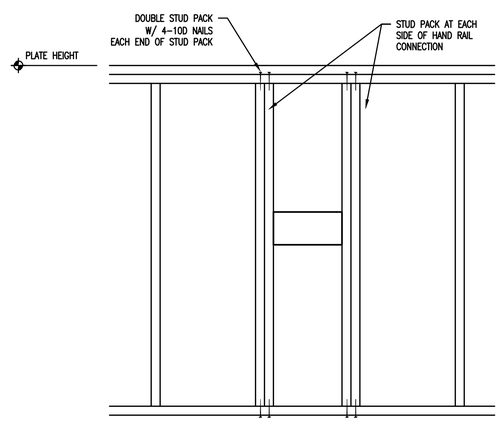
7 BEARING BLOCK DETAIL

Scale: 1"=1'-0"

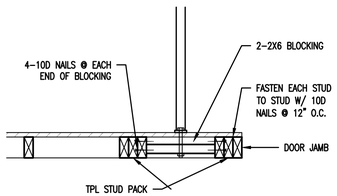


8 STUD PENETRATION OVER-SIZE DETAIL

Scale: 1"=1'-0"



STUD PACK ELEVATION



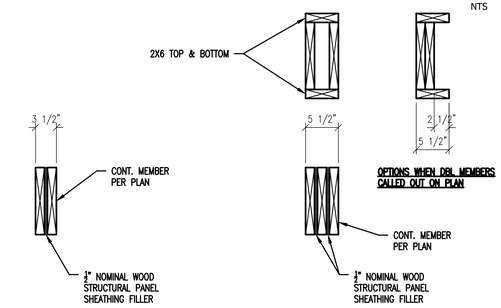
PLAN AT GUARD RAIL

5 2X4 STUD SHOE SCHEDULE

NTS

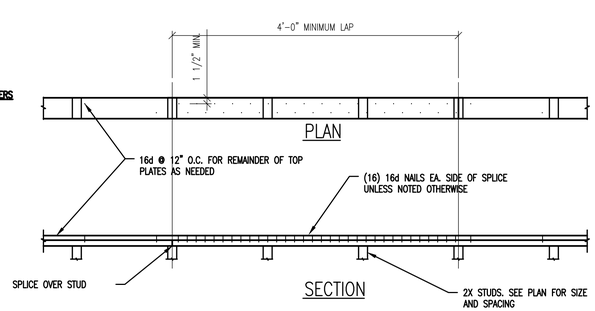
9 TYPICAL GUARD RAIL ATTACHMENT DETAIL

Scale: 1"=1'-0"



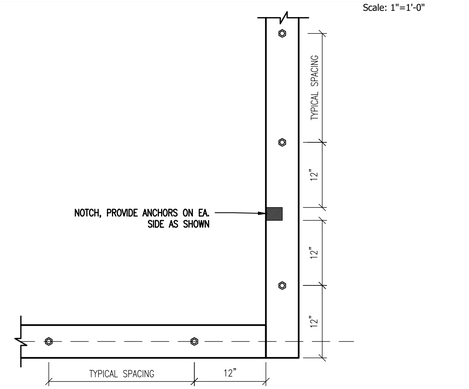
6 2X6 STUD SHOE SCHEDULE

NTS



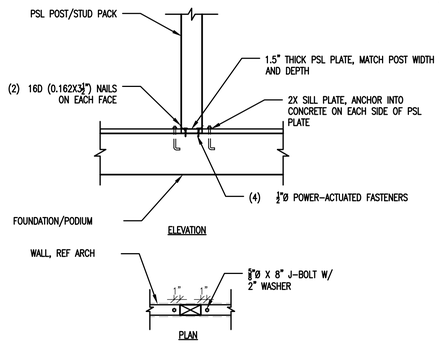
7 BEARING BLOCK DETAIL

Scale: 1"=1'-0"



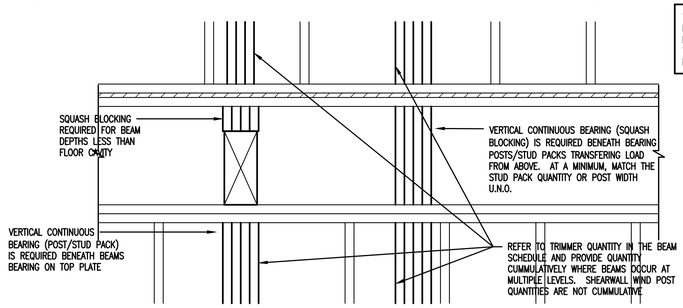
8 STUD PENETRATION OVER-SIZE DETAIL

Scale: 1"=1'-0"



10 TYPICAL HEADER FRAMING DETAILS

Scale: 1"=1'-0"



11 TYPICAL TOP PLATE SPLICE

Scale: 1"=1'-0"

VERTICAL CONTINUOUS BEARING IS REQUIRED AT BEAM BEARINGS ON TOP PLATES, BEARING POSTS AND SHEARWALL WIND POSTS. PROVIDE STRAPPING AS NOTED IN DETAILS.

12 TYPICAL SILL PLATE ANCHOR LAYOUT

Scale: 1"=1'-0"

9 TYPICAL GUARD RAIL ATTACHMENT DETAIL

Scale: 1"=1'-0"

13 POST/STUD PACK AT PODIUM/FOUNDATION WITHIN WALL

Scale: 1"=1'-0"

14 VERTICAL CONTINUOUS BEARING REQUIREMENTS

Scale: 1"=1'-0"

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Christopher P. Hillman, P.E.
LICENSED ENGINEER #
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ON
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TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

REVISION/ISSUE	DATE
HDRC PROGRESS SET	08/02/2019

Sheet Name:
TYPICAL WALL FRAMING DETAILS

Sheet No.:
S-560

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	REVISION/ISSUE	DATE
	HDRC PROGRESS SET	08/02/2019

Sheet Name:

NON-TYPICAL WALL FRAMING DETAILS

Sheet No.:

S-561

STUD SCHEDULE

LEVEL	LOCATION				
	INTERIOR NON-LOAD BEARING WALL	UNIT PARTY WALLS	INTERIOR UNIT BEARING WALLS (NON-PARTY WALLS)	CORRIDOR BEARING WALLS	EXTERIOR BEARING WALLS
4	(1) 2X4 @ 16" O.C.		(1) 2X4 @ 16" O.C.	(1) 2X4 @ 16" O.C.	(1) 2x4 @ 16" O.C.
3	(1) 2X4 @ 16" O.C.		(1) 2X4 @ 16" O.C.	(1) 2X4 @ 16" O.C.	(1) 2x4 @ 16" O.C.
2	(1) 2X4 @ 16" O.C.		(1) 2X4 @ 16" O.C.	(1) 2X4 @ 12" O.C.	(2) 2x4 @ 16" O.C.
1	(1) 2X4 @ 16" O.C.		(1) 2X4 @ 12" O.C.	(2) 2X4 @ 16" O.C.	(2) 2x4 @ 12" O.C.

NOTES:
1. ALL STUDS WITHIN BEARING WALLS SHALL ALIGN THROUGHOUT THE ENTIRE HEIGHT OF THE WALL. STUDS MAY BE PLACED AT A MAXIMUM 1" OUT OF ALIGNMENT WITH THE STUD IN THE FLOOR ABOVE AND BELOW
2. PLUMBING WET WALLS SHALL BE 2X6 STUDS WITH THE SAME SPACING REQUIREMENTS SHOWN.
3. NON-LOAD BEARING INTERIOR STUDS MAY BE SPF OR HEM-FIR.
4. MAXIMUM PLATE HEIGHT IS 9'-1 1/8".

1 STUD SCHEDULE — NTS

LOAD BEARING HEADER SCHEDULE

INTERIOR				EXTERIOR			
HEADER SPAN	MIN. HEADER SIZE	MIN. REQUIRED CRIPPLE STUDS	MIN. REQUIRED KING STUDS	HEADER SPAN	MIN. HEADER SIZE	MIN. REQUIRED CRIPPLE STUDS	MIN. REQUIRED KING STUDS
< 3'	226	1	1	< 3'	228	1	1
< 6'	2210	2	2	< 6'	2212	2	2
< 8'	B411	2	2	< 8'	B411	2	2
< 10'	B411	2	2	< 10'	RE: PLAN		
< 12'	RE: PLAN			< 12'	RE: PLAN		

NOTES:
1. THIS SCHEDULE SHALL BE USED FOR ALL EXTERIOR HEADERS SUBJECT TO WIND LOADS.

2 LOAD BEARING HEADER SCHEDULE — NTS

INTERIOR NON-LOAD BEARING HEADER SCH.

HEADER SPAN	MIN. HEADER SIZE	MIN. REQUIRED CRIPPLE STUDS	MIN. REQUIRED KING STUDS
< 2'-0"	(1) 2x4 FLAT*	1	1
< 3'-0"	(1) 2x4 FLAT*	1	2
< 4'-0"	(1) 2x4 FLAT*	1	2
< 5'-0"	(2) 2x4 FLAT*	1	3
< 6'-0"	(2) 2x4 FLAT*	2	3
< 7'-0"	(2) 2x4 FLAT*	2	3
8'-0" OR >	RE: PLAN	2	3

* FOR 2X6 OR 2X4 STAGGERED WALL, USE 2X6 DIMENSIONAL LUMBER IN LIEU OF 2X4

3 NON-LOAD BEARING HEADER SCHEDULE — NTS

WALL ANCHORING SCHEDULE (NON-SHEARWALL)

LOCATION	ANCHORING
EXTERIOR LOAD BEARING	1/2" DIA. X (REQ. PROJECTION + 8" MIN. EMBED. INTO GRADE BEAM) J-BOLT CAST IN PLACE SPACED AT 48" O.C.
INTERIOR LOAD BEARING	INTO CONCRETE: POWDER ACTUATED HILTI X-C 0.138 SPACED AT 24" O.C. INTO STEEL: POWDER ACTUATED HILTI X-U 0.157 SPACED AT 24" O.C.
INTERIOR NON-LOAD BEARING	POWDER ACTUATED HILTI X-C 0.138 x 2 7/16 SPACED AT 48" O.C.

NOTES:
1. REFER TO SHEARWALL SCHEDULES AND DETAILS FOR MORE STRINGENT REQUIREMENTS AT SHEARWALLS.
2. EXTERIOR WALLS ARE ALWAYS CONSIDERED LOAD BEARING.
3. MINIMUM POINT PENETRATION INTO CONCRETE IS 1". MINIMUM POINT PENETRATION INTO STEEL IS 1/2"

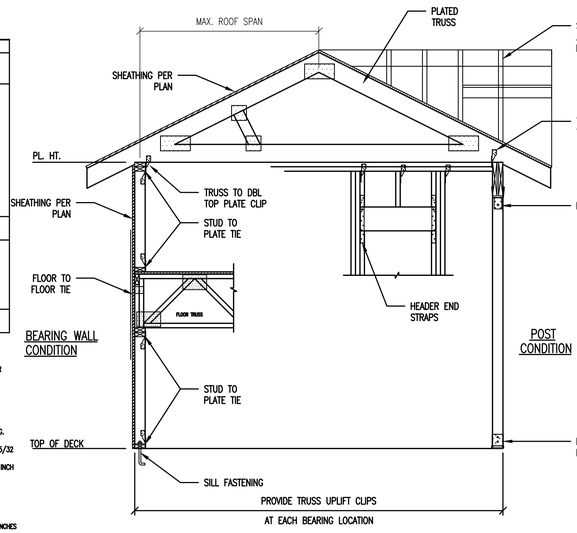
4 WALL ANCHORING SCHEDULE (NON-SHEAR WALL) — NTS

CONNECTION	FASTENING	LOCATION
1. JOIST TO SILL OR GIRDER	3 – 8D COMMON (2 1/2" X 0.131") 3 – 3" X 0.131" NAILS 3 – 3" 14 GAGE STAPLES	TOENAIL
2. BRIDGING TO JOIST	2 – 8D COMMON (2 1/2" X 0.131") 2 – 3" X 0.131" NAILS 2 – 3" 14 GAGE STAPLES	TOENAIL EACH END
3. 1" X 6" SUBFLOOR OR LESS TO EACH JOIST	2 – 8D COMMON (2 1/2" X 0.131")	FACE NAIL
3. WIDER THAN 1" X 6" SUBFLOOR OR LESS TO EACH JOIST	3 – 8D COMMON (2 1/2" X 0.131")	FACE NAIL
5. 2" SUBFLOOR TO JOIST OR GIRDER	2 – 16D COMMON (3 1/2" X 0.162")	BLIND AND FACE NAIL
6. SOLE PLATE TO JOIST OR BLOCKING	16D (3 1/2" X 0.135") AT 16" O.C. 3" X 0.131" NAILS AT 8" O.C. 3" 14 GAGE STAPLES AT 12" O.C.	TYPICAL FACE NAIL
SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANEL	3 – 16D COMMON (3 1/2" X 0.133") AT 16" O.C. 4 – 3" X 0.131" NAILS AT 16" O.C. 4 – 3" 14 GAGE STAPLES AT 16" O.C.	BRACED WALL PANELS
7. TOP PLATE TO STUD	16D (3 1/2" X 0.135") AT 16" O.C. 3" X 0.131" NAILS AT 8" O.C. 3" 14 GAGE STAPLES AT 12" O.C.	TYPICAL FACE NAIL
	3 – 16D COMMON (3 1/2" X 0.133") AT 16" O.C. 4 – 3" X 0.131" NAILS AT 16" O.C. 4 – 3" 14 GAGE STAPLES AT 16" O.C.	BRACED WALL PANELS
8. STUD TO SOLE PLATE	4 – 8D (2 1/2" X 0.131") 4 – 3" X 0.131" NAILS 3 – 3" 14 GAGE STAPLES	TOENAIL
	2 – 16D COMMON (3 1/2" X 0.162") 3 – 3" X 0.131" NAILS 3 – 3" 14 GAGE STAPLES	END NAIL
9. DOUBLE STUDS	16D (3 1/2" X 0.135") AT 24" O.C. 3" X 0.131" NAILS AT 8" O.C. 3" 14 GAGE STAPLES AT 8" O.C.	FACE NAIL
10. DOUBLE TOP PLATES	16D (3 1/2" X 0.135") AT 16" O.C. 3" X 0.131" NAILS AT 12" O.C. 3" 14 GAGE STAPLES 12" O.C.	TYPICAL FAIL NAIL
DOUBLE TOP PLATES	8 – 16D COMMON (3 1/2" X 0.162") 12 – 3" X 0.131" NAILS 12 – 3" 14 GAGE STAPLES	LAP SPLICE
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	3 – 8D COMMON (2 1/2" X 0.131") 3 – 3" X 0.131" NAILS 3 – 3" 14 GAGE STAPLES	TOENAIL
12. RIM JOIST TO TOP PLATE	8D (2 1/2" X 0.131") AT 6" O.C. 3" X 0.131" NAILS AT 6" O.C. 3" 14 GAGE STAPLES AT 6" O.C.	TOENAIL
13. TOP PLATES, LAPS AND INTERSECTIONS	2 – 16D (3 1/2" X 0.162") 3 – 3" X 0.131" NAILS 3 – 3" 14 GAGE STAPLES	FACE NAIL
14. CONTINUOUS HEADER, TWO PIECES	16D COMMON (3 1/2" X 0.162")	16" O.C. ALONG EDGE
15. CEILING JOISTS TO PLATE	3 – 8D COMMON (2 1/2" X 0.131") 5 – 3" X 0.131" NAILS 5 – 3" 14 GAGE STAPLES	TOENAIL
16. CONTINUOUS HEADER TO STUD	4 – 8D COMMON (2 1/2" X 0.131")	TOENAIL
17. CEILING JOISTS, LAP OVER PARTITIONS (SEE SECTION 2308.104.1, TABLE 2308.10.4.1)	3 – 16D COMMON (3 1/2" X 0.162") MINIMUM, TABLE 2308.10.4.1 4 – 3" X 0.131" NAILS 4 – 3" 14 GAGE STAPLES	FACE NAIL
18. CEILING JOISTS TO PARALLEL RAFTERS (SEE SECTION 2308.10.1, TABLE 2308.10.4.1) WITH 7:12 PITCH OR GREATER	6–16D COMMON (3.5" X 0.162") 7:12 PITCH OR GREATER, 10–16D COMMON (3.5" X 0.162") LESS THAN 7:12 PITCH	FACE NAIL
19. RAFTER TO PLATE (SEE SECTION 2308.10.1, TABLE 2308.10.1)	3 – 8D COMMON (2 1/2" X 0.131") 3 – 3" X 0.131" NAILS 3 – 3" 14 GAGE STAPLES	TOE NAIL
20. 1" DIAGONAL BRACE TO EACH STUD AND PLATE	2 – 8D COMMON (2 1/2" X 0.131") 2 – 3" X 0.131" NAILS 3 – 3" 14 GAGE STAPLES	FACE NAIL
21. 1" X 8" SHEATHING TO EACH BEARING	3 – 8D COMMON (2 1/2" X 0.131")	FACE NAIL
22. WIDER THAN 1" X 8" SHEATHING TO EACH BEARING	3 – 8D COMMON (2 1/2" X 0.131")	FACE NAIL
23. BUILT-UP CORNER STUDS	16D COMMON (3 1/2" X 0.162") 3" X 0.131" NAILS 3" 14 GAGE STAPLES	24" O.C. 16" O.C. 16" O.C.
24. BUILT-UP GIRDER AND BEAMS	20D (4" X 0.192") AT 32" O.C. 3" X 0.131" NAILS AT 24" O.C. 3" 14 GAGE STAPLES AT 24" O.C.	FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
	2 – 20D COMMON (4" X 0.192") 3 – 3" X 0.131" NAILS 4 – 3" 14 GAGE STAPLES	FACE NAIL AT ENDS AND EACH SPLICE
25. 2" PLANKS	16D COMMON (3 1/2" X 0.162")	AT EACH BEARING
26. COLLAR TIE TO RAFTER	3 – 10D COMMON (3" X 0.148") 4 – 3" X 0.131" NAILS 4 – 3" 14 GAGE STAPLES	FACE NAIL
27. JACK RAFTER TO HIP	3 – 10D (3" X 0.148") 4 – 3" X 0.131" NAILS 4 – 3" 14 GAGE STAPLES	TOENAIL
	2 – 16D COMMON (3 1/2" X 0.162") 3 – 3" X 0.131" NAILS 3 – 3" 14 GAGE STAPLES	FACE NAIL
28. ROOF RAFTER TO 2–BY RIDGE BEAM	2 – 16D (3 1/2" X 0.162") 3 – 3" X 0.131" NAILS 3 – 3" 14 GAGE STAPLES	TOENAIL
	2 – 16D COMMON (3 1/2" X 0.162") 3 – 3" X 0.131" NAILS 3 – 3" 14 GAGE STAPLES	FACE NAIL
29. JOIST TO BAND JOIST	3 – 16D COMMON (3 1/2" X 0.162") 4 – 3" X 0.131" NAILS 4 – 3" 14 GAGE STAPLES	XXX

CONNECTION	FASTENING	LOCATION
30. LEDGER STRIP	3 – 16D COMMON (3 1/2" X 0.162") 4 – 3" X 0.131" NAILS 3" 14 GAGE STAPLES	4 – FACE NAIL
31. WOOD STRUCTURAL PANELS, PARTICLEBOARD, SUBFLOOR, ROOF AND WALL SHEATHING TO FRAMING, (NOTE b)	1/2" AND LESS: 6D (NOTE c,j) 2 3/8" X 0.113" NAIL (NOTE n) 1 3/4" 16 GAGE STAPLE (NOTE o)	
	19/32" TO 3/4": 8D (NOTE d) OR 6D (NOTE e) 2 3/8" X 0.113" NAIL (NOTE p) 2" 16 GAGE STAPLE (NOTE p)	
	7/8" TO 1": 8D (NOTE c) 1 1/8" TO 1 1/4" 10D (NOTE d) OR 8D(NOTE e)	
	3/4" AND LESS: 6D (NOTE e) 7/8" TO 1": 8D (NOTE e) 1 1/8" TO 1 1/4" 10D (NOTE d) OR 8D (NOTE e)	
32. PANEL SIDING (TO FRAMING)	1/2" OR LESS: 6D (NOTE f) 5/8": 8D (NOTE f)	
33. FIBERBOARD SHEATHING (NOTE g)	1/2": NO. 11 GAGE ROOFING NAIL (NOTE h) 6D COMMON NAIL (2" X 0.113") NO. 16 GAGE STAPLE (NOTE i)	
	25/32": NO. 11 GAGE ROOFING NAIL (NOTE h) 8D COMMON NAIL (2 1/2" X 0.131") NO. 16 GAGE STAPLE (NOTE i)	
34. INTERIOR PANELING	1/4": 4D (NOTE j) 3/8": 6D (NOTE k)	

NOTES:
a. COMMON OR BOX NAILS ARE PERMITTED TO BE USED EXCEPT WHERE OTHERWISE STATED.
b. NAILS SPACED AT 6 INCHES ON CENTER AT EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS EXCEPT 6 INCHES AT SUPPORTS WHERE SPANS ARE 48 INCHES OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO IBC 2006 SECTION 2305. NAILS FOR WALL SHEATHING ARE PERMITTED TO BE COMMON, BOX OR CASING.
c. COMMON OR DEFORMED SHANK (6D – 2" X 0.113"; 8D – 2 1/2" X 0.131"; 10D – 3" X 0.148").
d. COMMON (6D – 2" X 0.113"; 8D – 2 1/2" X 0.131"; 10D – 3" X 0.148").
e. DEFORMED SHANK (6D – 2" X 0.113"; 8D – 2 1/2" X 0.131"; 10D – 3" X 0.148").
f. CORROSION–RESISTANT SIDING (6D 1 7/8" X 0.106"; 8D – 2 3/8" X 0.128") OR CASING (6D – 2" X 0.099"; 8D – 2 1/2" X 0.113") NAIL.
g. FASTENERS SPACED 3 INCHES ON CENTER AT EXTERIOR EDGES AND 6 INCHES ON CENTER AT INTERMEDIATE SUPPORTS, WHEN USED AS STRUCTURAL SHEATHING. SPACING SHALL BE 6 INCHES ON CENTER ON THE EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS FOR NONSTRUCTURAL APPLICATIONS.
h. CORROSION–RESISTANT ROOFING NAILS WITH 7/16 INCH DIAMETER HEAD AND 1 1/2 INCH LENGTH FOR 1/2 INCH SEWHTHING AND 1 3/4 INCH LENGTH FOR 25/32 INCH SHEATHING.
i. CORROSION–RESISTANT STAPLES WITH NOMINAL 7/16 INCH CROWN AND 1 1/8 INCH LENGTH FOR 1/2 INCH SHEATHING AND 1 1/2 INCH LENGTH FOR 25/32 INCH SHEATHING. PANEL SUPPORTS AT 16 INCHES (20 INCHES IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED).
j. CASING (11/2" – 0.080") OR FINISH (11/2" – 0.072") NAILS SPACED 6 INCHES ON PANEL EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS.
k. PANEL SUPPORTS AT 24 INCHES. CASING OR FINISH NAILS SPACED 6 INCHES ON PANEL EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS.
l. FOR ROOF SHEATHING APPLICATIONS, 8D NAILS (2 1/2" – 0.113") ARE THE MINIMUM REQUIRED FOR WOOD STRUCTURAL PANELS.
m. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16 INCH.
n. FOR ROOF SHEATHING APPLICATIONS, FASTENERS SPACED 4 INCHES ON CENTER AT EDGES, 8 INCHES AT INTERMEDIATE SUPPORTS.
o. FASTENERS SPACED 4 INCHES ON CENTER AT EDGES, 8 INCHES AT INTERMEDIATE SUPPORTS FOR SUBFLOOR AND WALL SHEATHING AND 3 INCHES ON CENTER AT EDGES, 6 INCHES AT INTERMEDIATE SUPPORTS FOR ROOF SHEATHING.
p. FASTENERS SPACED 4 INCHES ON CENTER AT EDGES, 8 INCHES AT INTERMEDIATE SUPPORTS

5 FASTENING SCHEDULE — NTS



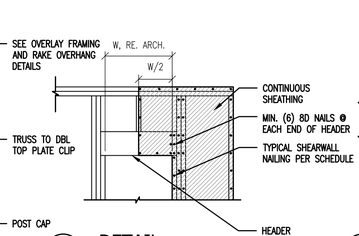
7 CONTINUOUS LOAD PATH DIAGRAM — Scale: 1/2"=1'-0"

CONTINUOUS UPLIFT LOAD PATH CONNECTOR SCHEDULE

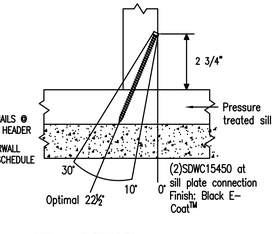
	NOMINAL WIND SPEED, Vult (Vasd) EXPOSURE C				
LOCATION	UP TO 120 MPH (93)	UP TO 140 MPH (108)	UP TO 150 MPH (116)	CODE REFERENCE	
TRUSS TO TOP PLATE (W/ <600 LBS MAX. UPLIFT)	H2.5A EA. TRUSS	H2.5A EA. TRUSS	H2.5A EA. TRUSS		
TRUSS TO TOP PLATE (W/ >600 LBS MAX. UPLIFT)	PER MAX. UPLIFT	PER MAX. UPLIFT	PER MAX. UPLIFT		4
DOUBLE TOP PLATE TO STUD	SHEATHING OVERLAP	SHEATHING OVERLAP	H2.5A EA. STUD		
STUD TO BOTTOM PLATE	WSP OVERLAP	H2.5A @ EVERY STUD	H2.5A @ EVERY STUD	SATISFIES NOTE 4 OF ANSI/AF&PA WFCM–2001 TABLE A–3.4	4.1, 8
FLOOR TO FLOOR	CS16X48/SIMPSON SDWF2724–TUW FLOOR TO FLOOR SCREW @ 48" O.C.	CS16X48/SIMPSON SDWF2724–TUW FLOOR TO FLOOR SCREW @ 32" O.C.	CS16X48/SIMPSON SDWF2724–TUW FLOOR TO FLOOR SCREW @ 32" O.C.	SATISFIES NOTE 4 OF ANSI/AF&PA WFCM–2001 TABLE A–3.4	4.2, 6
STUD TO TOP PLATE	H2.5A @ EVERY OTHER STUD	H2.5A @ EVERY STUD	H2.5A @ EVERY STUD	ANSI/AF&PA WFCM–2001 TABLE A–3.4	4.1, 8
RAFTER/TRUSS TO TOP PLATE	H2.5A @ EVERY RAFTER/TRUSS	H2.5A @ EVERY RAFTER/TRUSS	H2.5A @ EVERY RAFTER/TRUSS	ANSI/AF&PA WFCM–2001 TABLE A–3.4	4.1
RAFTERS ACROSS RIDGE	COLLAR TIE OR LSTA24 @ EVERY RAFTER	COLLAR TIE OR LSTA24 @ EVERY RAFTER	COLLAR TIE OR LSTA24 @ EVERY RAFTER	ANSI/AF&PA WFCM–2001 TABLE A–3.6A	3,4.3
RAKE OVERHANG OUTLOOKER TO GABLE WALL	(2) H2.5A @ EVERY OUTLOOKER	(2) H2.5A @ EVERY OUTLOOKER	(2) H2.5A @ EVERY OUTLOOKER	ANSI/AF&PA WFCM–2001 TABLE A–3.4C	
SILL PLATE TO WOOD	16d BOX NAIL (3 1/2" X 0.135) @ 16" O.C. / 8d COMMON NAIL (2 1/2" X 0.131") @ 8" O.C.	16d BOX NAIL (3 1/2" X 0.135) @ 16" O.C. / 8d COMMON NAIL (2 1/2" X 0.131") @ 8" O.C.	16d BOX NAIL (3 1/2" X 0.135) @ 16" O.C. / 8d COMMON NAIL (2 1/2" X 0.131") @ 6" O.C.		1
SILL PLATE TO CONCRETE	5/8" DIA. X 8" L–BOLT W/ 2" WASHER @ 48" O.C.	5/8" DIA. X 8" L–BOLT W/ 2" WASHER @ 48" O.C.	5/8" DIA. X 8" L–BOLT W/ 2" WASHER @ 32" O.C.		1,9
HEADER END STRAP	LSTA36	LSTA36	LSTA36	1,640 LBS PER SIMPSON STRONG TIE CATALOG	5, 7

NOTES:
1. REFER TO SHEARWALL SCHEDULE FOR MORE STRINGENT PLATE FASTENING REQUIREMENTS FOR SLIDING
2. FOR CONVENTIONAL LIGHT FRAME CONSTRUCTION, CLIP AND STRAP PURLIN SAME AS WALL IF OUT–TO–OUT OF EXTERIOR WALLS EXCEEDS THIS DISTANCE
3. FOR ROOF PITCHES GREATER THAN 5:12
4. CLIP AND STRAP WIND UPLIFT CAPACITIES
   4.1. H2.5A 600 LBS
   4.2. CS16X48 1,705 LBS
   4.3. CS16X60 1,705 LBS
   4.4. LSTA24 1,235 LBS
5. MAXIMUM 8' HEADER SPAN. PLACE STRAP CENTERED OVER TRIMMERS AT EACH END OF HEADER.
6. OVERLAPPING OF EXTERIOR SHEATHING IS ALLOWED IN LIEU OF CS16X60 STRAPPING. DETAIL ALTERNATE FLOOR TO FLOOR CONNECTION (120 MPH OR GREATER & OPTION A 110 MPH OR LESS)
7. OVERLAPPING OF EXTERIOR SHEATHING IS ALLOWED IN LIEU OF LSTA15 FOR PROJECTS 110 MPH OR LESS WITH 3' MAX HEADER SPAN, RE: DETAIL ALTERNATE HEADER STRAP CONNECTION
8. OVERLAPPING OF EXTERIOR SHEATHING & FASTENING TO PLATE W/ 10d COMMON NAIL 6"O.C. IS ALLOWED IN LIEU OF H2.5A FOR PROJECTS 110 MPH OR LESS
9. SILL BORE HOLE SHALL NOT EXCEED 1/8" LARGER THAN THE ANCHOR. 1–3/4" MINIMUM EDGE DISTANCE TO SILL PLATE AND CONCRETE EDGES REQUIRED.

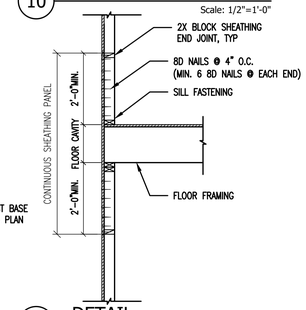
6 CONTINUOUS UPLIFT LOAD PATH DIAGRAM AND SCHEDULE — Scale: 1/2"=1'-0"



10 DETAIL — Scale: 1/2"=1'-0"



11 DETAIL — Scale: 1/2"=1'-0"



8 DETAIL — Scale: 1/2"=1'-0"

GIRDER TIE-DOWN SCHEDULE

TYPE	DESCRIPTION	ALLOWABLE UPLIFT LOADS
GT1	SIMPSON LGT2	2050
GT2	SIMPSON LGT3–SDS2.5	3685
GT3	SIMPSON LGT4–SDS3	4060

NOTES:
1. REFER TO SIMPSON STRONG–TIE FOR REQUIRED FASTENING.
2. ALLOWABLE LOADS HAVE BEEN INCREASED FOR WIND WITH NO FURTHER INCREASE ALLOWED.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING REQUIRED UPLIFT VALUES FROM ROOF TRUSS SHOP DRAWINGS BEFORE CHOOSING ADEQUATE GIRDER TIE–DOWN.

9 GIRDER TIE DOWN SCHEDULE — Scale: 1/2"=1'-0"

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Christopher P. Hillman, P.E.
LICENSED ENGINEER #
93952
ON
08/02/2019
FOR PURPOSES OF REVIEW. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.

TRAIL STREET TOWNHOMES

335 TRAIL STREET
SAN ANTONIO, TX 78212
CPH 157-021

This design relies upon architectural background drawings dated ??/??/?? issued for ????? These drawings shall not be used for construction unless the architectural backgrounds drawings utilized were also released for such purpose

	REVISION/ISSUE	DATE
	HDRC PROGRESS SET	08/02/2019

Sheet Name:
SCHEDULES

Sheet No.:
S-610

GENERAL MEP NOTES

1. IT IS THE INTENT OF THE CONTRACT DOCUMENTS TO PROVIDE AN INSTALLATION COMPLETE IN EVERY RESPECT. WORK SHALL BE EXECUTED IN A WORKMANLIKE MANNER AND SHALL INCLUDE ALL LABOR, MATERIALS, AND SUPERVISION ESSENTIAL TO PROVIDE COMPLETE FUNCTIONING SYSTEMS AS DESCRIBED IN THE CONTRACT DOCUMENTS. IN THE EVENT THAT ADDITIONAL DETAILS OR SPECIAL CONSTRUCTION IS REQUIRED FOR WORK INDICATED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE SAME AS WELL AS TO PROVIDE MATERIAL AND EQUIPMENT USUALLY FURNISHED WITH SUCH SYSTEMS OR REQUIRED TO COMPLETE THE INSTALLATION AT NO EXPENSE TO THE OWNER.
2. DEVIATIONS TO THE INTENDED DESIGN OR THE SCOPE OF THE WORK MUST BE APPROVED BY THE PROJECT ENGINEER PRIOR TO COMMENCING WORK. FAILURE TO DO SO MAY RESULT IN THE WORK TO BE REMOVED AT NO COST TO THE OWNER.
3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL CODES, STANDARDS, AND AMENDMENTS AND/OR OTHER AUTHORITIES THAT MAY HAVE JURISDICTION PERTAINING TO THE WORK. IN ADDITION, ALL WORK SHALL CONFORM TO THE STANDARDS AND PRACTICES OF THE OWNER.
4. ALL EQUIPMENT INSTALLED ON THIS PROJECT SHALL BE NEW AND UNUSED UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL REMOVE ALL SHIPPING LABELS, DIRT, PAINT SPOTS, GREASE, AND STAINS FROM ALL EQUIPMENT. DEBRIS SHALL BE REMOVED AS IT ACCUMULATES. UPON COMPLETION OF HIS WORK, THE CONTRACTOR SHALL CLEAN ALL EQUIPMENT. NO LOOSE PARTS OR SCRAPS OF EQUIPMENT SHALL BE LEFT ON THE PREMISES.
5. ALL MATERIALS SALVAGED TO OWNER SHALL BE STORED BY CONTRACTOR FOR REUSE UNTIL END OF PROJECT THEN RETURNED TO THE OWNER.
6. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTIVE MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION OR ACCEPTANCE OF THE WORK. THE CONTRACTOR SHALL REPAIR OR REPLACE, AT HIS OWN EXPENSE WHEN ORDERED TO DO SO, ALL WORK THAT MAY DEVELOP DEFECTS IN MATERIAL OR WORKMANSHIP WITHIN SAID PERIOD OF TIME. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED RECOMMENDATIONS FOR SERVICE INTENDED, AS INTERPRETED BY THE ENGINEER. THE INSTALLATION OF ALL EQUIPMENT SHALL BE MADE BY EXPERIENCED CRAFTSMAN IN A NEAT, WORKMANLIKE MANNER. ALL MATERIALS, TOOLS, COSTS, AND SERVICES NECESSARY TO COMPLETELY INSTALL ALL WORK SHALL BE PROVIDED BY THE CONTRACTOR.
7. ALL SAFETY EXPOSURES OR VIOLATIONS SHALL BE RECTIFIED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROTECTION OF PERSONS AND PROPERTY, PROVIDING SAFE WORKING CONDITIONS THROUGHOUT THE WORK PROGRESS, PROVIDING TEMPORARY COVERINGS FOR OPENINGS THROUGH WALLS OR FLOORS, AND PROVIDING TEMPORARY BARRIERS, PARTITIONS AND/OR DUST BARRIERS WHERE REQUIRED TO MAINTAIN OSHA AND THE OWNER'S SAFETY STANDARDS AND TO PREVENT DAMAGE TO PROPERTY. ALL AREAS ADJACENT TO THE CONSTRUCTION AREA OR AFFECTED BY THE CONSTRUCTION MUST BE PROTECTED FROM DAMAGE, CLEANED, AND RESTORED TO THE ORIGINAL CONDITION AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL PROVIDE PROTECTIVE CLOTHING AND EYEWEAR FOR ALL PERSONNEL WHO ARE REQUIRED TO HANDLE HAZARDOUS CHEMICAL PRODUCTS OR WORK IN HAZARDOUS LOCATIONS.
8. ALL SHOP DRAWINGS, INCLUDING PRODUCT DATA SUBMITTALS, SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTING TO THE ENGINEER. ALL SHOP DRAWINGS NOT REVIEWED BY THE CONTRACTOR WILL BE RETURNED WITHOUT REVIEW. AFTER REVIEW HAS BEEN COMPLETED, SUBMIT A COPY OF EACH SHOP DRAWING TO THE OWNER WITH THE APPROVAL SEAL OF THE ENGINEER AND THE CONTRACTOR. THE USE OF REPRODUCTIONS OF THESE CONTRACT DRAWINGS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR OR MATERIAL SUPPLIER, IN LIEU OF THE PREPARATION OF SHOP DRAWINGS IS FORBIDDEN. SHOP DRAWINGS RECEIVED BEARING THE ENGINEER'S TITLE AND SEAL SHALL BE PROMPTLY REJECTED.
9. SUBMIT MATERIAL SAFETY DATA SHEETS AND MANUFACTURER'S CURRENT RECOMMENDED METHOD OF INSTALLATION FOR ALL MATERIALS USED TO PERFORM THE WORK INDICATED BY THESE DOCUMENTS. ALL SUBMITTALS SHALL BE PREPARED ACCORDING TO CURRENT OWNER SPECIFICATIONS AND SHALL BE APPROVED PRIOR TO STARTING ANY WORK. ALL CHEMICALS OR CHEMICAL COMPOUNDS PROPOSED FOR USE ON THE PROPERTY INCLUDING, BUT NOT LIMITED TO PAINT THINNERS, SOLVENTS, ADHESIVES, SEALANTS, CLEANING COMPOUNDS, EPOXIES, ETC. MUST BE APPROVED BY THE OWNER.
10. CONTRACTOR SHALL PROVIDE PRODUCT DATA SUBMITTALS ON ALL MAJOR EQUIPMENT, COMPONENTS, AND MATERIALS SPECIFIED IN THESE PLANS FOR ENGINEER'S AND OWNER'S REVIEW AND ACCEPTANCE PRIOR TO INSTALLATION.
11. CONTRACTOR SHALL DIRECT ALL QUESTIONS TO THE OWNER'S PROJECT COORDINATOR. THE CONTRACTOR SHALL VERIFY ALL WORKING CONDITIONS SUCH AS STARTING TIME, NOISE AND VIBRATION LIMITATIONS, CONFINED SPACE, ETC. THROUGH THE PROJECT COORDINATOR AND APPROVAL SHALL BE RECEIVED TO START WORK.
12. THE CONTRACTOR IS RESPONSIBLE FOR VISITING THE JOBSITE AND VERIFYING THE SCOPE OF WORK REQUIRED INCLUDING ALL EXISTING CONDITIONS, LOCATIONS, DIMENSIONS, AND QUANTITIES AS SHOWN AND NOTED ON THE DRAWINGS AND THE EXTENT AND EFFECT OF EXISTING SYSTEMS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING FULL COORDINATION WITH OTHER TRADES AND CONTRACTORS TO ACCOMPLISH THE WORK AS SHOWN AND NOTED IN THESE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL COMPARE THE DRAWINGS OF OTHER TRADES AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING CONDITIONS, AND SHALL PERFORM FIELD MEASUREMENTS PRIOR TO FABRICATION AND/OR PURCHASE OF ANY MATERIAL AND SHALL CONTACT THE PROJECT MANAGER SHOULD EXISTING CONDITIONS BE DIFFERENT FROM THE DESIGN DRAWINGS FOR THIS PROJECT. CONFLICTS ARISING DUE TO LACK OF COORDINATION SHALL BE THE RESPONSIBILITY AND AT THE EXPENSE OF THE CONTRACTOR.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING AND PAYING FOR ALL PERMITS, LICENSES, CLEARANCES AND CERTIFICATES FROM THE OWNER AND LOCAL AUTHORITIES HAVING JURISDICTION AS REQUIRED PRIOR TO THE COMMENCEMENT OF THE WORK.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAINING HIS/HER EMPLOYEES AND SUBCONTRACTORS AS REQUIRED BY THE OWNER, AND IN THE RECOGNITION AND AVOIDANCE OF UNSAFE CONDITIONS, AND IN THE REGULATIONS AND HAZARDS WHICH APPLY TO THE AREA IN WHICH THE WORK WILL TAKE PLACE.
17. ANY REQUIRED CHANGES TO THE DRAWINGS RESULTING FROM THE ACCEPTANCE OF ALTERNATIVES AND/OR SUBSTITUTIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBMITTED TO THE PROJECT COORDINATOR FOR APPROVAL.
18. THE CONTRACTOR SHALL MAINTAIN HIS SET OF CONSTRUCTION DRAWINGS ON SITE AT ALL TIMES SO THAT ALL CHANGES BETWEEN THE DRAWINGS AND THE ACTUAL CONSTRUCTION CAN BE NOTED ON THE DRAWINGS. THIS INCLUDES ALL DEVIATIONS FROM THE ORIGINAL CONTRACT. THE CONTRACTOR SHALL INDICATE ALL CHANGES FROM THE ORIGINAL PLANS MADE DURING THE INSTALLATION OF HIS WORK IN RED INK ON TWO BLUELINE PRINTS. AT THE END OF CONSTRUCTION, THE CONTRACTOR SHALL SIGN AND DATE THE DRAWINGS CERTIFYING THAT THEY ARE AN ACCURATE REFLECTION OF THE ACTUAL CONSTRUCTION. AS-BUILT DRAWINGS ARE TO BE DELIVERED TO THE OWNER'S PROJECT COORDINATOR AFTER PROJECT COMPLETION. NOTE THAT THE FINAL INVOICE FOR THE CONTRACT WILL NOT BE PAID BY THE OWNER UNTIL FINAL AS-BUILT DRAWINGS ARE RECEIVED.
19. SHOULD ANY ERRORS, OMISSIONS, CONFLICTS, OR AMBIGUITIES EXIST IN THE DRAWINGS, THE CONTRACTOR SHALL BRING THESE TO THE ATTENTION OF THE ENGINEER IMMEDIATELY FOR ADJUSTMENT IN WRITING BEFORE SIGNING THE CONTRACT OR PROCEEDING WITH THE WORK. OTHERWISE, HE SHALL AT HIS OWN EXPENSE, SUPPLY THE PROPER MATERIALS AND LABOR TO MAKE GOOD ANY DAMAGE OR DEFECT CAUSED BY SUCH UNINTENTIONAL ERROR.
20. CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS FOR ACCURACY, AND CONFIRMING THAT THE WORK IS BUILDABLE AS SHOWN AND MEETS ALL APPLICABLE CODES BEFORE PROCEEDING WITH CONSTRUCTION. IF THERE ARE ANY QUESTIONS REGARDING THESE OR OTHER COORDINATION ISSUES, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH THE WORK IN QUESTION OR RELATED WORK.
21. THE CONTRACTOR SHALL NOT FABRICATE OR INSTALL ITEMS AS SHOWN ON THE DRAWINGS IF THERE ARE DISCREPANCIES OR CONFLICTS BETWEEN THE EXISTING CONDITIONS AND THE INFORMATION SHOWN ON THE DRAWINGS UNTIL SUCH DISCREPANCIES HAVE BEEN RESOLVED. PRIOR TO FABRICATION OR INSTALLATION, THE CONTRACTOR SHALL IMMEDIATELY CALL SUCH DISCREPANCIES OR CONFLICTS TO THE ATTENTION OF THE PROJECT COORDINATOR.
22. ALL WORK NOTED "NIC" OR "NOT IN CONTRACT" IS TO BE ACCOMPLISHED BY ANOTHER CONTRACTOR AND IS NOT TO BE PART OF THE CONSTRUCTION AGREEMENT.
23. IN CASES OF A DIFFERENCE BETWEEN THE MINIMUM REQUIREMENTS OF THE VARIOUS LAWS, CODES, AUTHORITIES, AND THE DOCUMENTS; THE WORK SHALL EXCEED THE LESSER REQUIREMENTS WHILE MEETING THE GREATER OR MORE STRINGENT REQUIREMENTS.
24. THE SEQUENCE OF CONSTRUCTION SHALL BE SCHEDULED AND COORDINATED WITH THE PROJECT COORDINATOR.
25. WORK AREAS SHALL BE KEPT CONTINUOUSLY, AT ALL TIMES, FREE OF DEBRIS AND NON-HAZARDOUS MATERIAL TO THE SATISFACTION OF THE PROJECT COORDINATOR. ALL EXISTING PIPING AND CONDUITS SHALL HAVE TEMPORARY PROTECTION DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE STORAGE OF MATERIALS, PARKING OF VEHICLES, AND RESTRICTIONS OF WORK WITH THE PROJECT COORDINATOR. AFTER PROJECT COMPLETION, THE SITE SHALL BE CLEANED UP AND RESTORED TO ITS CONDITION OR BETTER PRIOR TO THE START OF THE PROJECT TO THE SATISFACTION OF THE PROJECT COORDINATOR.
26. THE DRAWINGS ARE DIAGRAMMATIC ONLY AND DO NOT GIVE FULLY DIMENSIONED LOCATIONS OF VARIOUS ELEMENTS OF WORK OR INDICATE ALL OFFSETS THAT MAY BE REQUIRED. DETERMINE EXACT LOCATIONS FROM FIELD MEASUREMENTS. MAKING ADJUSTMENTS TO FIELD CONDITIONS IS CONSIDERED A PART OF THE WORK REQUIRED.
27. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
28. DUCTWORK, PIPING, CONDUIT, CABLING, ETC. SHOWN ON DRAWINGS SHALL BE COORDINATED WITH AIR DISTRIBUTION DEVICES, SPECIAL CEILING, FLOOR, AND STRUCTURE CONSTRUCTION, ETC. PROVIDE ADDITIONAL RISES AND DROPS TO THOSE INDICATED ON THE DRAWINGS AS REQUIRED TO COORDINATE WITH ARCHITECTURAL, STRUCTURAL OR MEP ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS. ALL UTILITIES SHALL BE ROUTED IN AN ORDERLY MANNER, GROUPED TOGETHER WHEREVER POSSIBLE, AND LOCATED SO AS TO CONSERVE BUILDING SPACE.
29. COORDINATION OF ALL TRADES IN CEILING SPACES TO ALLOW AN 8-INCH CLEAR PLANE FOR LOCATION OF LIGHTS IS OF UTMOST IMPORTANCE TO MAXIMIZE FUTURE FLEXIBILITY. REALIZING THAT THIS IS NOT POSSIBLE IN ALL CASES, DUE TO CEILING ELEVATION AND STRUCTURAL LIMITATIONS, MAXIMUM EFFORT SHALL BE GIVEN TO MAINTAINING THE 8-INCH LIGHTING PLANE UNLESS NOTED OTHERWISE.
30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING WORK AS REQUIRED TO INSTALL THE SYSTEMS AS SHOWN ON THE DRAWINGS. ANY CUTTING THRU STRUCTURAL MEMBERS OR FLOORS SHALL FIRST BE COORDINATED WITH THE STRUCTURAL ENGINEER. ALL PATCHING AT WALLS SHALL BE THE SAME MATERIAL AS THE WALL AND TOUCHED UP WITH PAINT. ALL NEW WALL AND FLOOR PENETRATIONS SHALL BE MADE AT 90 DEGREE ANGLES AND SHALL BE SEALED FIREPROOF WITH AN APPROVED SEALANT. THERE SHALL BE NO DRILLING INTO THE FLOOR ABOVE OR BELOW, WITHOUT FIRST CONTACTING THE OWNER'S DESIGNATED REPRESENTATIVE.
31. ALL PENETRATIONS THROUGH FIRE-RATED CONSTRUCTION SHALL BE SEALED WITH UL 1479 LISTED THROUGH-PENETRATION FIRESTOP SYSTEMS.
32. PRIOR TO ANY CUTTING OR TRENCHING, VERIFY WITH OWNERS REP., UTILITY COMPANIES, AND LANDLORD THAT ALL AVAILABLE INFORMATION IS KNOWN REGARDING UNDERGROUND OBSTRUCTIONS. TAKE CAUTION WHEN TRENCHING NOT TO DISTURB ANY EXISTING UTILITIES. NOTIFY OWNERS REPRESENTATIVE IMMEDIATELY UPON UNCOVERING UNKNOWN UTILITIES FOR FURTHER DIRECTION.
33. NO ASBESTOS CONTAINING MATERIALS SHALL BE USED IN ANY OF THE NEW CONSTRUCTION.
34. CONTRACTOR TO PROVIDE START-UP AND COMMISSIONING SERVICES FOR ALL NEW SYSTEMS AND EQUIPMENT, AS WELL AS TRAINING SERVICES FOR THE OWNER'S MAINTENANCE PERSONNEL IN THE USE OF THESE SYSTEMS AND EQUIPMENT.
35. PROVIDE AND INSTALL 2" TALL ENGRAVED PHENOLIC PLASTIC EQUIPMENT TAGS, WHITE LETTERS ON BLACK BACKGROUND, FOR ALL EQUIPMENT TO MATCH TAGS INDICATED ON PLANS. IF EXISTING TAGS ARE PRESENT EITHER FROM THE MANUFACTURER OR EXISTING CONDITIONS, COVER OR PAINT OVER THE OLD TAG AS REQUIRED TO ELIMINATE CONFLICTING TAG NAMES. LABEL THERMOSTATS TO MATCH UNIT DESIGNATION. INDICATE ELECTRICAL PANEL AND CIRCUIT BREAKER NUMBER IDENTIFICATION ON NAMEPLATE IN SMALLER LETTERS IN PARENTHESES.
36. COORDINATE LOCATIONS OF ROOF PENETRATIONS TO MINIMIZE NUMBER OF OPENINGS. ROOF PENETRATIONS SHALL BE MADE WITHIN ROOF CURB. ELECTRIC AND REFRIGERANT LINES TO USE SAME PENETRATIONS WHERE POSSIBLE.
37. EQUIPMENT SCHEDULED ON THE DRAWINGS IS BASED UPON EQUIPMENT OF MANUFACTURER NOTED. EQUIPMENT FROM ANOTHER MANUFACTURER MAY BE USED PROVIDED THAT THE CONTRACTOR SUBMIT PROOF THAT THE EQUIPMENT TO BE USED IS EQUAL TO OR BETTER THAN THAT SCHEDULED ON THE DRAWINGS.
38. COORDINATE LOCATIONS OF EXISTING ROOF PENETRATIONS (IF PRESENT) WITH REQUIREMENTS FOR NEW AND TO MINIMIZE NUMBER OF OPENINGS. ELECTRIC AND REFRIGERANT LINES TO USE SAME PENETRATIONS WHERE POSSIBLE.
39. ALL ROOF PENETRATIONS ARE TO COMPLY WITH OWNERS ROOFING CONTRACTORS AND/OR ROOFING INSURANCE REQUIREMENTS.
40. DO NOT DISTURB ASBESTOS CONTAINING MATERIALS (ACM). IF ACM ARE ENCOUNTERED OR SUSPECTED DURING THE COURSE OF WORK, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE OWNER AND ACCOMMODATE FURTHER NECESSARY ABATEMENT BY THE OWNER. ASBESTOS ABATEMENT SHALL OCCUR PRIOR TO CONTRACTOR COMMENCING OR CONTINUING DEMOLITION OR CONSTRUCTION OPERATIONS.
41. ALL MOTORS SHALL MEET THE MINIMUM EFFICIENCIES LISTED IN NEMA MG1 TABLE 12-11 FOR ENERGY EFFICIENT MOTORS.
42. WHERE REQUIRED, INVERTER DUTY MOTORS SHALL BE PROVIDED WITH GROUNDED SHAFT OR CERAMIC BEARINGS TO INSULATE SHAFT AND CLASS F 105° C RISE INSULATION. REFERENCE NEMA MG1 PART 31.
43. INSTALL ISOLATION VALVES AT ALL PIPING BRANCH TAPS (WATER, AIR, STEAM, ETC.).
44. THIS DESIGN PROVIDES REQUIRED SIZES AND APPROXIMATE LOCATIONS FOR NEW WORK SHOWN, AND MAKES NO GUARANTEE OF THE SIZE AND LOCATION OF EXISTING CONDITIONS OR THOSE PROPOSED BY OTHER TRADES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND VERIFYING THE SIZE AND LOCATION OF ALL PROPOSED AND EXISTING UTILITIES WITH OTHER TRADES, UTILITY COMPANIES, EXISTING DRAWINGS, AND IN THE FIELD PRIOR TO BID. ALL WORK REQUIRED FOR SERVING THE NEW WORK IDENTIFIED IN THIS DESIGN SHALL BE INCLUDED IN THE CONTRACTOR'S BID. QUESTIONS OR CONFLICTS IDENTIFIED PRIOR TO BID SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND OWNER IMMEDIATELY, AND ALL COST AND PROVISIONS SHALL BE INCLUDED IN THE CONTRACTOR'S BID. QUESTIONS OR CONFLICTS ARISING AFTER BID SHALL BE RESOLVED BY THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, AND WITH ENGINEER AND OWNER APPROVAL.

DEMOLITION NOTES

EACH CONTRACTOR SHALL VERIFY DEMOLITION SCOPE OF WORK WITH THE GENERAL CONTRACTOR FOR THE REMOVAL OF ANY EXISTING FIRE PROTECTION, PLUMBING FIXTURES, PIPING, HVAC UNITS, REFRIGERANT RECAPTURE, EXHAUST FANS, ETC. AND ASSOCIATED ROOF CURBS NOT BEING REUSED ON THIS PROJECT, UNLESS SPECIFICALLY NOTED OTHERWISE. CONTRACTOR MUST VERIFY WITH THE OWNER ALL PRESUMED ABANDONED EQUIPMENT, PIPES, AND DUCTWORK PRIOR TO REMOVAL. ROOF CURBS SHALL BE REMOVED AND THE ROOF PATCHED. ALL EXTRANEOUS ITEMS IN THE SPACE OR ON THE ROOF NOT APPLICABLE TO THE NEW WORK MUST BE REMOVED AND ROOF/WALL/FLOOR PATCHED/REPAIRED TO MATCH EXISTING STRUCTURE. EXISTING ABANDONED PIPES, DUCTS, OR EQUIPMENT IN THE FLOOR, EMBEDDED IN CONCRETE, OR OTHERWISE INACCESSIBLE ARE TO BE CUT OFF AND SEALED BELOW OR WITHIN FLOOR OR WALL LEVEL WHEN THEY ARE NOT TO BE REUSED IN THIS PROJECT. IF REQUIRED BY OWNER OR CODES, ABANDONED PIPING AND/OR DUCTWORK MUST BE REMOVED TO POINT OF ORIGIN. CONFIRM THE EXTENT OF DEMOLITION WITH THE GENERAL CONTRACTOR PRIOR TO BID AND INCLUDE IN BID PROPOSAL AS DIRECTED.

APPLICABLE CODES FOR MEP WORK

- 2018 INTERNATIONAL BUILDING CODE WITH LOCAL AMENDMENTS
- 2018 INTERNATIONAL ENERGY CODE (IECC) WITH LOCAL AMENDMENTS
- 2018 INTERNATIONAL FIRE CODE WITH LOCAL AMENDMENTS
- 2018 INTERNATIONAL FUEL GAS CODE WITH LOCAL AMENDMENTS
- 2018 INTERNATIONAL MECHANICAL CODE WITH LOCAL AMENDMENTS
- 2018 INTERNATIONAL PLUMBING CODE WITH LOCAL AMENDMENTS
- 2017 NATIONAL ELECTRIC CODE WITH LOCAL AMENDMENTS

MEP SHEET LIST

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DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

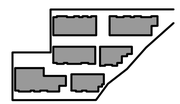
TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER: 2019-004

ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



MEP
GENERAL NOTES

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MEP0.01

GENERAL MECHANICAL NOTES

1. FLEXIBLE DUCT SHALL NOT EXCEED 5 FEET IN LENGTH. DUCT SHALL HAVE AN INTERNAL DIMENSION EQUAL TO THE CONNECTING ROUND DUCT DIMENSION. BALANCING DAMPERS ARE REQUIRED AT ALL DIFFUSER BRANCH CONNECTIONS AND SHALL BE LOCATED AS CLOSE TO THE MAIN DUCT CONNECTION AS POSSIBLE. FLEX DUCT INSULATION SHALL HAVE A MIN. "R" VALUE OF 6.0. FLEX DUCT AND ROUND DUCT CONNECTIONS TO MAIN DUCT OR BRANCH DUCTS SHALL BE MADE VIA SPIN-IN OR DOVE-TAILED CONICAL TAPS WITH DAMPERS. FLEXIBLE DUCT MATERIAL SHALL CONFORM TO UL 181 DESIGNATION AS AN AIR DUCT MATERIAL.

2. ALL INSULATING MATERIALS PRESENT SHALL CONFORM TO ASTM E 84, HAVING A MAXIMUM FLAME SPREAD RATING OF 25 AND A MAXIMUM SMOKE DEVELOPED RATING OF 50.

3. ALL WALL MOUNTED ROOM THERMOSTATS SHALL BE LOCATED 48" A.F.F., CENTERED ADJACENT TO LIGHT SWITCHES WHERE BOTH OCCUR IN THE SAME LOCATION. WHERE LOCATED ON COLUMN, THERMOSTAT SHALL BE CENTERED. TEMPERATURE SENSORS SHALL BE MOUNTED AT 70" A.F.F. SENSORS MOUNTED ON EXTERIOR COLUMNS SHALL BE MOUNTED ON INSULATED BASES. CONFIRM EXACT LOCATIONS OF THERMOSTATS WITH OWNER'S REPRESENTATIVE. THE MECHANICAL CONTRACTOR IS TO COORDINATE WITH THE OWNER AND PROGRAM ALL THERMOSTATS TO OWNER'S SPECIFIC SCHEDULE.

4. LOCATION OF AIR DEVICES SHALL BE COORDINATED W/ ARCHITECTURAL REFLECTED CEILING PLANS. TO ACHIEVE THE BEST COMBINATION OF PERFORMANCE AND AESTHETICS, THE FINAL LOCATIONS OF AIR DEVICES SHALL BE DETERMINED FROM THE ARCHITECTURAL REFLECTED CEILING PLANS. NO CHANGES TO AIR DEVICE LOCATIONS SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE ARCHITECT AND ENGINEER. SPRAY PAINT INTERIOR OF DUCTWORK BEHIND OR ABOVE AIR DEVICES TO 12" INSIDE DUCTWORK OPENING WITH FLAT BLACK PAINT TO RENDER DUCT INTERIOR INVISIBLE. LOCATE LOUVERED RETURN GRILLE BLADES SUCH THAT VISION INTO DUCT INTERIOR IS RESTRICTED.

5. BALANCING DAMPERS ARE REQUIRED AT ALL BRANCH CONNECTIONS. FLEX DUCT AND ROUND CONNECTIONS TO MAIN DUCT OR BRANCH DUCTS SHALL BE MADE VIA SPIN-IN CONICAL TAPS WITH DAMPERS.

6. DUCTWORK, PIPING, CONDUIT, CABLING, ETC. SHOWN ON DRAWINGS SHALL BE COORDINATED WITH AIR DISTRIBUTION DEVICES, SPECIAL CEILING, FLOOR, AND STRUCTURE CONSTRUCTION, ETC. PROVIDE ADDITIONAL RISES AND DROPS TO THOSE INDICATED ON THE DRAWINGS AS REQUIRED TO COORDINATE WITH ARCHITECTURAL, STRUCTURAL OR MEP ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS. DUCTWORK, PIPING, CONDUIT, CABLING, ETC. SHOWN ON EACH PLAN IS RUN ABOVE THE CEILING ON THE FLOOR WHERE IT IS SHOWN UNLESS OTHERWISE NOTED.

7. ALL DUCT SIZES ARE INSIDE CLEAR DIMENSIONS IN INCHES.

8. CONCEALED DUCTWORK - GALVANIZED SHEETMETAL, SIZED, CONSTRUCTED, AND INSTALLED IN ACCORDANCE WITH THE LATEST SMACNA STANDARDS. EXTERNALLY INSULATE ALL NEW SUPPLY, RETURN, AND OUTSIDE AIR DUCTWORK WITH R-6 MINIMUM 1-1/2" THICK, 3/4 LB. DENSITY FIBERGLASS INSULATION WITH ALUMINUM FOIL KRAFT VAPOR BARRIER. ALL AIR DUCT INSULATION TO HAVE A MAXIMUM FLAME SPREAD INDEX OF 25 AND A MAXIMUM SMOKE DEVELOPED RATING OF 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84. SEAL ALL TRANSVERSE AND LONGITUDINAL JOINTS OF DUCTWORK WITH HARDCAST DT-5400 TAPE AND FTA-20 INDOOR ADHESIVE PER SMACNA "SEAL CLASS C" RECOMMENDATIONS FOR LOW PRESSURE DUCTWORK. ROUND DUCTWORK SHALL BE SPIRAL SEAM PER SMACNA.

9. EXPOSED DUCTWORK - GALVANIZED SHEETMETAL, SIZED, CONSTRUCTED, AND INSTALLED IN ACCORDANCE WITH THE LATEST SMACNA STANDARDS. INTERNALLY LINE/INSULATE ALL NEW SUPPLY, RETURN, AND OUTSIDE AIR DUCTWORK WITH R-6 MINIMUM INSULATION WITH ANTI-MICROBIAL TREATMENT. SEAL ALL TRANSVERSE AND LONGITUDINAL JOINTS OF DUCTWORK WITH HARDCAST DT-5400 TAPE AND FTA-20 INDOOR ADHESIVE PER SMACNA "SEAL CLASS C" RECOMMENDATIONS FOR LOW PRESSURE DUCTWORK. ROUND DUCTWORK SHALL BE SPIRAL SEAM DOUBLE WALL PER SMACNA.

10. WHERE DUCTS PASS THROUGH ROOFS AND FLOORS, PROVIDE AS MINIMUM 1-1/2"x1-1/2"x1/8" STEEL ANGLE FRAMES AT EACH SIDE OF OPENING. THE ANNULAR SPACE BETWEEN DUCT AND ANGLE FRAMES SHALL BE CAULKED WITH SILICONE SEALANT OR FIREPROOFED AS REQUIRED BY ASSEMBLY FIRE RATING.

11. FLEXIBLE COLLARS SHALL BE FURNISHED AND INSTALLED IN ALL CONNECTIONS BETWEEN VIBRATING EQUIPMENT (FANS, AIR HANDLERS, ROOFTOP UNITS, ETC.) AND DUCTS OR CASINGS. ALSO FURNISH AND INSTALL FLEXIBLE CONNECTIONS WHERE DUCTS CROSS BUILDING EXPANSION JOINTS.

12. LOCATION OF MECHANICAL EQUIPMENT IS APPROXIMATE WHERE SHOWN. FIELD ADJUST AS REQUIRED. MAINTAIN ACCESS TO EQUIPMENT FOR MAINTENANCE. SUFFICIENT SPACE SHALL BE MAINTAINED FOR REMOVAL OF INDIVIDUAL COMPONENTS WITHOUT REMOVAL OF THE ENTIRE UNIT.

13. VIBRATION ISOLATION DEVICES SHALL BE PROPERLY SIZED, FURNISHED, AND INSTALLED FOR ALL MOTORIZED EQUIPMENT THAT IS NOT PROVIDED FROM THE MANUFACTURER WITH INTERNAL ISOLATION. PROVIDE VIBRATION ISOLATION AS RECOMMENDED BY EQUIPMENT MANUFACTURER OR AS INDICATED IN THE DRAWINGS.

14. CONDENSATE PIPING SHALL BE ASTM B88, TYPE L, HARD DRAWN COPPER TUBING AND WROUGHT COPPER AND BRONZE FITTINGS, SLOPED 1/8" PER FOOT TOWARDS DRAIN. INSULATE ALL CONDENSATE PIPING WITH 1/2" ARMAFLEX INSULATION. SEAL ALL LONGITUDINAL AND BUTT SEAMS. CONDENSATE PUMPS SHALL BE PROVIDED AS NEEDED.

15. FURNISH AND INSTALL ALL MITERED ELBOWS WITH TURNING VANES. RADIUSED RECTANGULAR ELBOWS SHALL HAVE CENTER LINE RADIUS TO WIDTH RATIO (R/W) OF 1.5 UNLESS OTHERWISE SPECIFIED. ALL ROUND ELBOWS SHALL HAVE A CENTERLINE RADIUS TO DIAMETER RATIO (R/D) OF 1.5 UNLESS OTHERWISE SPECIFIED. NO ELBOWS SHALL HAVE A CENTERLINE RADIUS TO DIAMETER RATIO (R/D) OF LESS THAN 1.0.

16. PROVIDE PIPE HANGERS OR SUPPORTS FOR HORIZONTAL PIPING ON SPACING ADEQUATE TO PREVENT SAGGING. PROVIDE COPPER PLATED HANGERS AND SUPPORTS FOR COPPER PIPING. PLACE HANGER WITHIN TWELVE INCHES OF EACH HORIZONTAL ELBOW.

17. AN NEBB OR AABC CERTIFIED CONTRACTOR SHALL BALANCE ALL AIRSIDE AND WATERSIDE SYSTEMS TO THE QUANTITIES AND FLOWRATES SHOWN ON THE DRAWINGS AND FURNISH A CERTIFIED TESTING AND BALANCING REPORT TO THE ENGINEER FOR REVIEW AND APPROVAL.

18. ALL INSULATED PIPING SHALL BE SUPPORTED BY PIPE HANGERS, B-LINE MODEL B3100.

19. INSULATE AND JACKET ALL REFRIGERANT LINES.

20. INSTALL A NEW SET OF AIR FILTERS ON ALL APPLICABLE EQUIPMENT AT COMPLETION OF PROJECT.

21. THIS DESIGN PROVIDES REQUIRED SIZES AND APPROXIMATE LOCATIONS FOR NEW WORK SHOWN, AND MAKES NO GUARANTEE OF THE SIZE AND LOCATION OF EXISTING CONDITIONS OR THOSE PROPOSED BY OTHER TRADES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND VERIFYING THE SIZE AND LOCATION OF ALL PROPOSED AND EXISTING UTILITIES WITH OTHER TRADES, UTILITY COMPANIES, EXISTING DRAWINGS, AND IN THE FIELD PRIOR TO BID. ALL WORK REQUIRED FOR SERVING THE NEW WORK IDENTIFIED IN THIS DESIGN SHALL BE INCLUDED IN THE CONTRACTOR'S BID. QUESTIONS OR CONFLICTS IDENTIFIED PRIOR TO BID SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND OWNER IMMEDIATELY, AND ALL COST AND PROVISIONS SHALL BE INCLUDED IN THE CONTRACTOR'S BID. QUESTIONS OR CONFLICTS ARISING AFTER BID SHALL BE RESOLVED BY THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, AND WITH ENGINEER AND OWNER APPROVAL.

HVAC SYMBOLS AND ABBREVIATIONS

SYMBOL	DESCRIPTION
	TURNING VANES
	MANUAL VOLUME DAMPER
FD	FIRE DAMPER
FSD	FIRE/SMOKE DAMPER
SD	DUCTWORK SMOKE DETECTOR (BY EC)
T	DUCTWORK TEMPERATURE SENSOR
H	DUCTWORK HUMIDITY SENSOR
SP	DUCTWORK STATIC PRESSURE SENSOR
	SUPPLY DUCT
	RETURN OR EXHAUST DUCT
	SQUARE TO ROUND TRANSITION
M	MOTORIZED DAMPER
	ROUND DUCT RISE
	ROUND DUCT DROP
CO	CO2 SENSOR
H	HUMIDISTAT/HUMIDITY SENSOR
T	THERMOSTAT/TEMPERATURE SENSOR
SD	SMOKE DETECTOR
UCD	UNDERCUT DOOR
	AIRFLOW DIRECTION
DP	PIPING DIFFERENTIAL PRESSURE SENSOR
	PIPE BRANCH TAKE-OFF FROM BOTTOM
	PIPE BRANCH TAKE-OFF FROM TOP
	PIPE DROP
	PIPE RISE
CD	AC CONDENSATE DRAIN PIPING
PCD	PUMPED AC CONDENSATE DRAIN PIPING
CHS	CHILLED WATER SUPPLY PIPING
CHR	CHILLED WATER RETURN PIPING
CWS	CONDENSER WATER SUPPLY PIPING
CWR	CONDENSER WATER RETURN PIPING
HWS	HOT WATER SUPPLY PIPING
HWR	HOT WATER RETURN PIPING
G	LOW PRESSURE NATURAL GAS PIPING

EQUIPMENT TAGGING LEGEND

EQUIPMENT	DESCRIPTION
AIR DEVICE	TYPE X-XXX CFM (IF NEEDED) CEILING SUPPLY AIR CEILING RETURN AIR CEILING EXHAUST AIR SLOT SUPPLY / RETURN / EXHAUST AIR SIDEWALL SUPPLY / RETURN / EXHAUST AIR
MECHANICAL EQUIPMENT	BUILDING (IF NEEDED) EQUIPMENT TYPE B1-AHU-1-1 EQUIPMENT DESIGNATION BUILDING LEVEL (IF NEEDED)

NEW CONSTRUCTION LEGEND

- EXISTING TO REMAIN
- RELOCATED EQUIPMENT OR MATERIALS
- NEW CONSTRUCTION

m(ødm)

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markodom@udio.com

DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

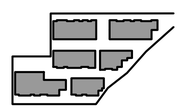
TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER: 2019-004

ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



MECHANICAL SYMBOLS, NOTES & ABBREVIATIONS

M0.01

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512.270.9660

TEXAS FIRM # F-18749
AUSTIN, TEXAS 78734
www.mintengineers.com

KEYNOTES (#)

1. FAN COIL UNIT LOCATION IS SCHEMATIC. COORDINATE FAN COIL UNITS WITH EXISTING CONDITIONS AND OTHER TRADES. WALL MOUNT AND INSTALL PER MANUFACTURER'S REQUIREMENTS.

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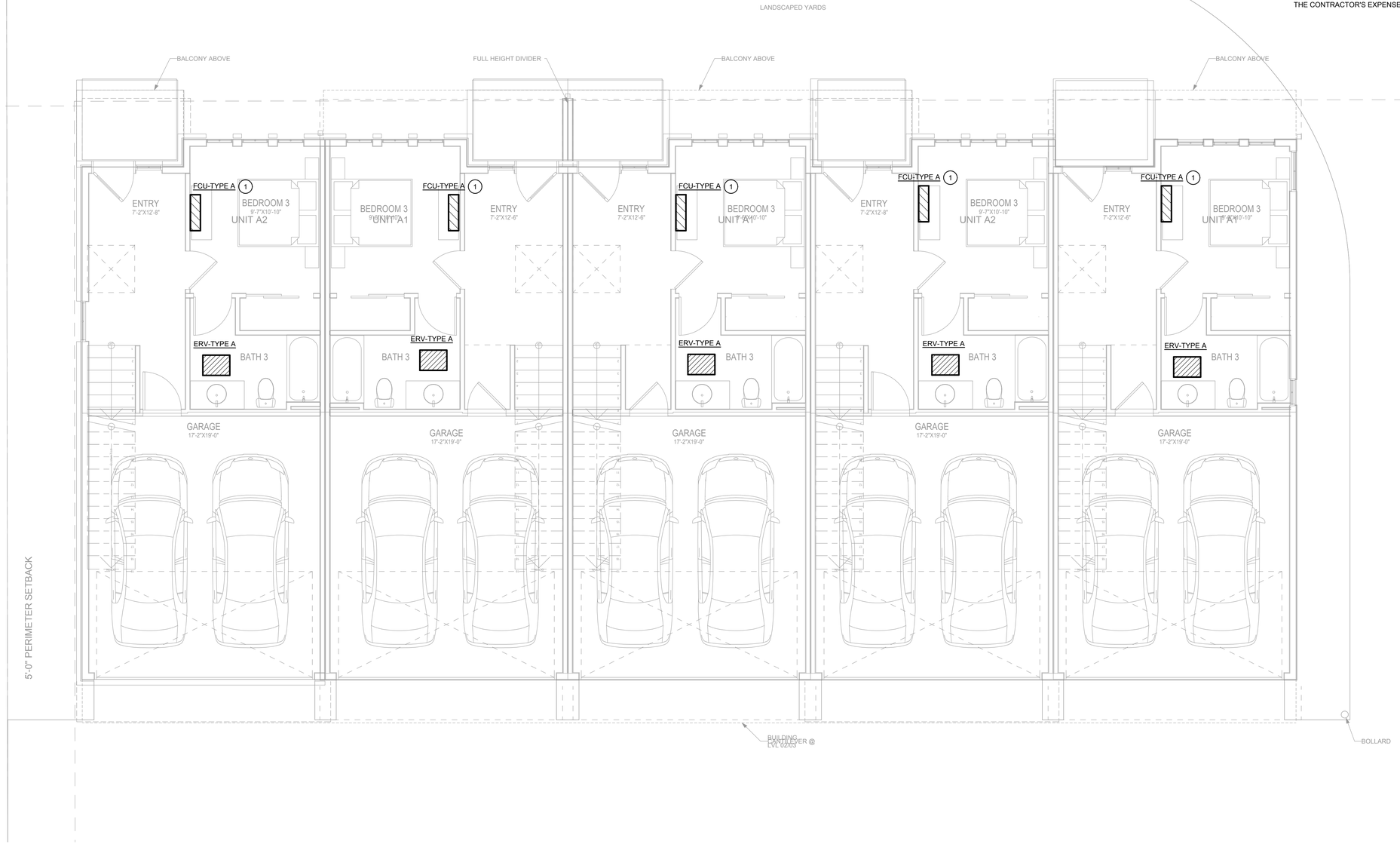

1 BLDG 1 - 1ST FLOOR M□□□ANI□AL PLAN

Scale: 1/4"=1'-0"

m(ødm)

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ISSUED SETS	DATE
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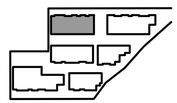

BLDG 1
1ST FLOOR
MECHNICAL PLAN

M1.11

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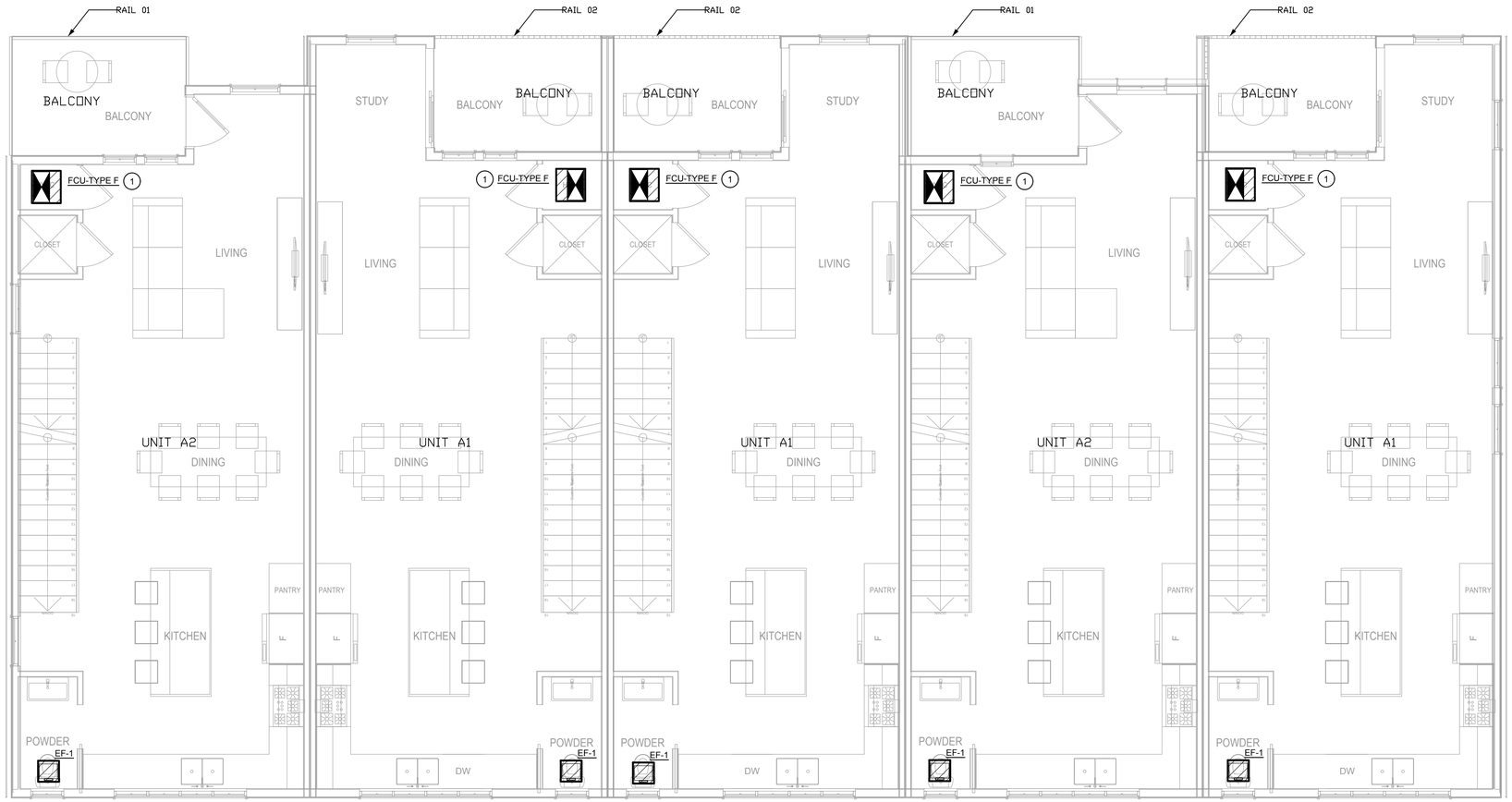

1 BLDG 1 - 2ND FLOOR MECHANICAL PLAN

Scale: 1/4"=1'-0"

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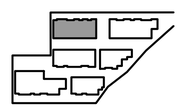

BLDG 1
2ND FLOOR
MECHNICAL PLAN

M1.12

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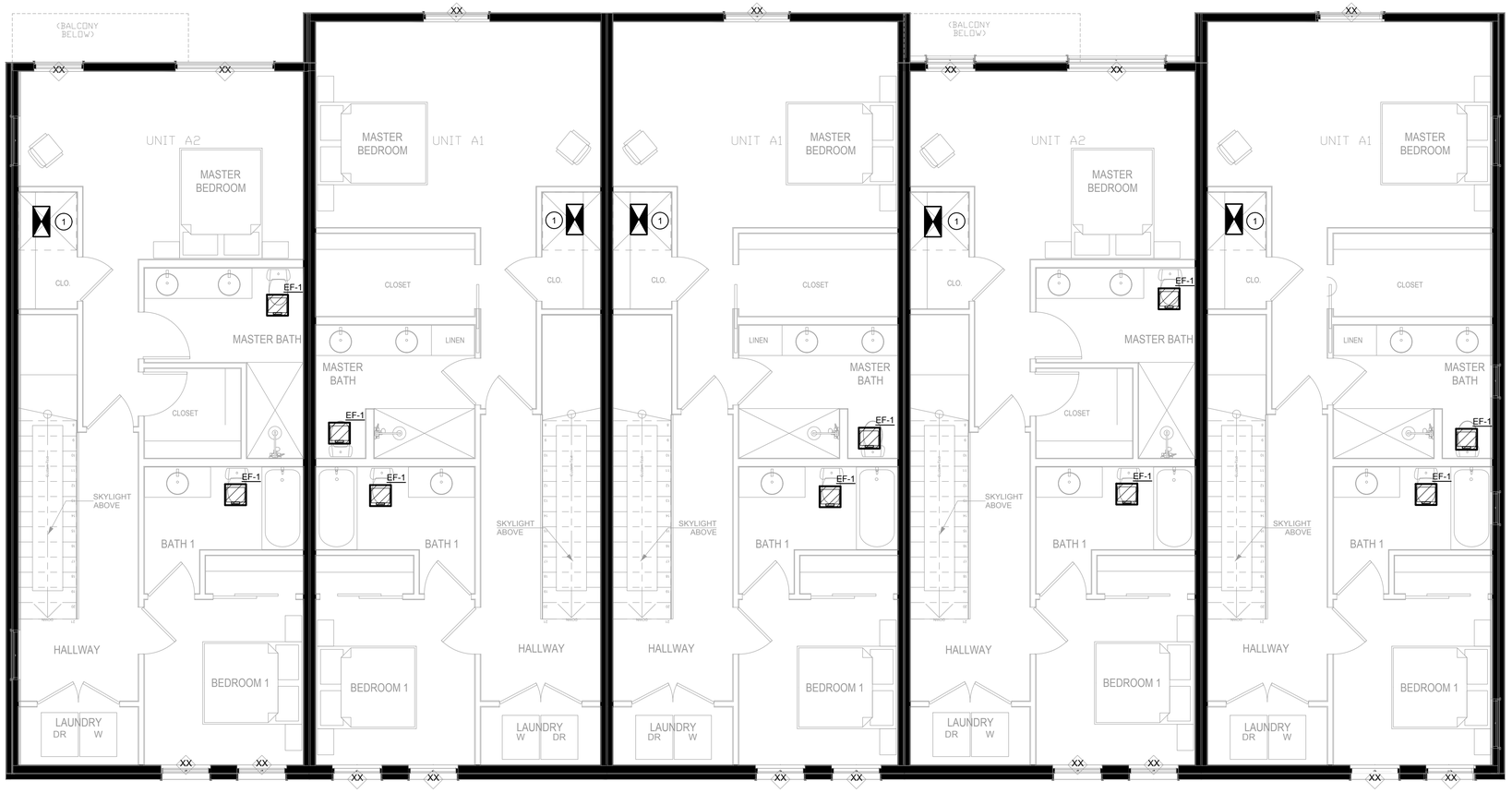

1 BLDG 1 - 3RD FLOOR MECHANICAL PLAN

Scale: 1/4"=1'-0"

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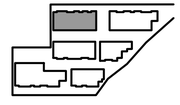

BLDG 1
3RD FLOOR
MECHNICAL PLAN

M1.13

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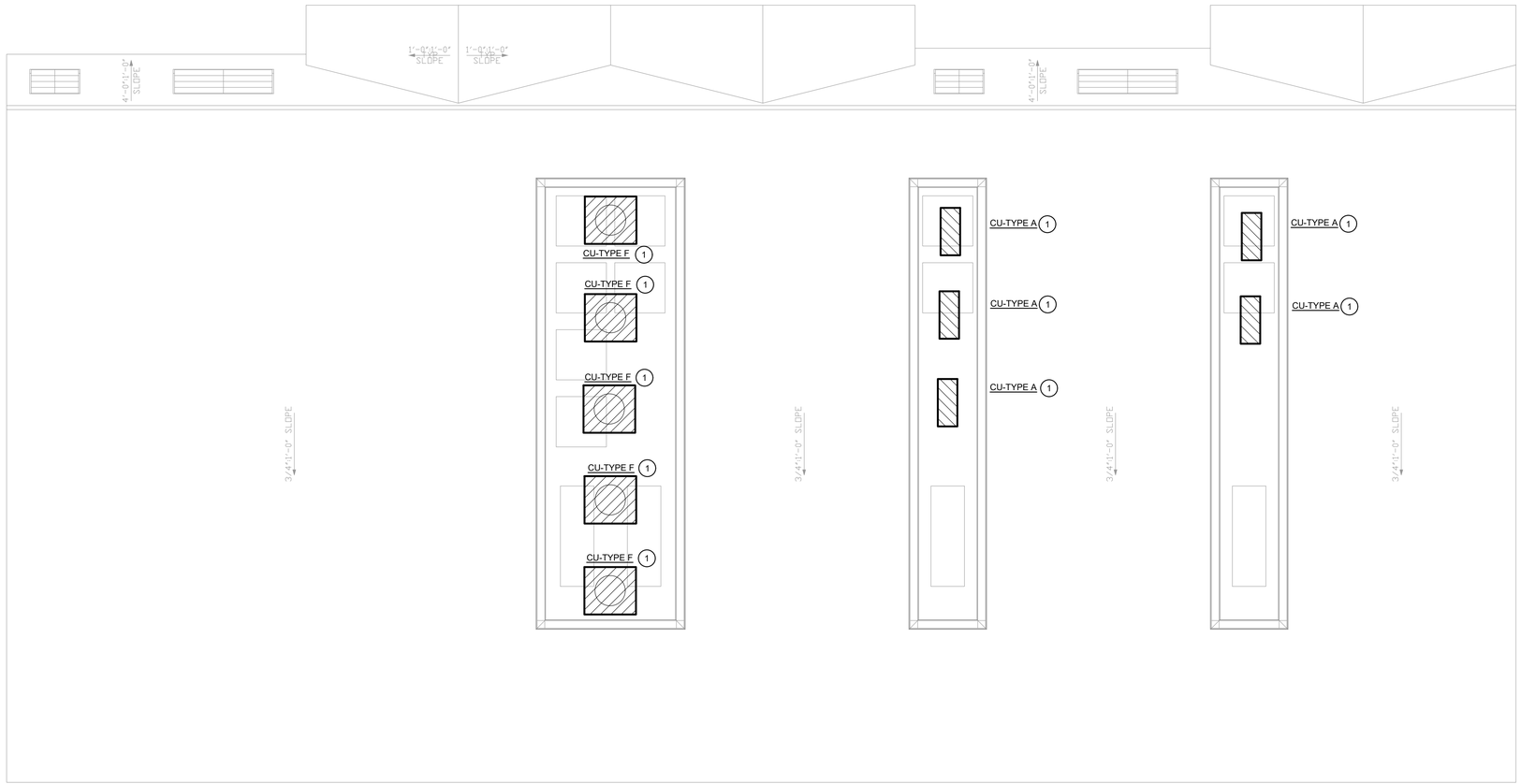

1 BLDG 1 - ROOF MECHANICAL PLAN

Scale: 1/4"=1'-0"

m(ødm)

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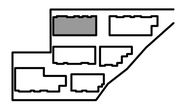

BLDG 1
ROOF
MECHNICAL PLAN

M1.14

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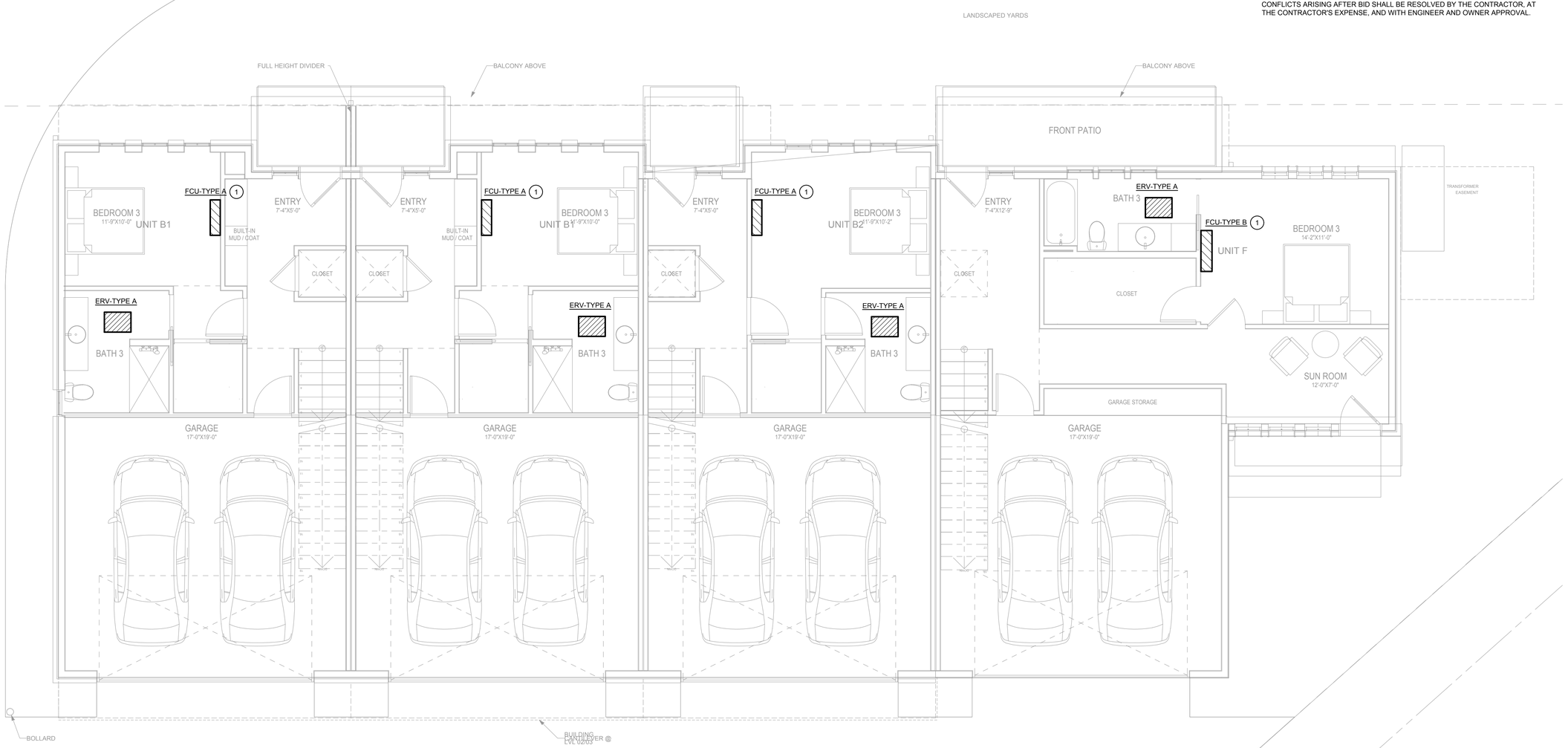

1 BLDG 2- 1ST FLOOR MECHANICAL PLAN

Scale: 1/4"=1'-0"

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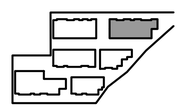

BLDG 2
1ST FLOOR
MECHANICAL PLAN

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M1.21

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1 BLDG 2- 2ND FLOOR MECHANICAL PLAN

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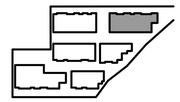

BLDG 2
2ND FLOOR
MECHANICAL PLAN

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M1.22

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1 BLDG 2 - 3RD FLOOR MECHANICAL PLAN

Scale: 1/4"=1'-0"

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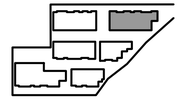

BLDG 2
3RD FLOOR
MECHANICAL PLAN

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M1.23

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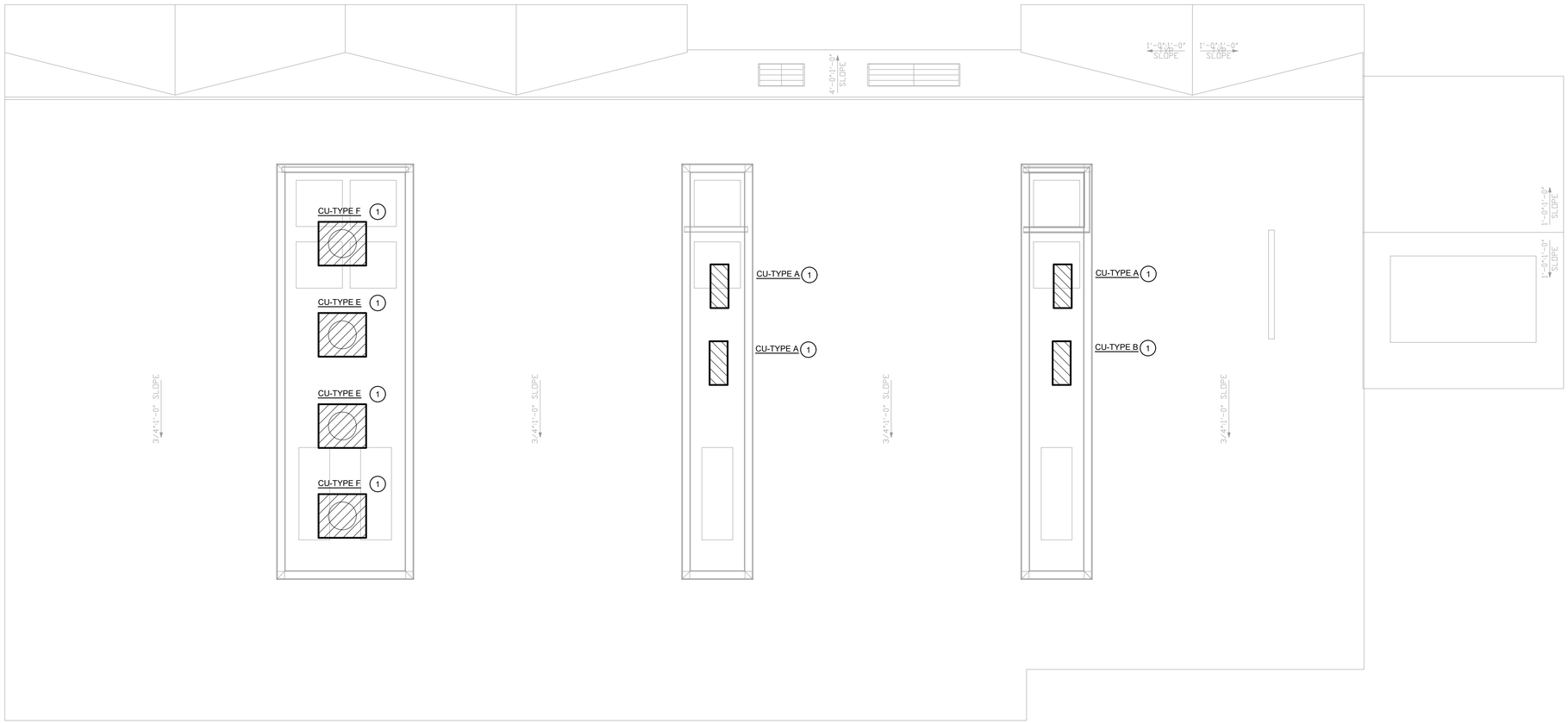

1 BLDG 2 - ROOF MECHANICAL PLAN

Scale: 1/4"=1'-0"

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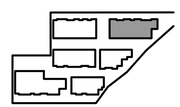

BLDG 2
ROOF
MECHANICAL PLAN

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M1.24

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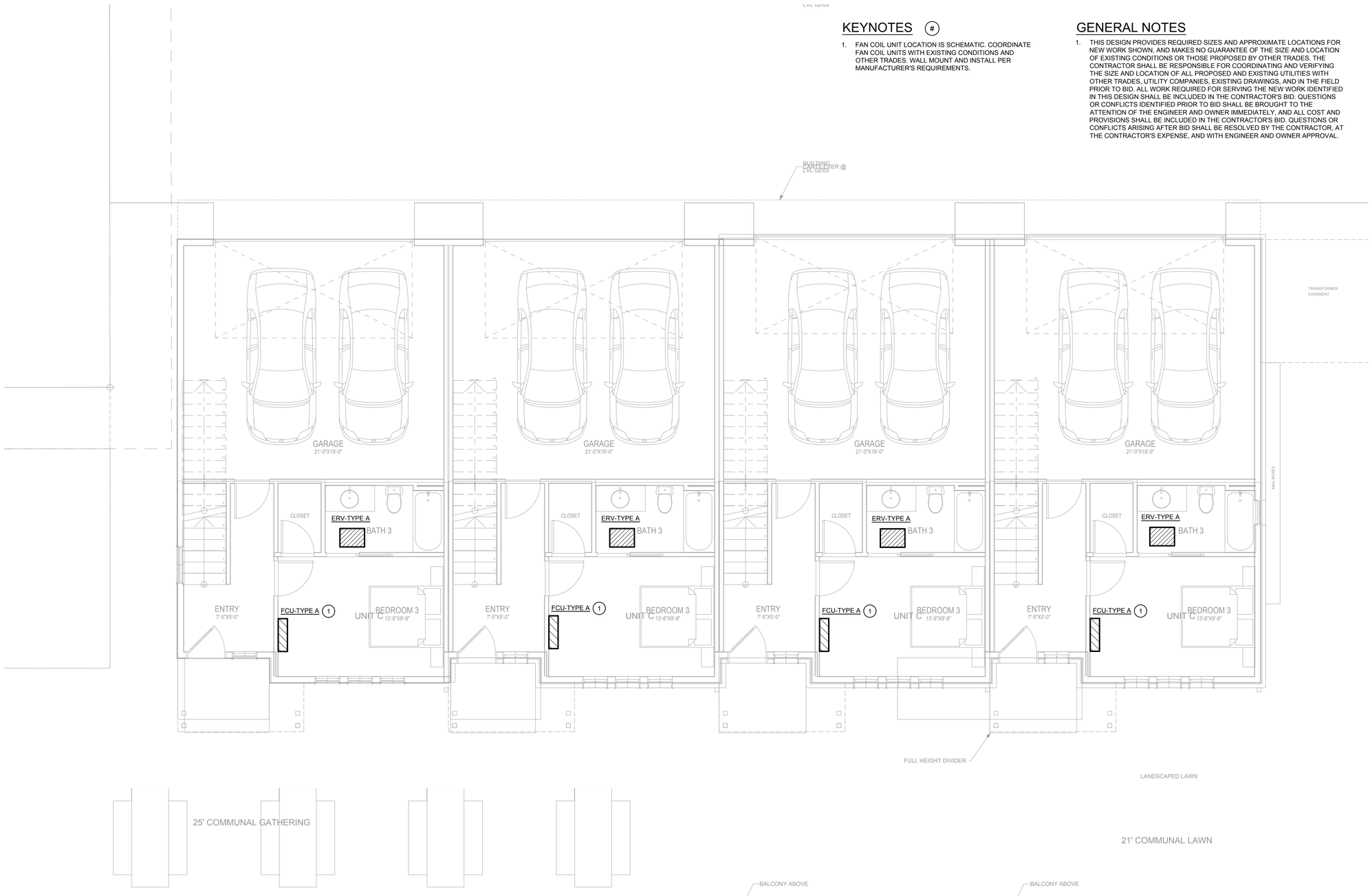


1 BLDG □- 1ST FLOOR M□□□ANI□AL PLAN

Scale: 1/4"=1'-0"

m(ødm)

Austin [tel] 469.5950
1009 West 6th Street #50 78703

San Antonio [tel] 469.5950
201 Groveton Street 78210

markodom@udio.com

DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

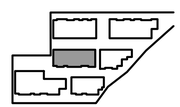
TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER: 2019-004

ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 3
1ST FLOOR
MECHANICAL PLAN

M1.31

mint ENGINEERING

MINT ENGINEERING LLC TEXAS FIRM # F-18749
107 RR 620 SOUTH, SUITE 350 AUSTIN, TEXAS 78734
512.270.9660 www.mintengineers.com

KEYNOTES (#)

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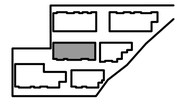
335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER: 2019-004

ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 3
2ND FLOOR
MECHANICAL PLAN

M1.32

mint ENGINEERING

MINT ENGINEERING LLC
107 RR 620 SOUTH, SUITE 350
512.270.9960

TEXAS FIRM # F-18749
AUSTIN, TEXAS 78734
www.mintengineers.com

KEYNOTES (#)

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1 BLDG 3 - 3RD FLOOR MECHANICAL PLAN

Scale: 1/4"=1'-0"

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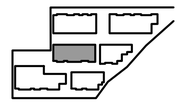
ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 3
3RD FLOOR
MECHANICAL PLAN

mint ENGINEERING
MINT ENGINEERING LLC 107 RR 620 SOUTH, SUITE 350 AUSTIN, TEXAS 78734
512.270.9960 TEXAS FIRM # F-18749
www.mintengineers.com

M1.33

KEYNOTES (#)

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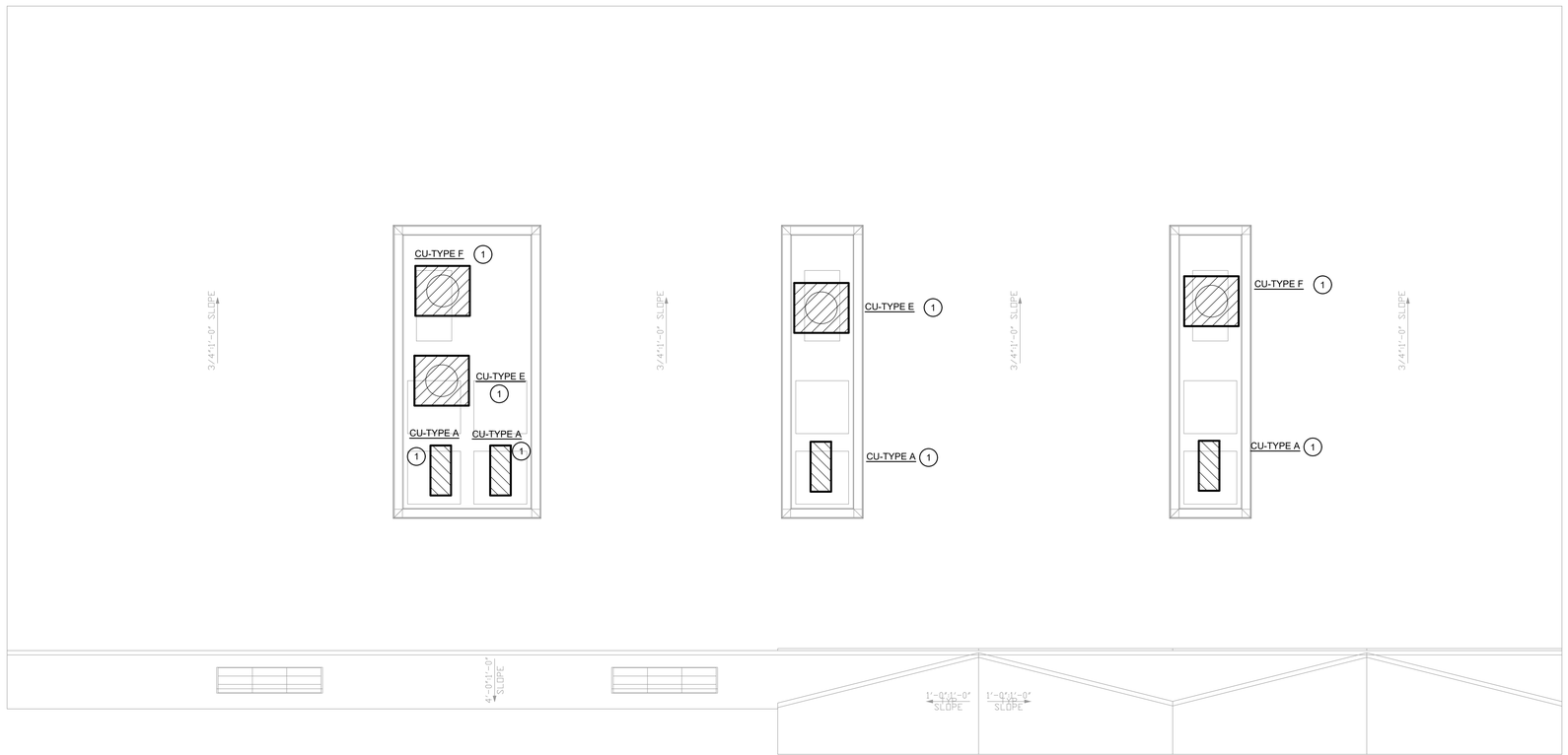

1 BLDG □- ROOF M□□□ANI□AL PLAN

Scale: 1/4"=1'-0"

m(ødm)

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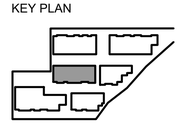
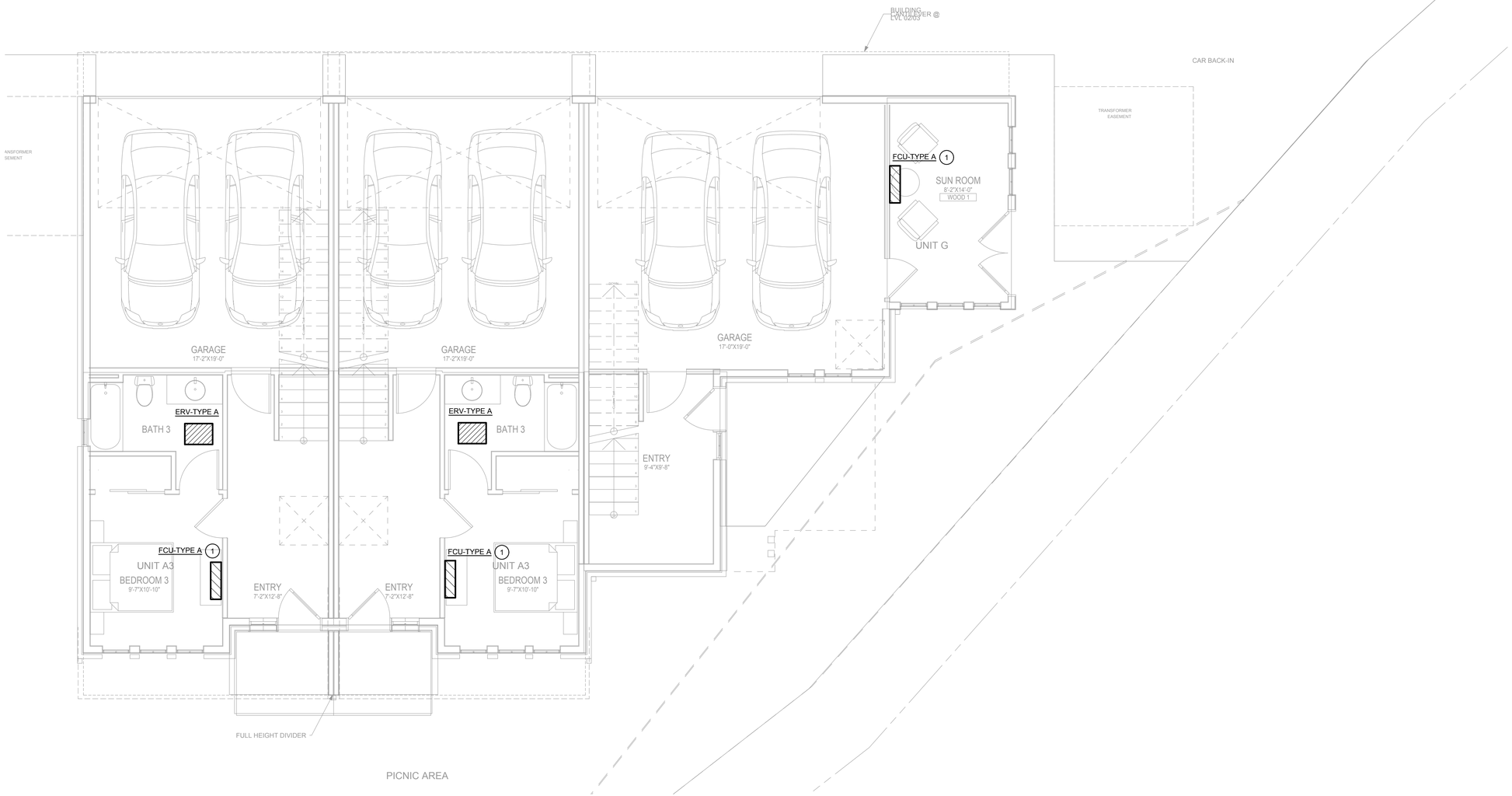


BLDG 3
ROOF
MECHANICAL PLAN

M1.34

mint ENGINEERING

MINT ENGINEERING LLC 107 RR 620 SOUTH, SUITE 350 512.270.9980
TEXAS FIRM # F-18749 AUSTIN, TEXAS 78734 www.mintengineers.com



1 BLDG 4 - 1ST FLOOR M□□□ANI□AL PLAN

Scale: 1/4"=1'-0"

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ISSUED SETS	DATE
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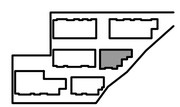
KEY PLAN

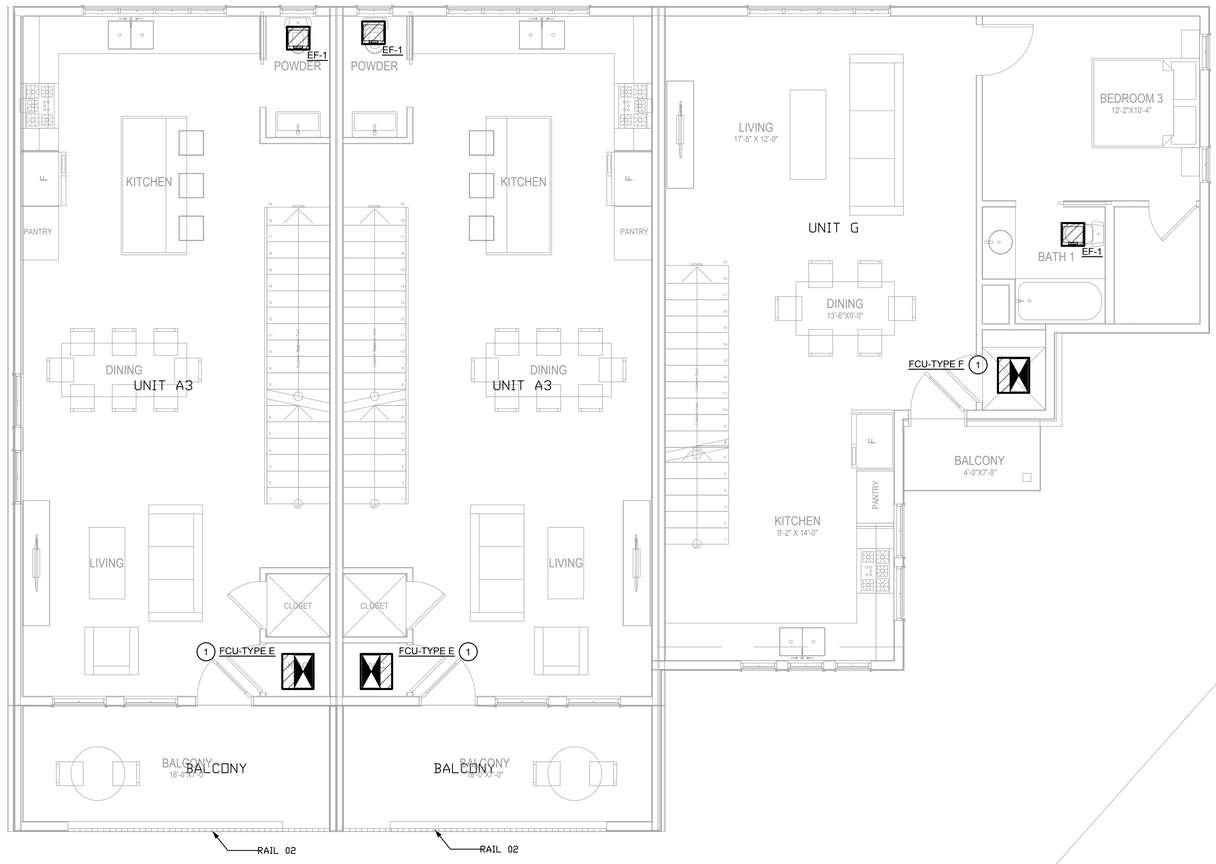


BLDG 4
1ST FLOOR
MECHANICAL PLAN

M1.41

mint ENGINEERING

MINT ENGINEERING LLC TEXAS FIRM # F-18749
107 RR 620 SOUTH, SUITE 350 AUSTIN, TEXAS 78734
512.270.9980 www.mintengineers.com



1 BLDG 4 - 2ND FLOOR MECHANICAL PLAN

Scale: 1/4"=1'-0"

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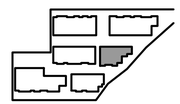

BLDG 4
2ND FLOOR
MECHANICAL PLAN

M1.42

mint ENGINEERING

MINT ENGINEERING LLC
107 RR 620 SOUTH, SUITE 350
512.270.9960

TEXAS FIRM # F-18749
AUSTIN, TEXAS 78734
www.mintengineers.com

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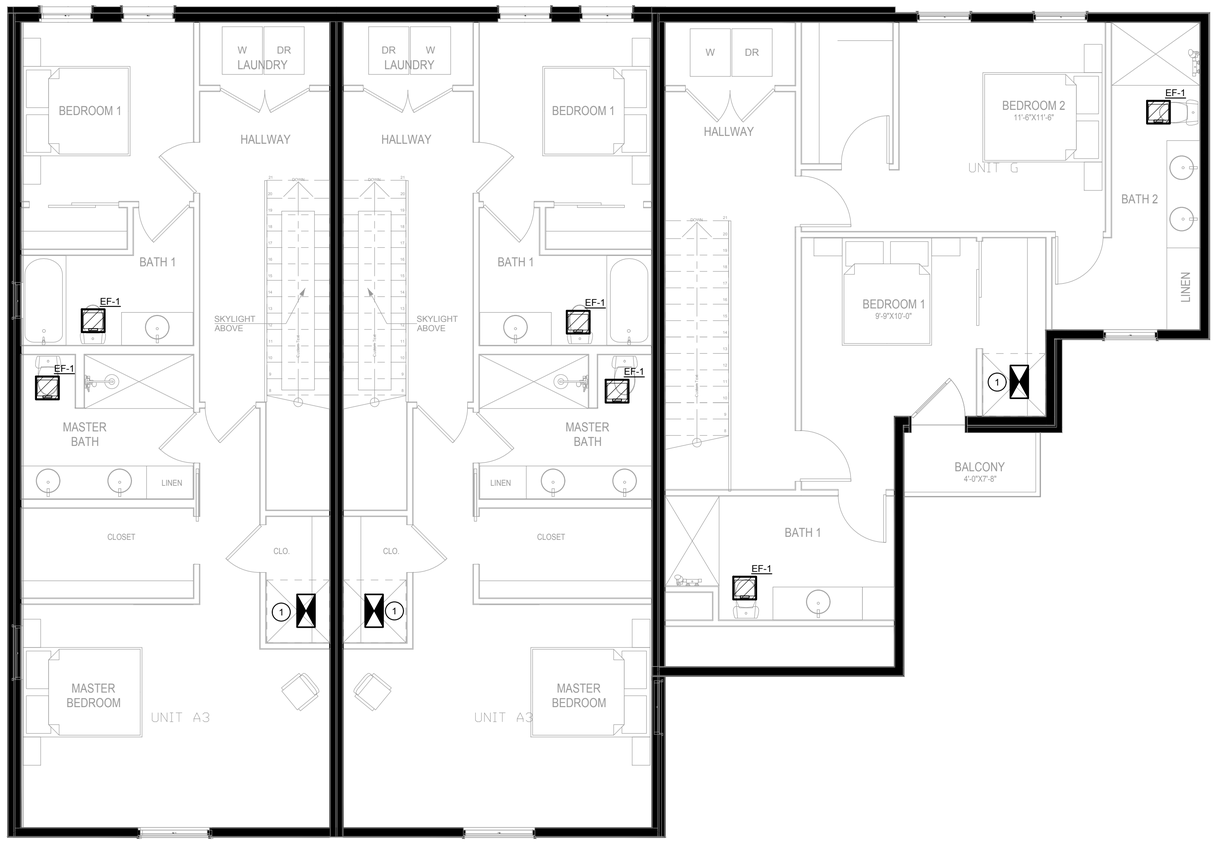

1 BLDG 4 - 3RD FLOOR MECHANICAL PLAN

Scale: 1/4"=1'-0"

m(ødm)

Austin [tel] 469.5950
1009 West 6th Street #50 78703

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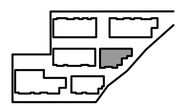

BLDG 4
3RD FLOOR
MECHANICAL PLAN

M1.43

mint ENGINEERING

MINT ENGINEERING LLC
107 RR 620 SOUTH, SUITE 350
512.270.9960

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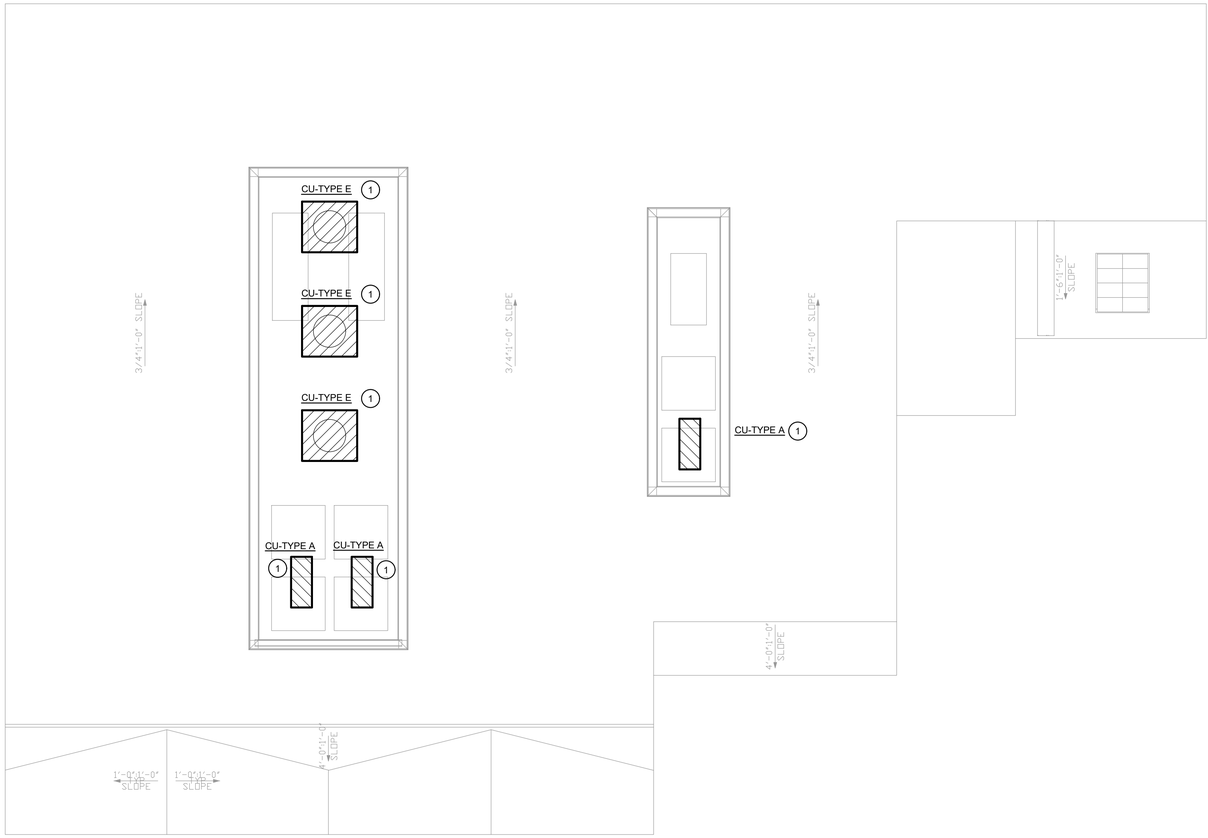

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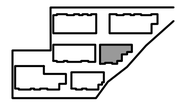

BLDG 4
ROOF
MECHANICAL PLAN

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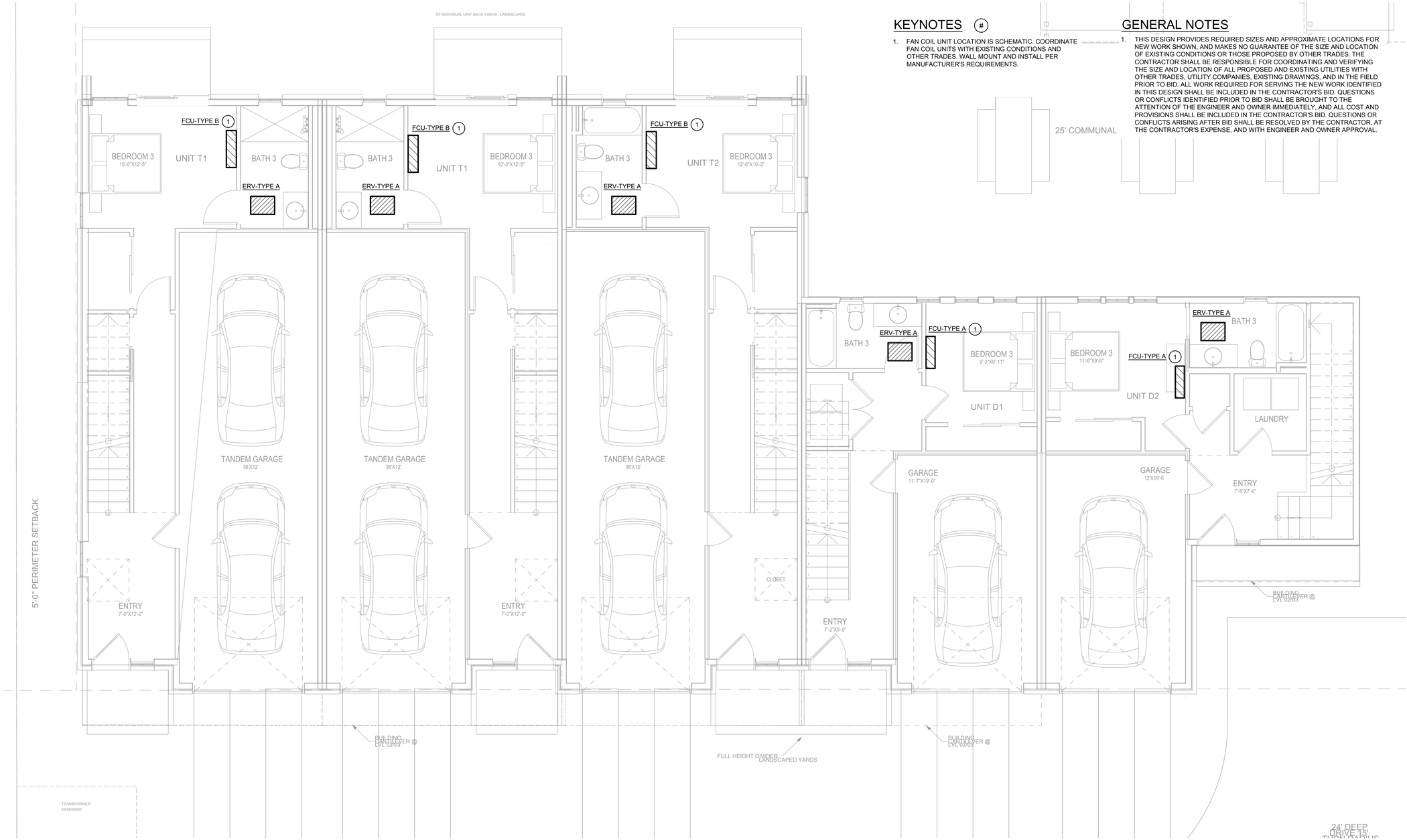
M1.44



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1 BLDG 5 - 1ST FLOOR MECHANICAL PLAN

Scale: 1/4"=1'-0"

m(ødm)

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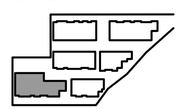

BLDG 5
1ST FLOOR
MECHANICAL PLAN

M1.51

mint ENGINEERING

MINT ENGINEERING LLC
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512.270.9660

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1 BLDG 5 - 2ND FLOOR MECHANICAL PLAN

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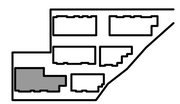

BLDG 5
2ND FLOOR
MECHANICAL PLAN

M1.52

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KEYNOTES (#)

1. DUCTWORK CONTINUES FROM FAN COIL UNIT.

GENERAL NOTES

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1 BLDG 5 - 3RD FLOOR MECHANICAL PLAN

Scale: 1/4"=1'-0"

m(ødm)

Austin [tel] 469.5950
1009 West 6th Street #50 78703

San Antonio [tel] 469.5950
201 Groveton Street 78210

markodom@udio.com

DRAFT: NOT FOR FINAL CONSTRUCTION/ PERMITTING/ PRICING

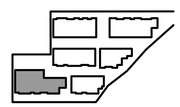
TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER: 2019-004

ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 5
3RD FLOOR
MECHANICAL PLAN

M1.53

mint ENGINEERING

MINT ENGINEERING LLC
107 RR 620 SOUTH, SUITE 350
512.270.9960

TEXAS FIRM # F-18749
AUSTIN, TEXAS 78734
www.mintengineers.com

KEYNOTES (#)

1. CONDENSING UNIT LOCATION IS SCHEMATIC. COORDINATE EXACT LOCATION WITH EXISTING CONDITIONS AND OTHER TRADES. INSTALL PER MANUFACTURER'S REQUIREMENTS.

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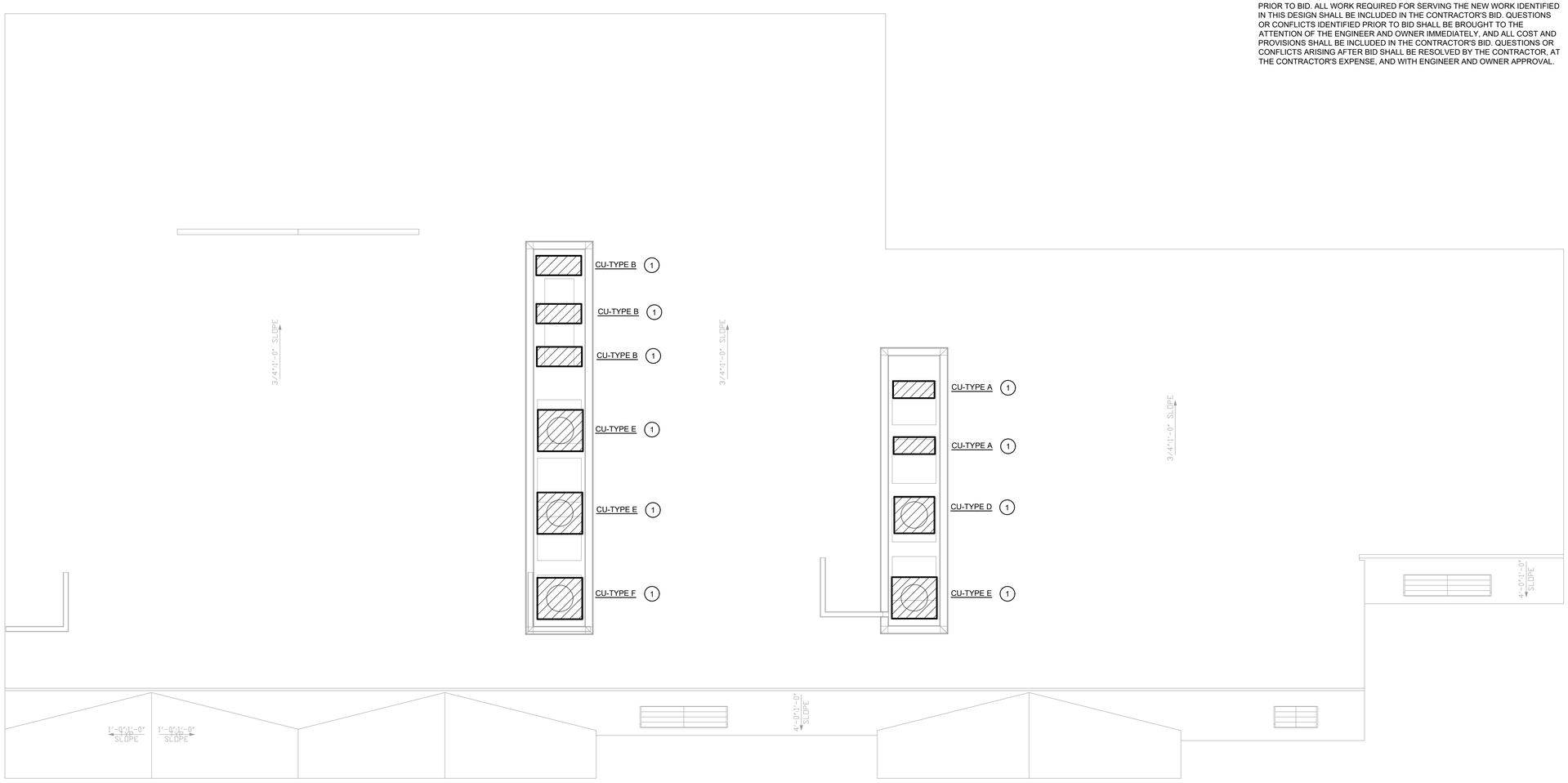

1 BLDG □- ROOF M□□□ANI□AL PLAN

Scale: 1/4"=1'-0"

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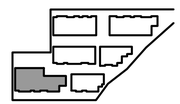

BLDG 5
ROOF
MECHANICAL PLAN

M1.54

mint ENGINEERING

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TEXAS FIRM # F-18749 AUSTIN, TEXAS 78734 www.mintengineers.com

KEYNOTES (#)

1. FAN COIL UNIT LOCATION IS SCHEMATIC. COORDINATE FAN COIL UNITS WITH EXISTING CONDITIONS AND OTHER TRADES. WALL MOUNT AND INSTALL PER MANUFACTURER'S REQUIREMENTS.

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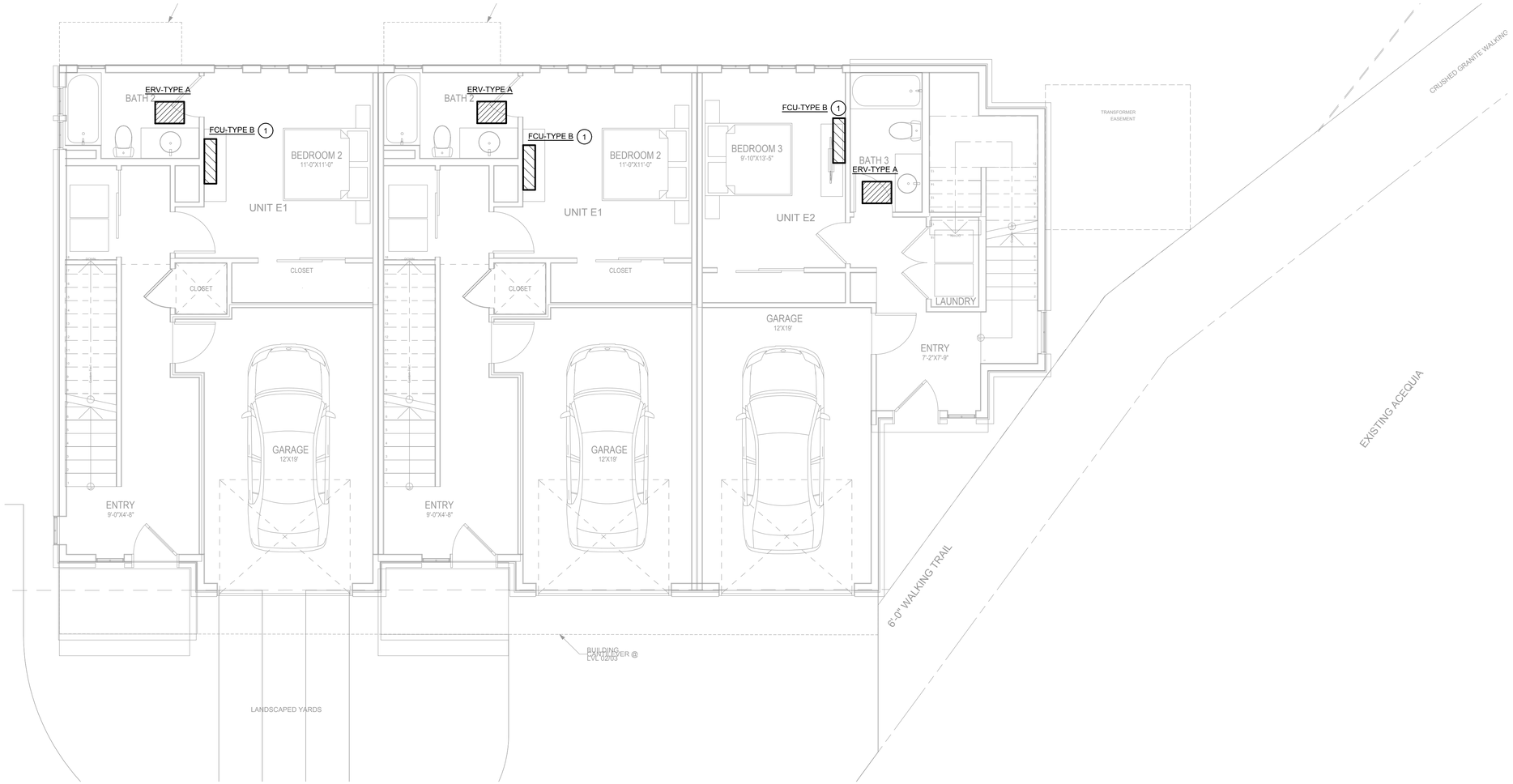

1 BLDG 6 - 1ST FLOOR MECHANICAL PLAN

Scale: 1/4"=1'-0"

m(ødm)

Austin [tel] 469.5950
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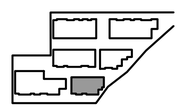

BLDG 6
1ST FLOOR
MECHANICAL PLAN

M1.61

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MINT ENGINEERING LLC
107 RR 620 SOUTH, SUITE 350
512.270.9660

TEXAS FIRM # F-18749
AUSTIN, TEXAS 78734
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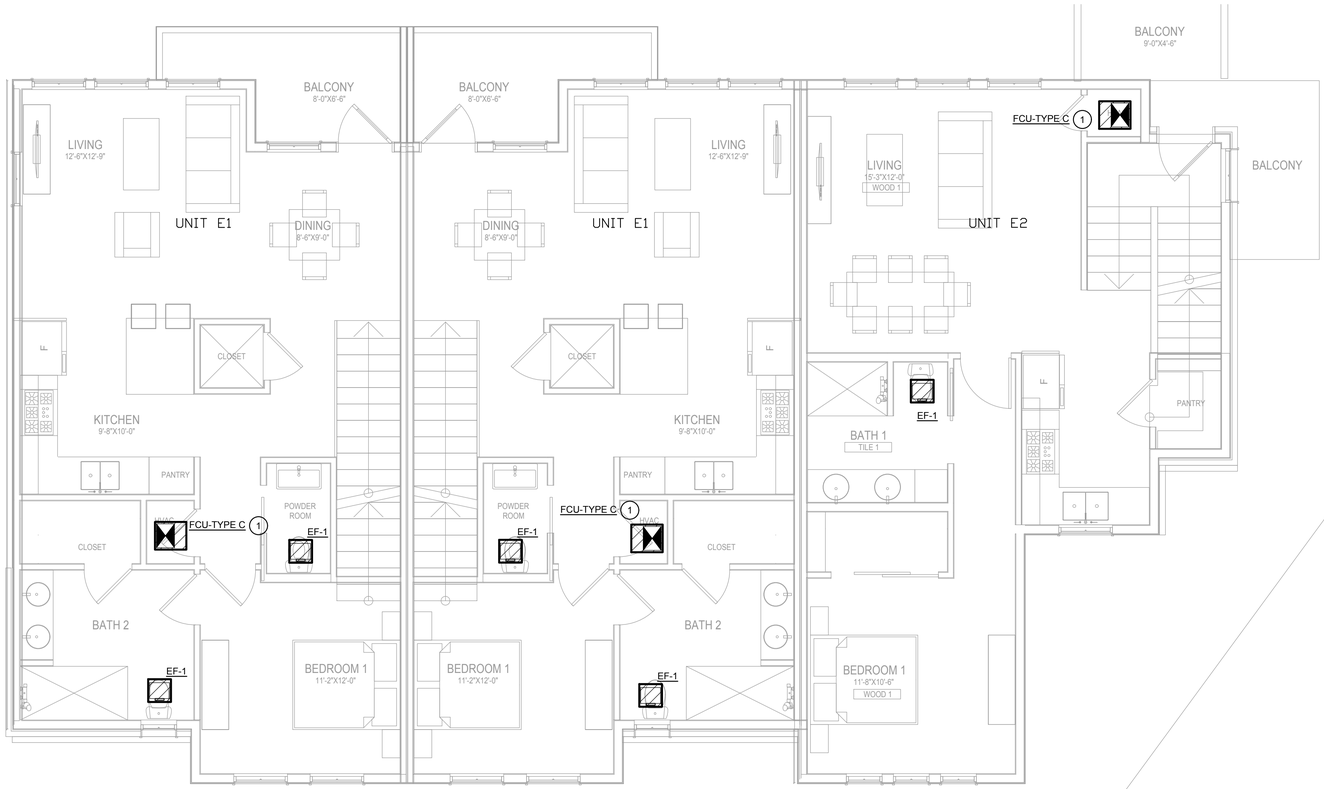

1 BLDG 6 - □ND FLOOR M□□□ANI□AL PLAN

Scale: 1/4"=1'-0"

m(ødm)

Austin [tex] 469.5950
1009 West 6th Street #50 78703

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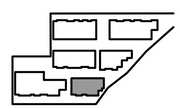
PROJECT NUMBER: 2019-004

ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 6
2ND FLOOR
MECHANICAL PLAN

mint ENGINEERING

MINT ENGINEERING LLC
107 RR 620 SOUTH, SUITE 350
512.270.9960

TEXAS FIRM # F-18749
AUSTIN, TEXAS 78734
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M1.62

KEYNOTES (#)

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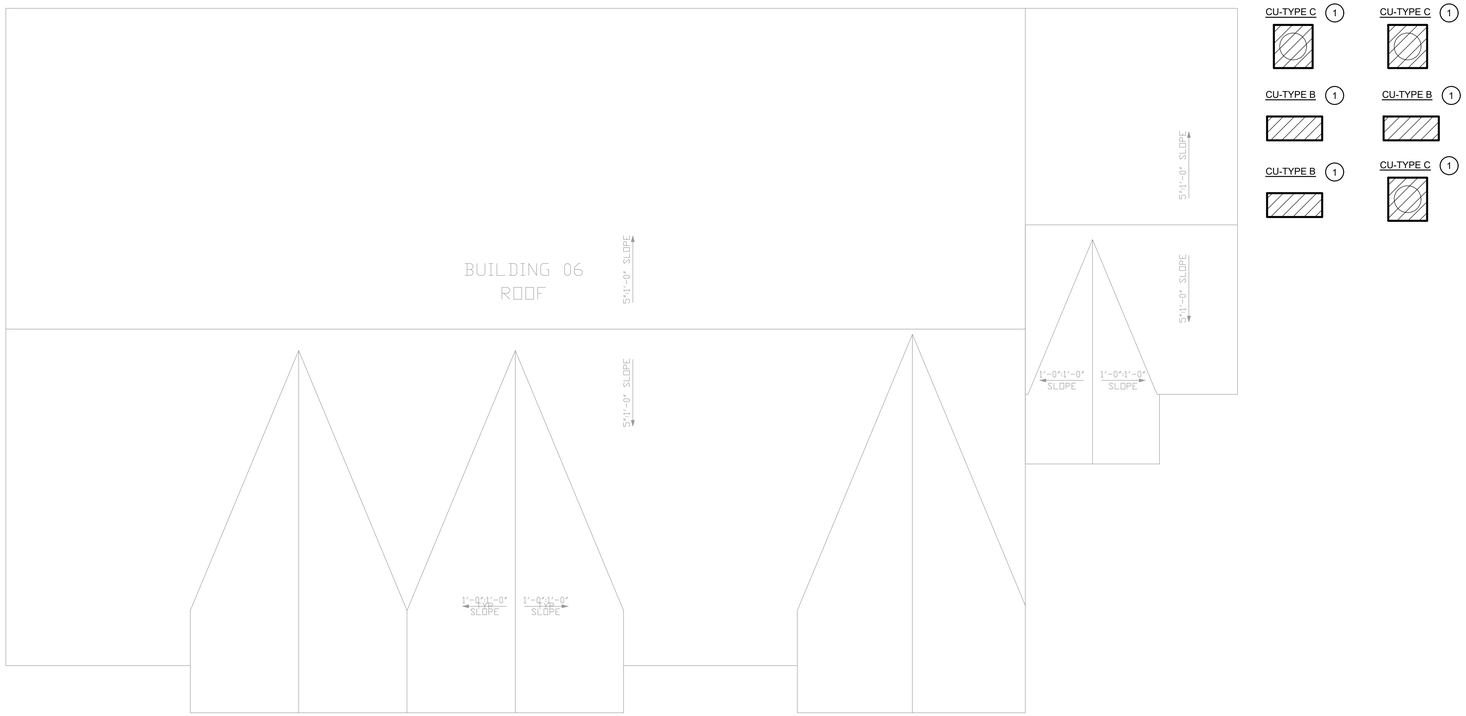

CU-TYPE C (1)

CU-TYPE C (1)

CU-TYPE B (1)

CU-TYPE B (1)

CU-TYPE B (1)

CU-TYPE C (1)

1 BLDG 6 - ROOF MECHANICAL PLAN

Scale: 1/4"=1'-0"

m(ødm)

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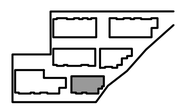

BLDG 6
3RD FLOOR
MECHANICAL PLAN

M1.63

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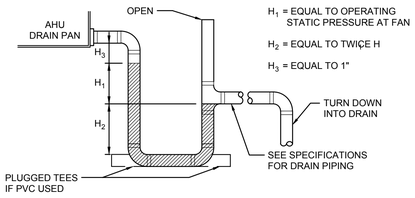
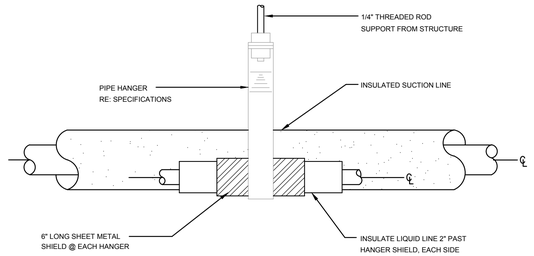


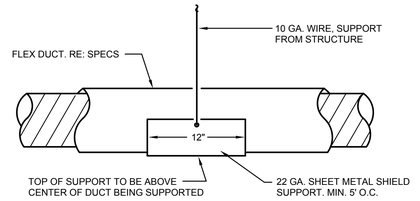
DRAIN-THROUGH UNIT DRAIN DETAIL

NOT TO SCALE



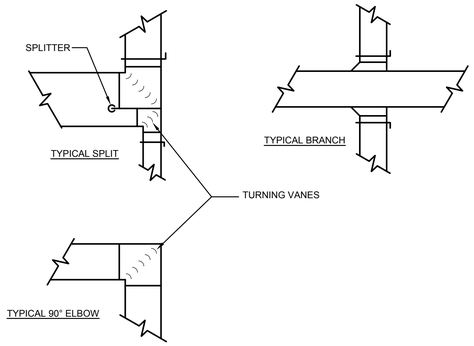
REFRIGERANT PIPE SUPPORT DETAIL

NOT TO SCALE



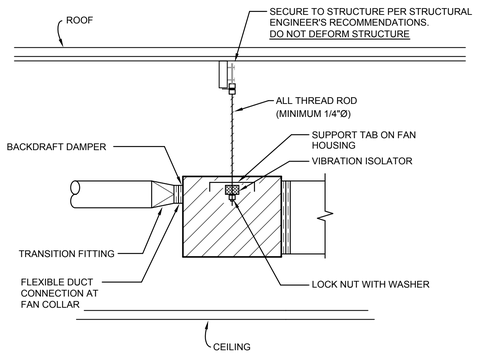
FLEX DUCT SUPPORT DETAIL

NOT TO SCALE



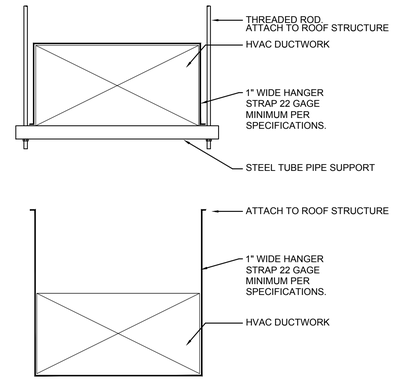
6 DUCTWORK DETAILS

NOT TO SCALE



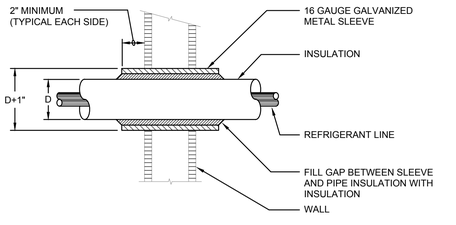
5 IN-LINE FAN DETAIL

NOT TO SCALE

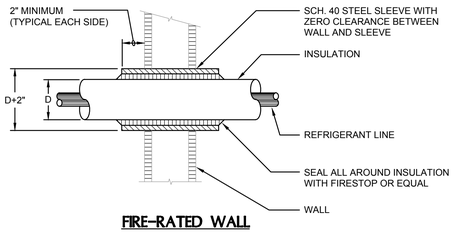


4 DUCT SUPPORT DETAIL

NOT TO SCALE



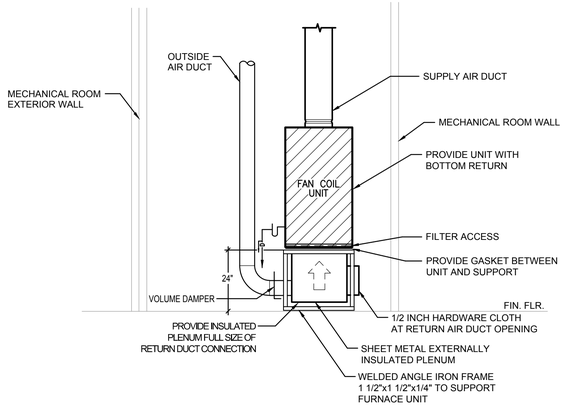
NON RATED WALL



FIRE-RATED WALL

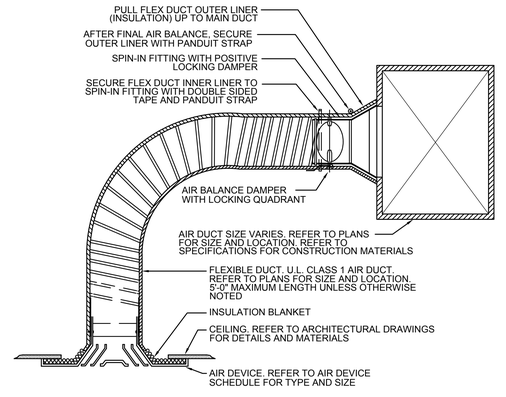
3 TYPICAL PIPE PENETRATION

NOT TO SCALE



VERTICAL FAN COIL MOUNTING DETAIL

NOT TO SCALE



1 SUPPLY AIR DEVICE DUCT CONNECTION DETAIL

NOT TO SCALE

m(ødm)

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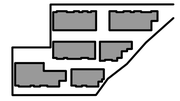
KEY PLAN



MECHANICAL DETAILS

mint ENGINEERING

MINT ENGINEERING LLC TEXAS FIRM # F-18749
107 RR 620 SOUTH, SUITE 350 AUSTIN, TEXAS 78734
512.270.9960 www.mintengineers.com

M5.01

ENERGY RECOVERY VENTILATOR SCHEDULE

INDOOR		ERV-TYPE B	-
SUPPLY AIR VOLUME	CFM	45	-
SUPPLY ESP	IN. H2O	0.7	-
EXHAUST AIR VOLUME	CFM	30	-
EXHAUST ESP	IN. H2O	0.82	-
POWER	V/PH/HZ	120/1/60	-
POWER CONSUMPTION	WATTS	96	-
FLA PER MOTOR	A	2	-
MCA	A	10	-
MOP	A	15	-
NOISE	SONES	3.8	-
WEIGHT	LBS.	32	-
MAKE	-	RENEWAIRE	-
MODEL	-	SL70H	-
	-	1, 2	-

NOTES:
1. PROVIDE MERV 13 FILTER FOR OA AIRSTREAM, 6 INCH BACKDRAFT DAMPER, AND 6 INCH WALL CAPS FOR OA AND EA AIRSTREAMS.
2. ERV SHALL RUN CONTINUOUSLY IN LOW SPEED.

FAN SCHEDULE

UNIT MARK		EF-1	-
SERVICE	-	BATHROOM	-
FAN TYPE	-	CEILING CENTRIF.	-
FLOW	CFM	70	-
EXTERNAL STATIC PRESS.	IN. W.G.	0.49	-
FAN RPM	RPM	935	-
MOTOR POWER	W	6	-
DRIVE TYPE	-	DIRECT	-
MOTOR TYPE	-	TEAO	-
POWER	V/PH/HZ	115/1/60	-
FLA	A	0.1	-
MAX SOUND POWER	SONES	0.6	-
WEIGHT	LBS.	12	-
MAKE	-	GREENHECK	-
MODEL	-	SP-80-VG	-
NOTES:	-	1	-

NOTES:
1. PROVIDE WITH ECM MOTOR WITH REMOTE MOUNTED SPEED CONTROL DIAL, THERMAL OVERLOAD PROTECTION DISCONNECT SWITCH, WIRING PIGTAIL, HANGING VIBRATION ISOLATORS, ROUND DUCT CONNECTION, AND GRAVITY BACKDRAFT DAMPER.

AIR DISTRIBUTION DEVICE SCHEDULE

MARK	CONNECTION SIZE	CFM RANGE MIN	CFM RANGE MAX	FACE	SYSTEM	TYPE	MAKE	MODEL	NOTES
S1	6"ø	0	100	12" X 12"	SUPPLY	SQUARE	TITUS	OMNI	-
S2	6"ø	0	100	24" X 24"					-
S3	8"ø	101	200						-
S4	10"ø	201	400						-
S5	12"ø	401	600						-
S6	10" X 6"	0	250	10" X 6"		SIDEWALL	TITUS	300 FS	-
S7	12" X 6"	251	300	12" X 6"					-
S8	18" X 6"	301	500	18" X 6"					-
S9	18" X 10"	501	800	18" X 10"					-
S10	8"ø	0	230	1 - SLOT; 48" LONG		SLOT	TITUS	FL-20	PROVIDE WITH INSULATED PLENUM BOX
S11	10"ø	231	380	1 - SLOT; 48" LONG					
R1	6"ø	0	100	12" X 12"	RETURN	SQUARE	TITUS	PAR-AA	-
R2	6"ø	0	100	24" X 24"					-
R3	8"ø	101	200						-
R4	10"ø	201	400						-
R5	12"ø	401	600						-
R6	18" X 18"	601	1200						-
R7	22" X 22"	0	2000						-
R8	10" X 6"	0	250	10" X 6"		SIDEWALL	TITUS	350 FL	-
R9	12" X 6"	251	300	12" X 6"					-
R10	18" X 6"	301	500	18" X 6"					-
R11	18" X 10"	501	800	18" X 10"					-
R12	22" X 10"	801	1000	22" X 10"					-
R13	24" X 12"	1001	1300	24" X 12"					-
R14	-	0	500	1 - SLOT; 48" LONG		SLOT	TITUS	FBRI-20	PROVIDE WITH INSULATED HOOD/LIGHT SHIELD
R15	10"ø	0	500	1 - SLOT; 48" LONG				FL-20	PROVIDE WITH INSULATED PLENUM BOX
E1	6"ø	0	100	12" X 12"	EXHAUST	SQUARE	TITUS	PAR-AA	-
E2	6"ø	0	100	24" X 24"					-
E3	8"ø	101	200						-
E4	10"ø	201	400						-
E5	12"ø	401	600						-
E6	18" X 18"	601	1200						-
E7	22" X 22"	0	2000						-
E8	10" X 6"	0	250	10" X 6"		SIDEWALL	TITUS	350 FL	-
E9	12" X 6"	251	300	12" X 6"					-
E10	18" X 6"	301	500	18" X 6"					-
E11	18" X 10"	501	800	18" X 10"					-
E12	22" X 10"	801	1000	22" X 10"					-
E13	24" X 12"	1001	1300	24" X 12"					-
E14	8"ø	0	230	1 - SLOT; 48" LONG		SLOT	TITUS	FL-20	PROVIDE WITH INSULATED PLENUM BOX
E15	10"ø	231	500	1 - SLOT; 48" LONG					

MARK
1. PROVIDE MAKE AND MODEL SPECIFIED OR ENGINEER APPROVED SUBSTITUTE.
2. COORDINATE AIR DEVICE COLOR SELECTION WITH ARCHITECT.
3. ALL 24"x24" CEILING MOUNTED SUPPLY AND RETURNS IN GYP OR PLASTER CEILINGS SHALL BE INSTALLED WITH A LAY-IN PLASTER FRAME EQUAL TO TITUS MODEL TRM.
4. NOT ALL DEVICES ARE USED ON THE PROJECT.

WALL-MOUNTED SPLIT SYSTEM SCHEDULE

INDOOR		FCU-TYPE A	FCU-TYPE B
SUPPLY AIRFLOW	CFM	321	522
COOLING EDB	'F	77.5	77.9
COOLING EWB	'F	61.7	62.6
COOLING LDB	'F	55.0	55.5
COOLING TOT. CAP. (NOMINAL)	MBH	12.0	18.0
COOLING SENS. CAP. (NOMINAL)	MBH	10.0	15.0
HEATING EDB	'F	70.0	70.0
HEATING LDB	'F	84.6	90.0
HEATING TOT. CAP. (NOMINAL)	MBH	14.40	21.6
MOTOR POWER OUTPUT	W	55	30.0
MOTOR FLA	A	0.50	0.67
MCA	A	1	1.0
MOP	A	15	15
WEIGHT	LBS.	22	28
BASIS OF DESIGN	-	MITSUBISHI	MITSUBISHI
MODEL	-	MSZ-GL12NA	MSZ-GL18NA

OUTDOOR		CU-TYPE A	CU-TYPE B
LOCATION	-	ROOF	ROOF
COOLING AMB	'F	105	105
COOLING TOT. CAP. (NOMINAL)	MBH	12	18
REFRIGERANT	-	R-410A	R-410A
VOLTAGE	V/PH/HZ	208/1/60	208/1/60
MCA	A	9	14
MOP	A	15	15
SYSTEM MIN. EFFICIENCY	SEER	23.1	20.5
	EER	13	13.4
	HSPF	12.5	11.2
WEIGHT	LBS.	81	121
BASIS OF DESIGN	-	MITSUBISHI	MITSUBISHI
MODEL	-	MUZ-GL12NA	MUZ-GL18NA
NOTES:	-	1, 2	1, 2

NOTES:
1. PROVIDE UNITS WITH CONDENSATE PUMP, DRAIN PAN LEVEL SENSOR, WALL MOUNTING BRACKET, THERMOSTAT, CU MOUNTING PAD, AND AIR OUTLET GUIDE.
2. INDOOR UNITS RECEIVE POWER FROM OUTDOOR UNIT.

SPLIT SYSTEM SCHEDULE

INDOOR		FCU-TYPE C	FCU-TYPE D	FCU-TYPE E	FCU-TYPE F
SUPPLY AIRFLOW	CFM	800	1,200	1,400	1,600
SUPPLY ESP	IN. H2O	0.45	0.5	0.55	0.6
MOTOR HP	HP	1/4	1/2	1/2	3/4
COOLING EDB	'F	79.1	81.4	80.4	80.5
COOLING EWB	'F	62.5	64.9	63.0	63.4
COOLING LDB	'F	55.0	55.0	55.0	55.0
COOLING TOT. CAP.	MBH	21.9	31.4	41.0	43.1
COOLING SENS. CAP.	MBH	19.5	25.3	36.6	37.6
HEATING EDB	'F	70.0	70.0	70.0	70.0
HEATING LAT.	'F	92.7	88.9	94.3	91.2
HEATING TOT. CAP.	kW	5.77	7.2	10.8	10.8
POWER	V/PH/HZ	208/1/60	208/1/60	208/1/60	208/1/60
MCA	A	36	48	73	73
MOP	A	40	50	80	80
WEIGHT	LBS.	110	138	138	138
MAKE	-	TRANE	TRANE	TRANE	TRANE
MODEL	-	TEM4A0B24	TEM4A0C42	TEM4A0C42	TEM4A0C48

OUTDOOR		CU-TYPE C	CU-TYPE D	CU-TYPE E	CU-TYPE F
COOLING AMB	'F	105.0	105.0	105.0	105.0
COOLING TOT. CAP.	MBH	21.9	31.4	41.0	43.1
REFRIGERANT	-	R-410A	R-410A	R-410A	R-410A
NO. OF CIRCUITS	-	1	1	2	2
NO. OF COMPRESSORS	-	1	1	1	1
NO. OF COOLING STAGES	-	1	1	1	1
POWER	V/PH/HZ	208/1/60	208/3/60	208/3/60	208/3/60
MCA	A	14	14	18	18
MOP	A	25	20	30	30
SYSTEM MIN. EFFICIENCY	SEER	15	14.75	14.75	14
	EER	12.5	12	12	11.5
WEIGHT	LBS.	133	149	196	203
MAKE	-	TRANE	TRANE	TRANE	TRANE
MODEL		4TTR4025	4TTA3036	4TTA3042	4TTA3048
NOTES:	-	1, 2	1, 2	1, 2	1, 2

NOTES:
1. PROVIDE UNITS WITH MERV 8 FILTERS, CONDENSATE OVERFLOW SWITCH, PROGRAMABLE THERMOSTAT, AND CONDENSATE PUMP, IF REQUIRED.
2. REFER TO OUTSIDE AIR CALCULATIONS FOR DESIGN OA CFM TO FAN COIL UNITS.

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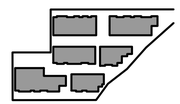
TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER: 2019-004

ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



MECHANICAL SCHEDULES

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M6.01

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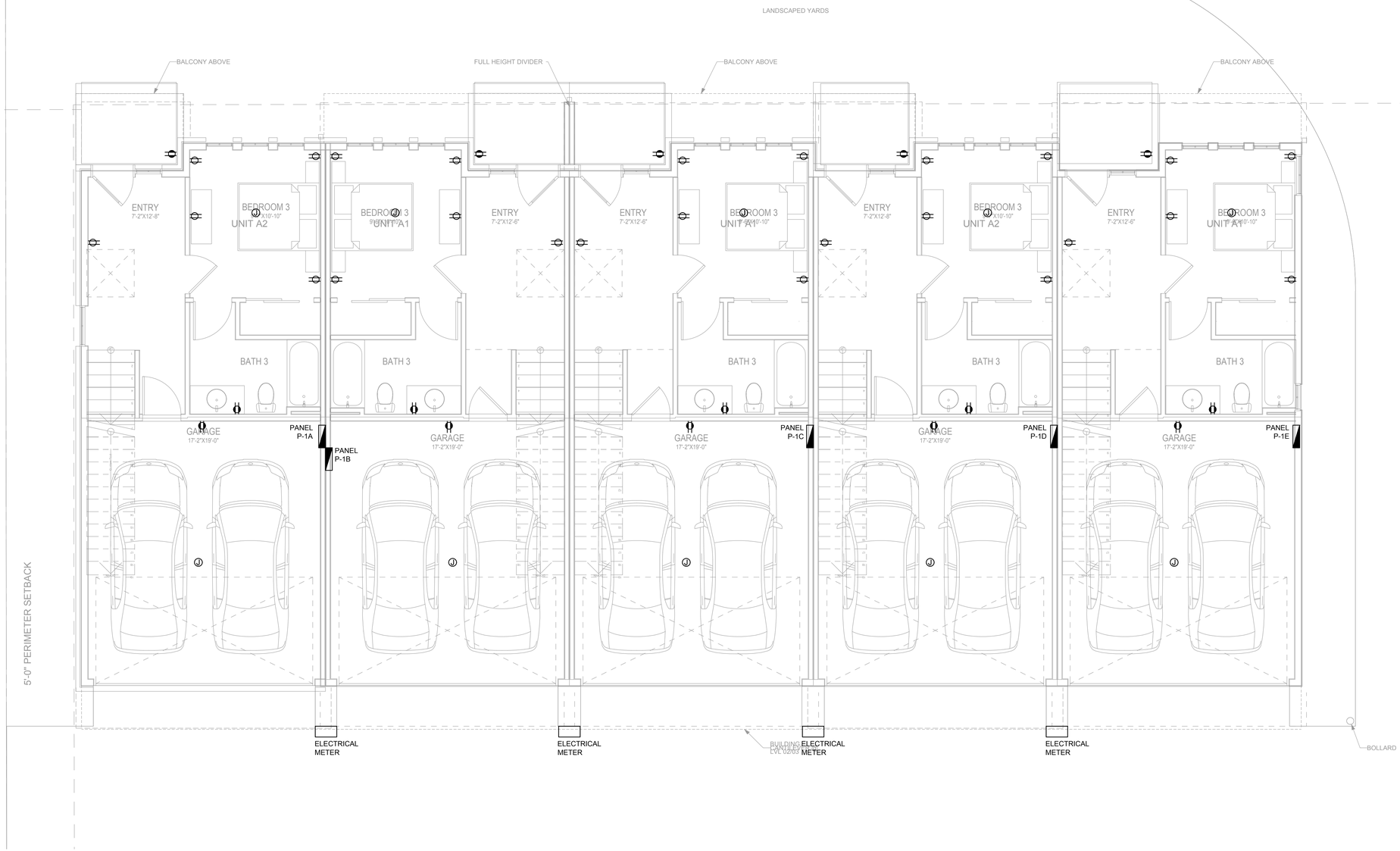
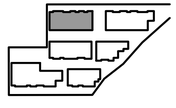


1 BLDG 1 - 1ST FLOOR ELECTRICAL PLAN

Scale: 1/4"=1'-0"

KEY PLAN



BLDG 1
1ST FLOOR
ELECTRICAL PLAN

E1.11

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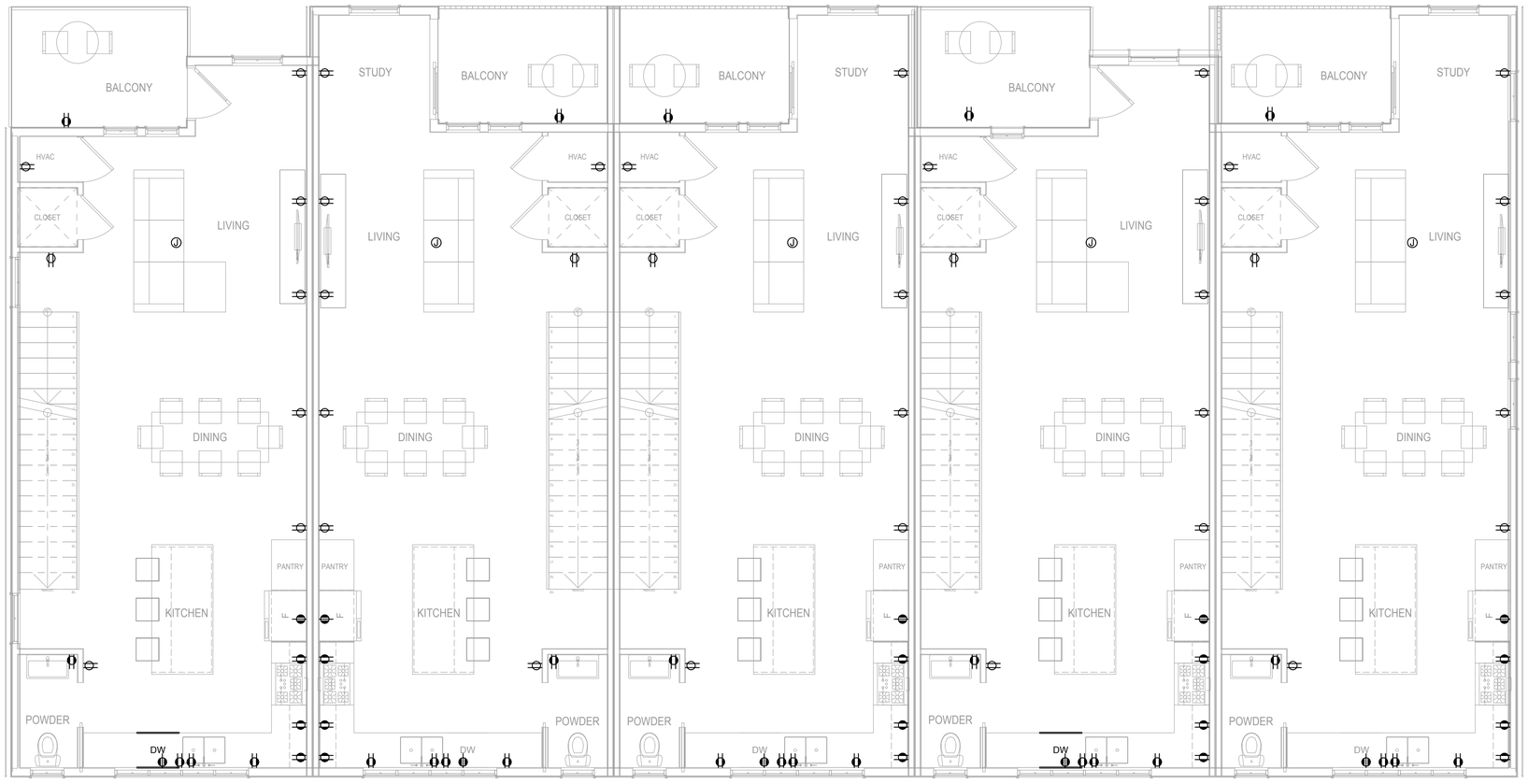
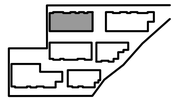


1 BLDG 1 - 2ND FLOOR ELECTRICAL PLAN

Scale: 1/4"=1'-0"

KEY PLAN



BLDG 1
2ND FLOOR
ELECTRICAL PLAN

E1.12

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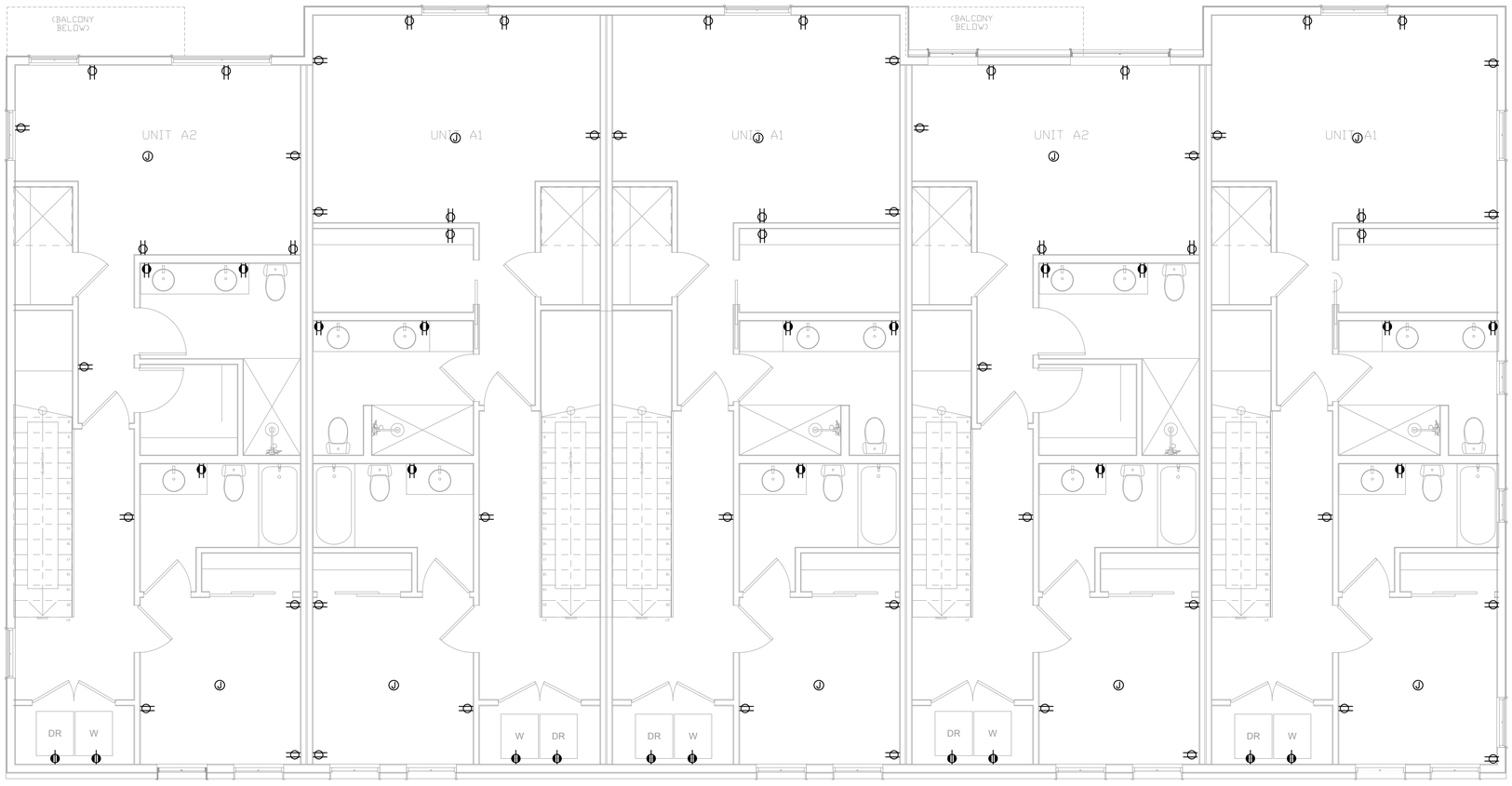

1 BLDG 1 - 3RD FLOOR ELECTRICAL PLAN

Scale: 1/4"=1'-0"

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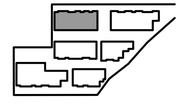
KEY PLAN



BLDG 1
3RD FLOOR
ELECTRICAL PLAN

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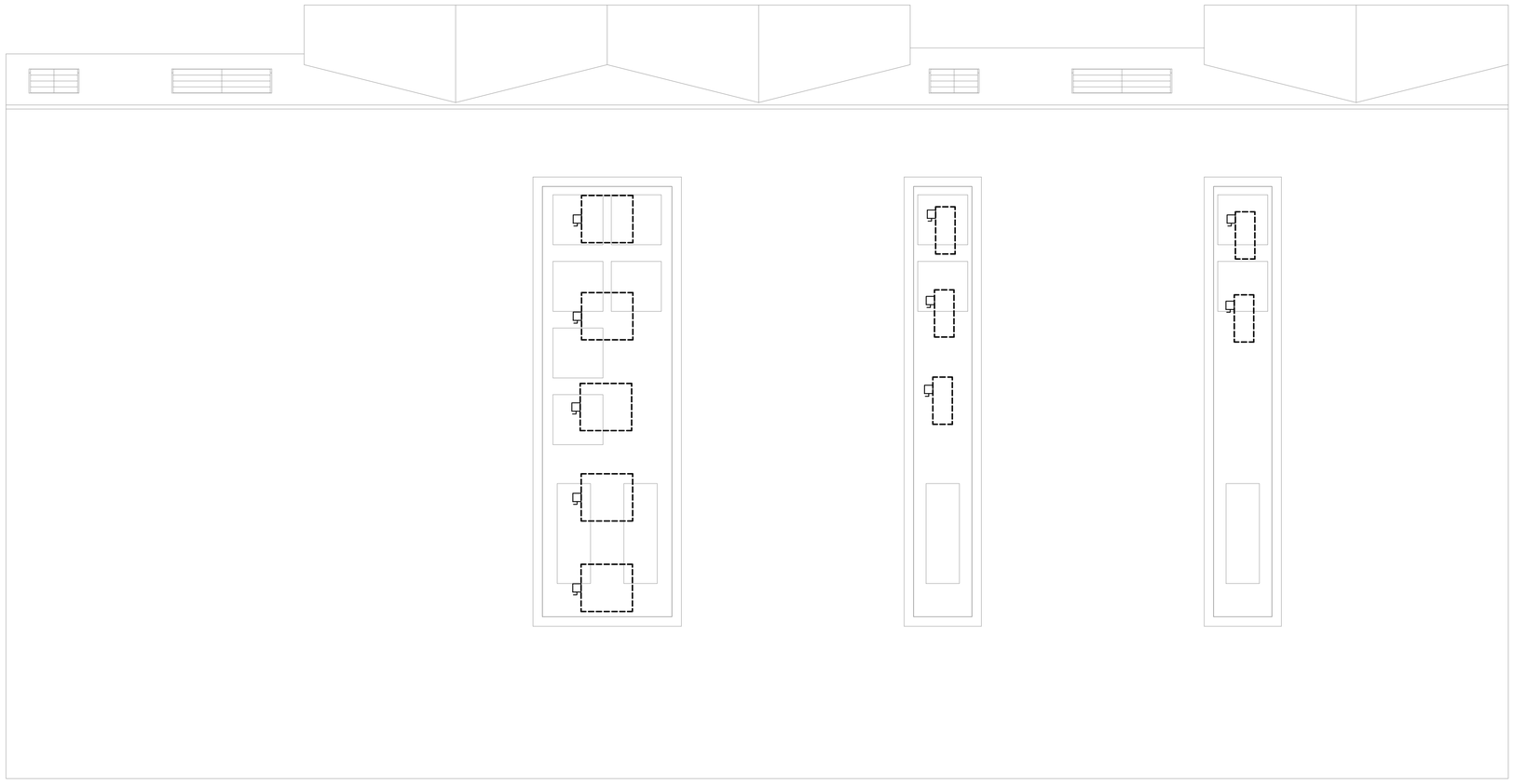
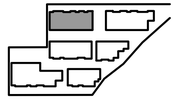


1 BLDG 1 - ROOF □L□□TRI□AL PLAN

Scale: 1/4"=1'-0"

KEY PLAN



BLDG 1
ROOF
ELECTRICAL PLAN

E1.14

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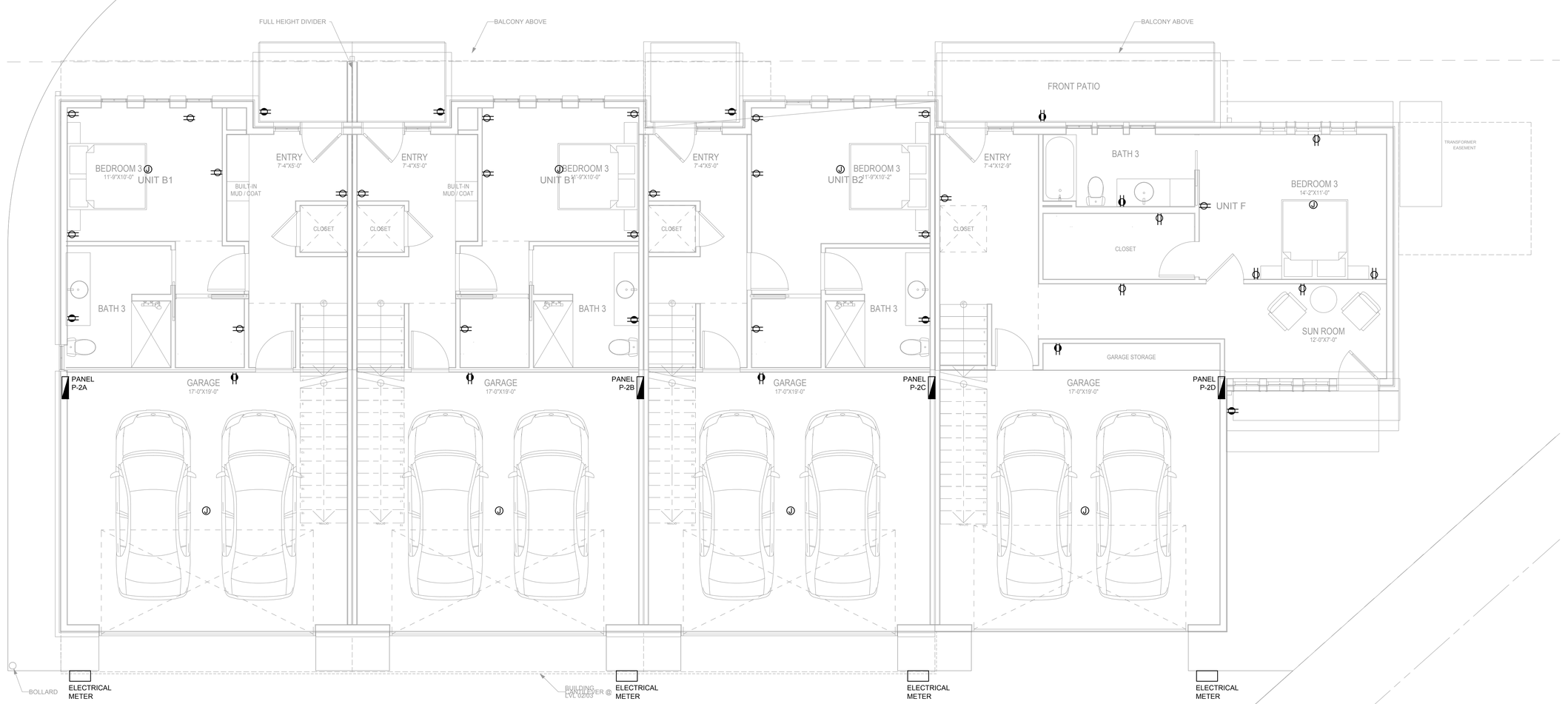
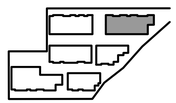


1 BLDG □- 1ST FLOOR □L□□TRI□AL PLAN

Scale: 1/4"=1'-0"

KEY PLAN



BLDG 2
1ST FLOOR
ELECTRICAL PLAN

E1.21

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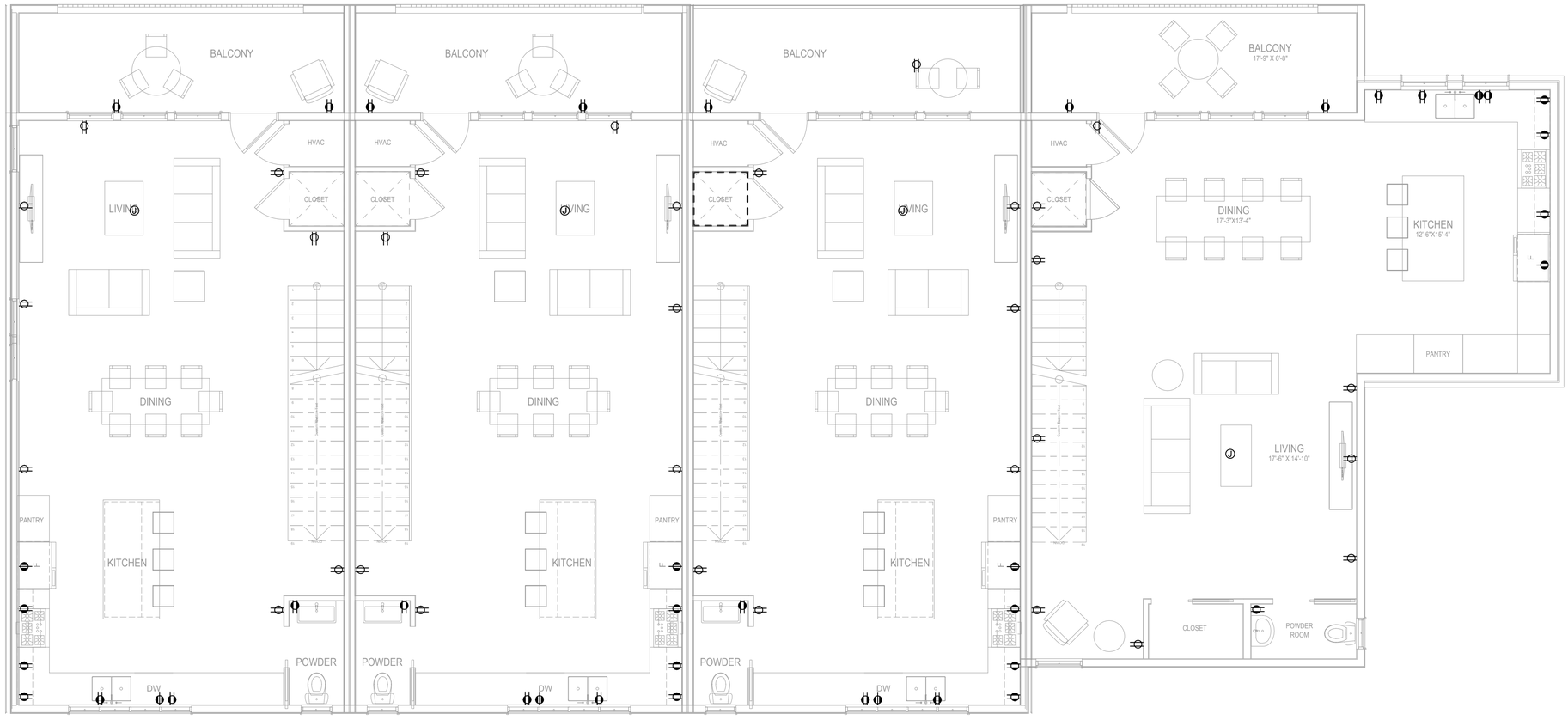

1 BLDG 2 - 2ND FLOOR ELECTRICAL PLAN

Scale: 1/4"=1'-0"

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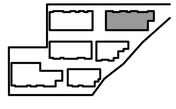
ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 2
2ND FLOOR
ELECTRICAL PLAN

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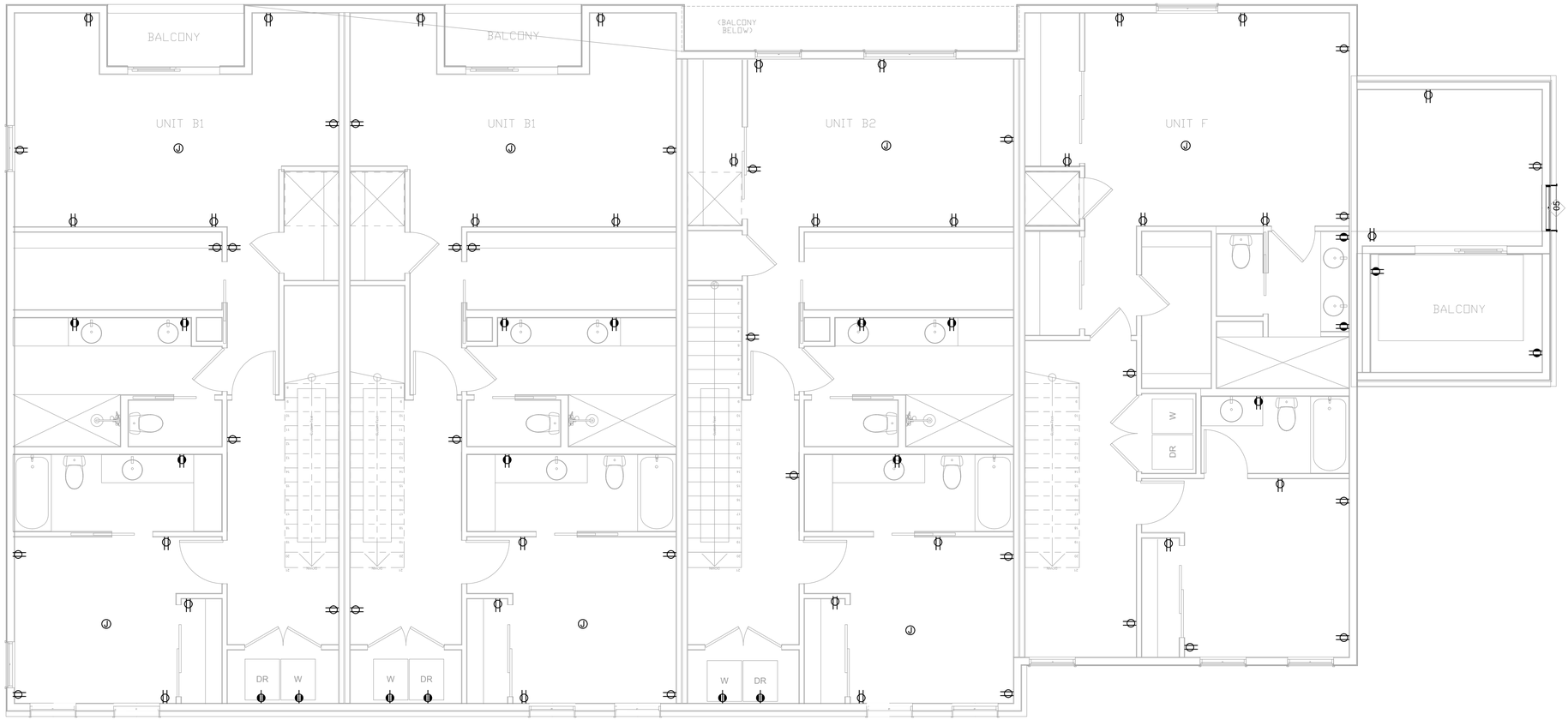
E1.22



1 BLDG □- □RD FLOOR □L□□TRI□AL PLAN

Scale: 1/4"=1'-0"

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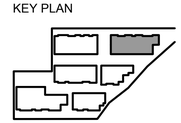
ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 2
3RD FLOOR
ELECTRICAL PLAN

E1.23

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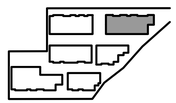
PROJECT NUMBER: 2019-004

ISSUED SETS	DATE
80% CD SET	08/01/19

1 BLDG 2 - ROOF ELECTRICAL PLAN

Scale: 1/4"=1'-0"

KEY PLAN



BLDG 2
ROOF
ELECTRICAL PLAN

E1.24

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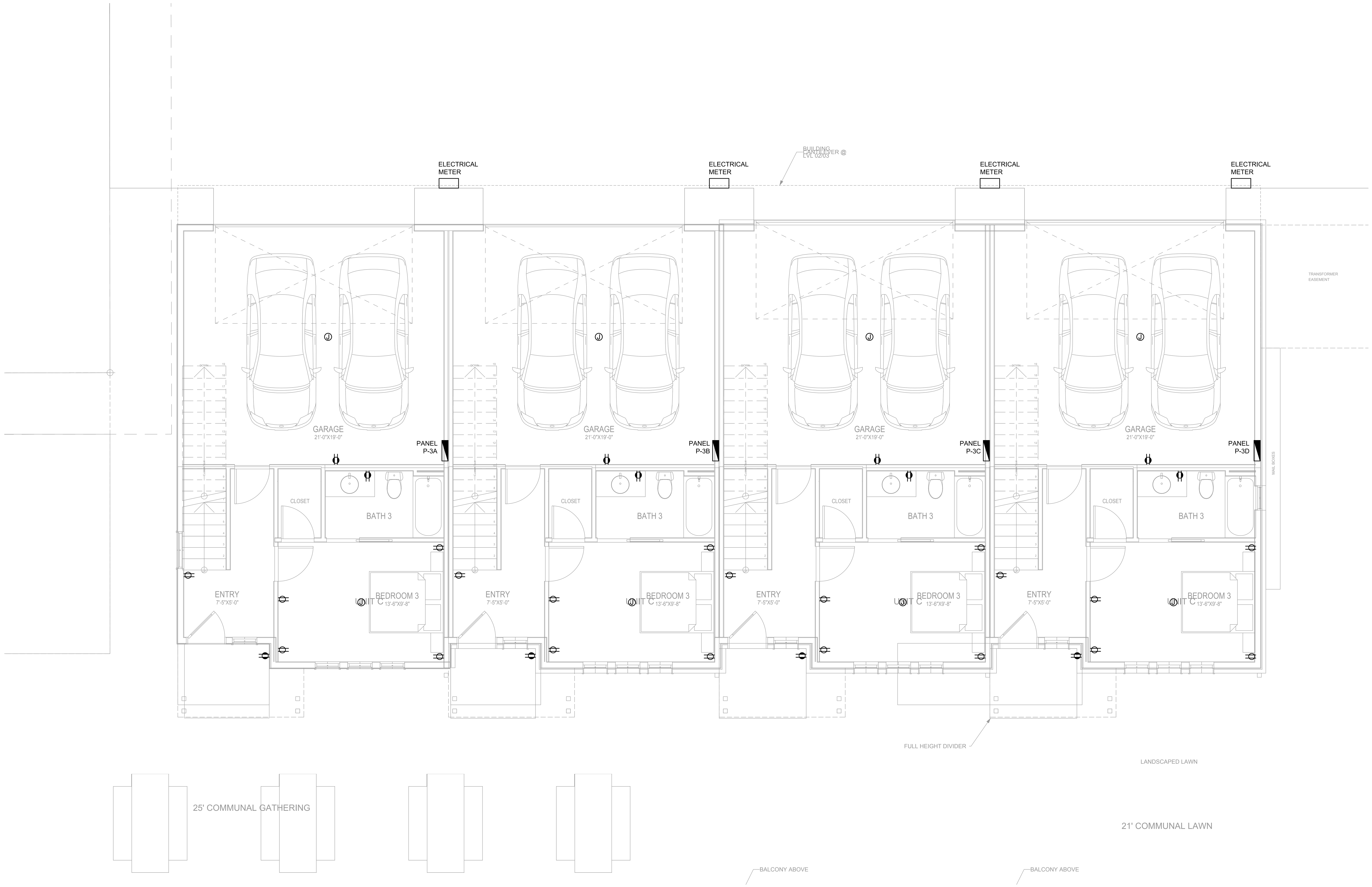

1 BLDG □- 1ST FLOOR □L□□TRI□AL PLAN

Scale: 1/4"=1'-0"

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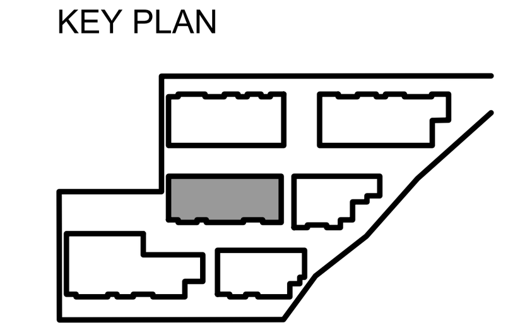
ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 3
1ST FLOOR
ELECTRICAL PLAN

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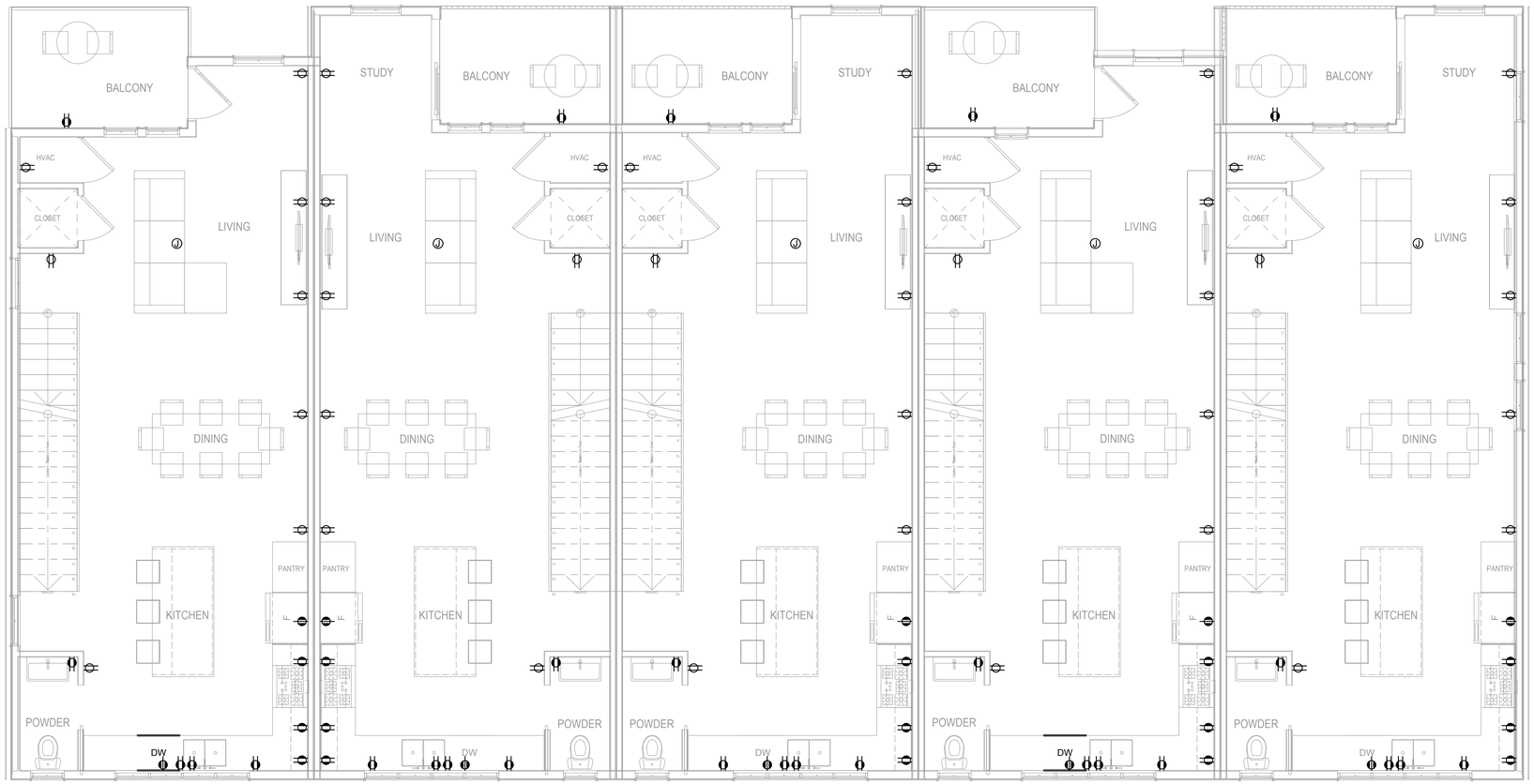
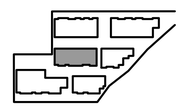


1 BLDG □- □ND FLOOR □L□□TRI□AL PLAN

Scale: 1/4"=1'-0"

KEY PLAN



BLDG 3
2ND FLOOR
ELECTRICAL PLAN

E1.32

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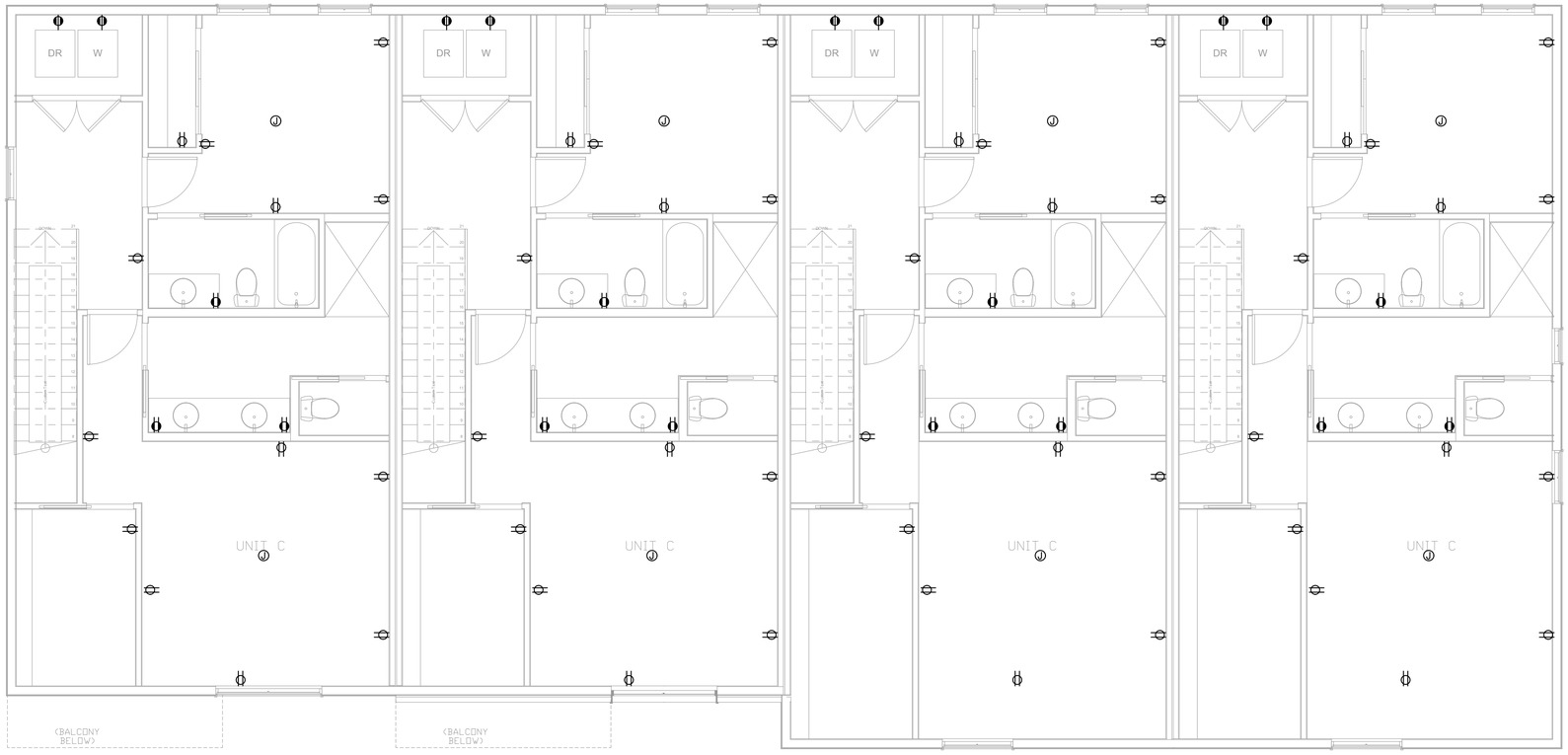

1 BLDG □- □RD FLOOR □L□□TRI□AL PLAN

Scale: 1/4"=1'-0"

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ISSUED SETS	DATE
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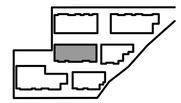
KEY PLAN



BLDG 3
3RD FLOOR
ELECTRICAL PLAN

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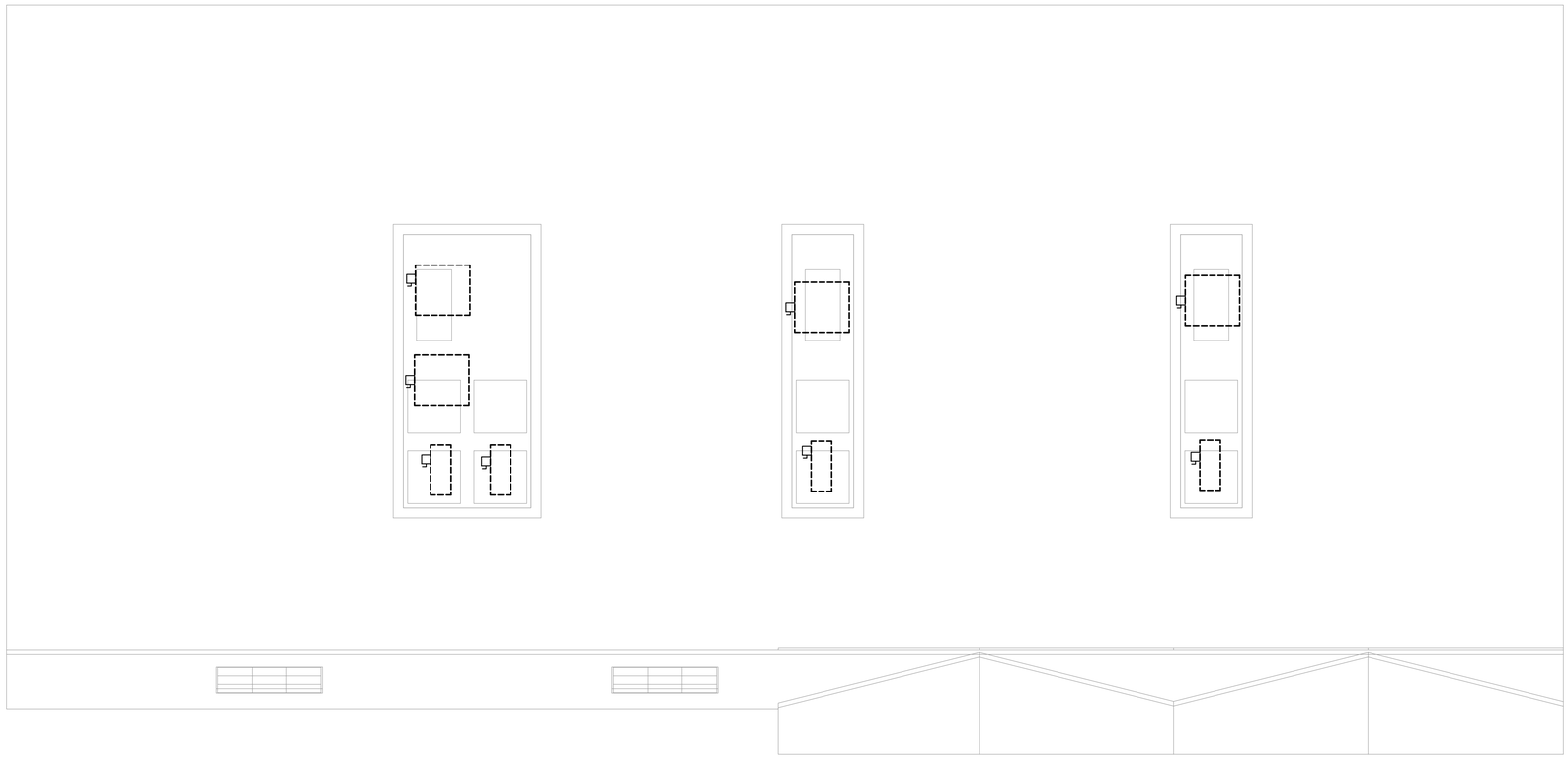
E1.33



1 BLDG 3 - ROOF ELECTRICAL PLAN

Scale: 1/4"=1'-0"

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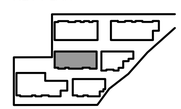
ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 3
ROOF
ELECTRICAL PLAN

E1.34

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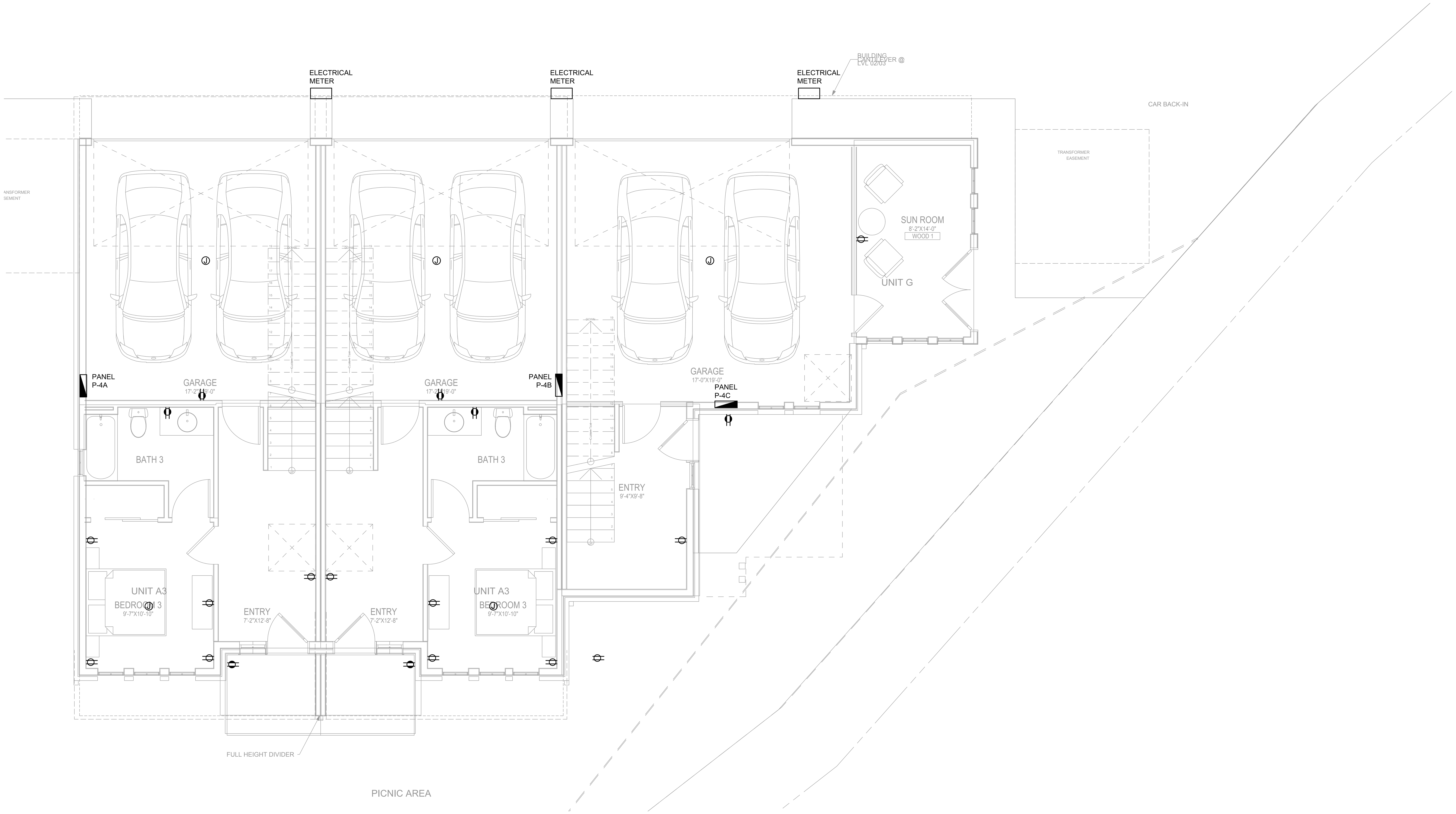

1 BLDG 4 - 1ST FLOOR ELECTRICAL PLAN

Scale: 1/4"=1'-0"

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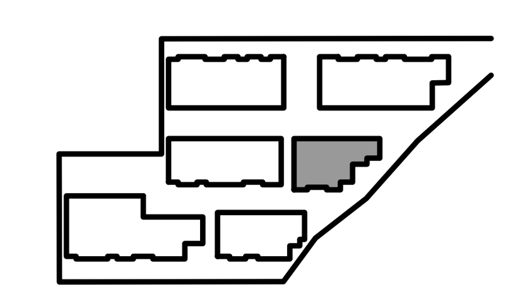
ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 4
1ST FLOOR
ELECTRICAL PLAN

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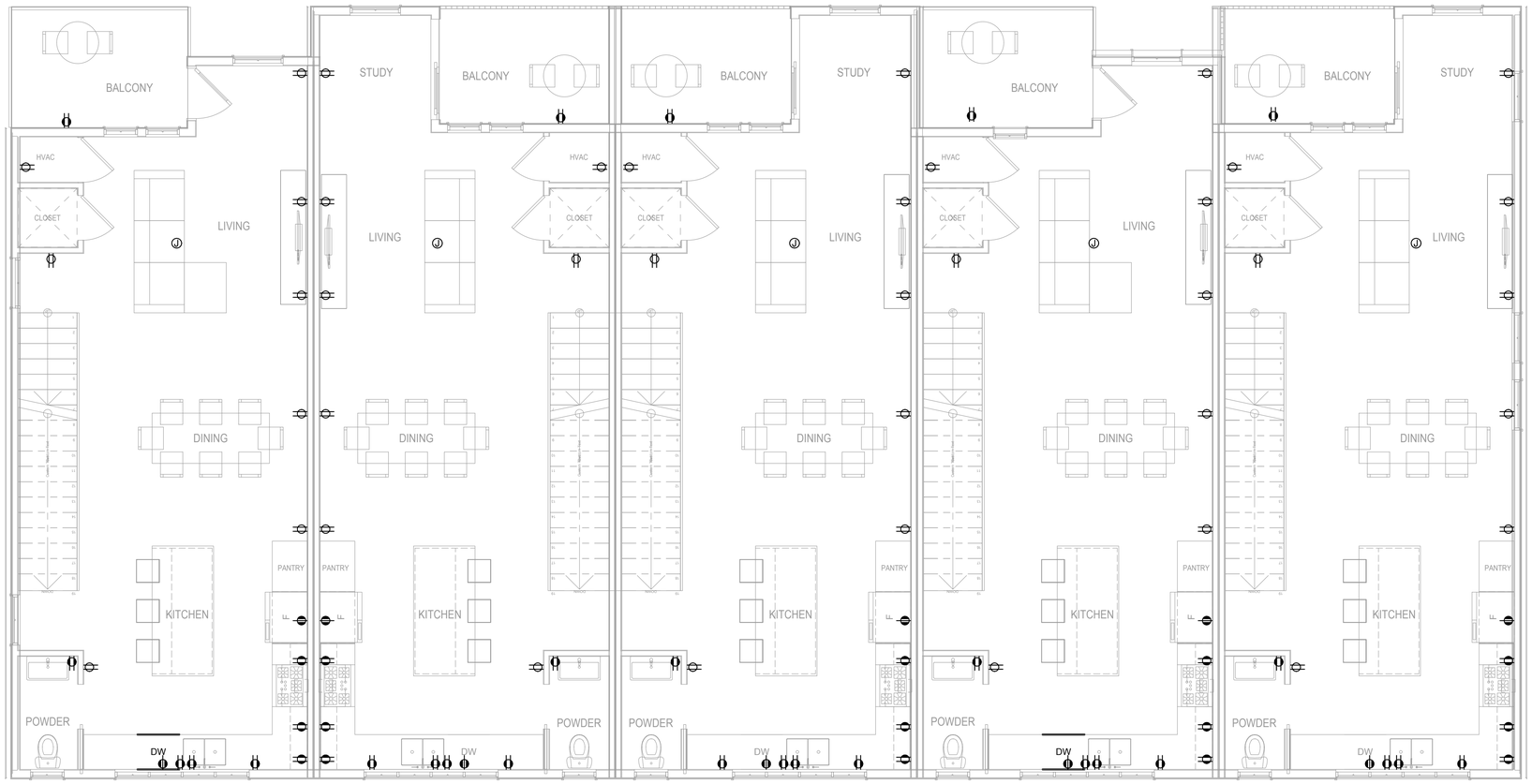
E1.41



1 BLDG 4 - 2ND FLOOR ELECTRICAL PLAN

Scale: 1/4"=1'-0"

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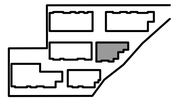
TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER: 2019-004

ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 4
2ND FLOOR
ELECTRICAL PLAN

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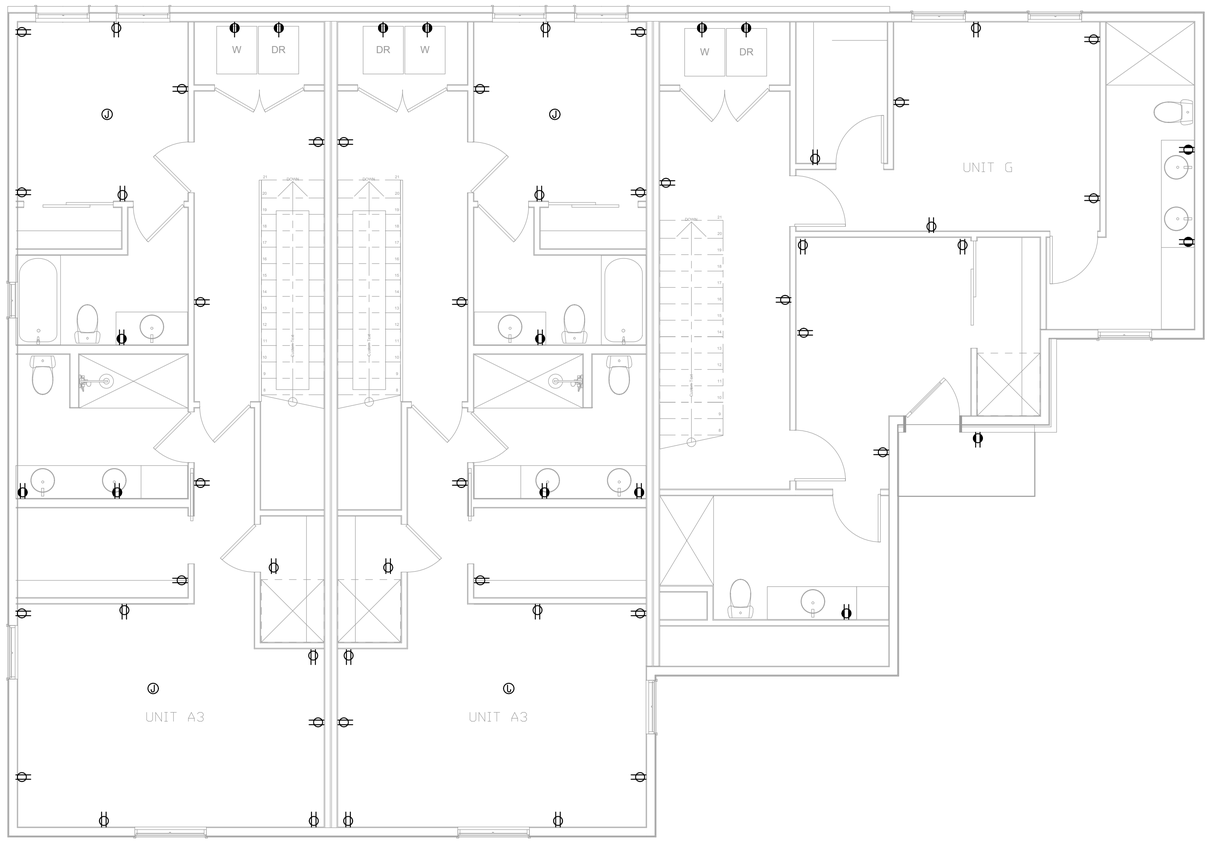
E1.42



1 BLDG 4 - 3RD FLOOR ELECTRICAL PLAN

Scale: 1/4"=1'-0"

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TRAIL STREET TOWNHOMES

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ISSUED SETS	DATE
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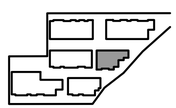

BLDG 4
3RD FLOOR
ELECTRICAL PLAN

E1.43

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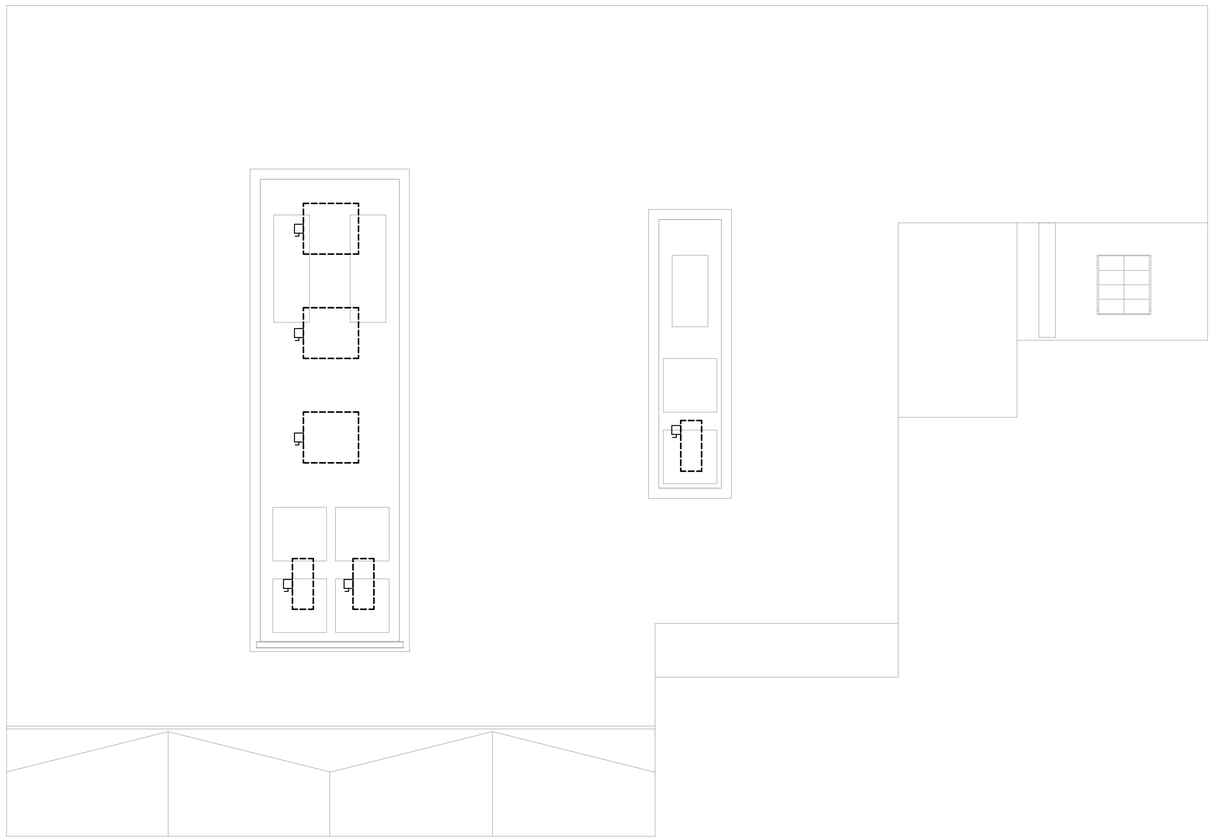

1 BLDG 4 - ROOF ELECTRICAL PLAN

Scale: 1/4" = 1'-0"

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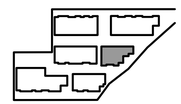
ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 4
ROOF
ELECTRICAL PLAN

E1.44

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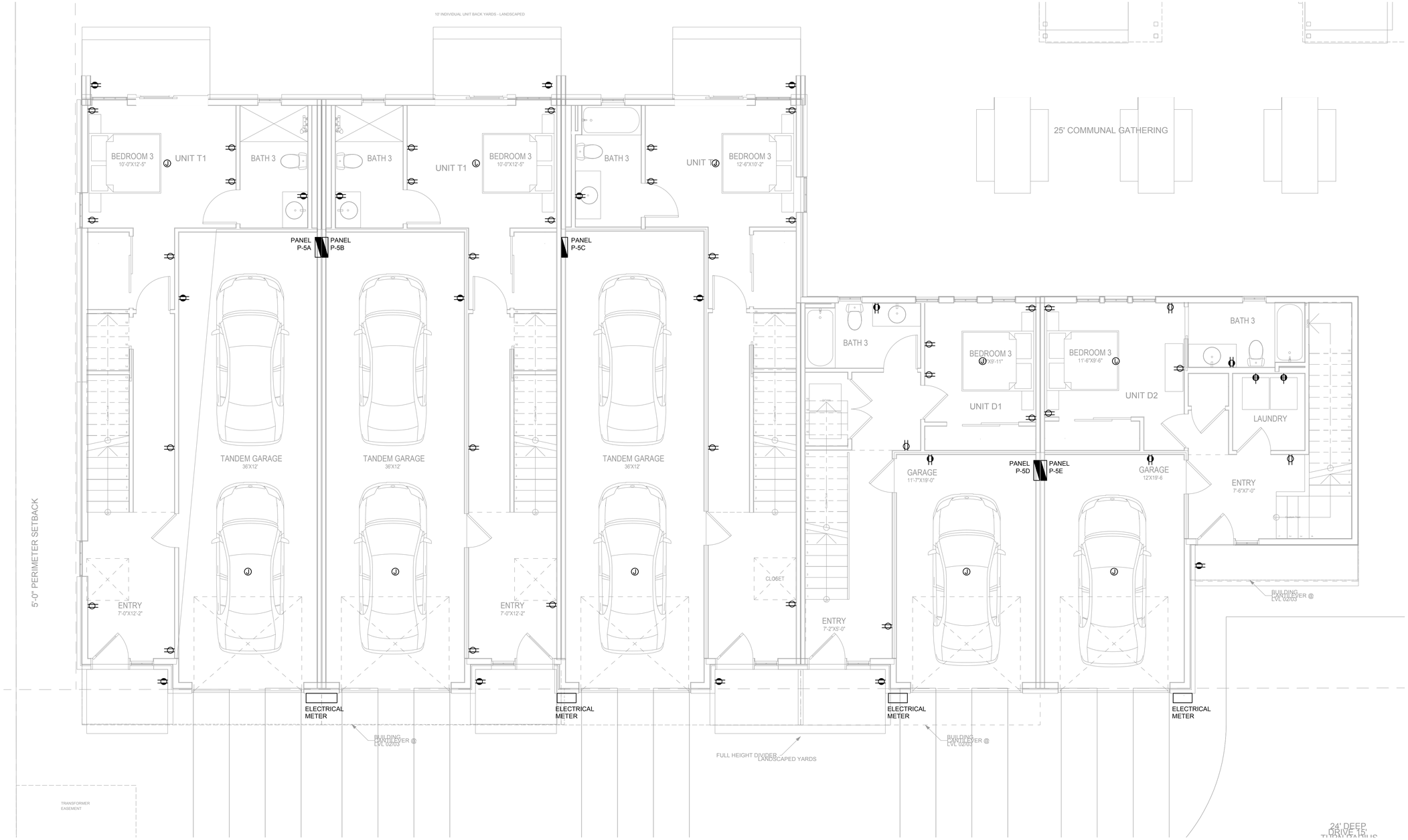

1 BLDG 5 - 1ST FLOOR ELECTRICAL PLAN

Scale: 1/4"=1'-0"

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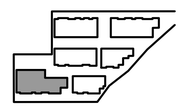

BLDG 5
1ST FLOOR
ELECTRICAL PLAN

E1.51

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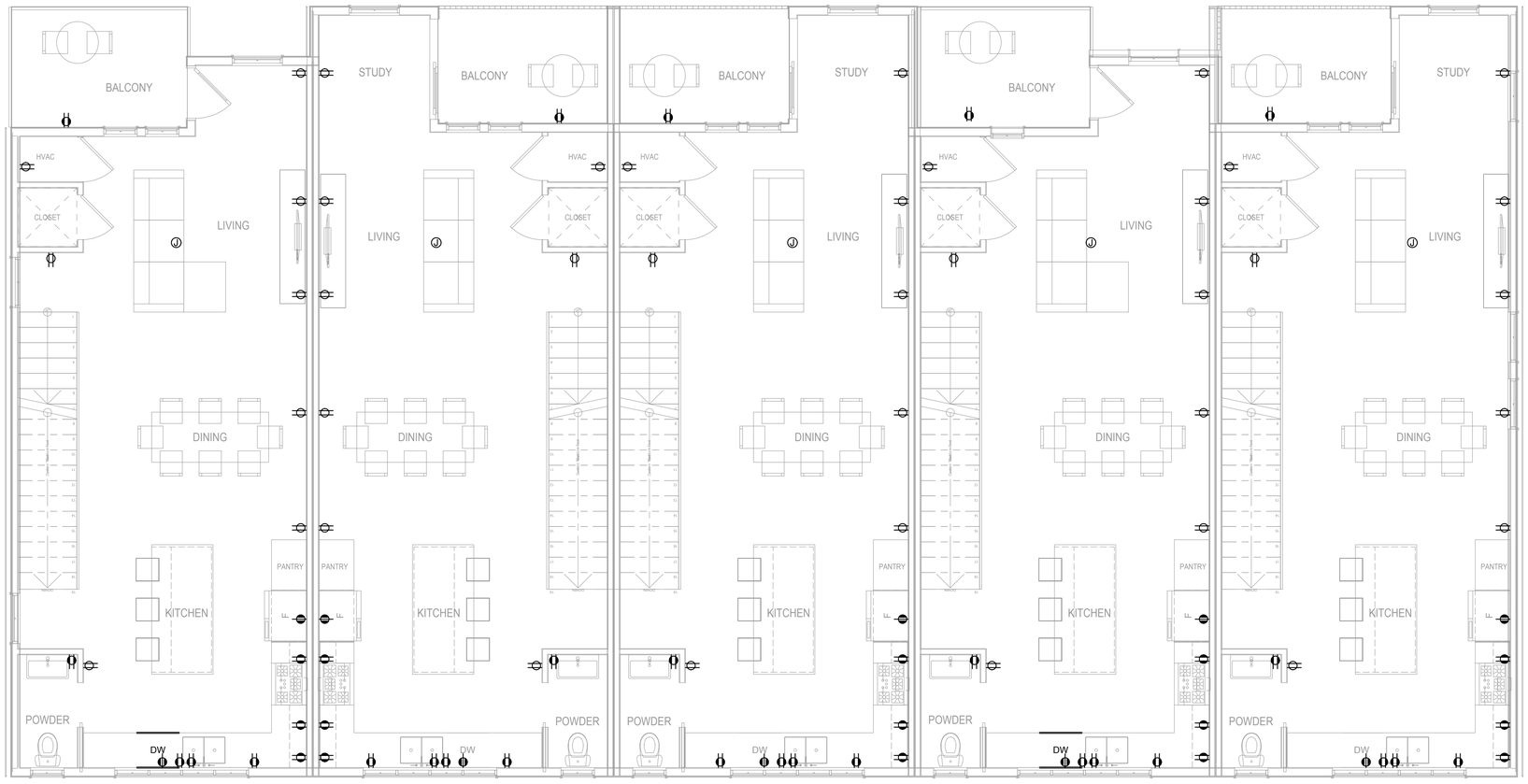
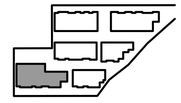


1 BLDG □- □ND FLOOR □L□□TRI□AL PLAN

Scale: 1/4"=1'-0"

KEY PLAN



BLDG 5
2ND FLOOR
ELECTRICAL PLAN

E1.52

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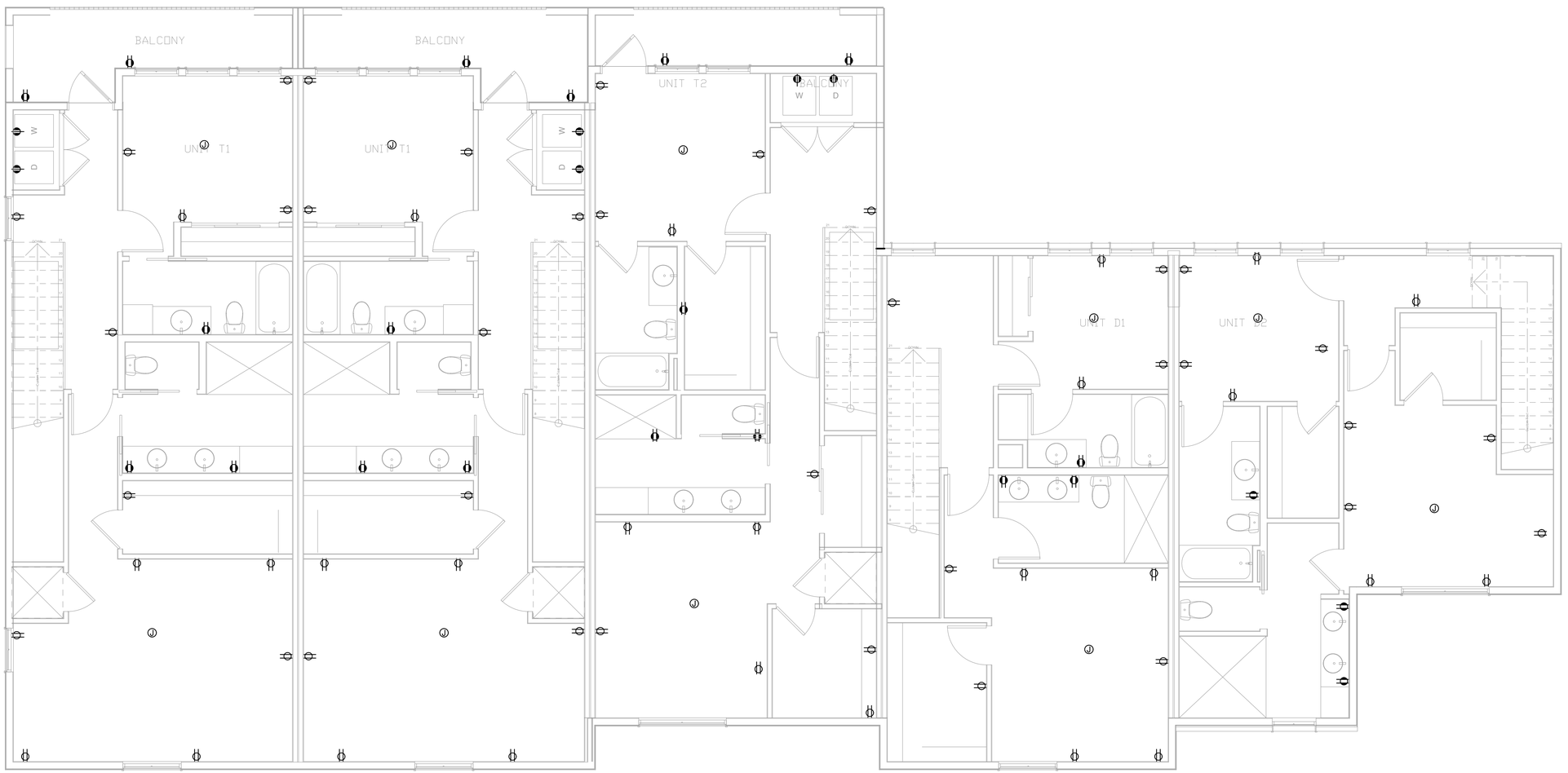
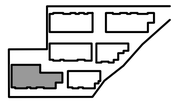


1 BLDG 5 - 3RD FLOOR ELECTRICAL PLAN

Scale: 1/4"=1'-0"

KEY PLAN



BLDG 5
3RD FLOOR
ELECTRICAL PLAN

E1.53

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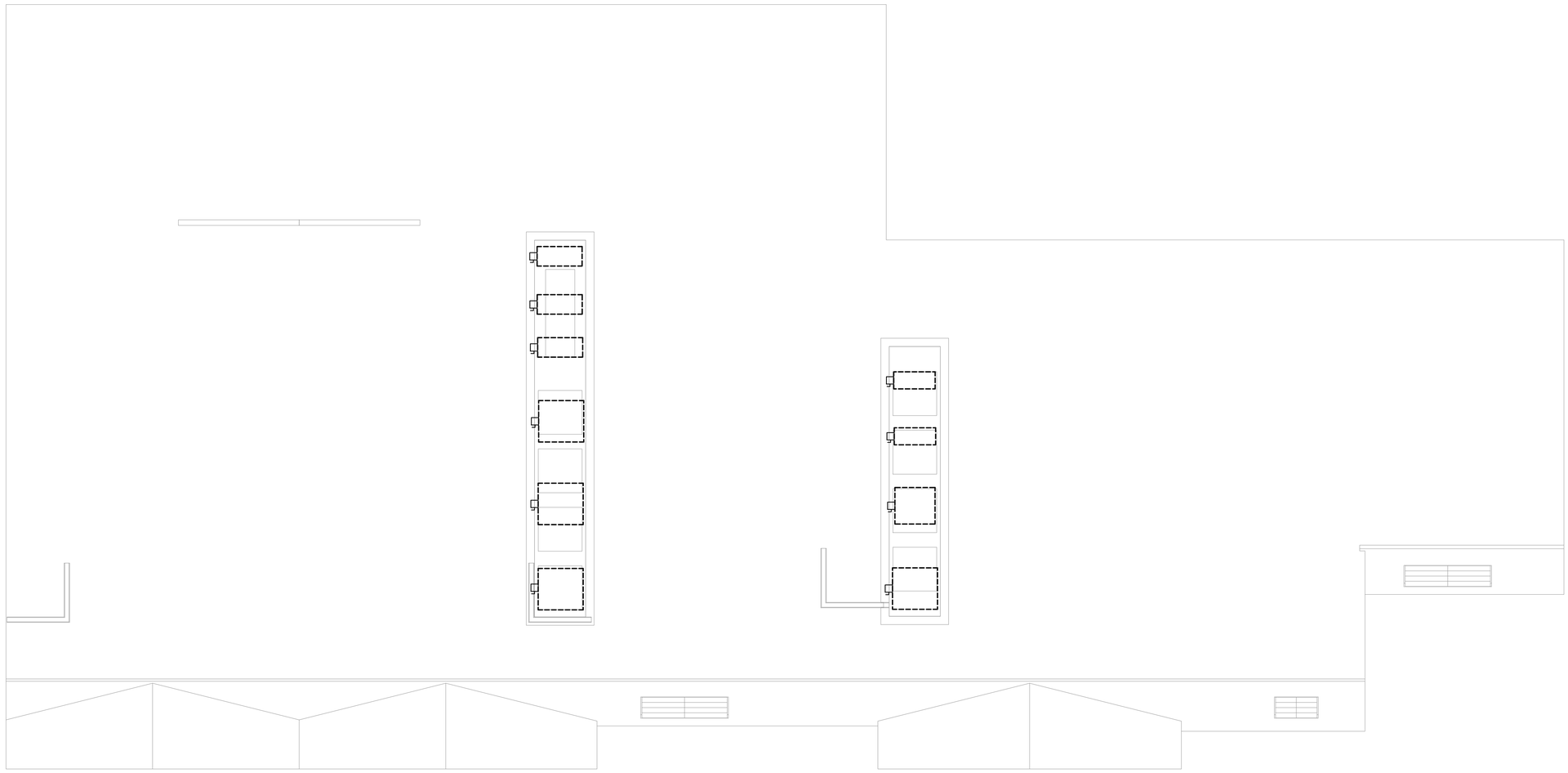

1 BLDG 5 - ROOF ELECTRICAL PLAN

Scale: 1/4"=1'-0"

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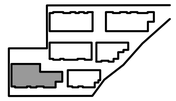
ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 5
ROOF
ELECTRICAL PLAN

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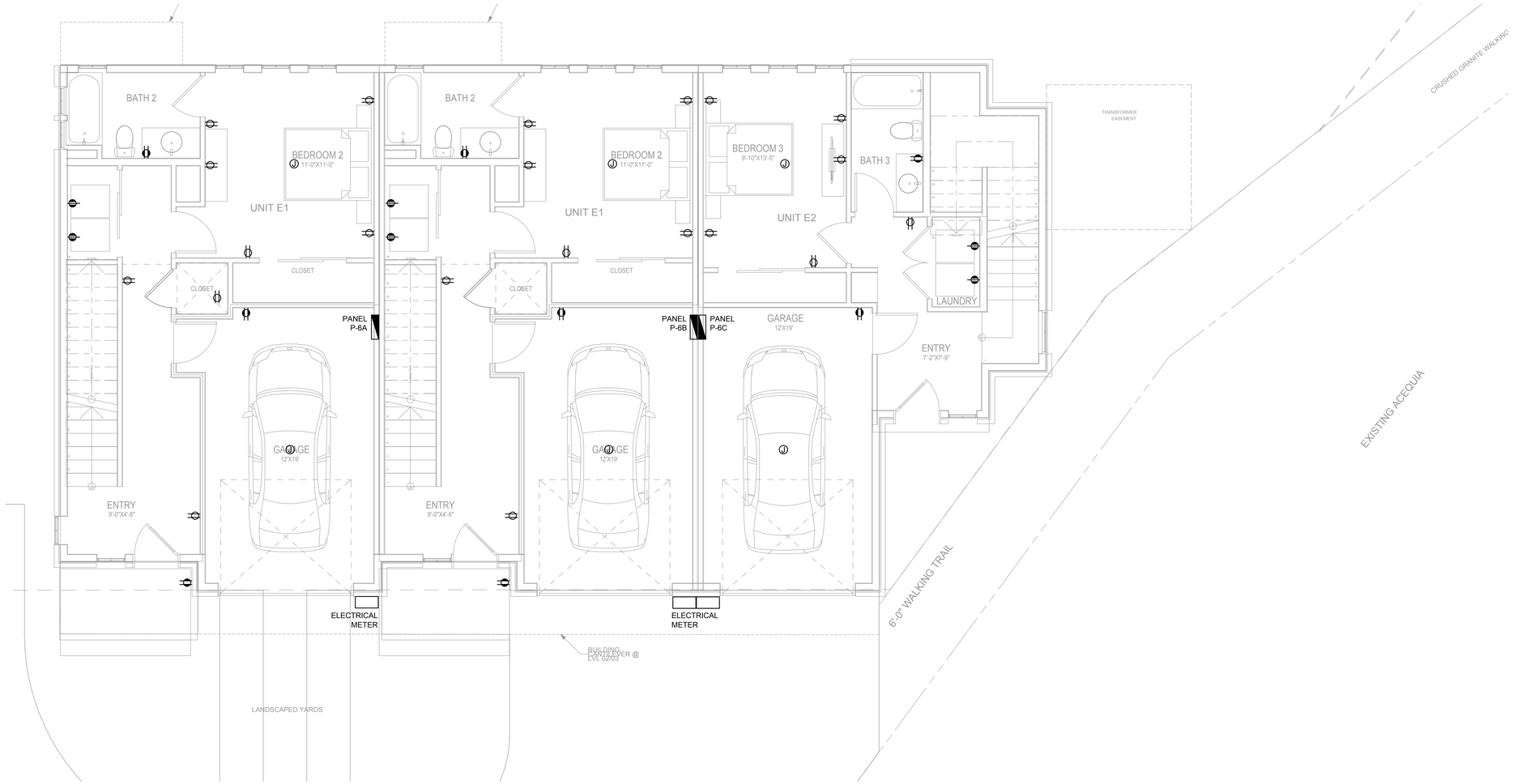
E1.54



1 BLDG 6 - 1ST FLOOR ELECTRICAL PLAN

Scale: 1/4"=1'-0"

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ISSUED SETS	DATE
80% CD SET	08/01/19

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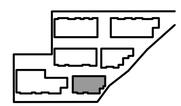

BLDG 6
1ST FLOOR
ELECTRICAL PLAN

E1.61

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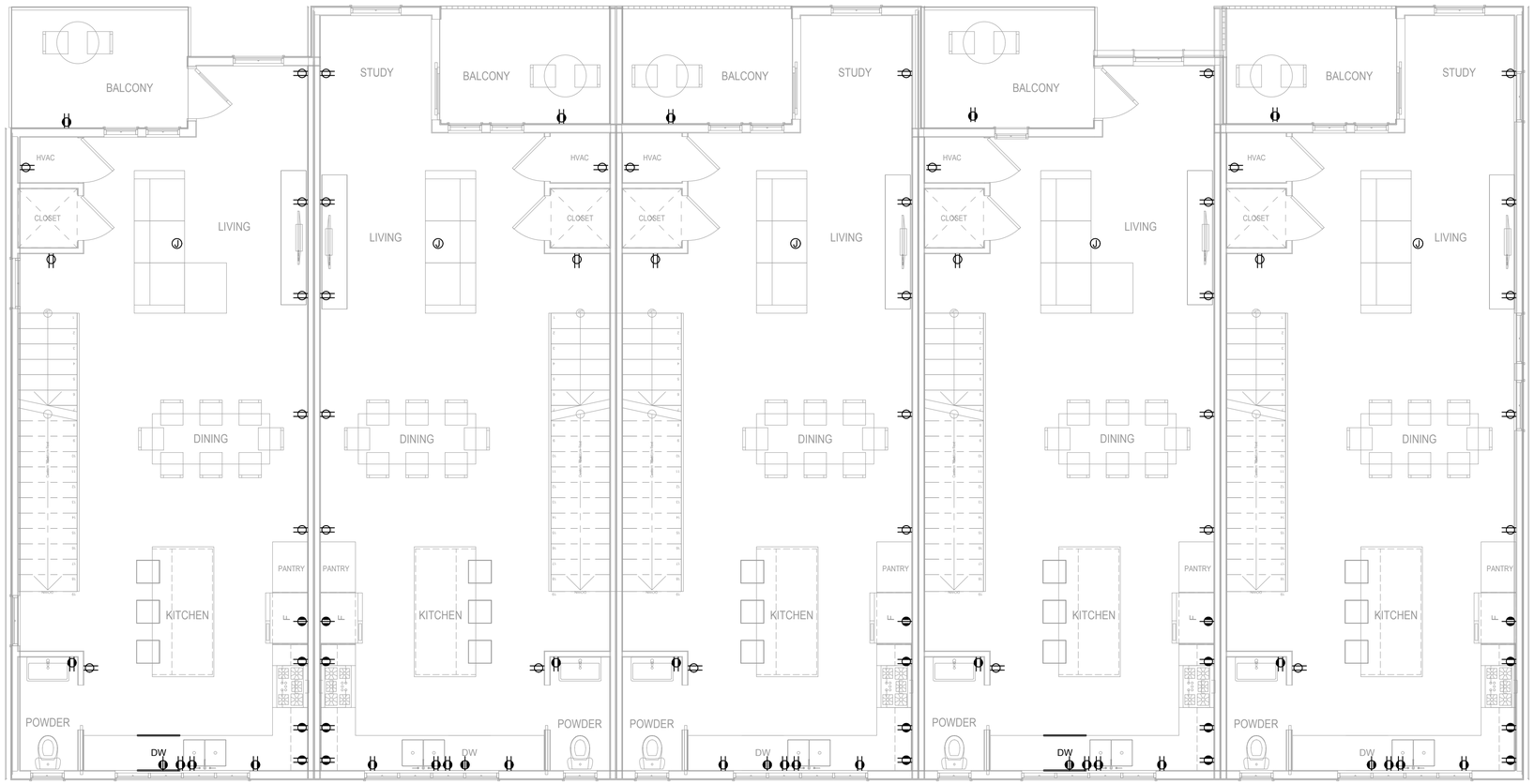
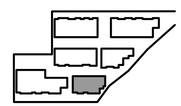


1 BLDG 6 - 2ND FLOOR ELECTRICAL PLAN

Scale: 1/4"=1'-0"

KEY PLAN



BLDG 6
2ND FLOOR
ELECTRICAL PLAN

E1.62

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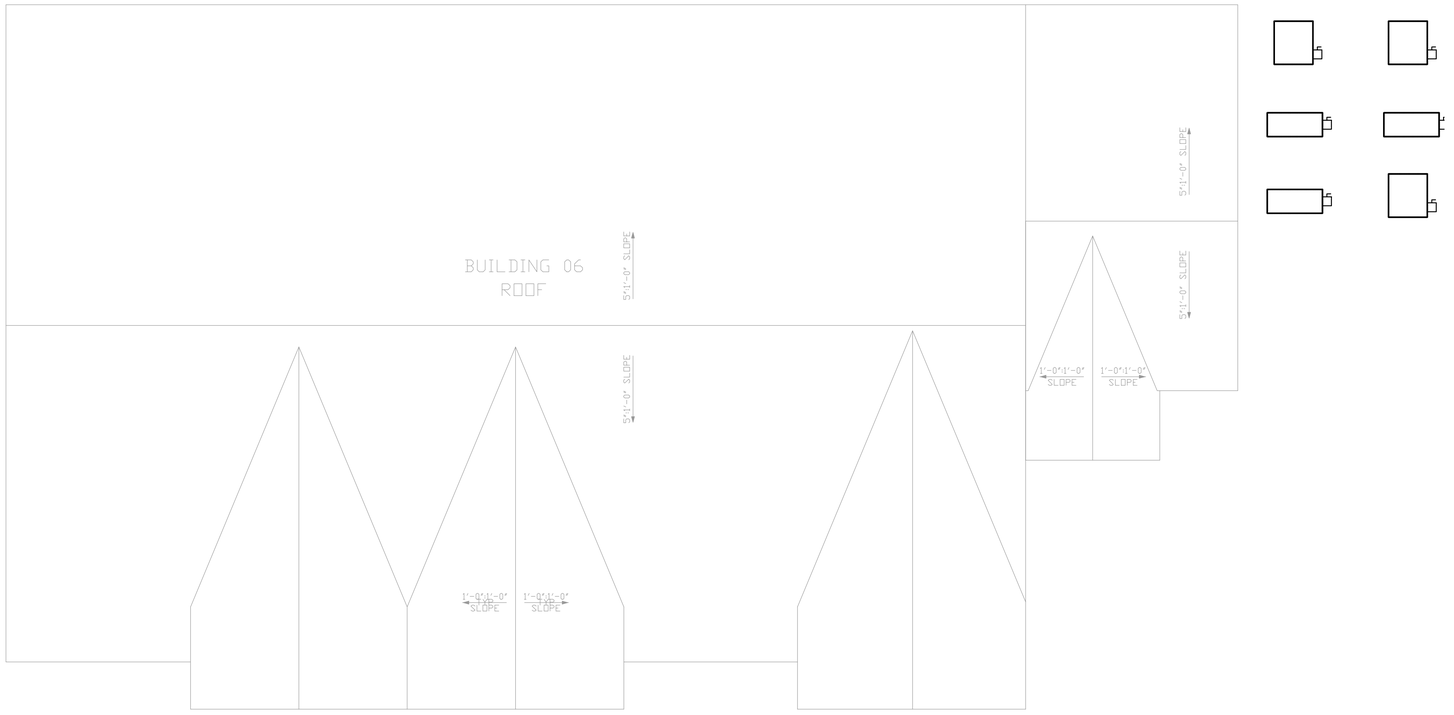

1 BLDG 6 - ROOF ELECTRICAL PLAN

Scale: 1/4"=1'-0"

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TRAIL STREET TOWNHOMES

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ISSUED SETS	DATE
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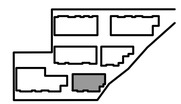
KEY PLAN



BLDG 6
ROOF
ELECTRICAL PLAN

E1.63

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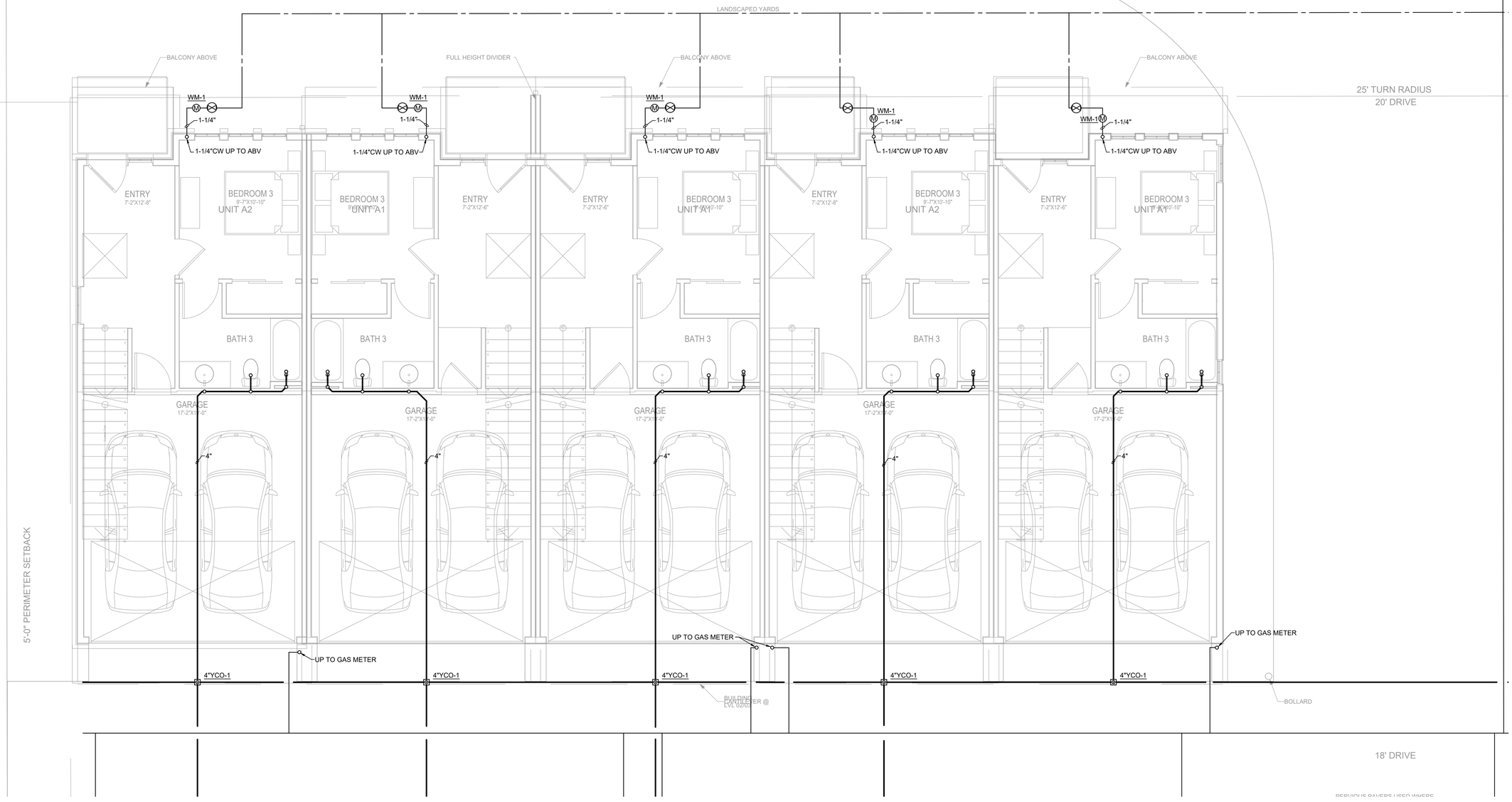

1 BLDG 1 - UNDERFLOOR PLUMBING PLAN

Scale: 1/4"=1'-0"

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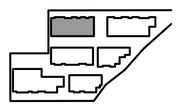
KEY PLAN



BLDG 1
UNDERFLOOR
PLUMBING PLAN

P1.10

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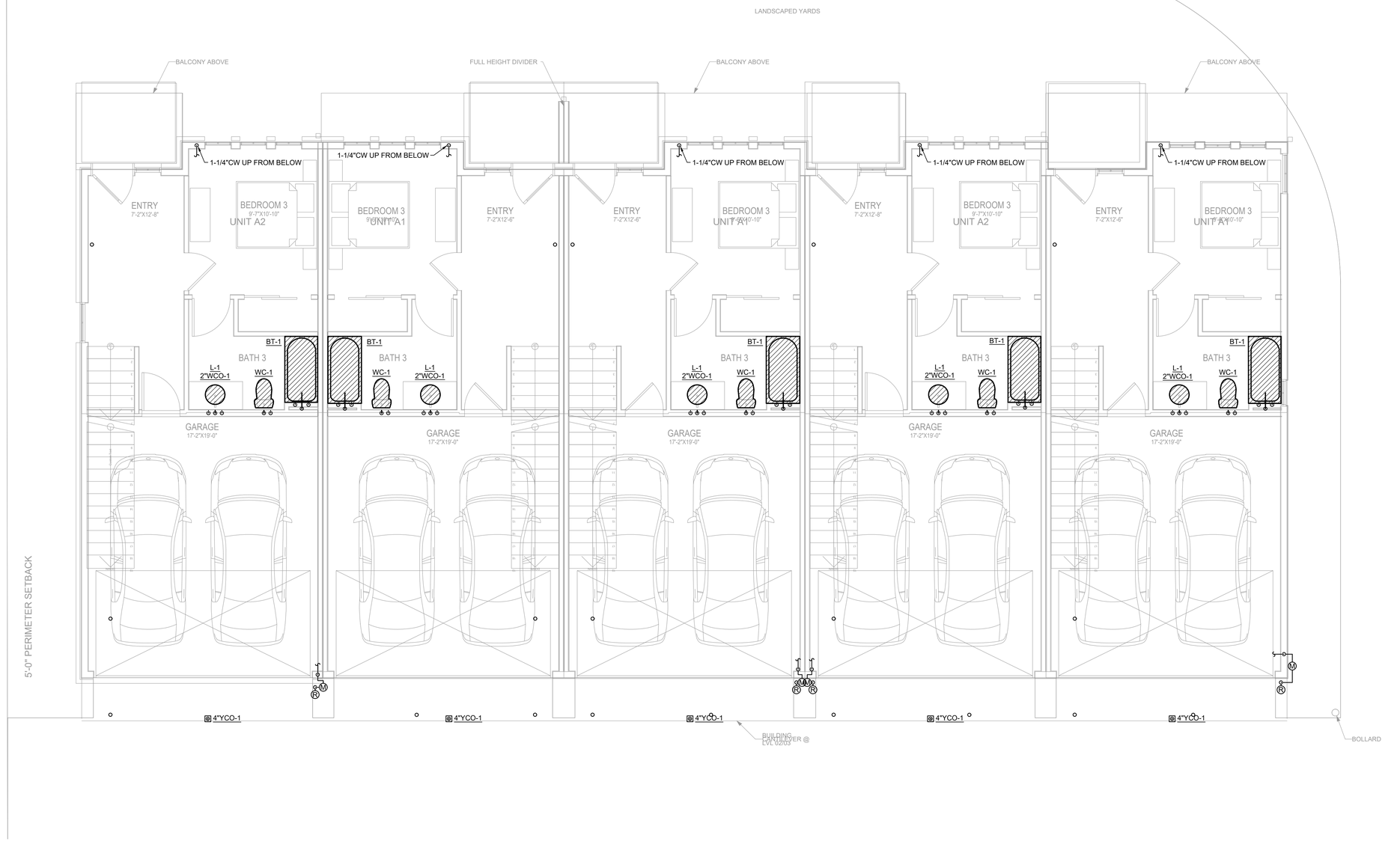

1 BLDG 1 - 1ST FLOOR PLUMBING PLAN

Scale: 1/4"=1'-0"

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ISSUED SETS	DATE
80% CD SET	08/01/19

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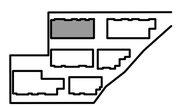

BLDG 1
1ST FLOOR
PLUMBING PLAN

P1.11

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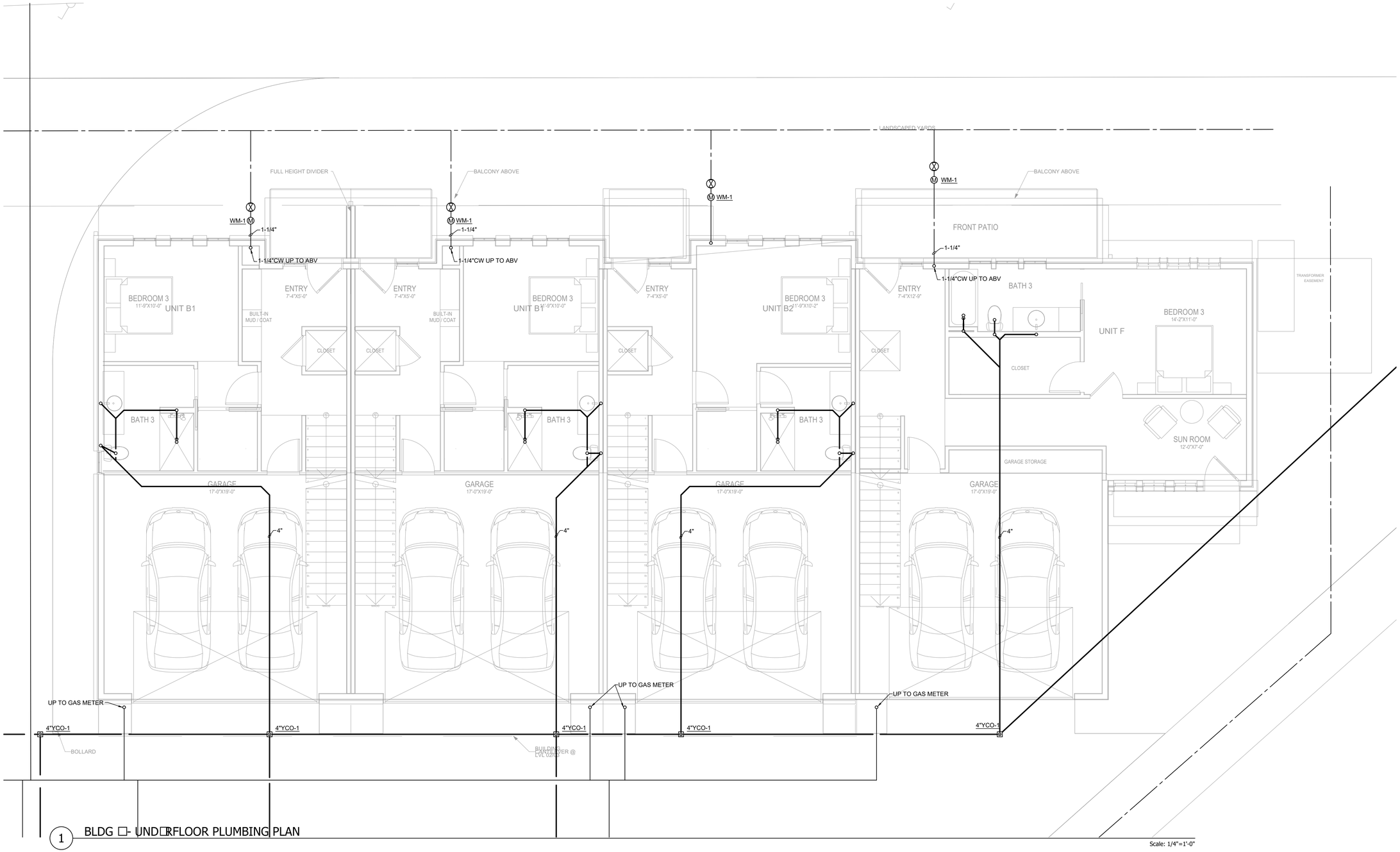

1 BLDG □- UND□RFLOOR PLUMBING PLAN

Scale: 1/4"=1'-0"

TRAIL STREET TOWNHOMES

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PROJECT NUMBER: 2019-004

ISSUED SETS	DATE
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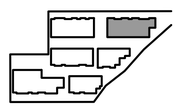
KEY PLAN



BLDG 2
UNDERFLOOR
PLUMBING PLAN

P1.20

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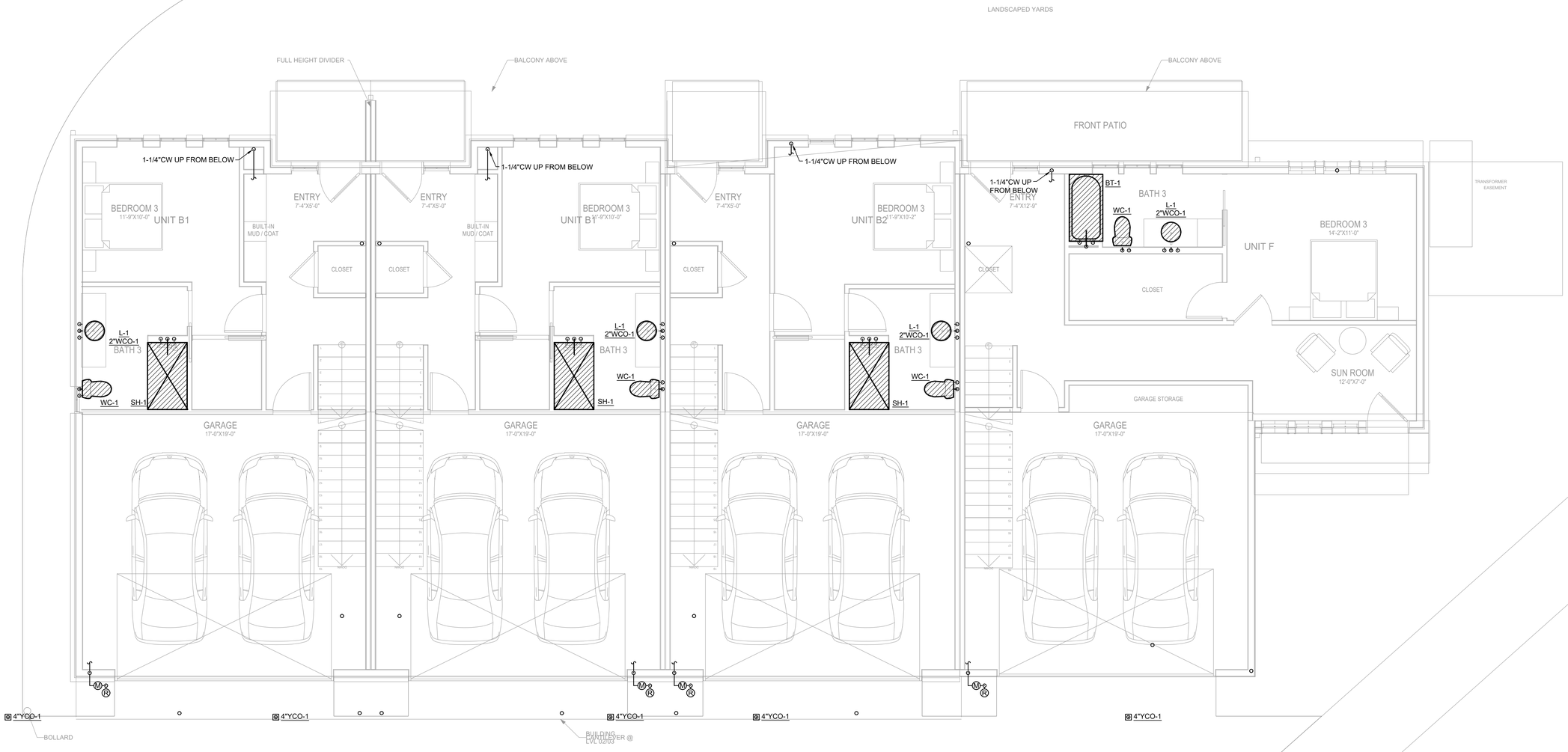

1 BLDG ☐- 1ST FLOOR PLUMBING PLAN

Scale: 1/4"=1'-0"

TRAIL STREET TOWNHOMES

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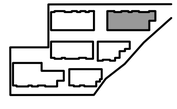
KEY PLAN



BLDG 2
1ST FLOOR
PLUMBING PLAN

P1.21

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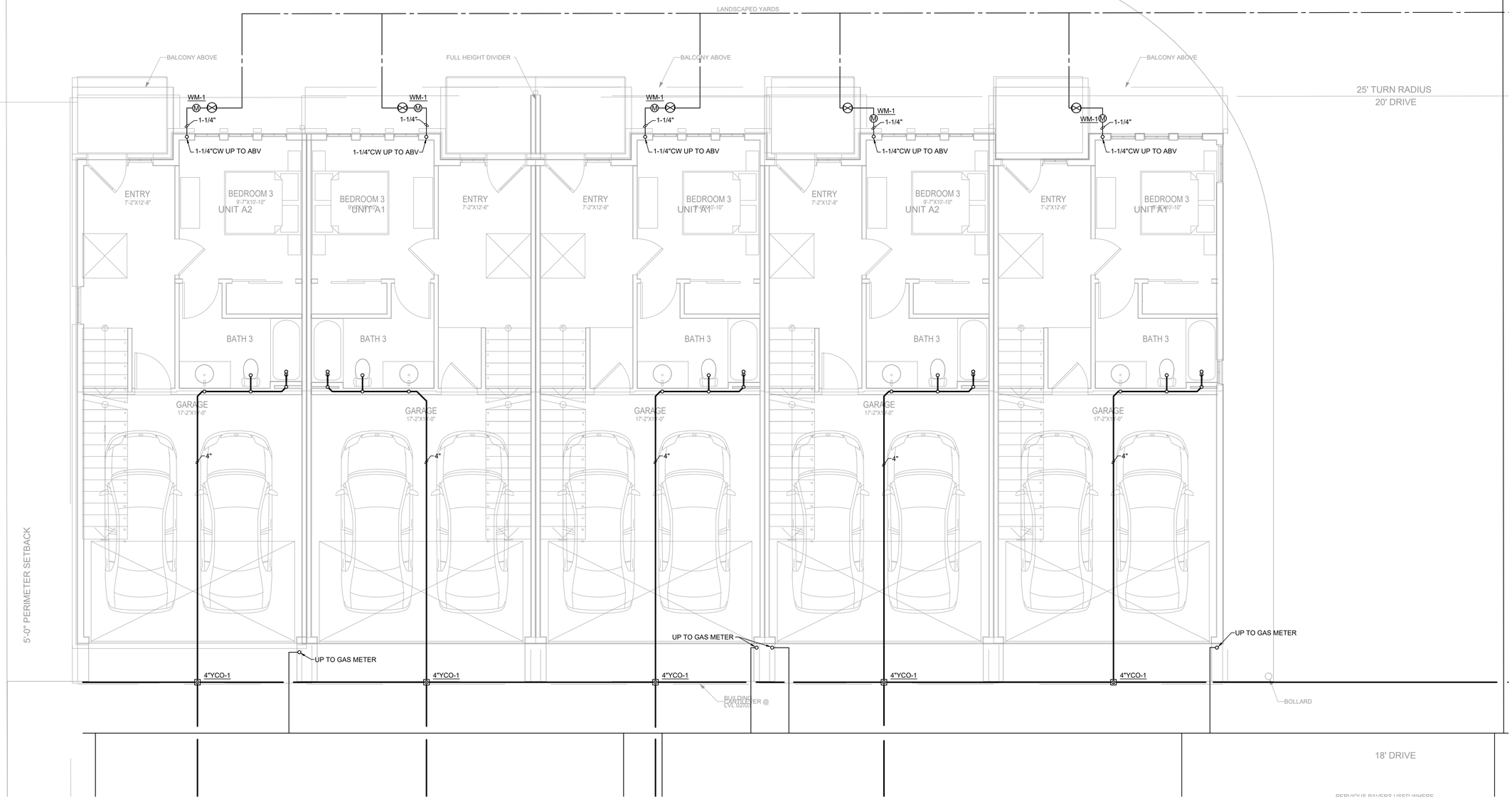

1 BLDG □- UND□RFLOOR PLUMBING PLAN

Scale: 1/4"=1'-0"

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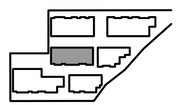
KEY PLAN



BLDG 3
UNDERFLOOR
PLUMBING PLAN

P1.30

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1 BLDG □- 1ST FLOOR PLUMBING PLAN

Scale: 1/4"=1'-0"

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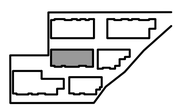
80% CD SET	08/01/19

KEY PLAN



BLDG 3
1ST FLOOR
PLUMBING PLAN

P1.31

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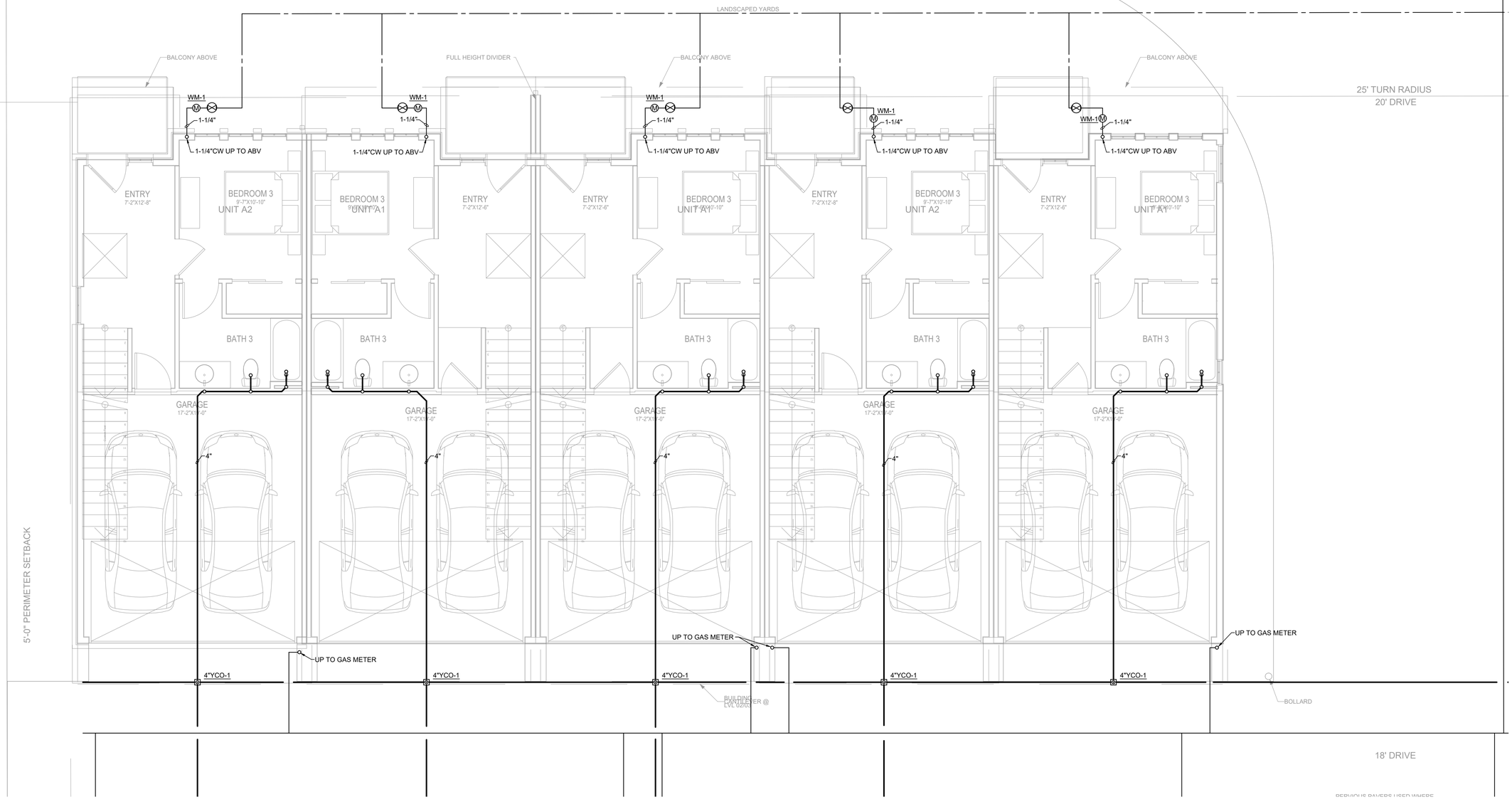

1 BLDG 4 - UNDERFLOOR PLUMBING PLAN

Scale: 1/4"=1'-0"

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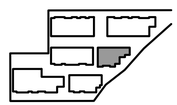
TRAIL STREET TOWNHOMES

335 Trail Street, San Antonio, TX 78212

PROJECT NUMBER: 2019-004

ISSUED SETS	DATE
80% CD SET	08/01/19

KEY PLAN



BLDG 4
UNDERFLOOR
PLUMBING PLAN

P1.40

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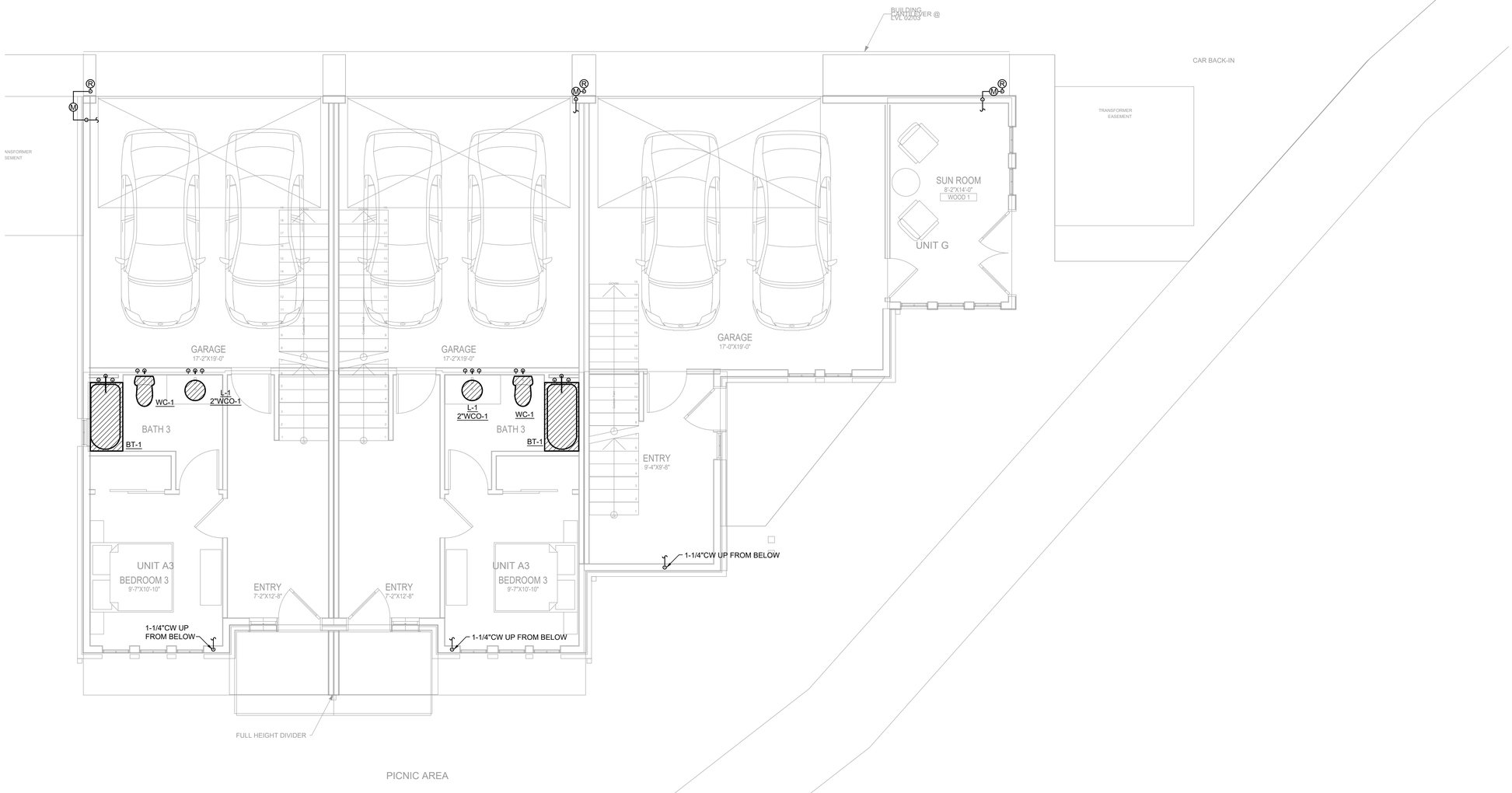

1 BLDG 4 - 1ST FLOOR PLUMBING PLAN

Scale: 1/4"=1'-0"

m(ødm)

Austin [tel] 469.5950
1009 West 6th Street #50 78703

San Antonio [tel] 469.5950
201 Groveton Street 78210

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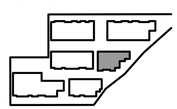

BLDG 4
1ST FLOOR
PLUMBING PLAN

P1.41

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1 BLDG □- UND□RFLOOR PLUMBING PLAN

Scale: 1/4"=1'-0"

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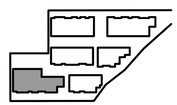

BLDG 5
UNDERFLOOR PLUMBING PLAN

P1.50

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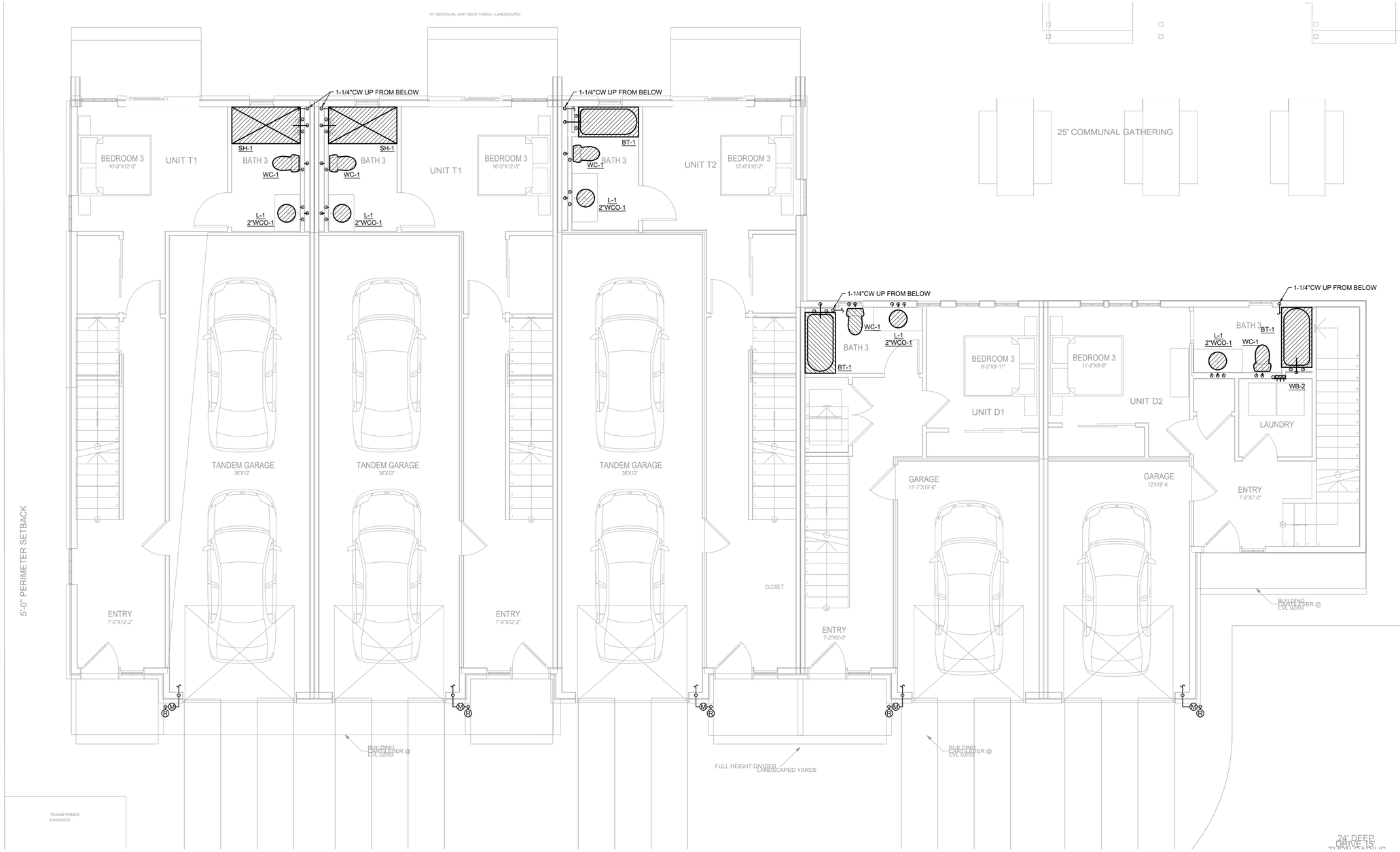

1 BLDG ☐- 1ST FLOOR PLUMBING PLAN

Scale: 1/4"=1'-0"

m(ødm)

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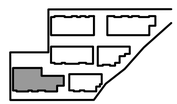

BLDG 5
1ST FLOOR
PLUMBING PLAN

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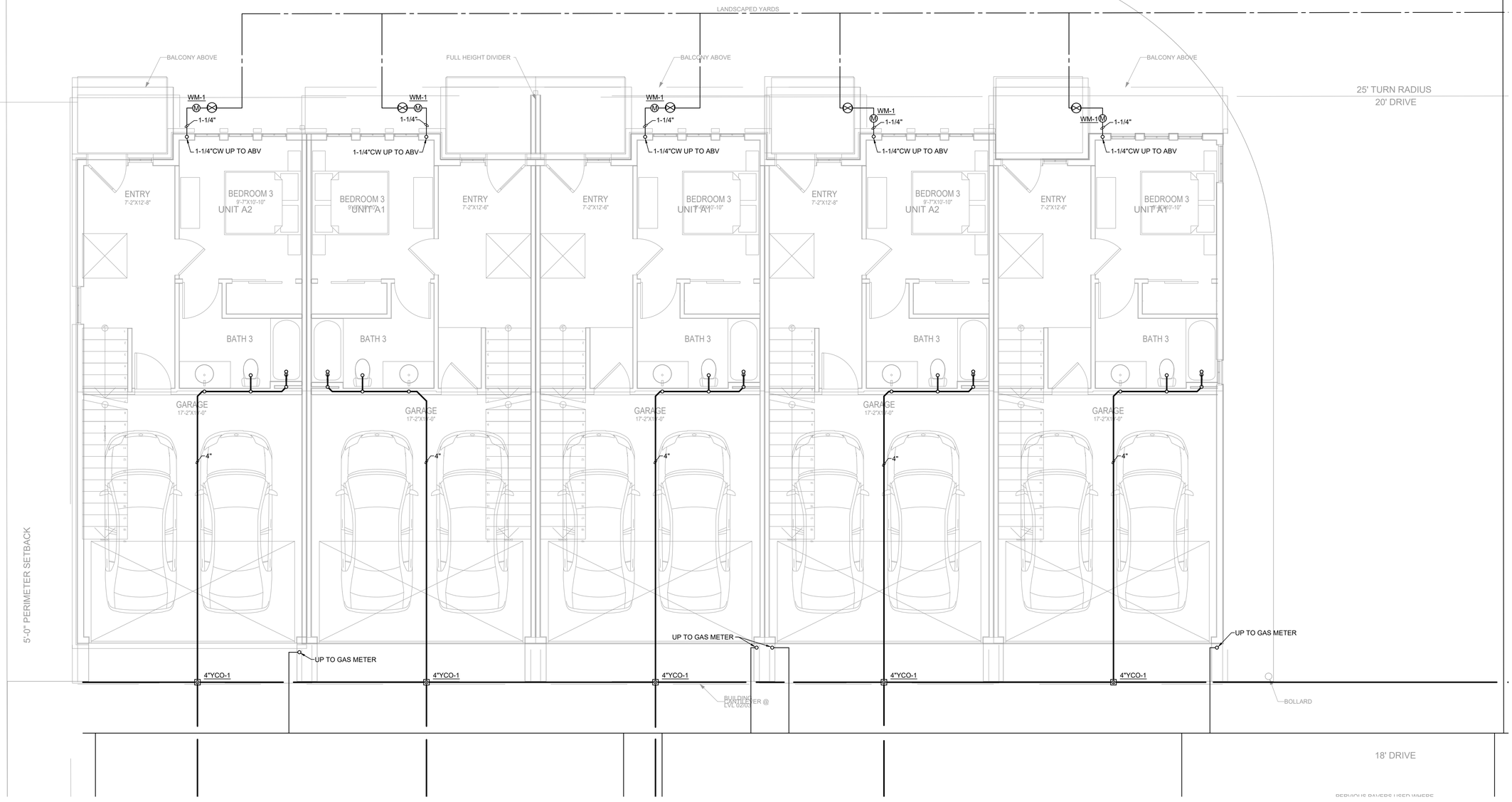
P1.51



1 BLDG 6 - UNDERFLOOR PLUMBING PLAN

Scale: 1/4"=1'-0"

m(ødm)

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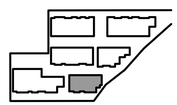

BLDG 6
UNDERFLOOR
PLUMBING PLAN

P1.60

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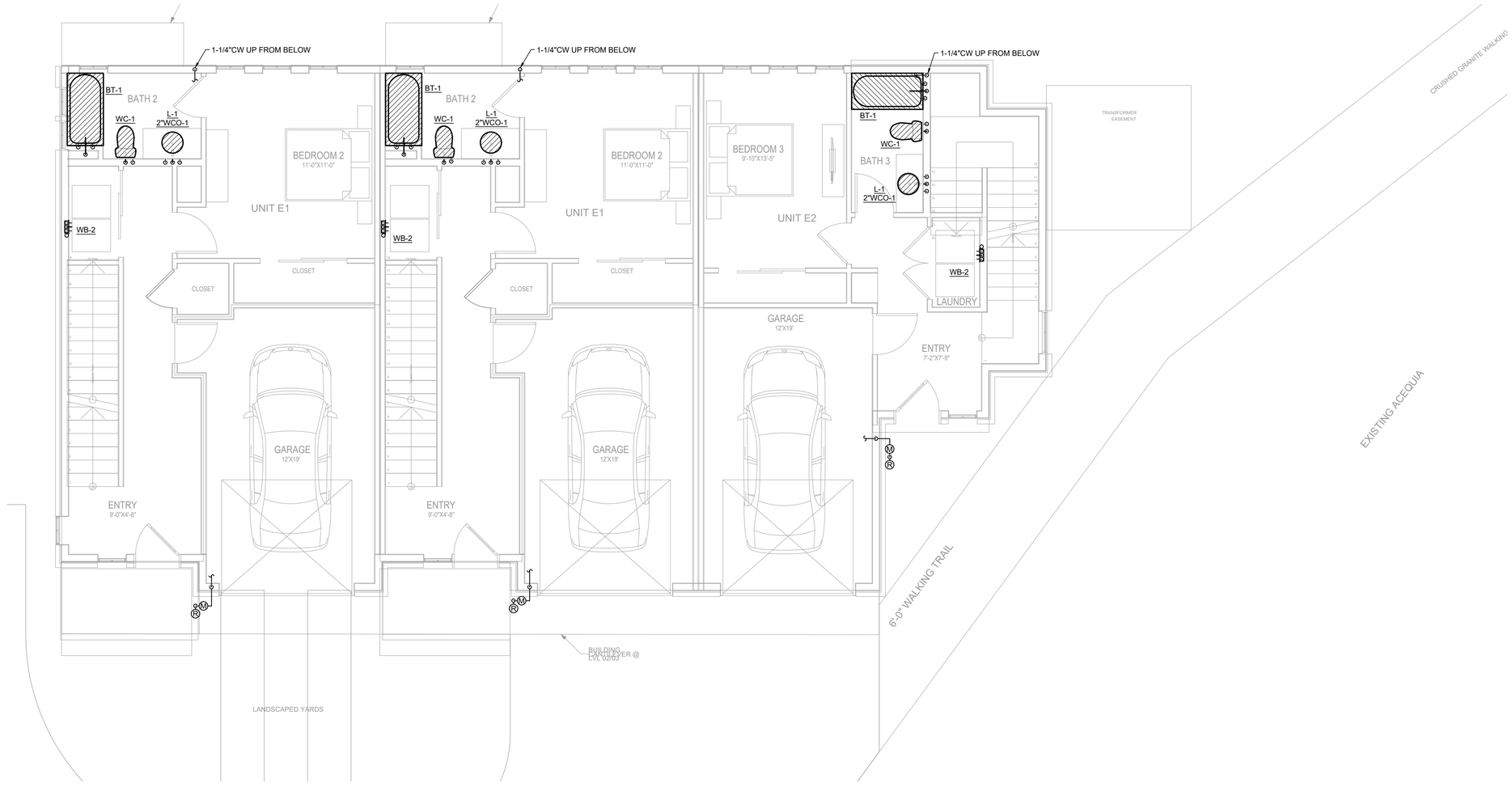

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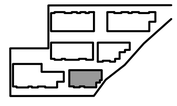

BLDG 6
1ST FLOOR
PLUMBING PLAN

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P1.61