

April 11, 2016
Revised April 18, 2016

PROJECT DESCRIPTION AND STATEMENT OF INTENT

Amendments to Detailed Plan Development Phase 2

Kane Commons

1142 through 1158 East Kane Place

*01/03/08 NOTE: ADDRESS RANGE REVISED TO 1146-1170 EAST KANE PLACE
PLEASE SEE ITEMS IN RED FOR AMENDMENTS TO THE DEVELOPMENT PLAN*

Milwaukee Wisconsin



The original Detailed Plan Development is being amended to allow for a single family home to be built at the 1168-1170 Address. Originally this was planned to be a duplex condominium. But with the economic down turn there has been no interest in construction that type of unit. In its place we are proposing a single family unit with the related changes to the Detailed Plan Development as listed below

Since the Detailed Plan was originally submitted, the East Village Conservation Overlay District has been removed and the project is no longer bound by its requirements.

EXECUTIVE SUMMARY OF REVISIONS

THE FOLLOWING IS THE LIST OF REVISIONS TO THE DETAILED PLAN DEVELOPMENT;

1. the units at 1168-1170 East Kane shall be reduced from 2 to 1 based on the lack of interest by potential buyers in constructing a duplex, a single family home has drawn more interest
2. The number of units will be reduced from 13 to 12 based on Item #1
3. Parking spots: the number of covered spots will be increased from 14 to 15 to address ongoing parking issues in the development. Even though we are reducing the number of units, we are increasing the number of parking spots.
4. The 1168-1170 unit will have a front setback for its overhangs and columns based on the average setback of the existing buildings directly to the West and East. Its garage wall will be set back from the face of the overhang an appropriate distance.
5. The eastside building setback for 1168-1170 will be 1'-6". This will match the set back on the west side of the development
6. 1170 East Kane will have a double garage door on the street. See attached drawings for style
7. The above changes are reflected in the density tables at the end of this letter

PROJECT SIZE ***NO CHANGE***

The size of the Project will be 29,098 square feet, (.67 acres).

PROJECT DENSITY ***SEE BELOW***

The proposed density of the Project is consistent with the East Village, because its housing layout generally continues that of the street. The present configuration of the site consists of an existing four-unit apartment building that is being converted into (3) condominiums (1142), a duplex which will remain as rental property (1148), a new single family home (1152) and a new duplex condominium (1154) Plan and design for all four street buildings was approved in Phase 1 of this project.

As part of the Phase work, 2 rear buildings in back of site were demolished.

Phase 2 of this project consists of two new single family buildings flanking a new courtyard in the middle of the site (1144 and 1156), and three new single family homes along the bluff edge (1146, 1150 and 1158).

In sum, the twelve pre-existing units will be replaced by ~~13~~ 12 new units, almost all of which have larger occupancy capacity than the previous units.

There is now only street parking with no on-site parking and the new development provides for 44 15 covered parking stalls and 3 surface stalls.

SPACE BETWEEN STRUCTURES ***See item 2***

The set backs approved in the General Plan are as follows:

1. Front setback (Kane Place): ~~the buildings will be setback 4'6" from the property line. The front porches and stoops will have a 0' setback to match.~~ The 1168-1170 unit will have a front setback for its overhangs and columns based on the average setback of the existing buildings directly to the West and East. Its garage wall will be set back from the face of the overhang an appropriate distance.
2. East Side setback: ~~the buildings will be setback 3'6" from the east property line.~~ The eastside building setback for 1168-1170 will be 1'-6". This will match the set back on the west side of the development
3. West Side setback: New buildings will have a 1'-6" minimum set back from the west property line.
4. North Side Setback: the setback from the north property line is determined by the buildable area atop of the bluff and varies from building to building.

5. Internal set backs for the street structures is 5'-0" minimum.

Since the approval of the General Plan and the Detailed Plan Phase 1, the internal set backs for the bluff homes has been changed. Phase 2 of the Detail Plan sets these setbacks as 3'-6" minimum. (this change is due to the overhangs required for straw bale construction).

There are no business or industrial uses in Kane Commons, so no screening is required.

COURTYARD AND COMMON OPEN SPACES **SEE BELOW**

Paving

Due to site contamination and bluff stability, the drive in the courtyard will be decorative concrete. Permeable paving will be used for the walks and center courtyard garden paths.

Retaining Walls

Retaining walls to be poured-in-place concrete with a stone veneer or landscaping block.

Plantings

Plantings will be generally native and low maintenance in accordance with principals of permaculture to aid in water retention, pollution remediation, bluff maintenance and light conditions. No sod will be planted. Courtyard will include trees and rain-gardens, with preference for native grasses, perennial and shrubs. Green roofs, trellis vines, integrated balcony planters and other plantings on structures are included..

Lighting

Lighting will be low level and architecturally integrated, and will emphasize walking surfaces, plantings and illumination for safety (no high level lighting or high color lamping, such as high pressure sodium).

Utilities

All utility lines will be underground and a transformer is not needed. **NOTE: this was changed during construction of Phase 2. The transformer was place interior to the site and out of sight from the street**

Signs

No signs, other than house numbers, are contemplated.

SITE ACCESS AND CIRCULATION **NO CHANGE**

Pedestrian

The site can be approached by foot from East Kane Place. The street front houses will all have entries on or near the street facades, accessed from the public sidewalk. Some of the front houses will also have second entries from the side and/or the rear courtyard. 1142 Unit C and 1148 Upper will have access from the Courtyard. The remaining houses will be accessed through the drive and Courtyard.

Vehicular

Parking will be integrated into the interior of the site, and car access will be through a drive located between 1144 and 1148, the remaining two existing buildings. All **but one of the** garage doors will be located on the courtyard elevations of the buildings (~~no garage doors to be on street facades or easily visible directly from the street~~). **1168-1170 will have a double garage door on Kane Place. This was done to accommodate the additional garage for the association.** The Master Plan will provide a minimum of one dedicated indoor parking space for 11 of the 13 dwelling units, with a majority of single home dwelling units will have two dedicated parking spaces.

Garbage Collection

Garbage storage generally to be located within garage units or in primary garbage storage structures, located at the south end of 1144 and the north end of 1148. These structures are easily accessible from the drive, but are located so not to be visible from the street. Structure will be enclosed and designed to be visually and materially harmonious with adjacent buildings.

Snow Removal and Collection

Zones for snow storage to be designed into plan of courtyard areas.

PHASE 2 COURTYARD BUILDINGS *NO CHANGE*

Massing and height

New buildings at courtyard shall be designed to take advantage of the sloping site, and will be positioned to reinforce the courtyard and establish gardens between the buildings. General scale of buildings to be similar to street-front buildings, with more articulation of entries, terraces, different floor levels and greater connections between interior and exterior spaces. Buildings on courtyard and bluff shall be no taller than the peak of the tallest building on the street front (1152), and may have a combination of sloped, low slope or flat roofs.

Entries

Entries of courtyard dwellings will be partially covered or recessed into façade to enhance scale and transition from public to private spaces.

Balconies

A minimum of one balcony or roof terrace will be provided for each living unit, in addition to garden and terrace spaces at grade.

Materials

Exteriors to be composed of a combination of materials, ranging from masonry, stuccoed straw bale, wood, concrete, cement panel and metal (no vinyl or aluminum siding). Changes in material will reflect massing, relationships between buildings, passive solar strategies, light, air currents and view orientations for interior spaces, and connections to the ground plane and retaining conditions. Foundation walls to be poured-in-place concrete, stone or stucco, and roof edges to be wood or metal with integrated wood soffits and venting (no corrugated perforated aluminum or vinyl soffits.).

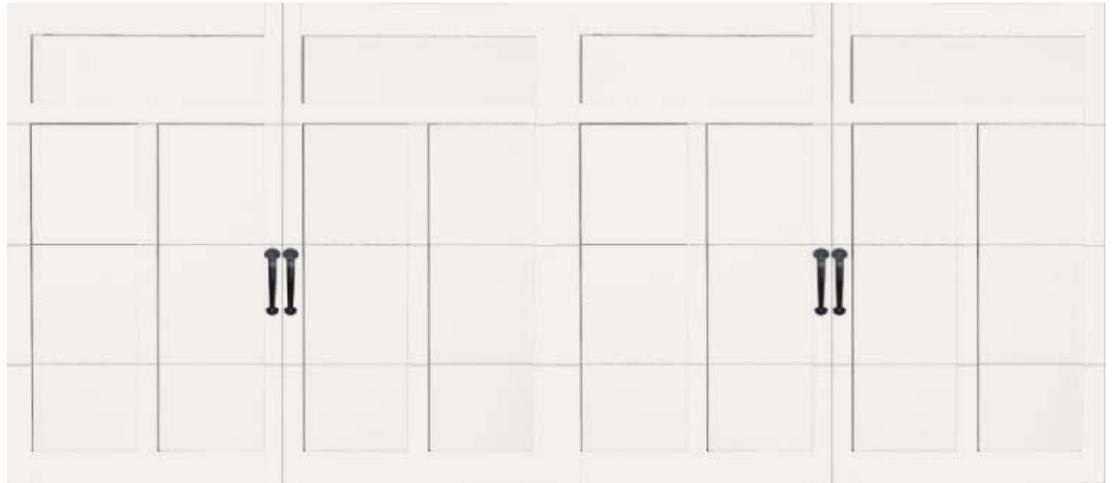
Green, Sustainable or Low Impact Features: the courtyard buildings and garden will be the focal point of the green, sustainable, and low impact design of the project. The design guidelines that achieve these features are as follows:

----Use site layout, design, construction, and management techniques that achieve multiple storm water management objectives such as groundwater recharge, discharge rate control, runoff volume control, and water quality improvements.

----Increase the aesthetic value of the proposed development and storm water management facilities through design.

----Integrate storm water management facilities into the natural environment through placement, landscaping, rain chains, raingardens and cisterns.

In accordance with these principles, rooftop runoff from all the buildings will be directed to various collection points throughout the courtyard where it can be stored or re-used through rain barrels or runoff cisterns. The project will take full advantage of this freedom to collect, convey, and treat rooftop runoff to minimize off-site discharges.

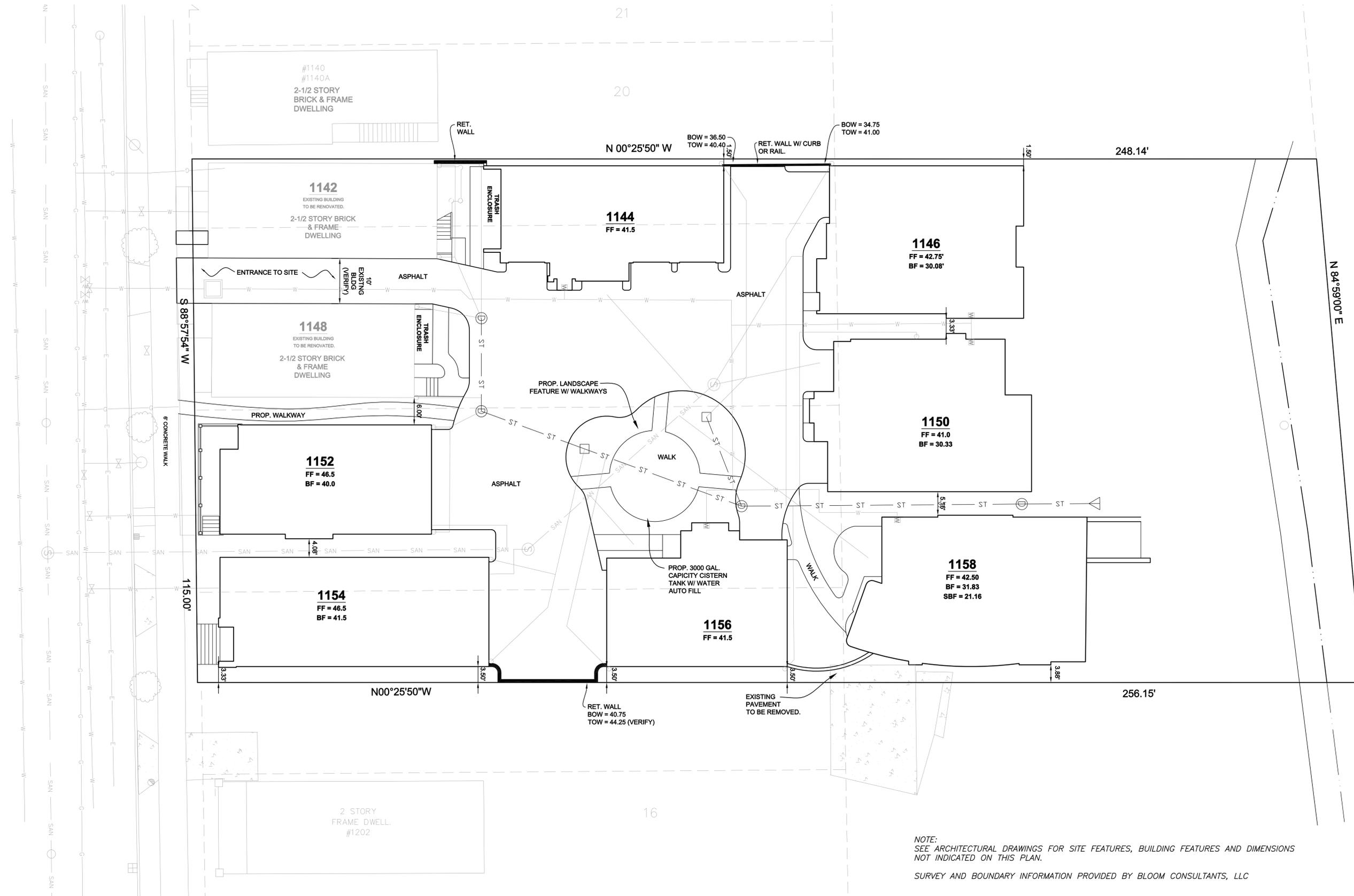


Item		Phase 1	Phase 2	Total	Comments
Gross Land Area		9272 SF	19826 SF	29098 SF	Measurements for Phase 2 and total taken to dock line
Maximum land covered by principal buildings	1142 1146-1150	1150 SF			
New addresses In red	1144 1152		1128 SF		
	1146 1154		1430 SF		
	1148 1162-1164	920 SF			
	1150 1156		1462 SF		
	1152 1166	1008 SF			
	1154 1168-1170	1464 SF			
	1156 1160		1084 SF		
	1158		1550 SF		
	TOTAL	4542 SF	6654 SF	11196 SF	
Maximum land for parking, drives		3015 SF	3258 SF	6273 SF	
Minimum amount of landscaped open space		1715 SF	9914 SF	11629 SF	Includes possible development of dock line
Maximum proposed dwelling unit density		8 units	5 units	13 units	
		0.21 acre	0.46 acre	0.67 acre	
		38 units/acre	11 units/acre	19 units/acre	
Number of buildings		4 buildings	5 buildings	9 buildings	1142 and 1148 East Kane are existing.
Maximum land covered by principal buildings	1142 1146-1150	3 units			
	1144 1152		1 units		
	1146 1154		1 units		
	1148 1162-1164	2 units			
	1150 1156		1 units		
	1152 1166	1 units			
	1154 1168-1170	2 units 1 unit			
	1156 1160		1 units		
	1158		1 units		
	TOTAL	8 7 units	5 units	13 12 units	

Number of Bedrooms per Unit	1142 1146- 1150	3			
	1144 1152		2		
	1146 1154		3		
	1148 1162- 1164	2			
	1150 1156		3		
	1152 1166	2			
	1154 1168- 1170	2			
	1156 1160		2		
	1158		3		
	TOTAL	9 bedrooms	13 bedrooms	21 bedrooms	
Parking spaces provide		6 Stalls	12 Stalls	18 Stalls	Phase1: 5 covered, 2 surface Phase 2: 10 covered 1 surface
Parking/Unit Ratio		0.85 Stall/unit	2.4 Stall/unit	1.5 Stall/unit	

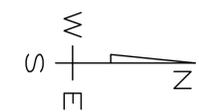
EAST KANE PLACE

MILWAUKEE RIVER
(WATER ELEVATION, JULY 8, 1999, = -1.6)



NOTE:
SEE ARCHITECTURAL DRAWINGS FOR SITE FEATURES, BUILDING FEATURES AND DIMENSIONS NOT INDICATED ON THIS PLAN.
SURVEY AND BOUNDARY INFORMATION PROVIDED BY BLOOM CONSULTANTS, LLC

NOTES:
1. THE LOCATION AND SIZE OF UNDERGROUND STRUCTURES AND UTILITIES SHOWN HEREON HAVE BEEN LOCATED TO A REASONABLE DEGREE OF ACCURACY, BUT THE ENGINEER DOES NOT GUARANTEE THEIR EXACT LOCATION OR THE LOCATION OF OTHERS NOT SHOWN. CONTACT DIGGERS HOTLINE.
2. ALL SITE GRADING ACTIVITY AND EROSION CONTROL MEASURES SHALL COMPLY WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS (1000-1070). ALL EROSION CONTROL MEASURES MUST BE IN PLACE BEFORE CONSTRUCTION BEGINS AND SHALL BE MAINTAINED DURING CONSTRUCTION.



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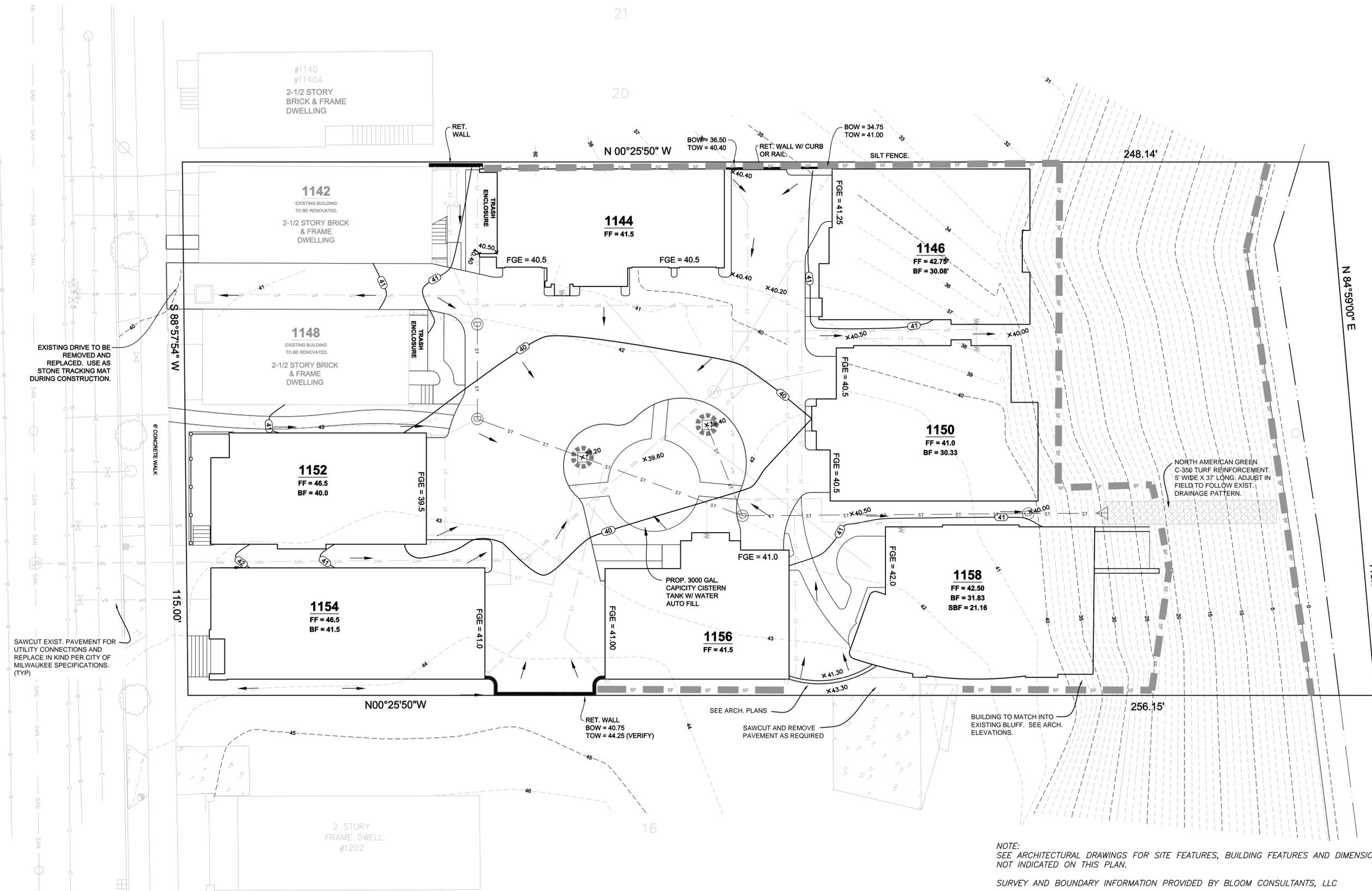
DESIGNED BY: A. KOCH, P.E.
CHECKED BY: A. KOCH, P.E.
APPROVED BY: _____ DATE _____
PROJECT NO.: 050376 - REV. DATE: Feb 07, 2007
HOR. SCALE: 1" = 10'

SITE PLAN
KANE COMMONS
CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

SHEET 1 OF 7

EAST KANE PLACE

MILWAUKEE RIVER
 (WATER ELEVATION, JULY 8, 1999, = -1.6)



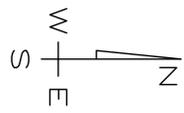
EXISTING DRIVE TO BE REMOVED AND REPLACED. USE AS STONE TRACKING MAT DURING CONSTRUCTION.

SAWCUT EXIST. PAVEMENT FOR UTILITY CONNECTIONS AND REPLACE IN KIND PER CITY OF MILWAUKEE SPECIFICATIONS. (TYP)

NORTH AMERICAN GREEN C-350 TURF REINFORCEMENT. 5' WIDE X 37' LONG. ADJUST IN FIELD TO FOLLOW EXIST. DRAINAGE PATTERN.

BUILDING TO MATCH INTO EXISTING BLUFF. SEE ARCH. ELEVATIONS.

LEGEND	
PROPOSED SPOT GRADE	X 39.55
EXIST MINOR CONTOUR	--- 39 ---
EXIST MAJOR CONTOUR	--- 40 ---
PROPOSED MINOR CONTOUR	--- 39 ---
PROPOSED MAJOR CONTOUR	--- 40 ---
SILT FENCE	SF
INLET PROTECTION	(Circular symbol)
FGE = FINISHED GARAGE ELEV. AT DOOR	



DIGGERS HOTLINE
 WISCONSIN STATE STATUTE 182.0175 REQUIRES THREE WORK DAYS NOTICE BEFORE YOU EXCAVATE CALL DIGGERS HOTLINE 1-800-242-8511



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 APPROVED BY: _____ DATE _____
 PROJECT NO.: 050376 - REV. DATE: Feb 07, 2007
 HOR. SCALE: 1" = 10'

GRADING AND EROSION CONTROL
 KANE COMMONS
 CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN
 SHEET 2 OF 7

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 SEE SHEET 7 FOR SITE DETAILS

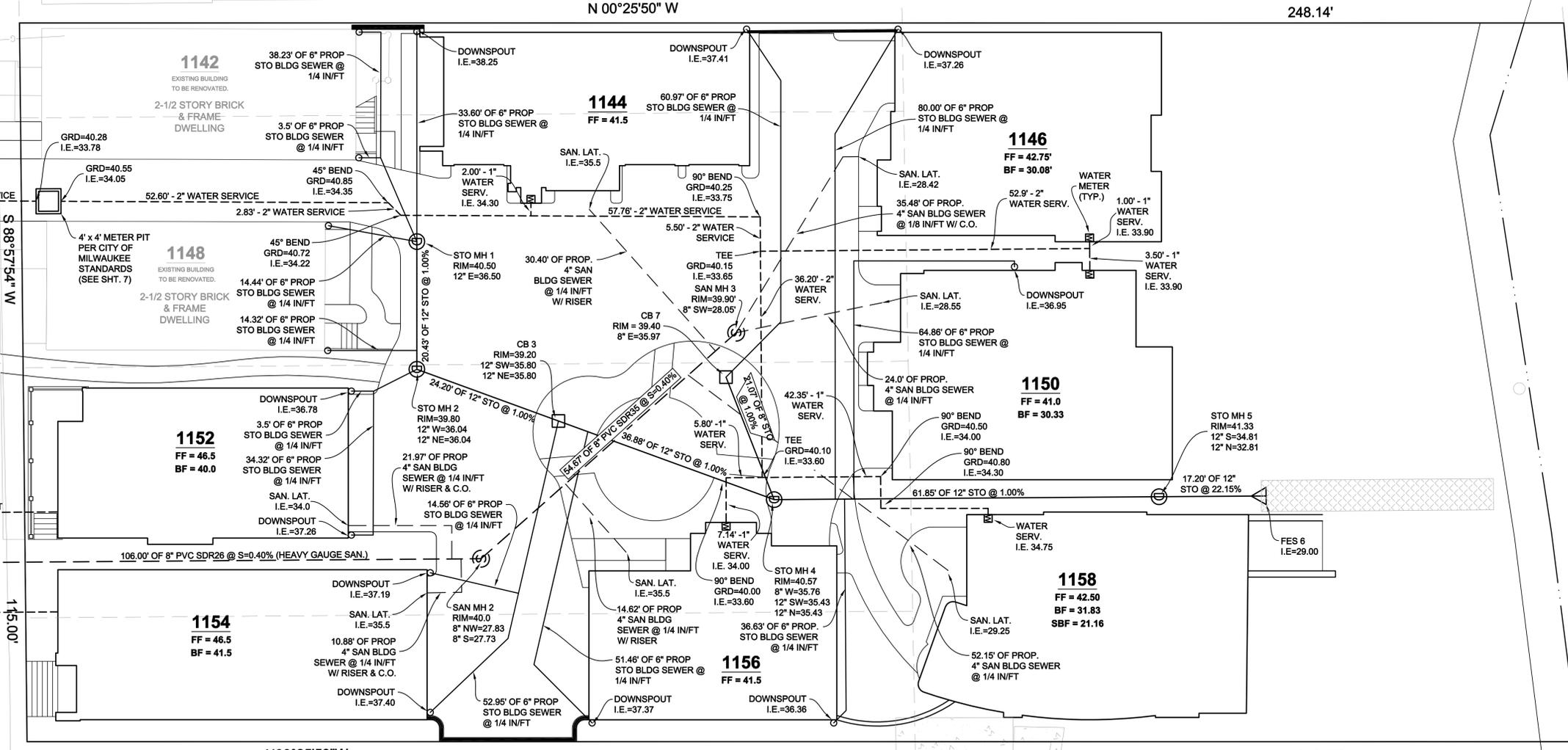
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PROJECT NO. 050376, 02-GPEC-01.DWG - KANE COMMONS, SHEET 2 OF 7, CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

EAST KANE PLACE

MILWAUKEE RIVER
(WATER ELEVATION, JULY 8, 1999, = -1.6)



FROM CITY FILE NO. 164-28
RIM = 41.36
15" E & W = 25.14

CONNECT TO EXIST. WATERMAIN PER CITY OF MILWAUKEE SPECIFICATIONS (TYP. 3 LOCATIONS)

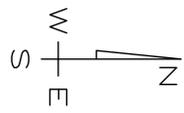
SAN MH 1 (PROP. SAN. MANHOLE) CUT EXIST. PIPE AND INSTALL NEW MANHOLE. USE RUBBER SLEEVES AT EXISTING PIPE. INSTALL PER CITY OF MILWAUKEE SPECIFICATIONS. RIM 42.48 (FIELD VERIFY) 8" N. I.E.=27.31 (PROP.) 15" (E&W) I.E.=26.73 (EXIST.) (VERIFY LOCATION AND ELEV PRIOR TO CONST.)

SAWCUT EXIST. PAVEMENT FOR UTILITY CONNECTIONS AND REPLACE IN KIND PER CITY OF MILWAUKEE SPECIFICATIONS. (TYP)

FROM CITY FILE NO. 164-28
RIM = 45.07
15" E & W = 30.42

NOTE:
1. PROVIDE CLEAN-OUTS ON STORM SEWER AND SANITARY SEWER LATERALS AS REQUIRED PER CITY OF MILWAUKEE SPECIFICATIONS.
2. ALL WATERMAIN IS TYPE "K" COPPER.
3. ALL STORM SEWER IS HDPE ADS N-12.
4. ALL SANITARY SEWER IS PVC SDR 35 UNLESS NOTED OTHERWISE.
5. SEE SHEET 7 FOR SITE DETAILS.
6. SEE ARCHITECTURAL DRAWINGS FOR SITE FEATURES, BUILDING FEATURES, AND DIMENSIONS NOT INDICATED ON THIS PLAN.
7. SURVEY AND BOUNDARY INFORMATION PROVIDED BY BLOOM CONSULTANTS, LLC.

LEGEND	
PROP. STORM SEWER	—————
PROP. STORM SEWER LATERAL	—————
PROP. STORM SEWER LATERAL TO CISTERN	—————
PROP. SANITARY SEWER	—————
PROP. SANITARY SEWER LATERAL	—————
PROP. WATER SERVICE	—————



NOTES:
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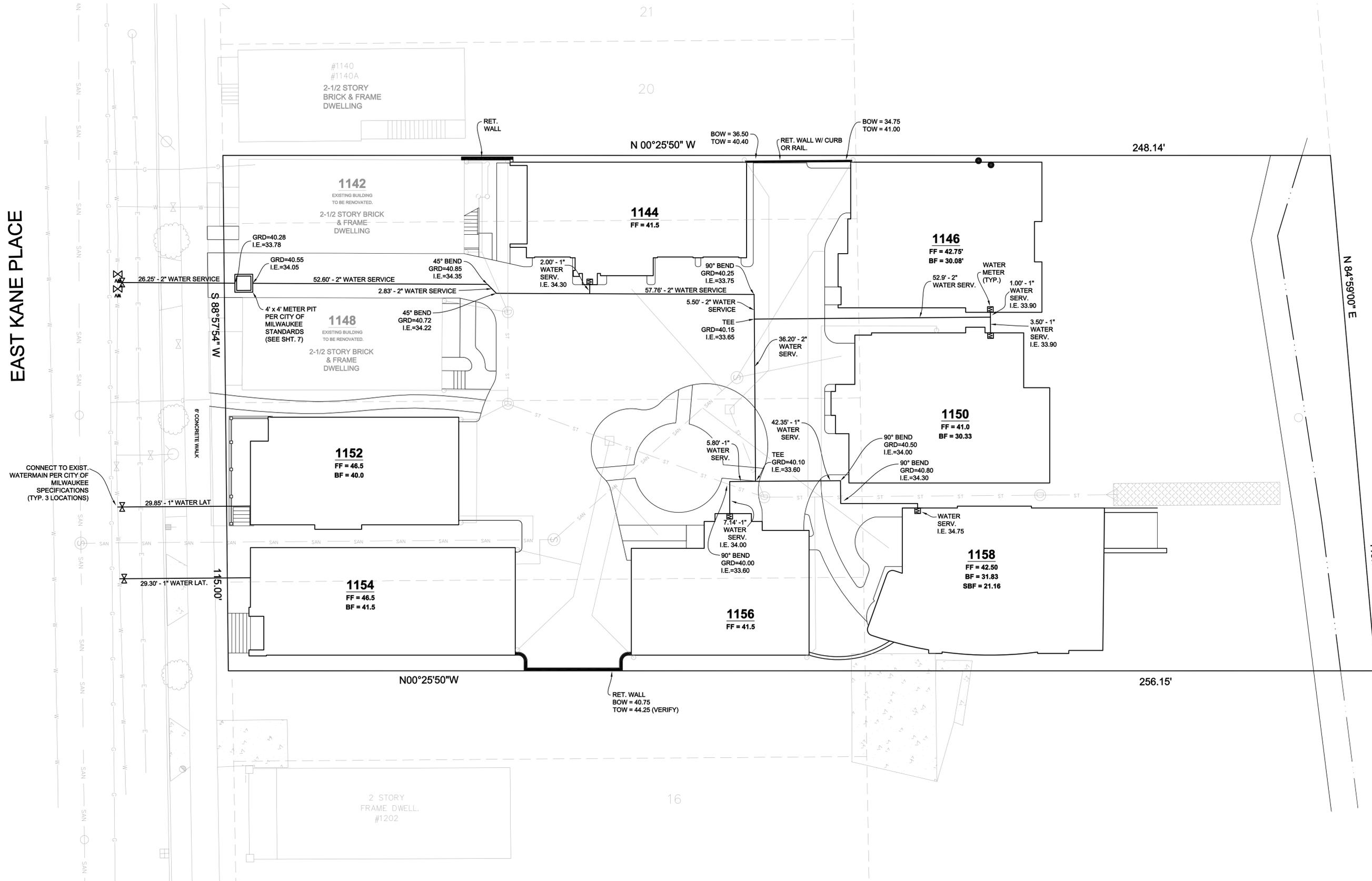
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CHECKED BY: A. KOCH, P.E.
APPROVED BY: _____
TOWN/CITY ENGINEER DATE
PROJECT NO.: 050376 - REV. DATE: Feb 07, 2007
HOR. SCALE: 1" = 10'

UTILITY PLAN
KANE COMMONS
CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN
SHEET 3 OF 7

EAST KANE PLACE

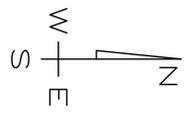
**MILWAUKEE RIVER
(WATER ELEVATION, JULY 8, 1999, = -1.6)**



CONNECT TO EXIST. WATERMAIN PER CITY OF MILWAUKEE SPECIFICATIONS (TYP. 3 LOCATIONS)

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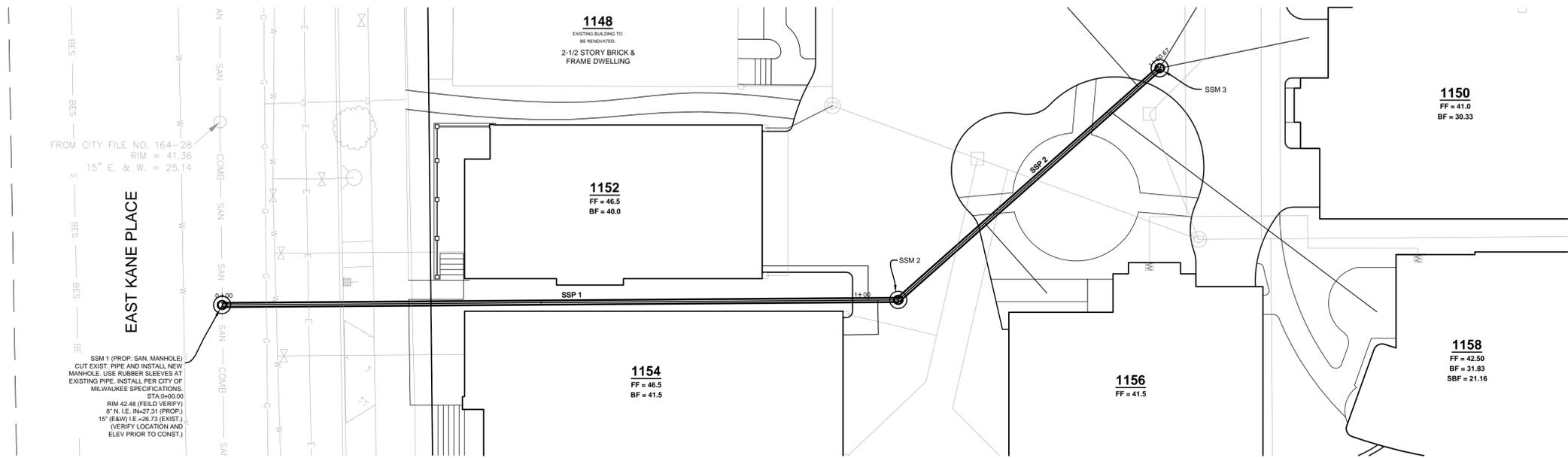
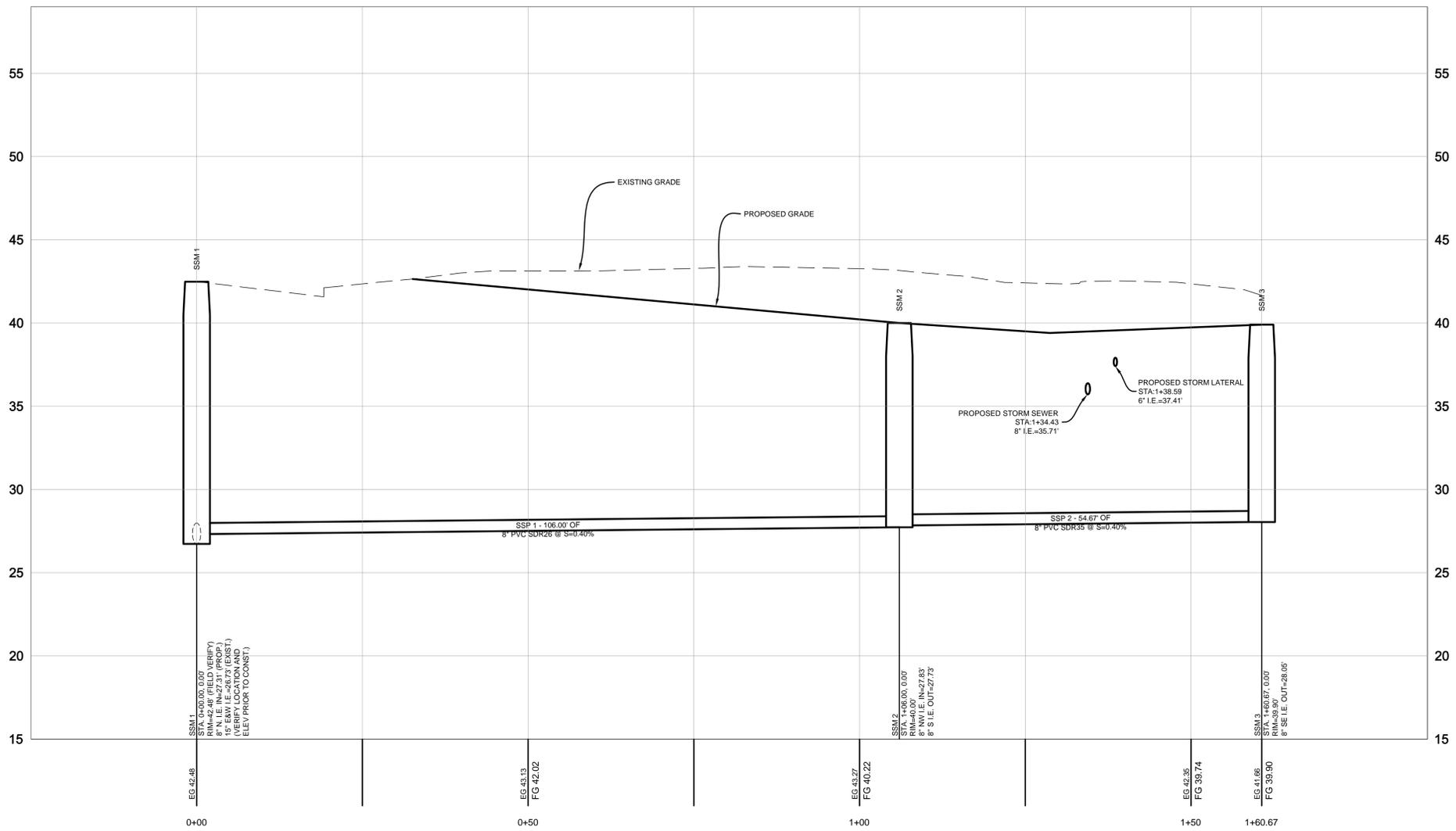
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WATER MAIN PLAN
 KANE COMMONS
 CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

SHEET 4 OF 7

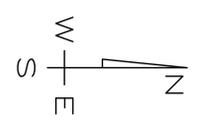
PROJECT NO. 050376, 04-WM-01.DWG - KANE COMMONS, SHEET 4 OF 7, CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN



- NOTES:**
- PIPE RUN LENGTHS AS SHOWN ON THIS PLAN ARE MEASURED NODE-TO-NODE (I.E. CENTER-TO-CENTER OF MANHOLES).
 - SEE SHEET 7 OF THIS SET FOR DETAILS.
 - THE LOCATION AND SIZE OF UNDERGROUND STRUCTURES AND UTILITIES SHOWN HEREON HAVE BEEN LOCATED TO A REASONABLE DEGREE OF ACCURACY, BUT THE ENGINEER DOES NOT GUARANTEE THEIR EXACT LOCATION OR THE LOCATION OF OTHERS NOT SHOWN. CONTACT DIGGERS HOTLINE.
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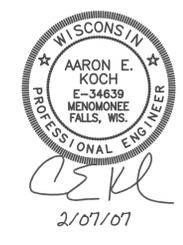
ABBREVIATIONS

- SSP - SANITARY SEWER PIPE
- SSM - SANITARY SEWER MANHOLE
- SSP - SANITARY SEWER PIPE
- HYD - HYDRANT
- GV - GATE VALVE
- WM - WATERMAIN
- AV - AIR RELIEF VALVE AND BOX
- WMP - WATERMAIN PIPE



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PROJECT NO.: 050376 - REV. DATE: Feb 07, 2007
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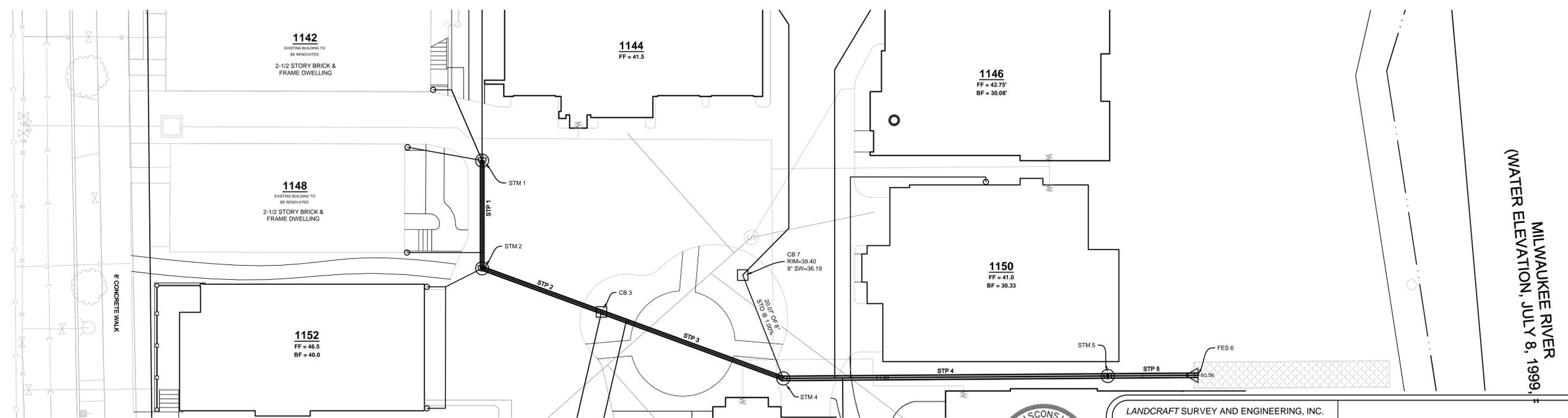
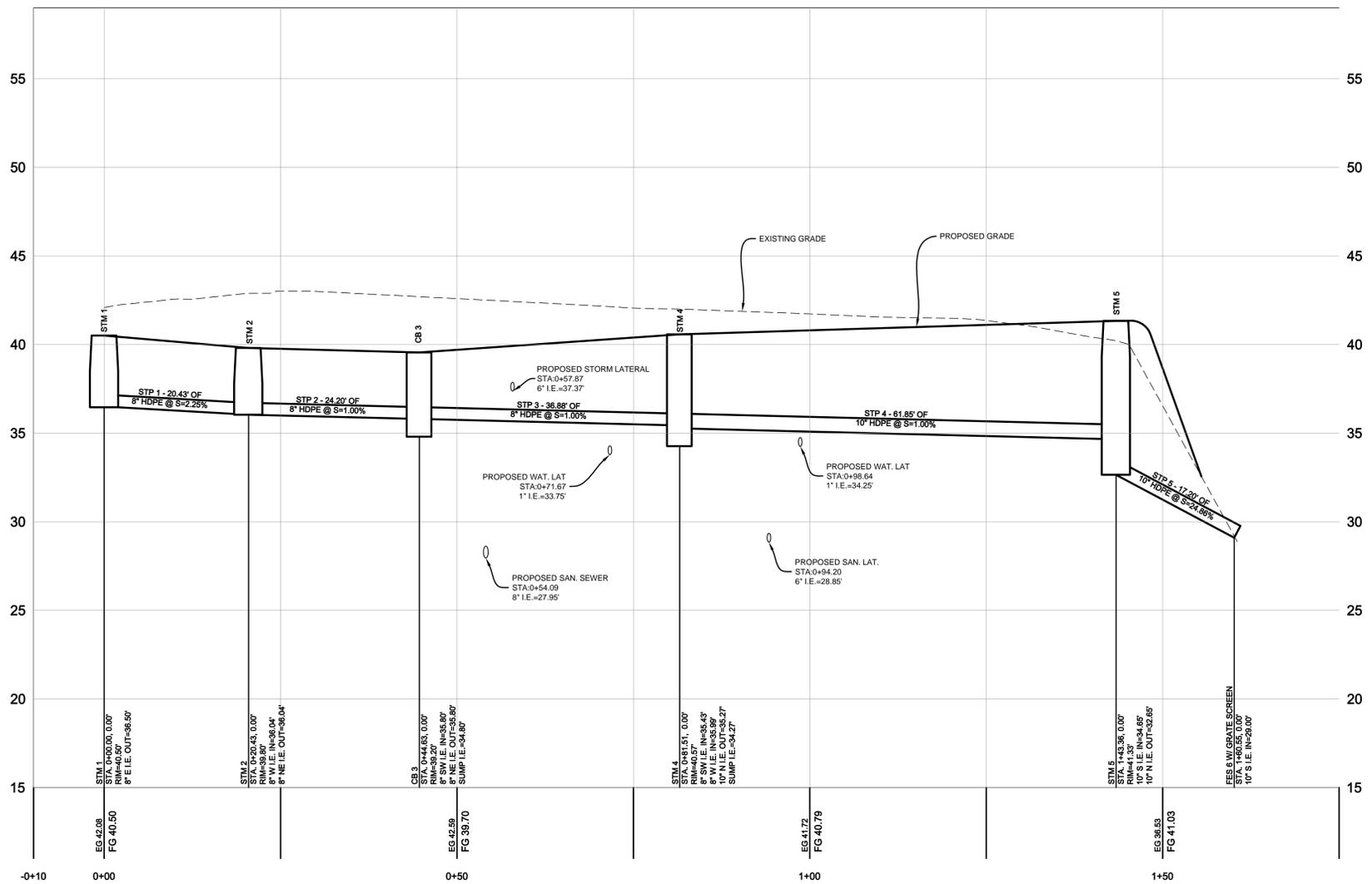
SANITARY SEWER PLAN
 KANE COMMONS
 CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

SHEET 5 OF 7

IN:
 FR: STA. 0+00.00
 TO: STA. 1+60.67

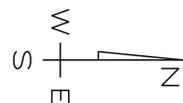
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NOTES:
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 3. THE LOCATION AND SIZE OF UNDERGROUND STRUCTURES AND UTILITIES SHOWN HEREON HAVE BEEN LOCATED TO A REASONABLE DEGREE OF ACCURACY, BUT THE ENGINEER DOES NOT GUARANTEE THEIR EXACT LOCATION OR THE LOCATION OF OTHERS NOT SHOWN. CONTACT DIGGERS HOTLINE.
 4. ALL SITE GRADING ACTIVITY AND EROSION CONTROL MEASURES SHALL COMPLY WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS (1000-1070). ALL EROSION CONTROL MEASURES MUST BE IN PLACE BEFORE CONSTRUCTION BEGINS AND SHALL BE MAINTAINED DURING CONSTRUCTION.

ABBREVIATIONS
 STP - STORM SEWER PIPE
 SSM - SANITARY SEWER MANHOLE
 SSP - SANITARY SEWER PIPE
 HYD - HYDRANT
 GV - GATE VALVE
 WM - WATERMAIN
 AV - AIR RELIEF VALVE AND BOX
 WMP - WATERMAIN PIPE



DIGGERS HOTLINE
 WISCONSIN STATE STATUTE 182.0175 REQUIRES
 THREE WORK DAYS NOTICE BEFORE YOU EXCAVATE
 CALL DIGGERS HOTLINE 1-800-242-8511



LANDCRAFT SURVEY AND ENGINEERING, INC.
 REGISTERED LAND SURVEYORS AND CIVIL ENGINEERS
 2077 SOUTH 116th STREET, WEST ALLIS, WI 53227
 PH. (414) 604-0674 FAX (414) 604-0677
 INFO@LANDCRAFTSE.COM

DESIGNED BY: A. KOCH, P.E.
 CHECKED BY: A. KOCH, P.E.
 APPROVED BY: _____ DATE _____
 TOWN/CITY ENGINEER

PROJECT NO.: 050376 - REV. DATE: Feb 07, 2007
 HOR. SCALE: 1" = 10' VERT. SCALE: 1" = 4'

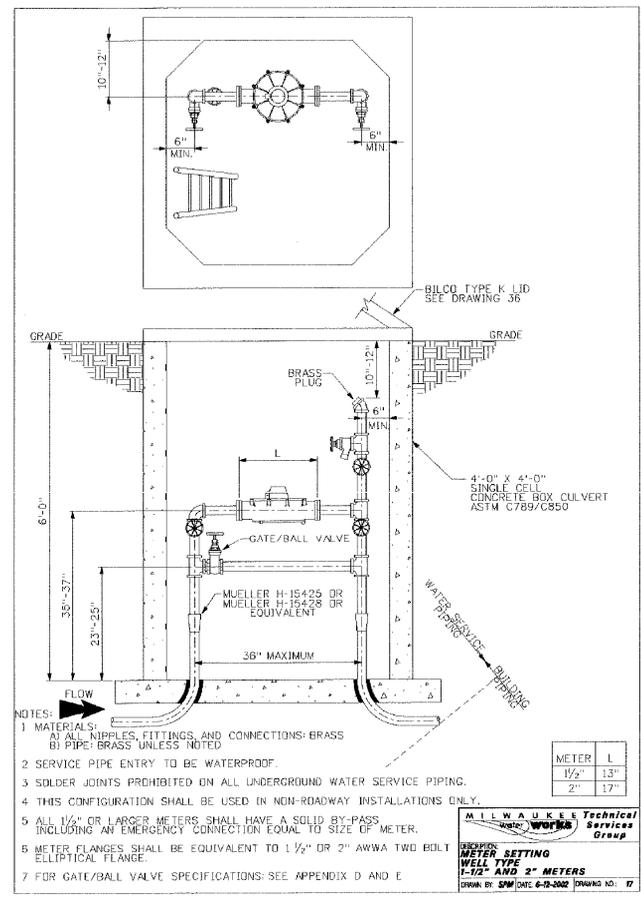
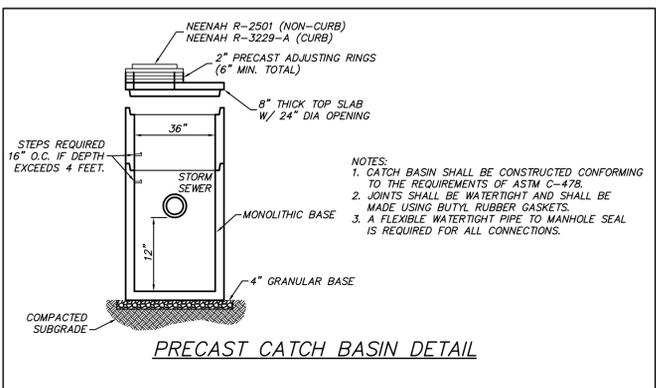
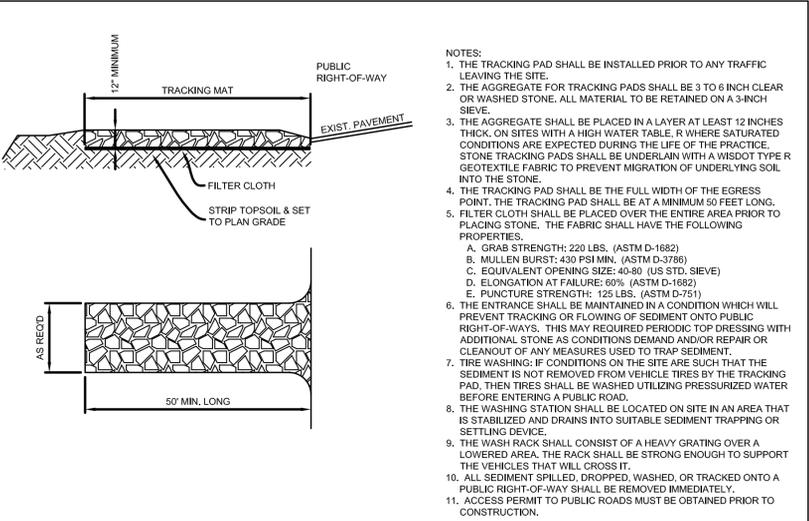
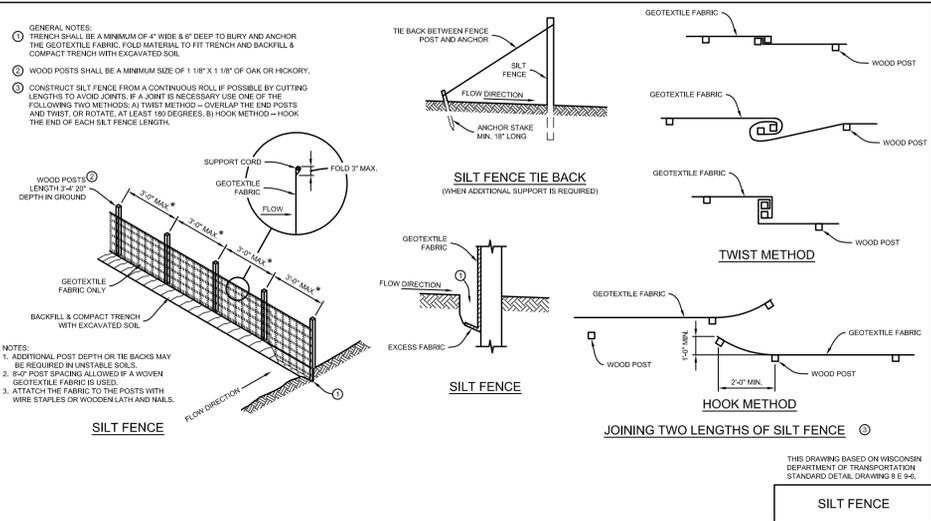
STORM SEWER PLAN
 KANE COMMONS
 CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

SHEET 6 OF 7

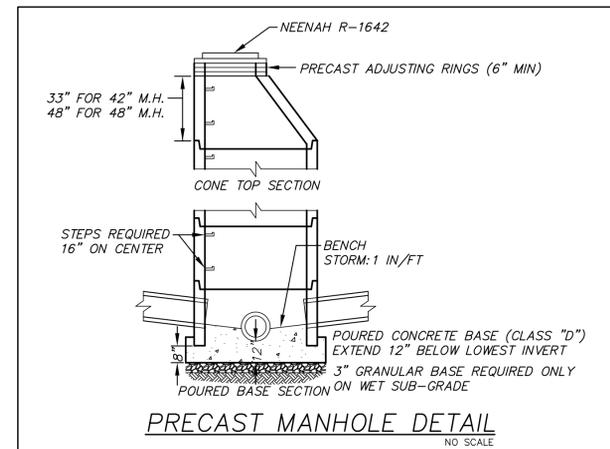
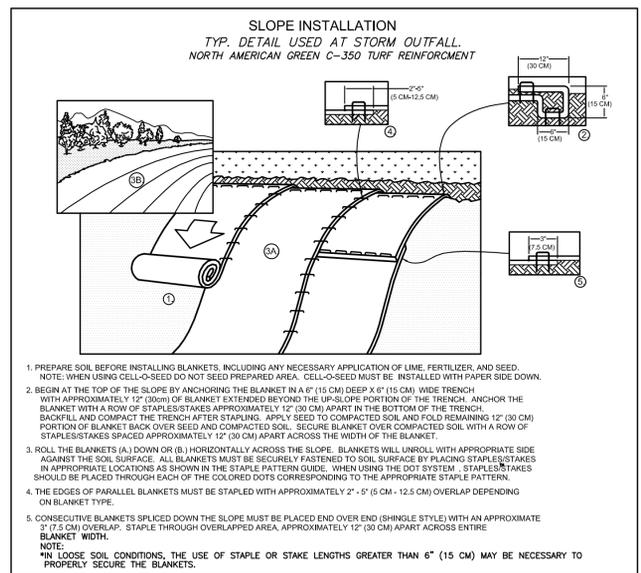
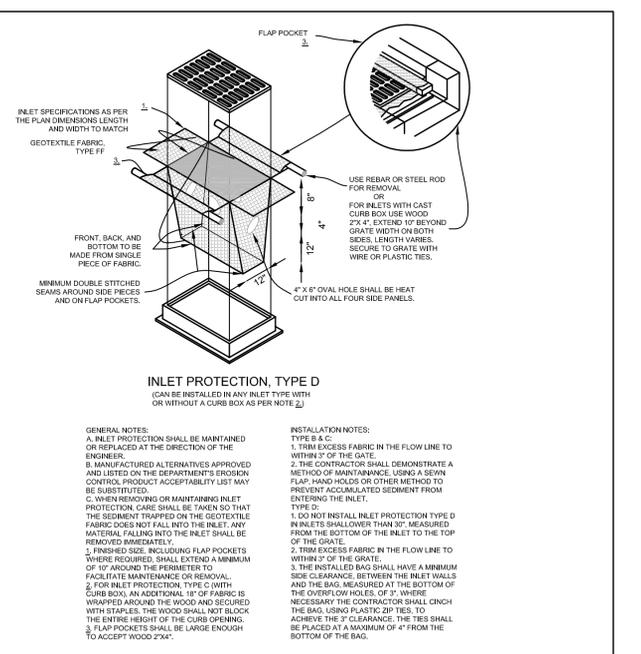
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 TO: STA. 1+86.35

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PROJECT NO. 050376, 06-ST-01.DWG - KANE COMMONS, SHEET 6 OF 7, CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN



STONE TRACKING MAT DETAIL



- SPECIFICATIONS FOR PRIVATE UTILITIES**
- THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO WISCONSIN ADMINISTRATIVE CODE, SECTION COMM. 82-87, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTIONS IN WISCONSIN, LATEST EDITION, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MUNICIPALITY FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION. THE MUNICIPALITY SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE IMPROVEMENTS OF THIS PROJECT.
 - THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC... FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK SHOWN.
 - THE CONTRACTOR ASSUMES SOLE RESPONSIBILITY FOR SITE SAFETY.
 - THE BIDDER WILL BE SOLELY RESPONSIBLE FOR DETERMINING QUANTITIES AND SHALL STATE SUCH QUANTITIES IN THE PROPOSAL. BIDS SHALL BE BASED ON THE BIDDERS OWN ESTIMATE OF THE WORK REQUIRED AND SHALL NOT RELY ON THE ENGINEER'S ESTIMATE.
 - THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER. THE CONTRACTOR SHALL ABIDE BY THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
 - THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPILE FIELD CONDITIONS WITH DRAWINGS.
 - THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS REQUIRED FOR THE EXECUTION OF THE WORK. THE CONTRACTOR SHALL CONDUCT HIS WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMITS.
 - THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL UTILITY INFORMATION SHOWN ON THE PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CALL THE DIGGER'S HOT LINE AT 1-800-242-8511 TO NOTIFY THE UTILITIES OF HIS INTENTIONS, AND TO VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
 - ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORDED CONNECTIONS.
 - PROPOSED SANITARY SEWER, WATER MAIN, AND INTERNALLY CONNECTED STORM SEWER SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL. STORM SEWER CONNECTING TO EXTERIOR DOWN SPOUTS SHALL BE PER DETAILS ON THE ARCHITECTURAL PLANS. THE EXACT LOCATION OF ALL DOWN SPOUTS SHALL BE PER THE ARCHITECTURAL PLANS. NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.
 - MATERIALS FOR STORM SEWER SHALL BE AS FOLLOWS:
STORM SEWER PIPE ON-SITE SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) CORRUGATED PIPE WITH AN INTEGRALLY FORMED SMOOTH WATERWAY SUCH AS ADS N-12.
TRENCH SECTION SHALL BE CLASS "C" FOR CONCRETE AND CLASS "B" FOR ALL OTHER MATERIALS.
SANITARY SEWER PIPE SHALL BE PVC, ASTM D-3034, SDR-35 WITH RUBBER GASKETED JOINTS, CONFORMING TO ASTM D-3212 UNLESS NOTED OTHERWISE. TRENCH SECTION SHALL BE CLASS "B" BEDDING, CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL.
SADDLE WYE CONNECTIONS ARE REQUIRED FOR SANITARY LATERALS.
 - MATERIALS FOR WATER SERVICE SHALL BE TYPE "K" COPPER, ASTM B88. ALL WATER SERVICE CONSTRUCTION SHALL CONFORM TO CITY OF MILWAUKEE STANDARD SPECIFICATIONS. SAND OR STONE CHIP BEDDING MATERIAL IS REQUIRED.
 - EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER & WITHIN 5 FEET OF ALL PAVEMENT INCLUDING FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED. THE COST OF THIS GRANULAR MATERIAL AND ITS COMPACTION IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF THE PROPOSED UTILITY.
 - UPON COMPLETION OF FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.
 - CONTRACTOR IS ADVISED THAT ALL MUD AND DEBRIS MUST NOT BE DEPOSITED ONTO THE ADJACENT ROADWAYS. ANY SUCH MUD OR DEBRIS SHALL BE REMOVED FROM THE ROADWAY IMMEDIATELY.
 - ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR. THE COST OF RESTORATION IS CONSIDERED INCIDENTAL AND SHOULD BE INCLUDED IN THE COST OF THE IMPROVEMENTS.
 - THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED-UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE OWNER.

- SEQUENCE OF CONSTRUCTION**
- PLACE SILT FENCE, DELINEATE CONSTRUCTION LIMITS AND PLACE TRACKING MAT AS SHOWN ON THE EROSION CONTROL PLAN.
 - CONSTRUCT DIVERSION SWALES IF NECESSARY TO CONVEY RUNOFF FROM DISTURBED AREAS.
 - STRIP TOPSOIL IN ROADS AND FILL AREAS. STOCKPILE TOPSOIL FOR REUSE. SURROUND THE DOWNHILL SIDE OF THE STOCKPILE WITH SILT FENCE. IF THE STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN 7 DAYS, THEN IT MUST BE SEEDED.
 - ROUGH GRADE THE REMAINDER OF PAVED AREAS TO WITHIN ±0.5" OF SUBGRADE. NOTIFY GAS, CABLE UTILITY AND UNDERGROUND CONTRACTOR THAT SITE IS READY FOR INSTALLATION.
 - ALL DISTURBED AREAS MUST BE STABILIZED WITH PAVING, SEEDING, MULCHING, SODDING OR EROSION MAT INSTALLATION WITHIN 7 DAYS AFTER GRADING IS COMPLETED.
 - INSTALL GAS MAIN, SANITARY SEWER, WATERMAIN, STORM SEWER AND CABLE UTILITIES.
 - INSTALL INLET PROTECTION ON ALL STORM SEWER MANHOLES AND CONSTRUCTED.
 - FINE GRADE ALL ROAD SUBBASE TO WITHIN ±0.10" BEING SURE TO DISTURBED AREAS LOW ENOUGH TO ACCEPT 4" (MIN.) OF TOPSOIL.
 - PLACE STONE SUBBASE IN PAVED AREAS AND PAVE ROAD BINDER COURSE.
 - RESURFAD TOPSOIL ON ALL DISTURBED AREAS; SEED, FERTILIZE AND MAT/MULCH AS SPECIFIED. RESTORE UTILITY TRENCHES AFTER CABLE UTILITY INSTALLATION. COORDINATE RESURFAD AND SEEDING WITH CABLE UTILITY CONTRACTOR.
 - UPON STABILIZATION OF 90% OF DISTURBED AREAS A CLOSURE REPORT WILL BE FILED WITH THE WDNR. RE-SEED AND MAT TURF AREAS AS REQUIRED.
- EROSION CONTROL INSPECTION AND GENERAL MAINTENANCE NOTES:**
- ALL EROSION CONTROLS MUST BE INSPECTED WEEKLY AND AFTER EACH RAINFALL OF 0.5" OR MORE. REPORTS SHALL BE FILED WITH THE ENGINEER.
 - FOLLOWING CONSTRUCTION, CATCH BASIN SUMPS SHALL BE CLEANED ONCE (1) TIME PER YEAR.
 - CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL SILT FENCE, TEMPORARY SWALES, AND SEDIMENT TRAPS.

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- NOTES:**
- PIPE RUN LENGTHS AS SHOWN ON THIS PLAN ARE MEASURED NODE-TO-NODE (I.E. CENTER-TO-CENTER OF MANHOLES).
 - THE LOCATION AND SIZE OF UNDERGROUND STRUCTURES AND UTILITIES SHOWN HEREON HAVE BEEN LOCATED TO A REASONABLE DEGREE OF ACCURACY, BUT THE ENGINEER DOES NOT GUARANTEE THEIR EXACT LOCATION OR THE LOCATION OF OTHERS NOT SHOWN. CONTACT DIGGER'S HOTLINE.
 - ALL SITE GRADING ACTIVITY AND EROSION CONTROL MEASURES SHALL COMPLY WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS (1000-1070). ALL EROSION CONTROL MEASURES MUST BE IN PLACE BEFORE CONSTRUCTION BEGINS AND SHALL BE MAINTAINED DURING CONSTRUCTION.

DIGGERS HOTLINE

WISCONSIN STATE STATUTE 182.0175 REQUIRES THREE WORK DAYS NOTICE BEFORE YOU EXCAVATE CALL DIGGERS HOTLINE 1-800-242-8511

2/08/07

LANDCRAFT SURVEY AND ENGINEERING, INC.
REGISTERED LAND SURVEYORS AND CIVIL ENGINEERS
2077 SOUTH 118th STREET, WEST ALLIS, WI 53227
PH. (414) 604-0674 FAX (414) 604-0677
INFO@LANDCRAFTSE.COM

DESIGNED BY: A. KOCH, P.E.
CHECKED BY: A. KOCH, P.E.
APPROVED BY: [Signature]
VILLAGE/CITY ENGINEER DATE
PROJECT NO.: 050376 - REV. DATE: Feb 08, 2007
HOR. SCALE: 1" = 1' VERT. SCALE: 1" = 1'

DETAILS
KANE COMMONS
CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

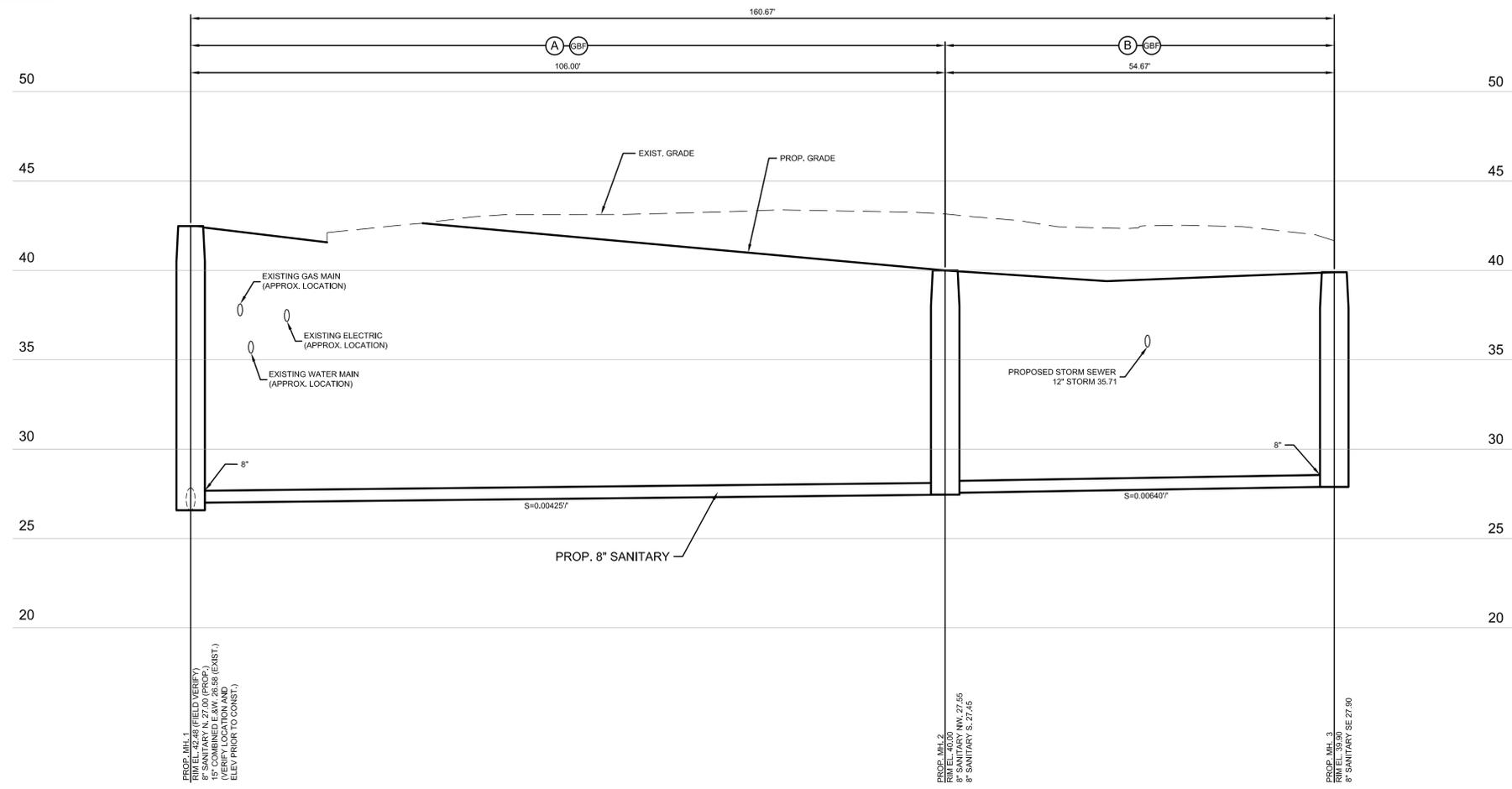
SHEET 7 OF 7

07-DTL-01.DWG - AUDUBON ARBORETUM, SHEET 7 OF 7 - VILLAGE OF CALEDONIA, RACINE COUNTY, WISCONSIN

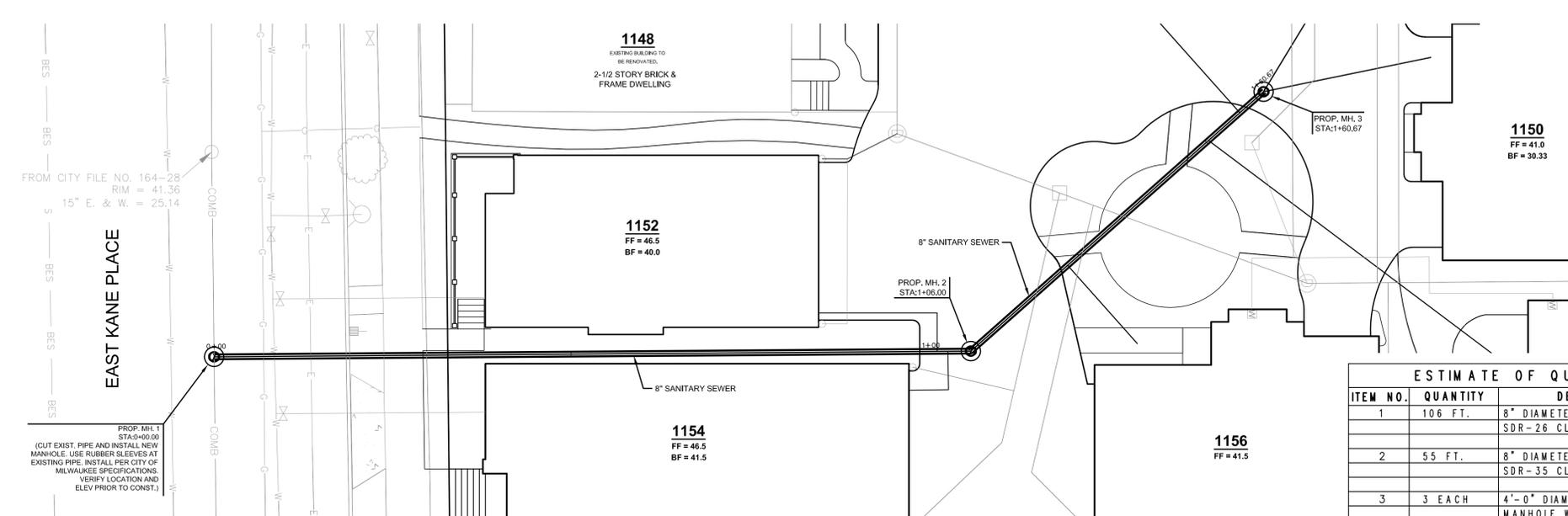
(A)	(B)
8" SANITARY PVC, ASTM D-3034, SDR-26 CLASS "C" BEDDING	8" SANITARY PVC, ASTM D-3034, SDR-35 CLASS "C" BEDDING

BACKFILL KEY

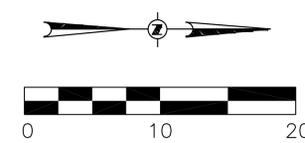
(GBF) GRANULAR MATERIAL



- SPECIAL PROVISIONS FOR STORM & SANITARY SEWER**
- This project has been submitted to the Milwaukee Metropolitan Sewerage District (MMSD) and the Department of Natural Resources (DNR) for approvals. No work shall be performed on this contract until MMSD and DNR approvals have been obtained. The construction engineer shall contact Mr. James Simons (MMSD) at 225-2219 to confirm that the approvals have been granted.
 - Standard special provisions, (plan file No. 52-4-51, revised February 06, 2006 or latest revision thereof), are part of this contract.
 - All private main sewer construction work shall be done in accordance with the "Standard Specifications for Sewer and Water Construction in Wisconsin" 6th edition and addenda thereto unless otherwise specified in the contract documents and under the inspection of the Department of Building Inspection.
 - Notice for inspection shall be given by the Contractor to the Superintendent. Plumbing Inspection Division Department of Building Inspection (telephone number 286-3361) forty-eight (48) hours before commencing work on the project.
 - The Contractor shall notify construction division at 286-3443 at least three (3) working days prior the start of work on the private main sewer project so the inspection of the work can be arranged.
 - A public works inspector will be assigned to the project. All work shall be performed in the presence of this inspector. Cost of this inspection will be borne by the owner. No work shall be started on the private main sewer until the necessary inspection fee has been deposited with the Department of Public Works. Contract and bid section (Rm. 500 municipal bldg. 841 N. Broadway, Milwaukee, WI 53201).
 - The Owner shall prepare or cause to be prepared an "as-built" of the private main sewer.
 - Any changes in location, elevation, or materials from those shown on the approved plans shall be approved by the sewer engineering division and once marked up "as-built" print shall be furnished upon completion of the sewer work for record purposes.
 - All castings shall be supplied by the Contractor. The manufacturing and workmanship of all casting supplied shall conform to ASTM A48-83, the grey iron shall be class 30B. All storm manholes shall have MS 21 frame and MS 28 cover.
 - The bench of each manhole shall be constructed in "U" shape to the elevation of the outside top of the downstream pipe (except dead end manholes).
 - The minimum vertical distance from the top of the frame of any storm manhole to the top of the corbel section or flat slab top shall be 22 inches.
 - Erosion control plans shall meet the requirement of chapter 290 of the Milwaukee code of ordinances.
 - All manhole steps used on the contract shall be capable of withstanding a minimum design vertical load of 800 lbs. with a maximum permanent set of 1/2 inch after application of the vertical load and a horizontal pull out load of 400 lbs. section 4.13.1(a) of the City of Milwaukee sewer and building service specifications is revised using a 3/4 inch diameter reinforcing bar.
 - Line and grade shall be provided by the Owner.
 - Any costs incurred in the testing of pipe or materials shall be borne by the Contractor. All material tests required on this contract shall be performed at a testing laboratory designated by the City of Milwaukee.
 - The Contractor shall comply with the City of Milwaukee, Department of Public Works Booklet "Traffic Control for Construction and Maintenance Work" and part IV of the State of Wisconsin "Manual on Uniform Traffic Control Devices."
 - The Contractor shall comply with all Federal, State, and Local Laws and regulations controlling pollution of the environment, including obtaining and executing all permits required when contaminated soil is encountered. Mr. Ted Bosch of the Department of Natural Resources shall be contacted at 263-8623 and the handling, storage and disposal of such soil shall conform to their requirements, costs associated with meeting these requirements shall be paid for in accordance with the "Costs Plus Basis" for extra work.
 - The soil erosion control plan - rural areas (plan file no. 51-5-63, revised May 10, 1995) is part of this contract.
 - Lids on all sanitary sewer manholes shall be type MS-58A with a gasket.
 - The Contractor shall install an internal chimney seal, such as from Cretek Company or Adaptor Inc. or equal for each sanitary manhole. The cost of providing and installing the seal shall be included in the unit price bid for the sanitary sewer.
 - The Contractor shall perform vacuum testing on each new sanitary manhole built on this project in accordance with section 3.7.6 of the "Standard Specifications for Sewer and Water Construction in Wisconsin" 6th edition and addenda thereto unless otherwise specified in the contract documents. The cost of vacuum testing shall be included in the unit price bid for the sanitary manhole.
 - Granular backfill is required.
 - Consolidation of backfill shall be done in accordance with the standard specifications for sewer and water construction in Wisconsin section 2.6.17. Trench maintenance is the responsibility of the Contractor.
 - Contractor shall promptly remove all excess trench spoil material from the job site per section 2.2.11 section A of the standard specification for sewer & water construction in Wisconsin.
 - Contractors shall be responsible for not tracking sediment onto public streets. Should sedimentation from the site reach a public street, it shall be removed by street cleaning other than flushing, before the end of each workday.
 - High-density polyethylene (HDPE) pipe may be used for the storm sewer on this project. HDPE pipe manufactured for the specification shall comply with and be certified to meet the requirements for test methods, dimensions and markings found in ASTM F-2306 and AASHTO M-294, current additions. Pipe and blow molded fitting shall be made from virgin PE compounds which conform to the requirements of call class 435400C, in the latest version of ASTM D-3350. A manufacturer's certification that the pipe provided meets these requirements shall accompany the first shipment of pipe to a given project. The certification shall explicitly certify that it applies to all shipments of pipe for the project name.
 - Nominal sizes for HDPE used on this project are designated in AASHTO M-294 and ASTM F-2306 as full circular cross-section with an outer corrugated pipe wall and essentially smooth inner wall (waterway). Pipe corrugations shall be similar.
 - Pipe joints shall be watertight and consist of in-line integral bell and spigot with rubber gasket that meets specification requirements of ASTM F-477. Bell shall span over three spigot corrugations. Watertight pipe joints shall meet a laboratory pressure test of at least 10.8 PSI following ASTM D-3212.
 - Fittings shall not reduce or impair the overall integrity or function of the pipeline and shall meet the requirements of AASHTO M-294 and ASTM F-2306. Fittings may be either molded or fabricated. Only fittings supplied or recommended by the Manufacturer shall be used. Pipe to manhole connection shall conform to section 3.5.7 of the standard specifications for sewer and water construction in the state of Wisconsin, 6th edition for flexible or plastic pipe.
 - The Contractor is required to perform a deflection test on the entire length of installed main line pipe at no additional cost to the City of Milwaukee. The test shall be conducted after all backfilling has been placed and consolidated but before paving is constructed. Any line that does not pass a 3% deflection test shall be repaired and retested. All testing shall be done under the observation of the engineer. Deflection testing on pipe diameters 24-inches and less shall be conducted by Mandrel. For 30-inches or larger, the deflection test may be accomplished by physical measurement or by other methods approved by the engineer.



12/07/06



SHEET 2 OF 2 IS PLAN FILE NO. PM-275

ESTIMATE OF QUANTITIES		
ITEM NO.	QUANTITY	DESCRIPTION
1	106 FT.	8" DIAMETER SANITARY SEWER SDR-26 CLASS "C" BEDDING
2	55 FT.	8" DIAMETER SANITARY SEWER SDR-35 CLASS "C" BEDDING
3	3 EACH	4'-0" DIAMETER SANITARY SEWER MANHOLE W/ INTERNAL SEALS
4	3 EACH	SANITARY MANHOLE VACUUM TESTING
5	161 FT.	SANITARY AIR TESTING

ENVIRONMENTAL ENGINEERING SECTION		
INFRASTRUCTURE SERVICES DIVISION DEPARTMENT OF PUBLIC WORKS MILWAUKEE, WISCONSIN		
SANITARY SEWER MAIN PLAN		
IN KANE COMMONS		
FROM _____ TO _____		
SCALE	HORIZONTAL 1" = 4'	APPROVED _____ DATE _____
	VERTICAL 1" = 10'	
1/4 SEC. NO. 355		DESIGN ENGINEER _____
PLAN DATE _____		CHIEF DESIGN ENGINEER _____
DRAWN BY _____		ENGINEER IN CHARGE _____
CHECKED BY _____		
DESIGNED BY _____		
SYSTEM NO. 3019		
EASEMENT NO. _____		
CONTRACT NO. _____	CITY ENGINEER & SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	
PROJ. ID. _____	PROJECT NO. 050376	C.C. FILE NO. _____
	OFF. NOTICE NO. _____	DATE ADOPTED _____
SHEET NO. 1 OF 2 PLAN FILE NO. PM-274		

LANDCRAFT SURVEY AND ENGINEERING, INC.
REGISTERED LAND SURVEYORS AND CIVIL ENGINEERS
2077 SOUTH 116th STREET, WEST ALLIS, WI 53227
PH. (414) 604-0674 FAX (414) 604-0677
INFO@LANDCRAFTSE.COM

LINE CODE LEGEND			
GAS	G	SANITARY SEWER	SAN
ELECTRIC	E	STORM SEWER	STO
TELEPHONE	T	COMBINED SEWER	CMB
CABLE TELEVISION	TV	SEW. DISTRICT SEWER	MMSD
FIBER OPTICS	FO	WATER MAIN	W
CITY UNDERGROUND CONDUIT	CUC	SEWER/WATER OVER 24"	
		STREET LIGHTING	SL
		PAVING LIMITS	PL
		STRUCTURE / BUILDING	STR
		FENCE	F

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND
BEFORE YOU DIG. WISCONSIN STATUTE 182.0715 REQUIRES
MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

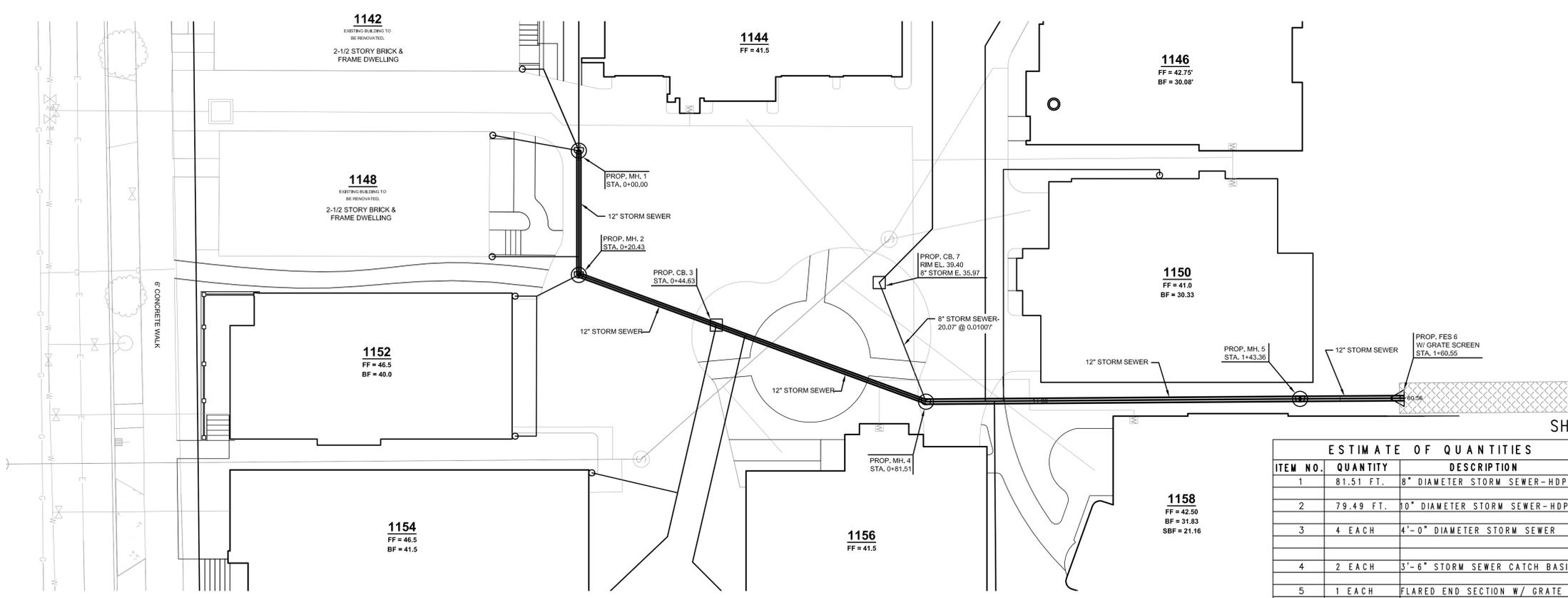
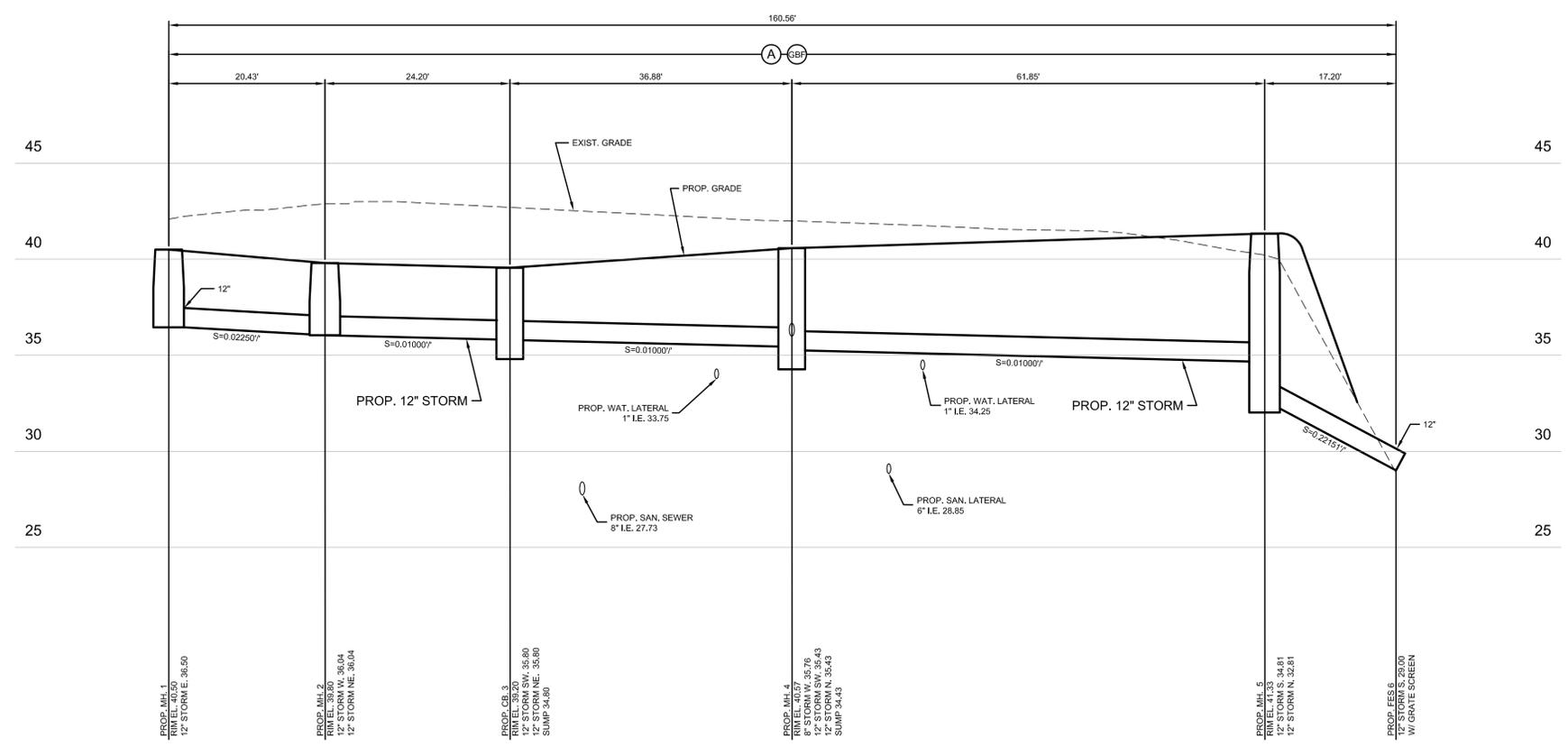
NO.	BY	REVISION	DATE

AS BUILT CONTRACT NO. _____ DATE ENT'D. _____ ENT'D. BY _____

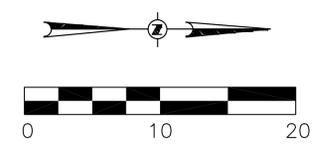
MICROFILMED

12" STORM HDPE

BACKFILL KEY
 (GBF) GRANULAR MATERIAL



WISCONSIN
 AARON E. KOCH
 E-34839
 MENOMONEE FALLS, WIS.
 PROFESSIONAL ENGINEER
 12/07/06



SHEET 1 OF 2 IS PLAN FILE NO. PM-274

ESTIMATE OF QUANTITIES		
ITEM NO.	QUANTITY	DESCRIPTION
1	81.51 FT.	8" DIAMETER STORM SEWER-HDPE
2	79.49 FT.	10" DIAMETER STORM SEWER-HDPE
3	4 EACH	4'-0" DIAMETER STORM SEWER
4	2 EACH	3'-6" STORM SEWER CATCH BASIN
5	1 EACH	FLARED END SECTION W/ GRATE SCREEN

ENVIRONMENTAL ENGINEERING SECTION
 INFRASTRUCTURE SERVICES DIVISION
 DEPARTMENT OF PUBLIC WORKS
 MILWAUKEE, WISCONSIN
 STORM SEWER MAIN PLAN

IN KANE COMMONS
 FROM _____
 TO _____

APPROVED _____ DATE _____
 DESIGN ENGINEER
 CHIEF DESIGN ENGINEER
 ENGINEER IN CHARGE

SCALE
 HORIZONTAL 1" = 4'
 VERTICAL 1" = 10'

1/4 SEC. NO. 355
 PLAN DATE _____
 DRAWN BY _____
 CHECKED BY _____
 DESIGNED BY _____
 SYSTEM NO. 3019

EASEMENT NO. _____
 CONTRACT NO. _____
 PROJ. ID. _____

CITY ENGINEER & SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS
 PROJECT NO. 050376 C.C. FILE NO. _____
 OFF. NOTICE NO. _____ DATE ADOPTED _____

SHEET NO. 2 OF 2 PLAN FILE NO. PM-275

LANDCRAFT SURVEY AND ENGINEERING, INC.
 REGISTERED LAND SURVEYORS AND CIVIL ENGINEERS
 2077 SOUTH 116th STREET, WEST ALLIS, WI 53227
 PH. (414) 604-0674 FAX (414) 604-0677
 INFO@LANDCRAFTSE.COM

LINE CODE LEGEND			
GAS	G	SANITARY SEWER	SAN
ELECTRIC	E	STORM SEWER	STO
TELEPHONE	T	COMBINED SEWER	CMB
CABLE TELEVISION	TV	SEW. DISTRICT SEWER	MMSD
FIBER OPTICS	FO	WATER MAIN	W
CITY UNDERGROUND CONDUIT	CUC	SEWER/WATER OVER 24"	
STREET LIGHTING		X X X X X	
PAVING LIMITS		X X X X X	
STRUCTURE / BUILDING		/ / / / /	
FENCE		x	

CALL DIGGERS HOTLINE
 1-800-242-8511
 TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND
 BEFORE YOU DIG. WISCONSIN STATUTE 192.0715 REQUIRES
 MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

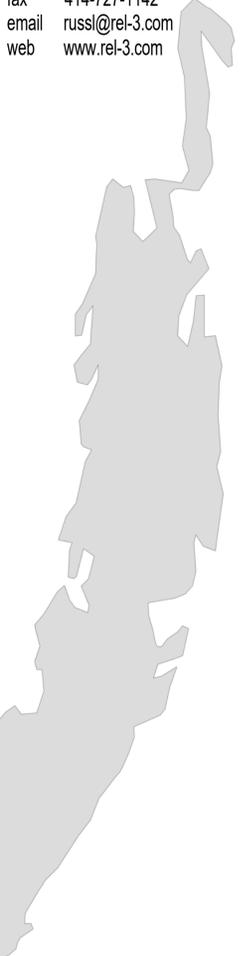
NO.	BY	REVISION	DATE

AS BUILT CONTRACT NO. _____
 DATE ENT'D. _____ ENT'D. BY _____

MICROFILMED



russell e. lafrombois, iii architect, llc
229 east wisconsin avenue
suite 701
milwaukee wisconsin 53202
phone 414-727-1141
fax 414-727-1142
email russ@rel-3.com
web www.rel-3.com



ROOM FINISH SCHEDULE										
Number	Name	FLOOR FIELD	BASE	NORTH WALL FIELD	EAST WALL FIELD	SOUTH WALL FIELD	WEST WALL FIELD	WEST WALL ACCENT	CEILING FIELD	NOTES
100	FOYER	CT	WD	PT	PT	PT	PT		PT	
101	GARAGE	CONC	NA	TAPEMUD	TAPEMUD	TAPEMUD	TAPEMUD		TAPEMUD	
102	MECHANICAL	CONC	NA	TAPEMUD	TAPEMUD	TAPEMUD	TAPEMUD		TAPEMUD	
103	GARAGE	CONC	NA	TAPEMUD	TAPEMUD	TAPEMUD	TAPEMUD		TAPEMUD	
104	STORAGE	CONC	NA	TAPEMUD	TAPEMUD	TAPEMUD	TAPEMUD		TAPEMUD	
200	LIVING ROOM	WD	WD	PT	PT	PT	PT		PT	
201	CLOSET	WD	WD	PT	PT	PT	PT		PT	
202	KITCHEN	WD	WD	PT	PT	PT	PT	CT	PT	
203	DINING	WD	WD	PT	PT	PT	PT		PT	
204	DEN	WD	WD	PT	PT	PT	PT		PT	
205	CLOSET	WD	WD	PT	PT	PT	PT		PT	
206	1/2 BATH	VINYL	WD	PT	PT	PT	PT		PT	
300	PASSAGE	CPT	WD	PT	PT	PT	PT		PT	
301	MASTER BEDROOM	CPT	WD	PT	PT	PT	PT		PT	
302	BATH	VINYL	WD	PT	PT	PT	PT		PT	
303	CLOSET	CPT	WD	PT	PT	PT	PT		PT	
304	CLOSET	CPT	WD	PT	PT	PT	PT		PT	
305	CLOSET	CPT	WD	PT	PT	PT	PT		PT	
306	LAUNDRY	VINYL	WD	PT	PT	PT	PT		PT	
307	BEDROOM	CPT	WD	PT	PT	PT	PT		PT	
308	BATH	VINYL	WD	PT	PT	PT	PT		PT	
309	CLOSET	CPT	WD	PT	PT	PT	PT		PT	

DOOR SCHEDULE														
Mark	Manufacturer	Model	Width	Height	Finish	Frame Material	Frame Type	Light	Fire Rating	Threshold detail	Jamb Detail	Head Detail	Hardware Groups	Comments
100-A			3' - 0"	7' - 0"									(none)	
100-B			3' - 0"	6' - 8"									(none)	
101-A	Genec	Genec	1 6' - 0"	8' - 0"					1 hour				(none)	
102-A			3' - 0"	7' - 0"									(none)	
103-A	DESIGNER DOORS EUROPEAN INSPIRATIONS		8' - 0"	7' - 0"									(none)	
104-A			3' - 0"	6' - 8"									(none)	
200-A	Kolbe # Kolbe Millwork Co., Inc.	GAU4-1006B	9' - 10 5/16"	6' - 10 7/16"									(none)	
201-A			2' - 8"	7' - 0"									(none)	
204-A			2' - 8"	7' - 0"									(none)	
205-A			2' - 0"	7' - 0"									(none)	
206-A			2' - 6"	7' - 0"									(none)	
301-A			2' - 8"	7' - 0"									(none)	
301-B	Kolbe # Kolbe Millwork Co., Inc.	GAU4-1006B	9' - 10 5/16"	6' - 10 7/16"									(none)	
302-A			2' - 6"	6' - 8"									(none)	
303-A			2' - 8"	6' - 8"									(none)	
304-A			2' - 6"	7' - 0"									(none)	
305-A			1' - 6"	6' - 4"									(none)	
306-A			2' - 10"	7' - 0"									(none)	
307-A			2' - 8"	7' - 0"									(none)	
308-A			2' - 6"	7' - 0"									(none)	
308-B													(none)	
309-A			2' - 6"	7' - 0"									(none)	

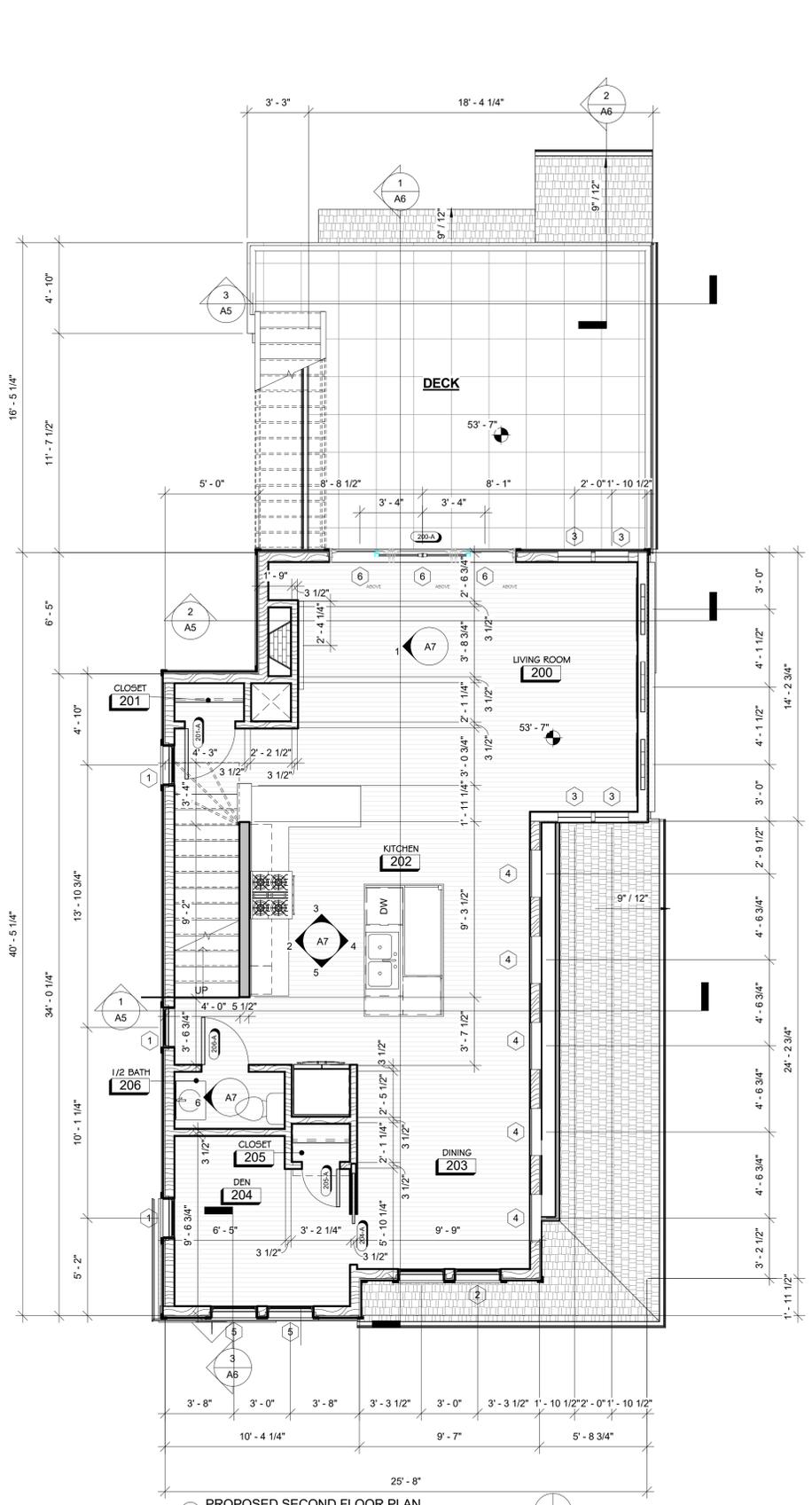
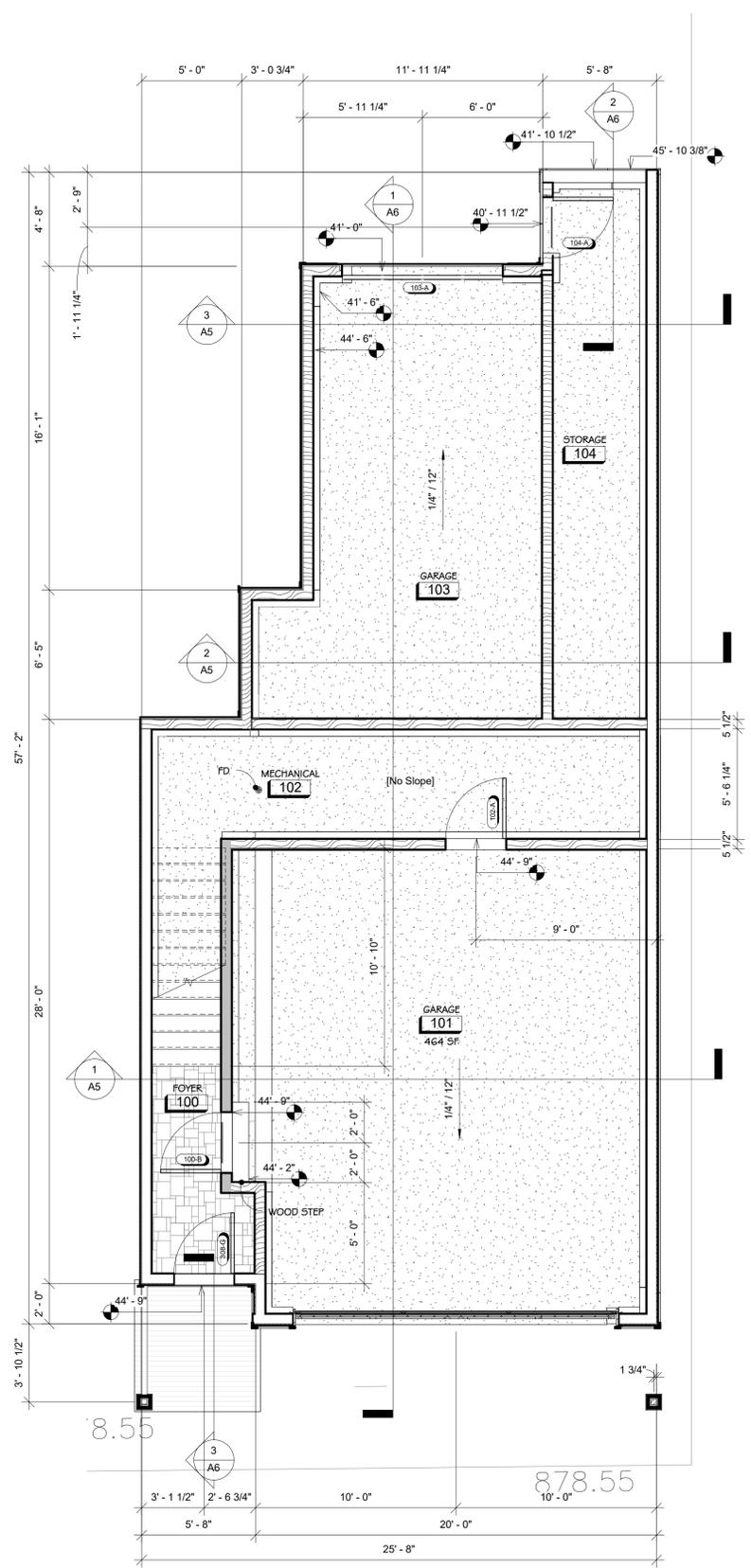
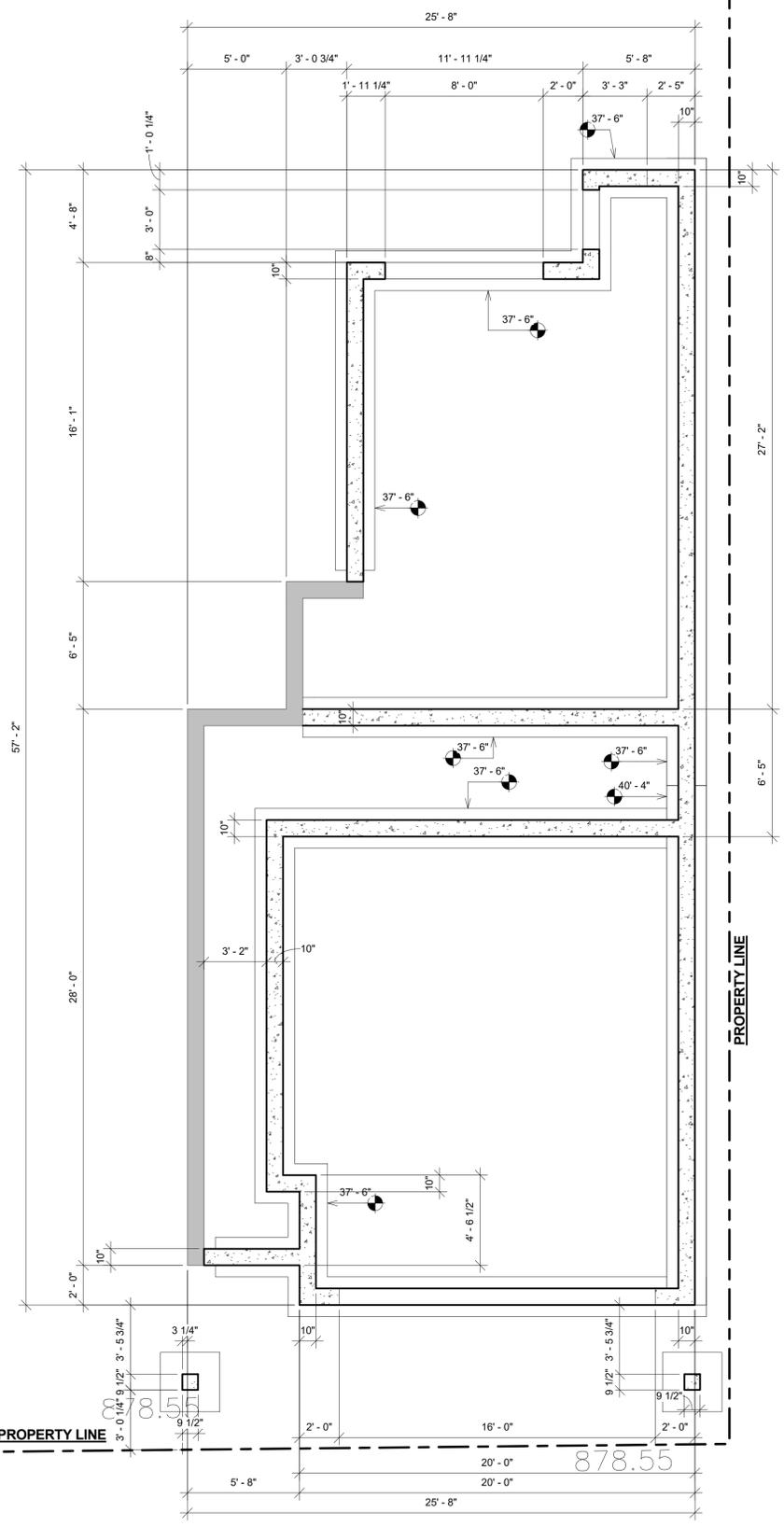
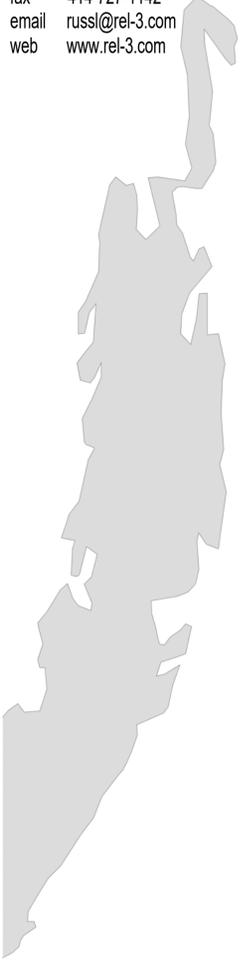
WINDOW SCHEDULE							
Type Mark	Level	Height	Width	Head Height	Manufacturer	Product Name	Model
8	ENTRY LEVEL	3' - 0"	1' - 9 3/8"	7' - 0"	JELD-WEN		TCD2136
1	SECOND FLOOR	4' - 8"	2' - 1 3/8"	7' - 0"	JELD-WEN		TCD2556
1	SECOND FLOOR	4' - 8"	2' - 1 3/8"	7' - 0"	JELD-WEN		TCD2556
1	SECOND FLOOR	4' - 8"	2' - 1 3/8"	7' - 0"	JELD-WEN		TCD2556
2	SECOND FLOOR	6' - 0"	2' - 9 3/8"	8' - 6"	JELD-WEN		TCD3372
2	SECOND FLOOR	6' - 0"	2' - 9 3/8"	8' - 6"	JELD-WEN		TCD3372
2	SECOND FLOOR	6' - 0"	2' - 9 3/8"	8' - 6"	JELD-WEN		TCD3372
2	SECOND FLOOR	6' - 0"	2' - 9 3/8"	8' - 6"	JELD-WEN		TCD3372
2	SECOND FLOOR	6' - 0"	2' - 9 3/8"	8' - 6"	JELD-WEN		TCD3372
3	SECOND FLOOR	3' - 4"	1' - 9 3/8"	8' - 6"	JELD-WEN		TCD2140
3	SECOND FLOOR	3' - 4"	1' - 9 3/8"	8' - 6"	JELD-WEN		TCD2140
3	SECOND FLOOR	3' - 4"	1' - 9 3/8"	8' - 6"	JELD-WEN		TCD2140
3	SECOND FLOOR	3' - 4"	1' - 9 3/8"	8' - 6"	JELD-WEN		TCD2140
4	SECOND FLOOR	2' - 8"	2' - 6"	8' - 6"	JELD-WEN		TCC3032
4	SECOND FLOOR	2' - 8"	2' - 6"	8' - 6"	JELD-WEN		TCC3032
4	SECOND FLOOR	2' - 8"	2' - 6"	8' - 6"	JELD-WEN		TCC3032
4	SECOND FLOOR	2' - 8"	2' - 6"	8' - 6"	JELD-WEN		TCC3032
6	SECOND FLOOR	0' - 11 1/2"	3' - 2 1/2"	8' - 1 27/32"	Kolbe & Kolbe Millwork Co., Inc.	Ultra Series Entrance Doors	GAUT3310
6	SECOND FLOOR	0' - 11 1/2"	3' - 2 1/2"	8' - 1 27/32"	Kolbe & Kolbe Millwork Co., Inc.	Ultra Series Entrance Doors	GAUT3310
6	SECOND FLOOR	0' - 11 1/2"	3' - 2 1/2"	8' - 1 27/32"	Kolbe & Kolbe Millwork Co., Inc.	Ultra Series Entrance Doors	GAUT3310
9	SECOND FLOOR	5' - 4"	2' - 1 3/8"	8' - 6"	JELD-WEN		TCD2564
9	SECOND FLOOR	5' - 4"	2' - 1 3/8"	8' - 6"	JELD-WEN		TCD2564
2	THIRD FLOOR	6' - 0"	2' - 9 3/8"	7' - 0"	JELD-WEN		TCD3372
2	THIRD FLOOR	6' - 0"	2' - 9 3/8"	7' - 0"	JELD-WEN		TCD3372
7	THIRD FLOOR	2' - 0"	2' - 8"	5' - 9 1/2"	JELD-WEN		TCA3224
7	THIRD FLOOR	2' - 0"	2' - 8"	5' - 9 1/2"	JELD-WEN		TCA3224
7	THIRD FLOOR	2' - 0"	2' - 8"	5' - 9 1/2"	JELD-WEN		TCA3224
7	THIRD FLOOR	2' - 0"	2' - 8"	5' - 9 1/2"	JELD-WEN		TCA3224
7	THIRD FLOOR	2' - 0"	2' - 8"	5' - 9 1/2"	JELD-WEN		TCA3224
7	THIRD FLOOR	2' - 0"	2' - 8"	5' - 9 1/2"	JELD-WEN		TCA3224
7	THIRD FLOOR	2' - 0"	2' - 8"	5' - 9 1/2"	JELD-WEN		TCA3224
8	THIRD FLOOR	3' - 0"	1' - 9 3/8"	12' - 0"	JELD-WEN		TCD2136
8	THIRD FLOOR	3' - 0"	1' - 9 3/8"	12' - 0"	JELD-WEN		TCD2136

EXTERIOR FINISHES	
MARK	DESCRIPTION
EX-1	COMPOSITE TRIM BOARD
EX-2	COMPOSITE PANEL
EX-3	4' EXPOSED LAP SIDING
EX-4	FIBERGLASS SHINGLES
EX-5	COMPOSITE BRACKET
EX-6	ALUM GUTTER
EX-7	DOWNSPOUT
EX-8	RIDGE VENT
EX-9	COMPOSITE GUARDRAIL
EX-10	COMPOSITE DECKING
EX-11	COMPOSITE CLAD COLUMN

INTERIOR FINISHES AND EQUIPMENT	
Key Value	Keynote Text
CT-1	WALL TILE: FIREPLACE
EQ-1	VANITY MIRROR-PROVIDED BY OWNER INSTALLED BY CONTRACTOR
EQ-2A	CABINET: VANITY 1 DRAWER NOM 19DX24WX33T
EQ-2B	CABINET: KITCHEN 2 DOOR SINK NOM 24DX45WX34.5T
EQ-2C	CABINET: KITCHEN 4 DRAWER NOM 24DX12WX34.5T
EQ-2D	CABINET: KITCHEN 2 DOOR/2 DRAWER NOM 24DX30WX34.5T
EQ-2E	CABINET: KITCHEN 4 DRAWER NOM 24DX15WX34.5T
EQ-2F	CABINET: KITCHEN 4 DRAWER NOM 24DX18WX34.5T
EQ-2G	CABINET: KITCHEN 2 DOOR/2 DRAWER NOM 24DX27WX34.5T
EQ-2H	CABINET: KITCHEN 2 DOOR UPPER NOM 18DXW36WX18T
EQ-2I	CABINET: KITCHEN 2 DOOR UPPER NOM 18DX30WX30T
EQ-2J	CABINET: KITCHEN 2 DOOR UPPER NOM 18DX30WX12T
EQ-2K	CABINET: KITCHEN 1 DOOR UPPER NOM 18DX18WX30T
EQ-2L	CABINET: KITCHEN 1 DOOR TRASH NOM 24DX15WX34.5T
EQ-3	DISHWASHER
EQ-4	DROP IN RANGE
EQ-5	MICROWAVE/EXHAUST FAN
EQ-6	REFRIGERATOR
EQ-7	TV
EQ-8	FIREPLACE
EQ-9	STACKABALE WASHER AND DRYER
L-1	EXTERIOR RECESSED LIGHT:
L-2	DECORATIVE PENDANT:
L-3	FLUOR UTILITY LIGHT
L-4	SMALL PENDANT
L-5	DINING ROOM PENDANT
L-6	DECORATIVE WALL SCONCE
L-7	CEILING FAN W/LIGHT
L-8	SURFACE MOUNTED CEILING LIGHT
L-9	INTERIOR RECESSED LIGHT
L-10	TRACK LIGHTING
L-11	UNDERCABINET LIGHT
L-12	WALL MOUNTED UTILITY LIGHT MOUNT ABOVE DOOR
L-13	STAIR PENDANT
P-1	VANITY SINK:
P-2	VANITY FAUCET
P-3	TOILET:
P-4	KITCHEN SINK:
P-5	KITCHEN FAUCET
P-6	DROP IN TUB ENCLOSURE
P-7	TUB FAUCET AND SHOWER CONTROLS
P-8	DROP IN SHOWER ENCLOSURE
P-9	SHOWER ASSEMBLY AND CONTROLS
QZ-1	QUARTZ COUNTER
WD-1	WOOD BASE: 1X3 POPAR PAINTED



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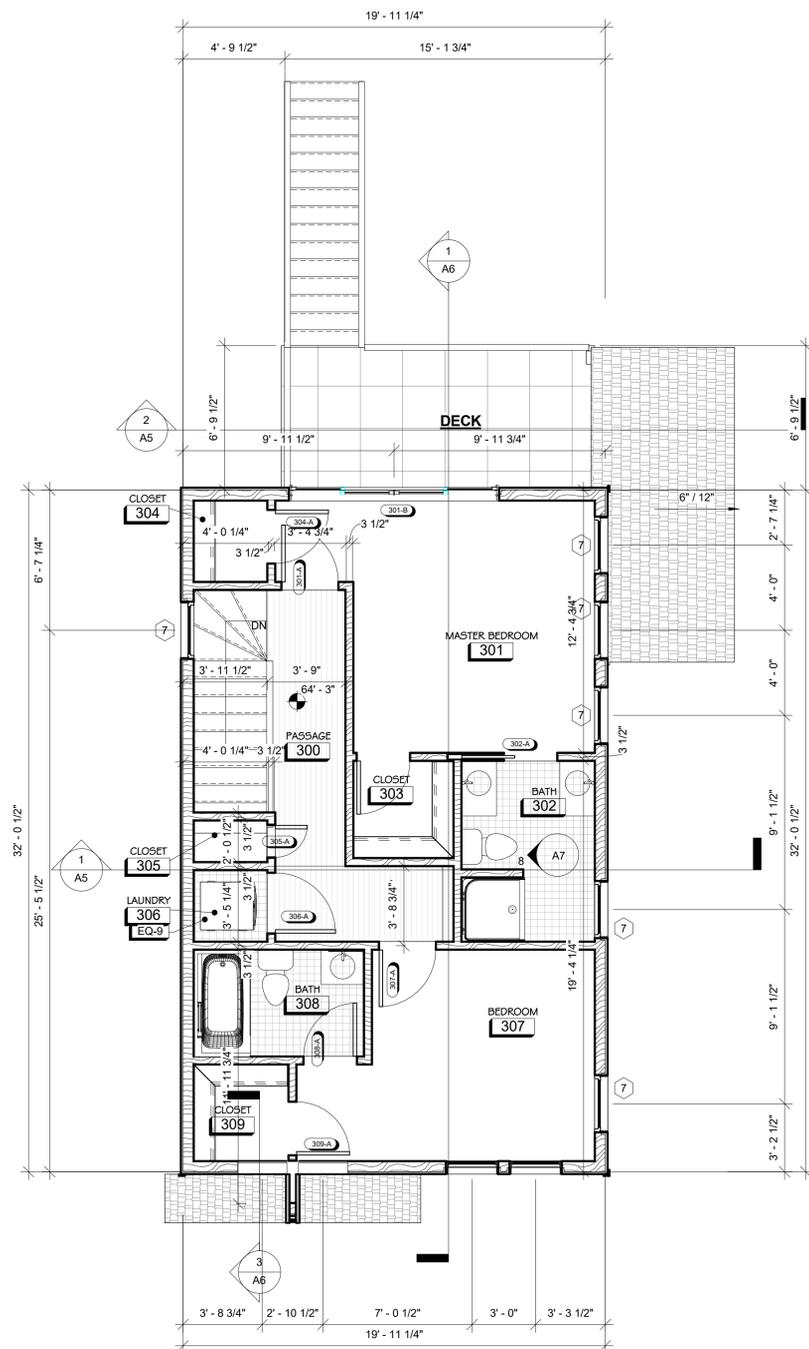
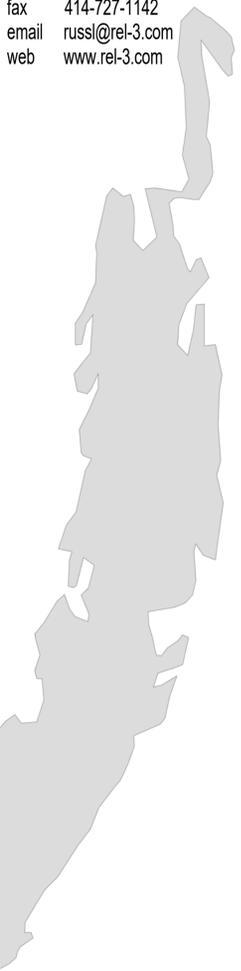


Sheet Number
 FLOOR PLANS

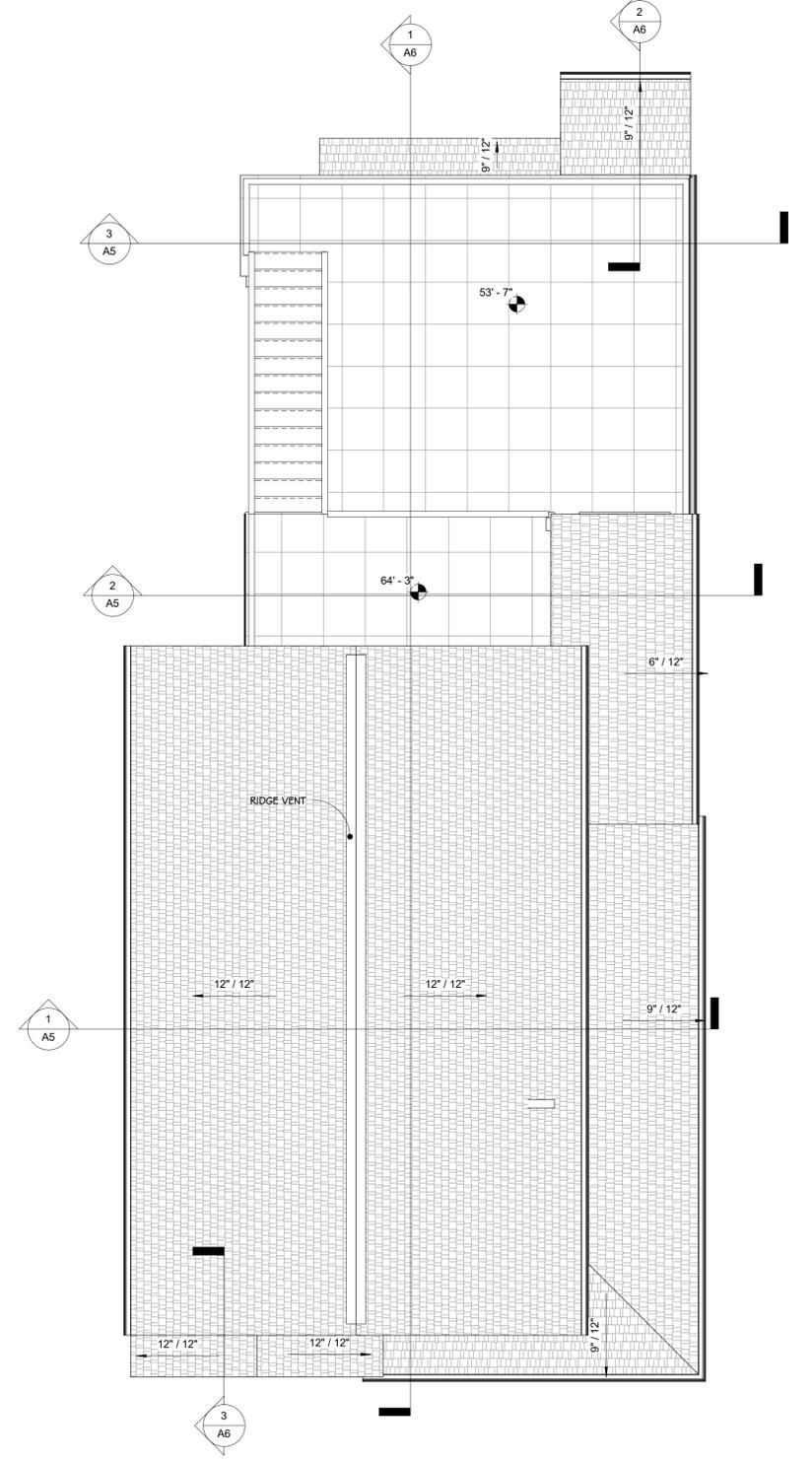
A1



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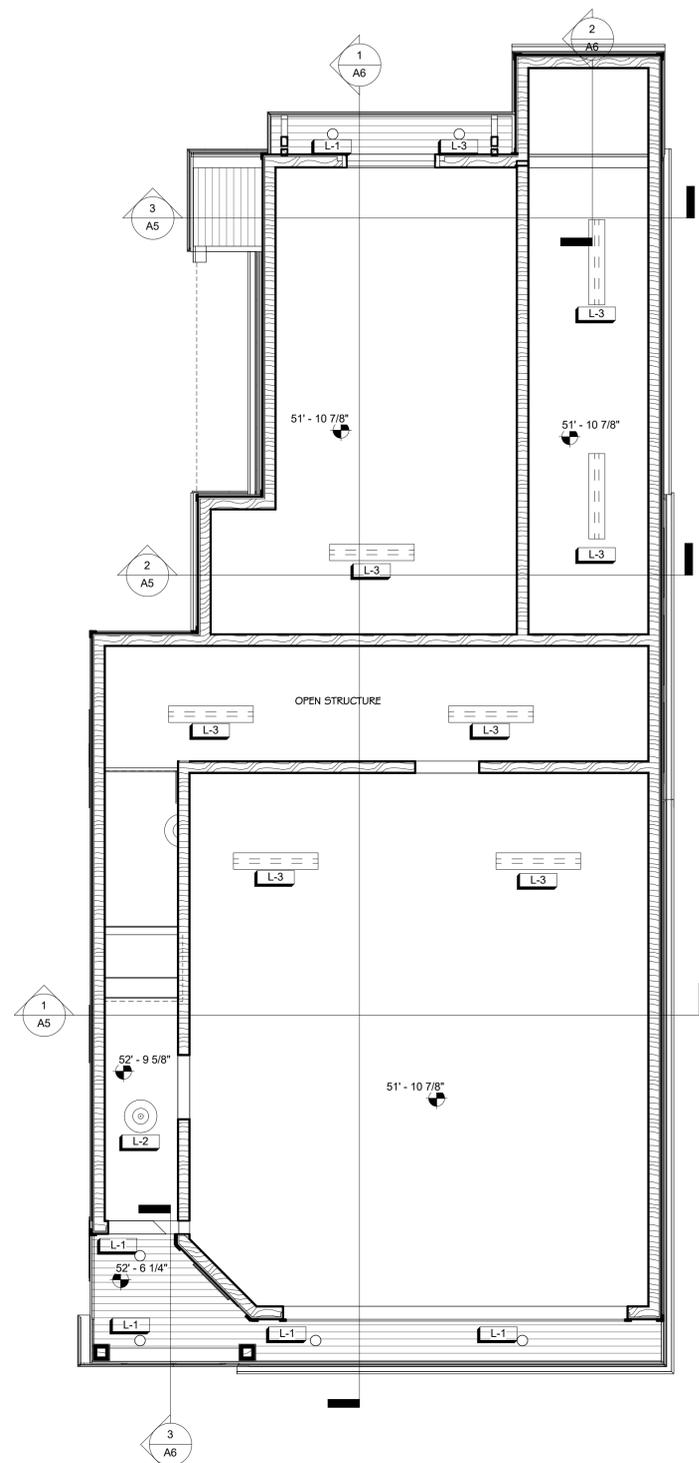
1 PROPOSED THIRD FLOOR PLAN
 1/4" = 1'-0"



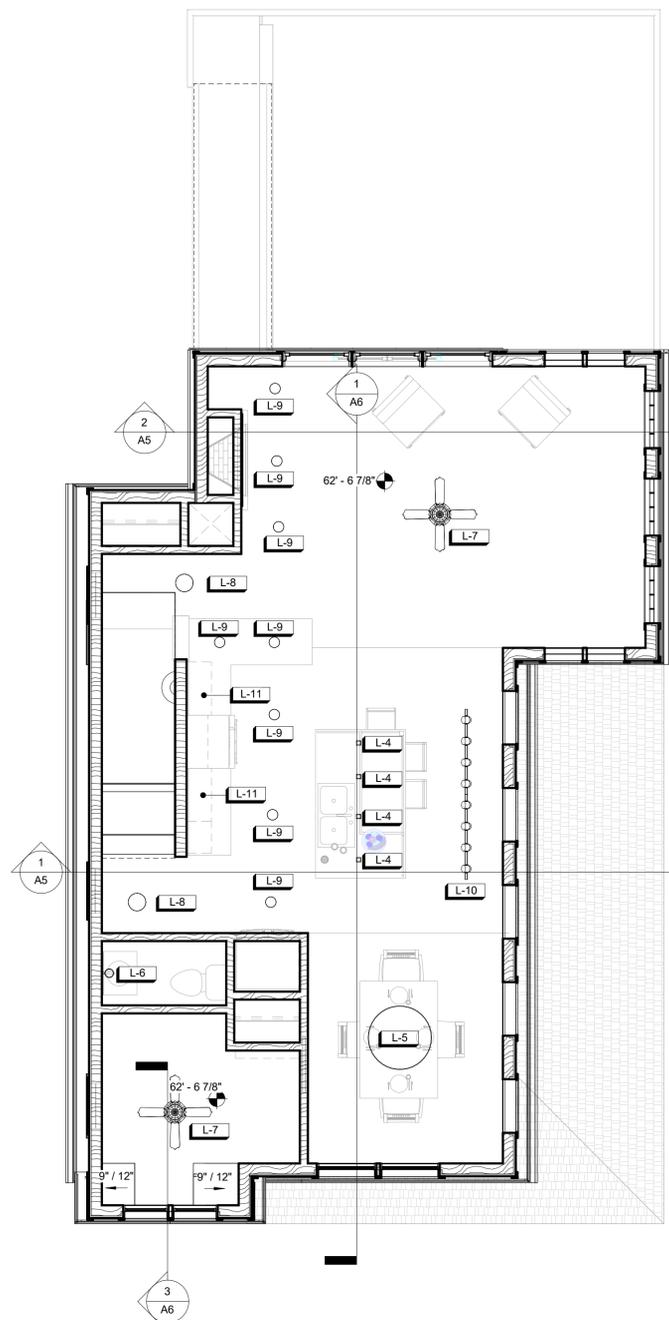
2 PROPOSED ROOF PLAN
 1/4" = 1'-0"



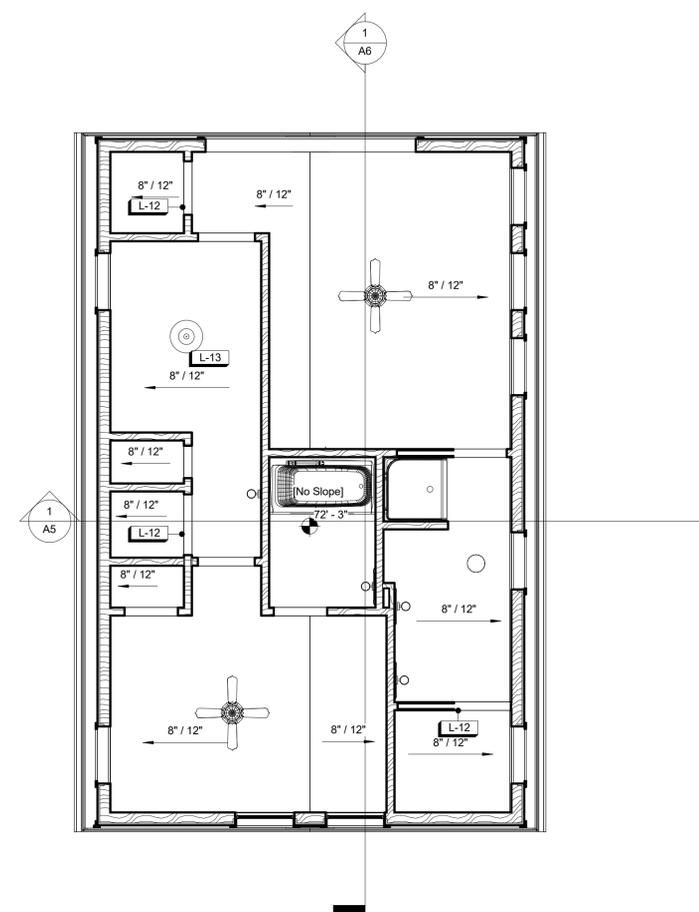
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1 PROPOSED FIRST FLOOR REFLECTED
 CEILING PLAN
 1/4" = 1'-0"



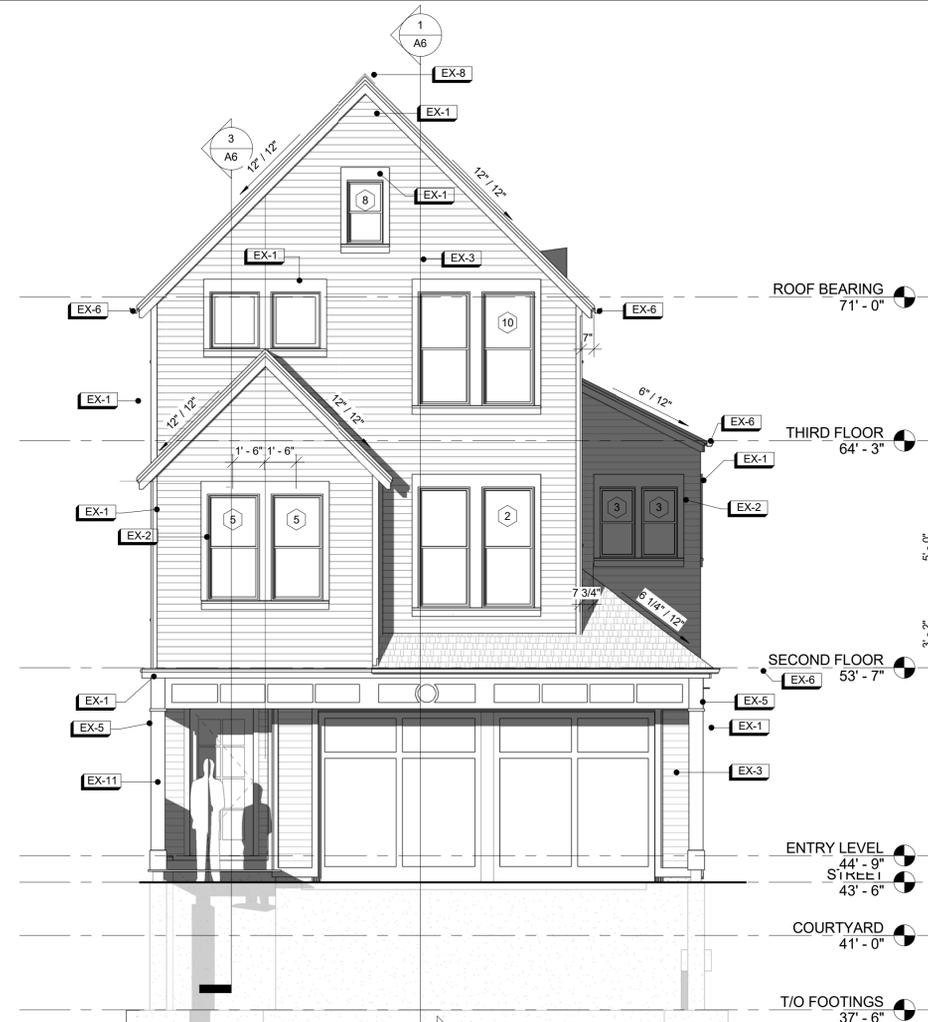
2 PROPOSED SECOND FLOOR REFLECTED
 CEILING PLAN
 1/4" = 1'-0"



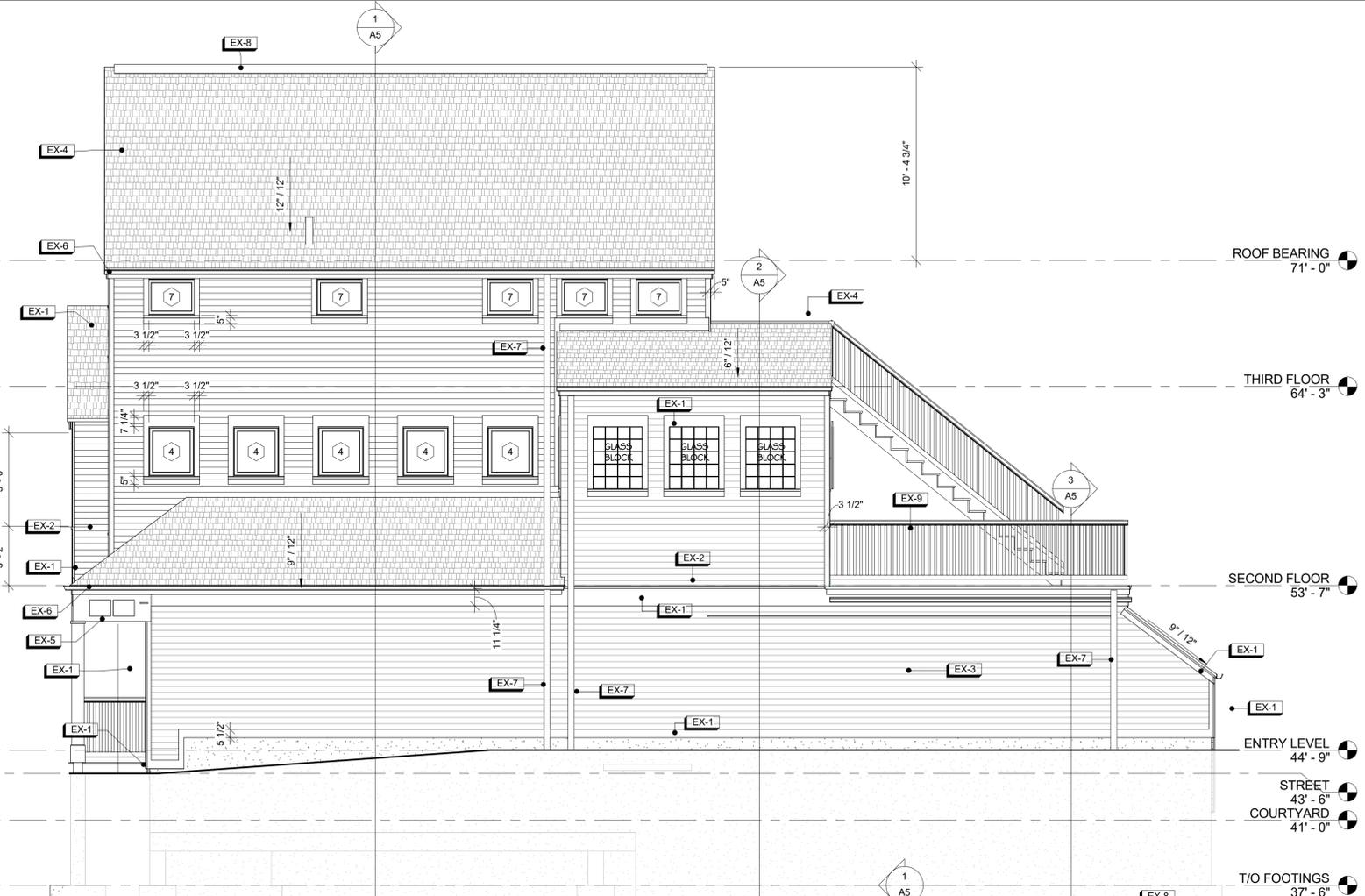
3 PROPOSED THIRD FLOOR REFLECTED
 CEILING PLAN
 1/4" = 1'-0"



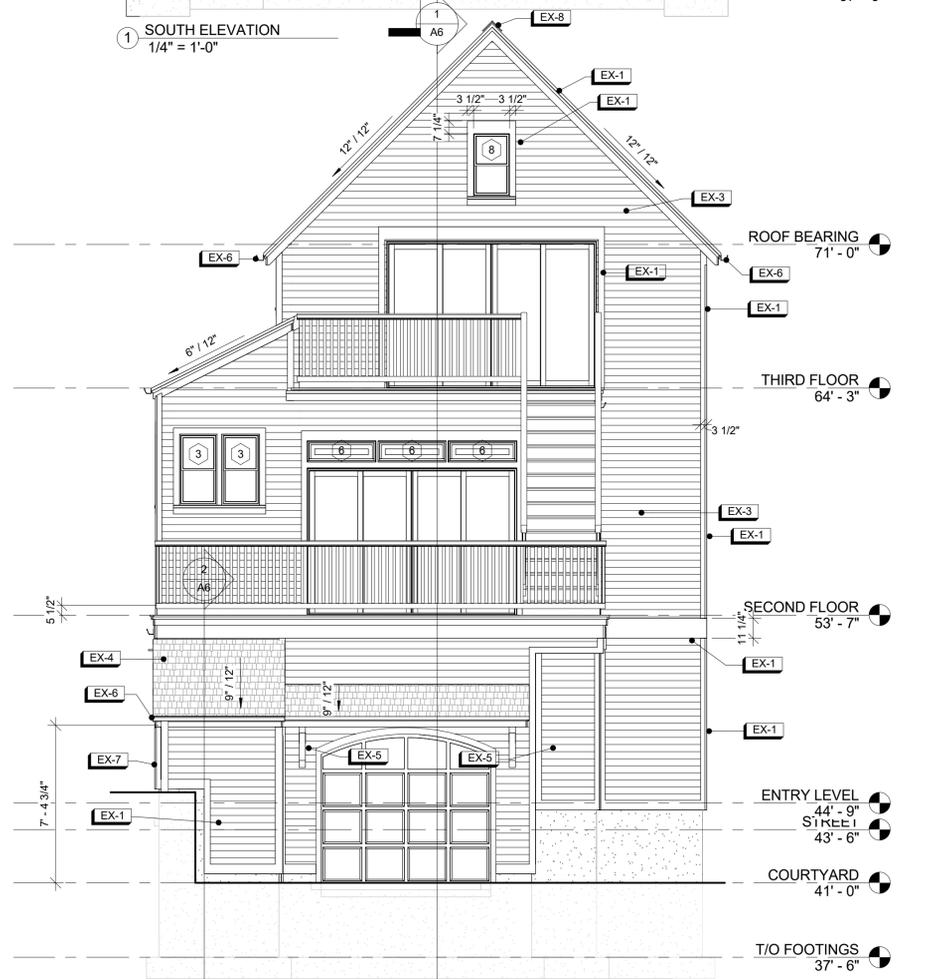
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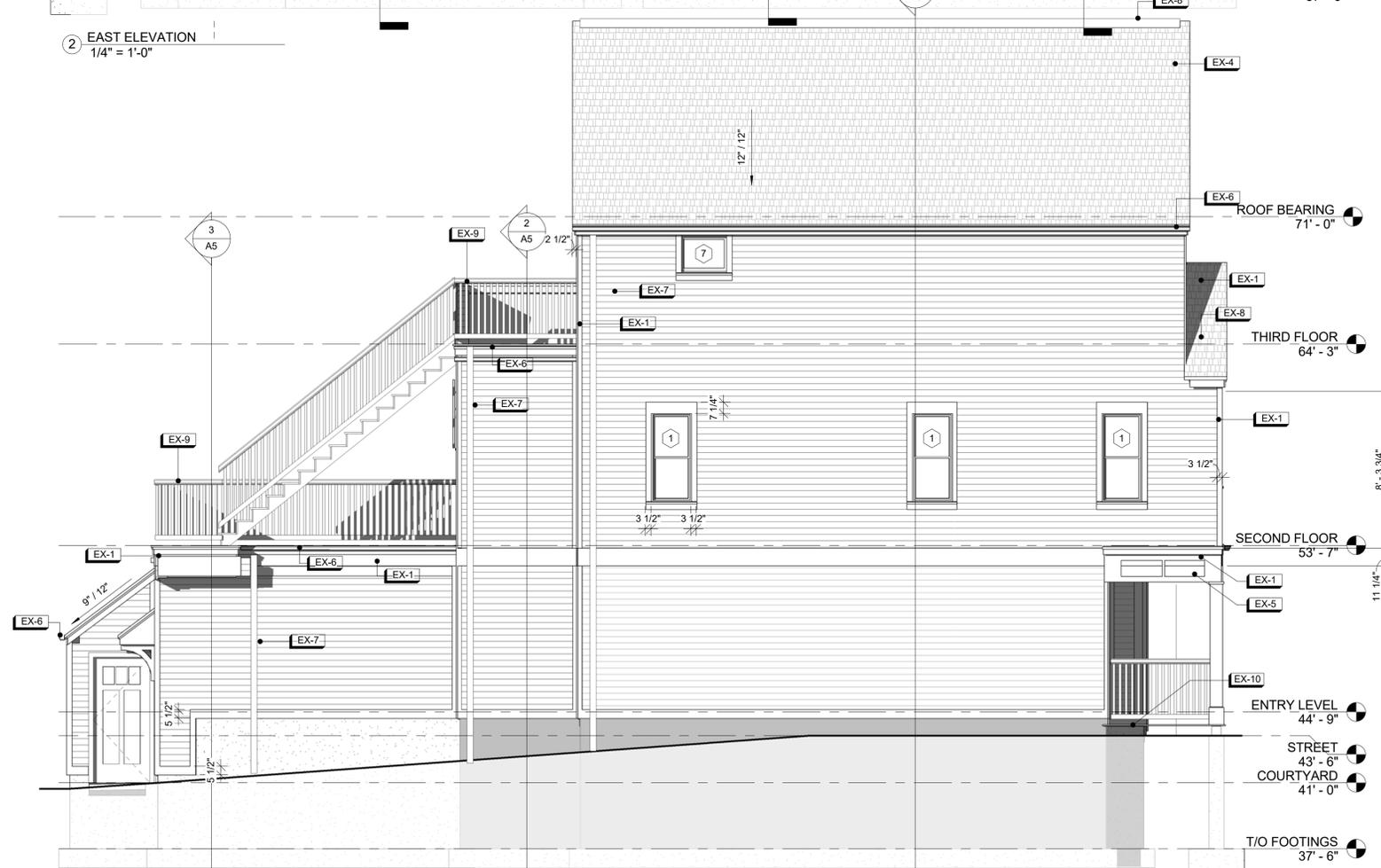
1 SOUTH ELEVATION
 1/4" = 1'-0"



2 EAST ELEVATION
 1/4" = 1'-0"



3 NORTH ELEVATION
 1/4" = 1'-0"

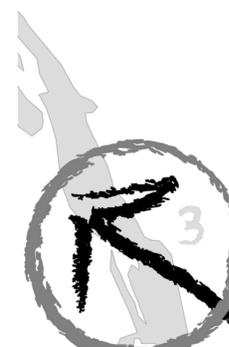


4 WEST ELEVATION
 1/4" = 1'-0"

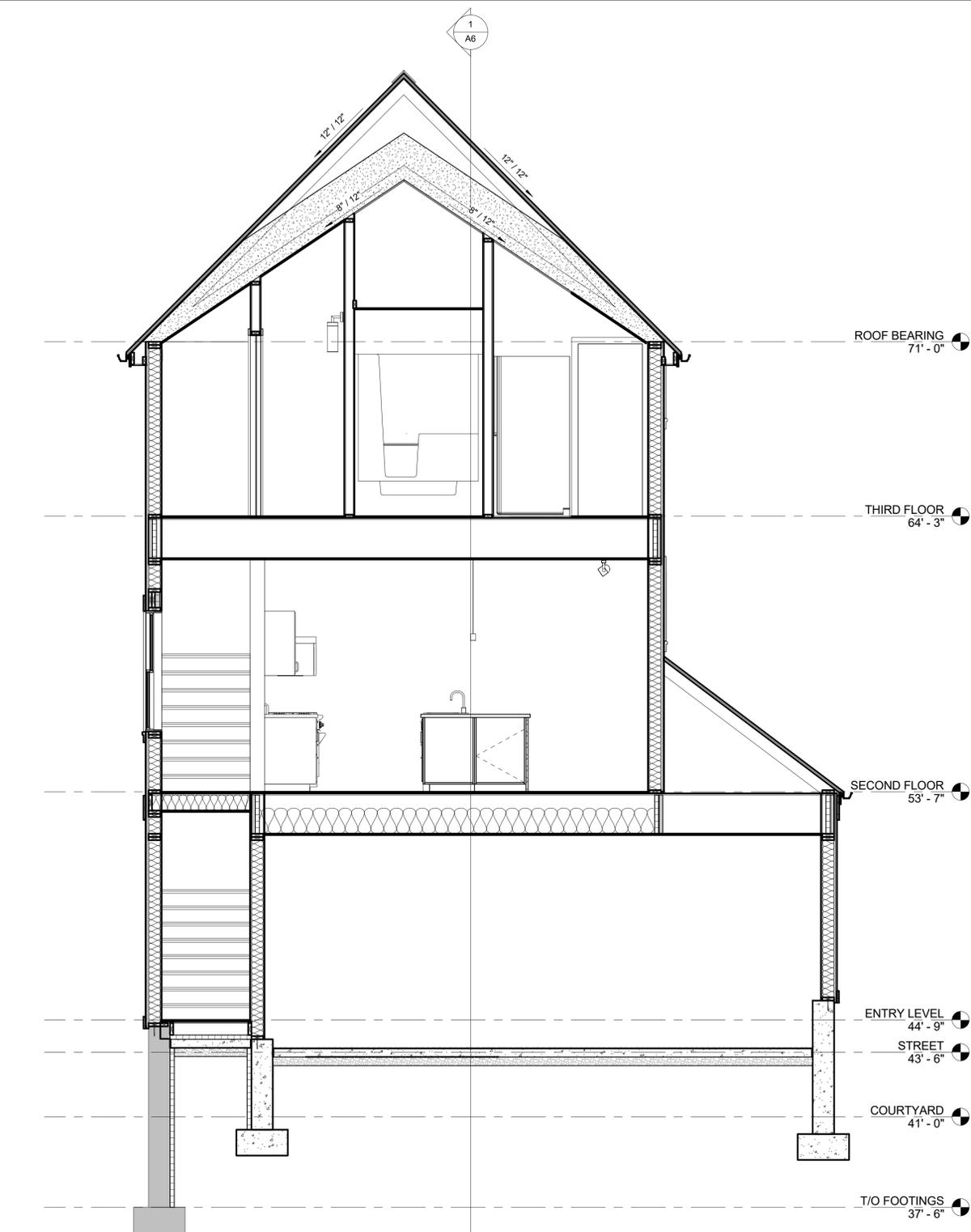
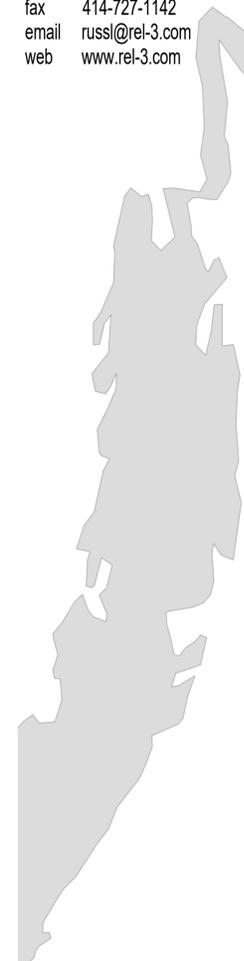
Sheet Number
 EXTERIOR
 ELEVATIONS

A4

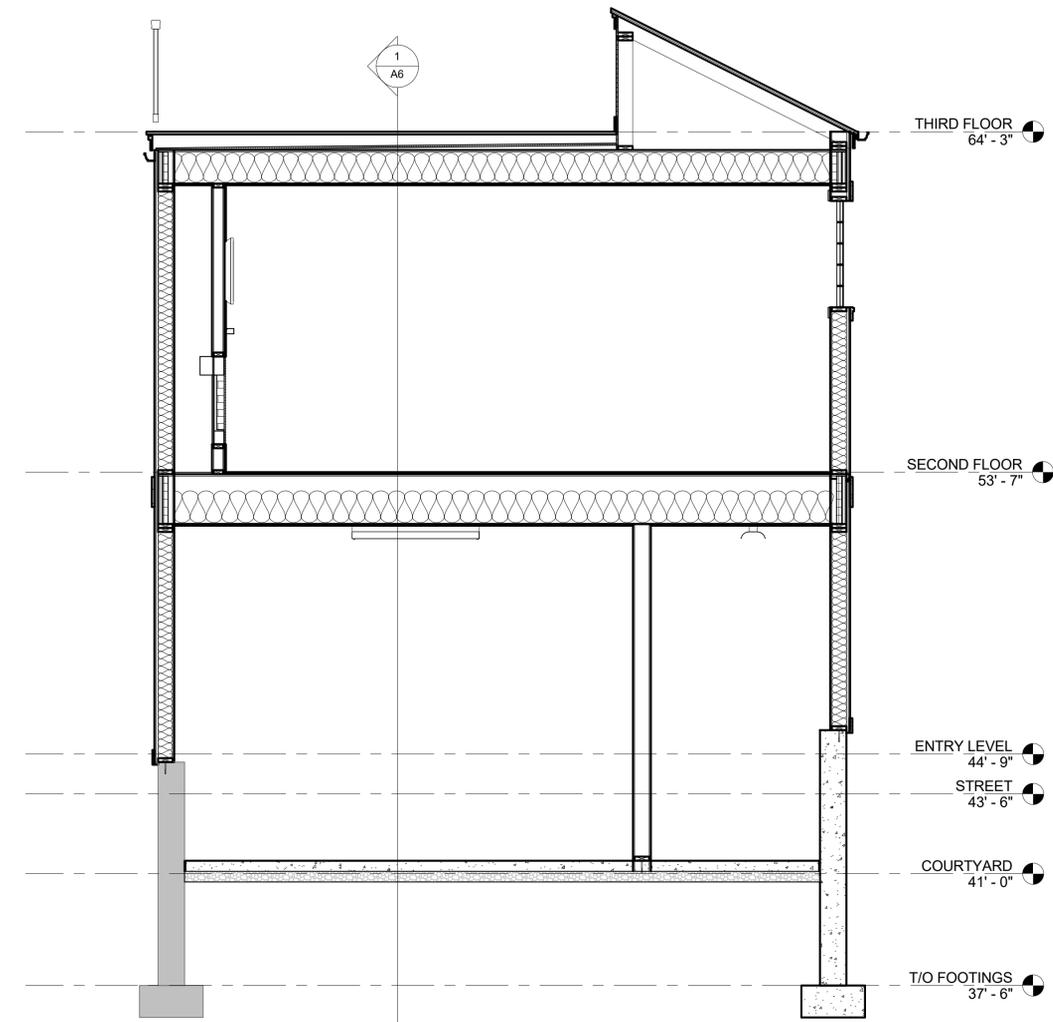
Date 03-10-16
 Project Number: 158001



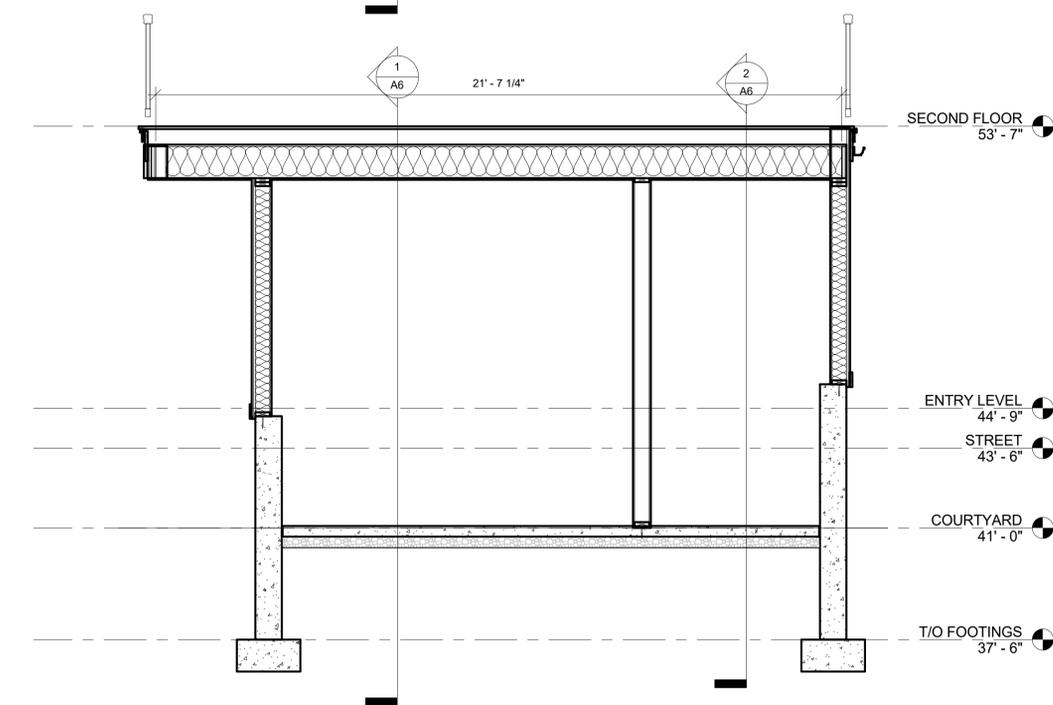
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① EAST WEST SECTION 1
 3/8" = 1'-0"



② EAST WEST SECTION 2
 3/8" = 1'-0"



③ EAST WEST SECTION 3
 3/8" = 1'-0"

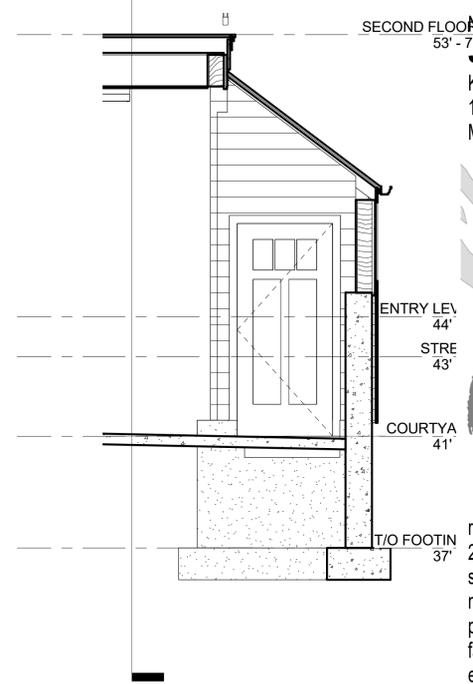
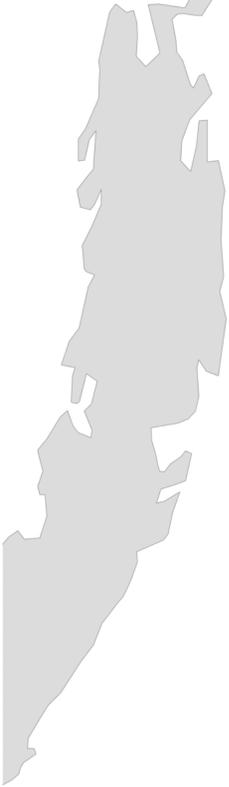
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A5

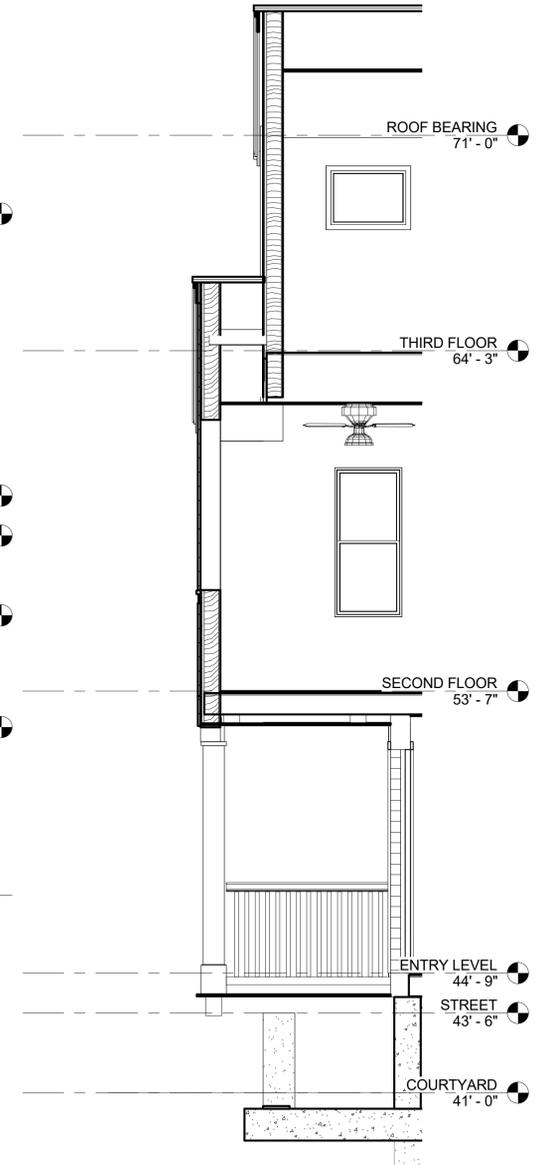
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 Project Number: 158001



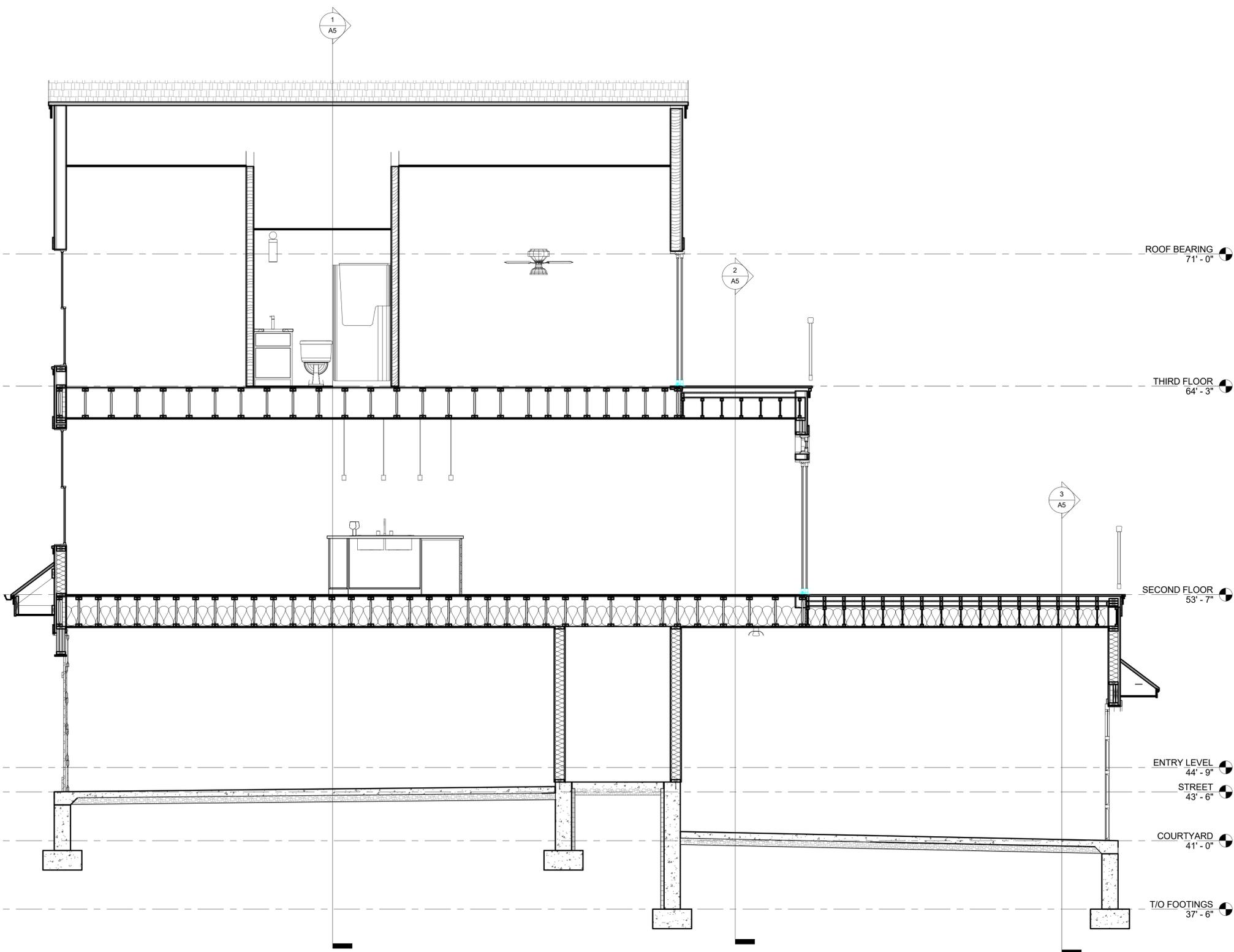
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② NORTH SOUTH SECTION 2
 3/8" = 1'-0"



③ NORTH SOUTH SECTION 3
 3/8" = 1'-0"



① NORTH SOUTH SECTION 1
 3/8" = 1'-0"

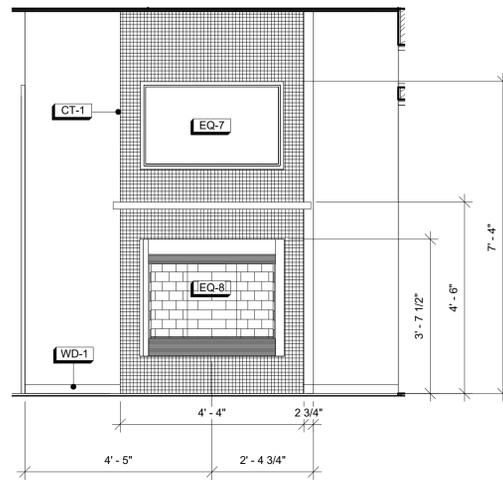
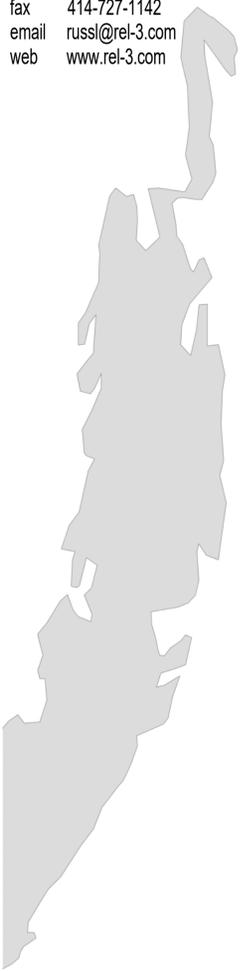
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A6

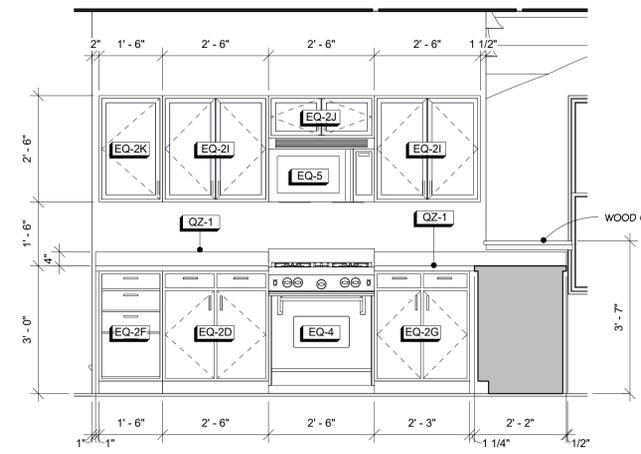
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 Project Number: 158001



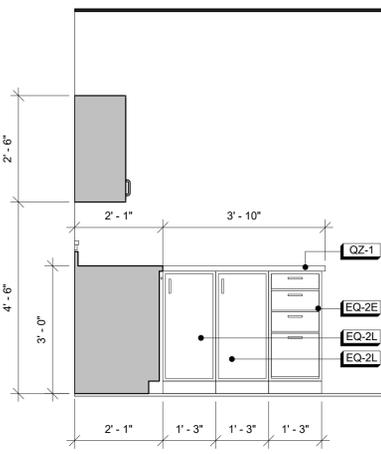
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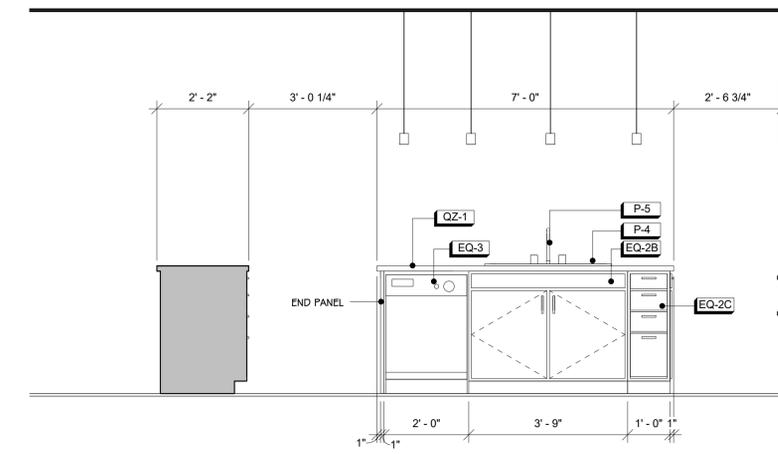
1 LIVING ROOM WEST ELEVATION
 1/2" = 1'-0"



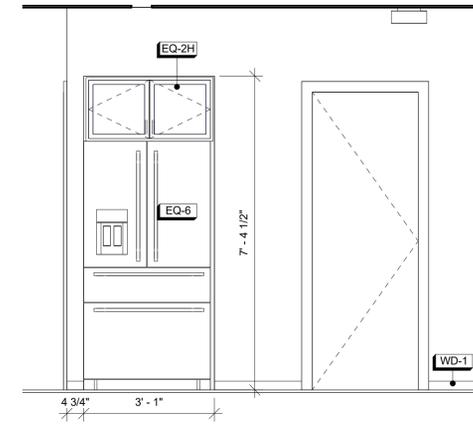
2 KITCHEN WEST ELEVATION
 1/2" = 1'-0"



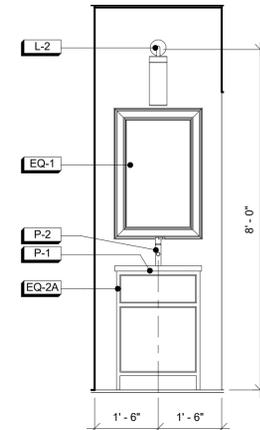
3 KITCHEN NORTH ELEVATION
 1/2" = 1'-0"



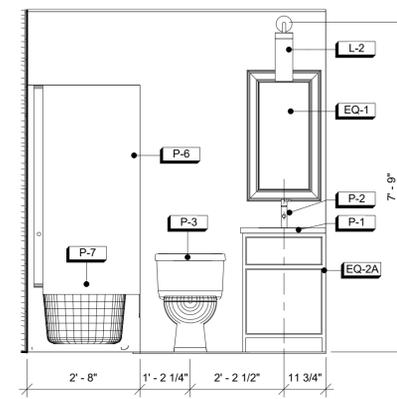
4 KITCHEN EAST ELEVATION
 1/2" = 1'-0"



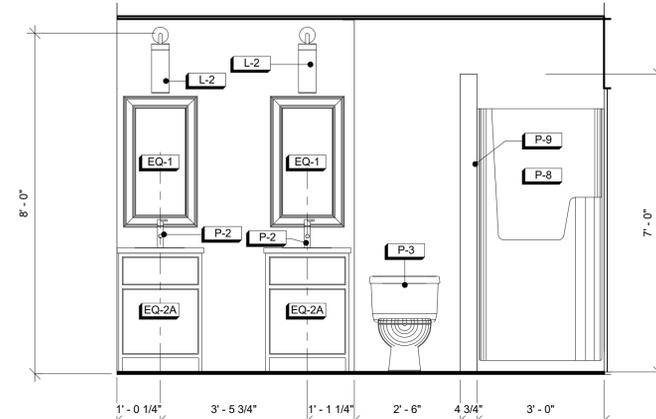
5 KITCHEN SOUTH ELEVATION
 1/2" = 1'-0"



6 1/2 BATH WEST ELEVATION
 1/2" = 1'-0"



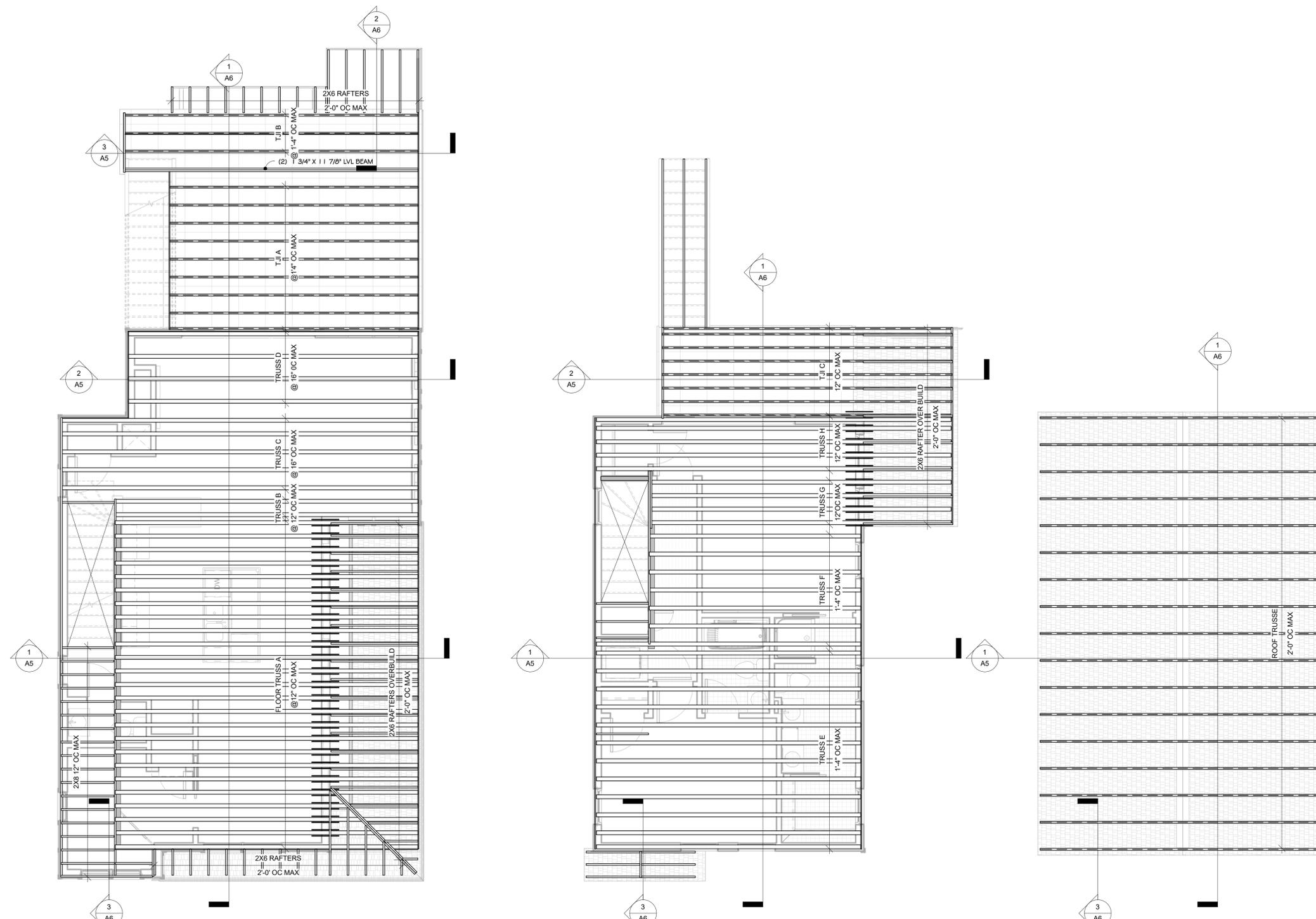
7 BATH EAST ELEVATION
 1/2" = 1'-0"



8 MASTER BATH WEST ELEVATION
 1/2" = 1'-0"



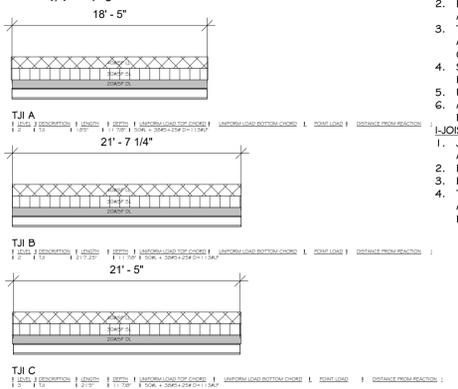
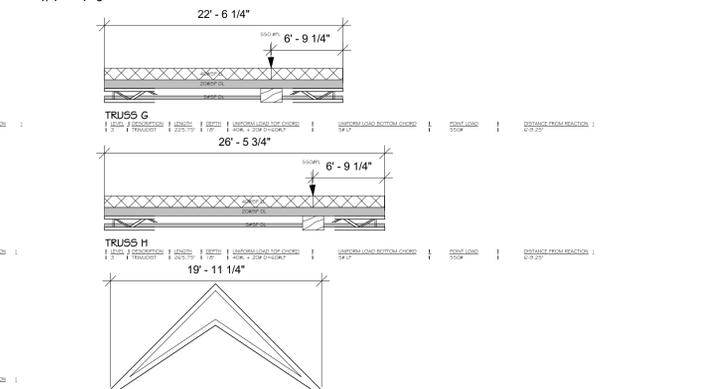
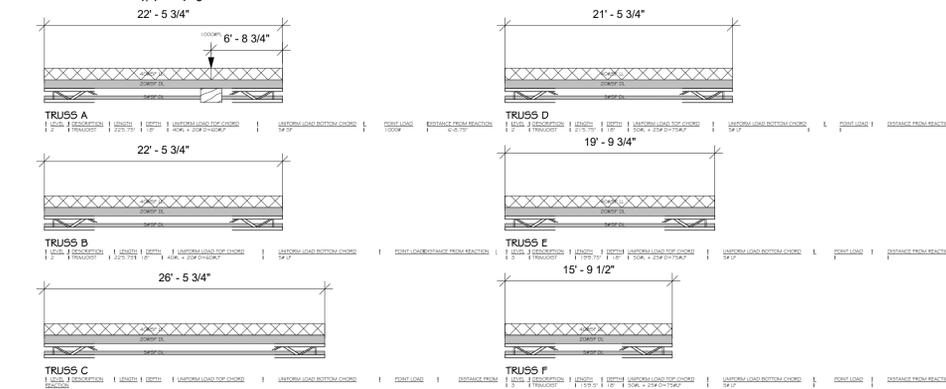
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1 PROPOSED SECOND FLOOR FRAMING PLAN
 1/4" = 1'-0"

2 PROPOSED THIRD FLOOR FRAMING PLAN
 1/4" = 1'-0"

3 PROPOSED ROOF FRAMING PLAN
 1/4" = 1'-0"



- TRUSS NOTES**
1. TRUSS MANUFACTURER SHALL VERIFY ALL DIMENSIONS WITH THE ARCHITECT'S DRAWING AND IN THE FIELD.
 2. LOCATIONS OF TRUSS GIRDERS AND HIP TRUSSES SHALL BE REVIEWED BY THE ARCHITECT PRIOR TO FABRICATION OF ANY MATERIAL.
 3. TRUSS DESIGNER SHALL VERIFY ADEQUACY OF ALL TRUSS, AND GIRDER TRUSS BEARING AREAS. TRUSS DESIGNER SHALL NOTIFY THE ARCHITECT IF INSUFFICIENT AREA IS CALLED FOR.
 4. SUBMIT TRUSS DESIGN SHOP DRAWINGS FOR ARCHITECT'S REVIEW PRIOR TO FABRICATION ANY MATERIAL.
 5. UNLESS NOTED OTHERWISE ALL FLOOR TRUSSES SHALL BE BOTTOM CHORD BEARING.
 6. ALL TRUSSES SHALL BE MANUFACTURED WITH GRADE 4X2 | 1.7E MRS OR BETTER.
- JOIST NOTES**
1. JOIST MANUFACTURER SHALL VERIFY ALL DIMENSIONS WITH THE ARCHITECT'S DRAWING AND IN THE FIELD.
 2. DESIGN IS BASED ON WEYERHAEUSER TJI.
 3. LOAD CALCULATIONS ARE BASED ON L480.
 4. TJI DESIGNER SHALL VERIFY ADEQUACY OF ALL JOISTS BEARING AREAS. DESIGNER SHALL NOTIFY THE ARCHITECT IF INSUFFICIENT AREA IS CALLED FOR.

4 TRUSS TYPES
 1/8" = 1'-0"

Sheet Number
STRUCTURAL PLANS

S1

Date
 Project Number: 158001

03-10-16
 158001

DIVISION 1 GENERAL CONDITIONS

SECTION 01732 - SELECTIVE DEMOLITION

- 1.1 SECTION REQUIREMENTS
- Comply with EPA regulations and disposal regulations of authorities having jurisdiction.
 - Conduct demolition without disrupting Owner's use of the building.
 - It is not expected that hazardous materials will be encountered in the Work.
 - If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner.
- 1.2 DEMOLITION
- Maintain and protect existing utilities to remain in service before proceeding with demolition, providing bypass connections to other parts of the building.
 - Locate, identify, shut off, disconnect, and cap off utility services to be demolished.
 - Conduct demolition operations and remove debris to prevent injury to people and damage to adjacent buildings and site improvements.
 - Provide and maintain shoring, bracing, or structural support to preserve building stability and prevent movement, settlement, or collapse.
 - Protect building structure and interior from weather and water leakage and damage.
 - Protect walls, ceilings, floors, and exposed finishes that are to remain. Erect and maintain dustproof partitions. Cover and protect fixtures, furnishings, and equipment that are to remain.
 - Promptly remove demolished materials from Owner's property and legally dispose of them. Do not burn demolished materials.

END OF SECTION 01732

DIVISION 2 SITE WORK

SECTION 02300-EARTHWORK

- 1.1 SECTION INCLUDES excavation for new foundations and grading of site.
- Unauthorized excavation consists of removing materials beyond indicated subgrade elevations or dimensions without direction by Architect. Unauthorized excavation and remedial work shall be at Contractor's expense.
- 1.2 MATERIALS
- Satisfactory Soil for planting beds: ASTM D 2487 Soil Classification Groups GW, GP, GM, SW, SP, and SM; free of rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation, or other deleterious matter.
 - Unsatisfactory Soil: ASTM D 2487 Soil Classification Groups GC, SC, ML, MH, CL, CH, OL, OH, and PT.
 - Backfill and Fill: Satisfactory soil materials.
 - Subbase: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand, ASTM D 2940, with at least 95 percent passing a 1-1/2-inch sieve and not more than 5 percent passing a No. 200 sieve.
 - Bedding: Subbase materials with 100 percent passing a 1-inch sieve and not more than 5 percent passing a No. 200 sieve.
 - Drainage Fill: Washed, evenly graded mixture of crushed stone, or crushed or uncrushed gravel, ASTM D 448, Size 57, with 100 percent passing a 1-1/2-inch sieve and not more than 5 percent passing a No. 5 sieve.
- 1.3 EARTHWORK
- Protect subgrades and foundation soils from softening and damage by water, freezing temperatures, or frost.
 - Explosives: Do not use explosives.
 - Excavate to subgrade elevations regardless of character of materials and obstructions encountered.
 - Excavate for structures, building slabs, pavements, and walkways. Trim subgrades to required lines and grades.
 - Utility Trenches: Excavate trenches to indicated slopes, lines, depths, and invert elevations. Maintain 12 inches of working clearance on each side of pipe or conduit.
 - Place, compact, and shape bedding course to provide continuous support for pipes and conduits over rock and other underlying bearing surfaces and to fill unauthorized excavations.
 - Place and compact final backfill of satisfactory soil material or subbase material, free of particles larger than 1 inch, to a height of 12 inches over the utility pipe or conduit. Place and compact final backfill of satisfactory soil material to final subgrade.
 - Flow strip or break up sloped surfaces steeper than 1 vertical to 4 horizontal to receive fill.
 - When subgrade or existing ground surface to receive fill has a density less than that required for fill, break up ground surface, pulverize, moisture-condition or aerate soil, and recompact.
 - Place backfill and fill in layers not more than 6 inches in loose depth at optimum moisture content. Compact each layer under structures, building slabs, pavements, and walkways to 95 percent of maximum dry unit weight according to ASTM D 698; elsewhere to 90 percent.
 - Grade areas to a smooth surface to cross sections, lines, and elevations indicated. Grade lawns, walkways, and unpaved subgrades to tolerances of plus or minus 1-1/4 inch and pavements and areas within building lines to plus or minus 1/2 inch.
 - Under pavements and walkways, place subbase course material on prepared subgrades and compact at optimum moisture content to required grades, lines, cross sections, and thicknesses.
 - Under slabs-on-grade, place drainage fill on prepared subgrade and compact to required cross section and thickness.
 - Allow testing agency to inspect and test each subgrade and each fill or backfill layer and verify compliance with requirements.
 - Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

SECTION 02751 - CEMENT CONCRETE PAVEMENT

- 1.1 SECTION REQUIREMENTS
- Comply with ACI 301, "Specification for Structural Concrete."
- 1.2 MATERIALS
- Welded Steel Wire Fabric: ASTM A 185, flat sheets not rolls.
- 1.3 MIXES
- Proportion normal-weight concrete mixes to provide the following properties:
 - Compressive Strength: 2500 psi at 28 days.
- 1.4 PAVING
- Accurately position and support reinforcement, and secure against displacement.
 - Locate and install contraction, construction, isolation, and expansion joints as indicated or required.
 - Place concrete in a continuous operation within planned joints or sections. Do not add water to adjust slump.
 - Floot surfaces to true planes within a tolerance of 1/4 inch in 10 feet and medium-to-fine-textured broom finish.
 - Begin curing after finishing concrete.

END OF SECTION 02751

DIVISION 3 CONCRETE

SECTION 03300 - CAST-IN-PLACE CONCRETE

- 1.1 SECTION REQUIREMENTS
- Comply with ASTM C 94; ACI 301, "Specification for Structural Concrete"; ACI 117, "Specifications for Tolerances for Concrete Construction and Materials"; and CRSI's "Manual of Standard Practice."
 - See structural drawings for further requirements.
- 1.2 MATERIALS
- Deformed Reinforcing Bars: ASTM A 615/A 615M, Grade 60.
 - Plain Steel Wire: ASTM A 82, as drawn.
 - Steel Welded-Wire Fabric: ASTM A 185, flat sheets not rolls.
 - Portland Cement: ASTM C 150, Type I or II.
 - Fly Ash: ASTM C 618, Type C or F.
 - Aggregates: ASTM C 33, uniformly graded.
 - Air-Entraining Admixture: ASTM C 260.
 - Vapor Retarder: Clear 10-mil-thick polyethylene sheet.
 - Liquid Membrane-Forming Curing and Sealing Compound: ASTM C 1315, clear, Type I, Class A, waterborne.
 - Joint-Filler Strips: ASTM D 1751, cellulose fiber, or ASTM D 1752, cork.
- 1.3 MIXES
- Proportion normal-weight concrete mixes to provide the following properties:
 - Compressive Strength: 2500 psi at 28 days.
 - Slump Limit: 4 inches at point of placement.
 - Air Content: 5.5 to 7.0 percent for concrete exposed to freezing and thawing, 2 to 4 percent elsewhere.
- 1.4 CONCRETING
- Construct formwork and maintain tolerances and surface irregularities within ACI 117 limits of Class A for concrete exposed to view and Class C for other concrete surfaces.
 - Place vapor retarder on prepared subgrade, with joints lapped 6 inches and sealed.
 - Accurately position, support, and secure reinforcement.
 - Install construction, isolation, and contraction joints where indicated. Install full-depth joint-filler strips at isolation joints.
 - Place concrete in a continuous operation and consolidate using mechanical vibrating equipment.
 - Anchor trusses securely at bearing points; use metal framing anchors. Install fasteners through each fastener hole in metal framing anchor.
 - Securely connect each truss purl required for forming built-up girder trusses.
 - Anchor trusses to girder trusses.
 - Install and fasten permanent bracing during truss erection and before construction loads are applied. Anchor ends of permanent bracing where terminating at walls or beams.
 - Install wood trusses within installation tolerances of ANSITYP 1.
 - Do not cut or remove truss members.
 - Remove wood trusses that are damaged or do not meet requirements and replace with trusses that do meet requirements.

END OF SECTION 03300

DIVISION 6 WOODS AND PLASTICS

SECTION 06100 - ROUGH CARPENTRY

- 1.1 WOOD PRODUCTS, GENERAL
- Lumber: Provide dressed lumber, S4S, 19 percent maximum moisture content.
 - Engineered Wood Products: Acceptable to authorities having jurisdiction.
 - Wood Structural Panels: DOC PS 2. Provide plywood complying with DOC PS 1, where plywood is indicated.
- 1.2 TREATED MATERIALS
- Preservative-Treated Materials: AWPAC C2 lumber and AWPAC C9 plywood. Treat indicated items and the following:
 - Wood members in connection with roofing, flashing, vapor barriers, and waterproofing.
 - Concealed members in contact with masonry or concrete.
 - Wood framing members less than 1 1/8 inches above grade.
 - Wood floor plates installed over concrete slabs directly in contact with earth.
- 1.3 LUMBER
- Dimension Lumber: The following grades are per inspection agency indicated:
 - Non-Load-Bearing Interior Partitions: Construction, Stud, or No. 3.
 - Framing Other Than Non-Load-Bearing Partitions: No. 2.
 - Exposed Framing: Select Structural.
 - Concealed Boards: 19 percent maximum moisture content; Eastern softwoods.
 - Miscellaneous Lumber: Construction, Stud, or No. 3 grade of any species for nailers, blocking, and similar members.
- 1.4 ENGINEERED WOOD PRODUCTS
- Engineered wood products with allowable design stresses, as published by manufacturer, that meet or exceed those indicated. Manufacturer's published values shall be demonstrated by comprehensive testing.
 - Laminated-Veneer Lumber: Manufactured with exterior-type adhesive complying with ASTM D 2559. Allowable design values determined according to ASTM D 5456.
 - Trim Boards: Performance-rated product complying with APA PRR-401, 1-inch rim board.
- 1.5 PANEL PRODUCTS
- Wall Sheathing: Exterior, Structural 1 sheathing.
 - Plywood Roof Sheathing: Exterior, Structural 1 sheathing.
 - Plywood Subflooring: Exterior, Structural 1 single-floor panels or sheathing.
 - Particleboard Underlayment: ANSI A208.1; Grade PBU.
 - Exterior Gypsum Sheathing: Certainteed GlasRoc Type "X" Sheathing 1/2" thick or equal.
- 1.6 MISCELLANEOUS PRODUCTS
- Fasteners: Size and type indicated. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
 - Power-Driven Fasteners: CABO NER-272.
 - Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.
 - Building Paper: Asphalt-saturated organic felt complying with ASTM D 226, Type I (No. 15 asphalt felt), unperforated.
 - Seal-er: Glass-fiber insulation, 1-inch thick, compressible to 1/32 inch.
 - Adhesives for Field Gluing Panels to Framing: APA AFG-01.
- 1.7 INSTALLATION
- Set rough carpentry to required levels and lines, with members plumb, true to line, out, and fitted. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
 - Securely attach rough carpentry to substrates, complying with the following:
 - CABO NER-272 for power-driven fasteners.
 - Published requirements of metal framing anchor manufacturer.
 - Nailing Schedules as outlined in the Uniform Dwelling Code.
 - Fastening Methods: Comply with recommendation in APA Form No. E30K and the following:
 - Combination Subflooring-Underlayment: Glue and nail to framing.
 - Subflooring: Glue and nail to framing.
 - Sheathing: Nail to framing.

END OF SECTION 06100

DIVISION 6 WOODS AND PLASTICS

SECTION 06176 - METAL-PLATE-CONNECTED WOOD TRUSSES

- 1.1 SECTION REQUIREMENTS
- Structural Performance: Provide metal-plate-connected wood trusses capable of withstanding design loads indicated without exceeding TPI 1 deflection limits.
 - Submittals: Product Data, Shop Drawings, and structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
 - Comply with TPI 1, "National Design Standard for Metal Plate Connected Wood Truss Construction"; TPI 1HB, "Commentary and Recommendations for Handling, Installing & Bracing Metal Plate Connected Wood Trusses"; and applicable requirements in AFPA's "National Design Specifications for Wood Construction" and its "Supplement."
 - See Structural Drawings for additional requirements.
- 1.2 MATERIALS
- Lumber: DOC PS 20 and applicable rules of lumber grading agencies certified by the American Lumber Standards Committee Date of Review, any species, graded visually or mechanically.
 - Connector Plates: TPI 1, fabricated from hot-dip galvanized steel sheet, complying with ASTM A 653/A 653M, G60 coating designation; Designation 55, Grade 33, and not less than 0.036 inch-thick.
 - Fasteners: Where trusses are exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
 - Metal Framing Anchors: Provide framing anchors made from hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 coating designation.
- 1.3 FABRICATION
- Assemble trusses using jigs or other means to ensure uniformity and accuracy of assembly with joints closely fitted to comply with tolerances in TPI 1. Position members to produce design camber indicated.
- 1.4 INSTALLATION
- Install and brace trusses according to TPI recommendations and as indicated. Install trusses plumb, square, and true to line and securely fasten to supporting construction.
 - Anchor trusses securely at bearing points; use metal framing anchors. Install fasteners through each fastener hole in metal framing anchor.
 - Securely connect each truss purl required for forming built-up girder trusses.
 - Anchor trusses to girder trusses.
 - Install and fasten permanent bracing during truss erection and before construction loads are applied. Anchor ends of permanent bracing where terminating at walls or beams.
 - Install wood trusses within installation tolerances of ANSITYP 1.
 - Do not cut or remove truss members.
 - Remove wood trusses that are damaged or do not meet requirements and replace with trusses that do meet requirements.

END OF SECTION 06176

SECTION 06402 - INTERIOR ARCHITECTURAL WOODWORK

- 1.1 SECTION REQUIREMENTS
- Submittals: Samples showing the full range of colors, textures, and patterns available for each type of finish.
 - Quality Standard: Architectural Woodwork Institute's "Architectural Woodwork Quality Standards."
 - Environmental Limitations: Do not deliver or install woodwork until building is enclosed, wet work is completed, and HVAC system is operating.
- 1.2 MATERIALS
- Hardboard: APA A 135.4.
 - Medium-Density Fiberboard: ANSI A208.2, Grade MD.
 - Particleboard: ANSI A208.1, Grade M-2.
 - Softwood Plywood: DOC PS 1.
 - Hardwood Plywood and Face Veneers: HPVA HP-1.
 - Thermoset Decorative Overlay: Comply with LMA SAT-1-1.
- 1.3 CABINET HARDWARE AND ACCESSORY MATERIALS
- Hardware Standards: Comply with BHMA A156 series standards.
 - Exposed Hardware Finishes: Comply with BHMA A156.18 for BHMA code number indicated.
 - Finish: Match Existing.
 - Furring, Blocking, Shims, and Hanging Strips: Softwood or hardwood lumber, kiln dried to 15 percent moisture content.
- 1.4 INTERIOR WOODWORK
- Complete fabrication before shipping to Project site to maximum extent possible. Disassemble only as needed for shipping and installing. Where necessary for fitting at Project site, provide for scriming and trimming.
 - Backcut or groove backs of flat trim members, left backs of other wide, flat members, except for members with ends exposed in finished Work.
 - Interior Standing and Running Trim for opaque finish: any closed-grain hardwood.
 - Wood Cabinets (Casework): Manufacturer Quality Cabinets - See plans for styles.
- 1.5 INSTALLATION
- Condition woodwork to prevailing conditions before installing.
 - Install woodwork to comply with AM Section 1700 for grade specified.
 - Install woodwork level, plumb, true, and straight. Shim as required with concealed shims. Install to a tolerance of 1/8 inch in 96 inches for level and plumb.
 - Scrub and cut woodwork to fit adjoining work, seal out surfaces, and repair damaged finish at cuts.
 - Install trim with minimum number of joints possible, using full-length pieces to greatest extent possible. Stagger joints in adjacent and related members.
 - Anchor countertops securely to base units. Seal space between backsplash and wall.
 - Anchor paneling to supports with concealed panel-hanger clips and by blind nailing on back-up strips, splined-connection strips, and similar associated trim and framing.
- 1.6 CABINET HARDWARE AND ACCESSORY SCHEDULE
- Concealed (European-Type) Hinges: BHMA A156.9, BO1 G02.
 - Pulls TBD.
 - Catches: Magnets catches, BHMA A156.9, B03 I 41.
 - Adjustable Shelf Standards: BHMA A156.9, B04071; with shelf rests, BHMA A156.9, B04081.
 - Drawer Slides: Side-mounted, zinc-plated steel drawer slides with steel ball bearings, complying with BHMA A156.9, Grade 1 and rated for the following loads:
 - Box Drawer Slides: 150 lb
 - Panel Drawer Slides: 45 lb.

END OF SECTION 06402

DIVISION 6 WOODS AND PLASTICS

SECTION 06660 - MANUFACTURED STANDING & RUNNING TRIM - PVC FOAM

- 1.1 SUMMARY
- Section includes the furnishing and installation of specified PVC foam trim and fabricated ornamental products, including but not limited to:
 - Fabricated Ornamental Trim
- 1.2 QUALITY ASSURANCE
- Control only materials that meet all manufacturer's recommendations and requirements.
- 1.3 DELIVERY, STORAGE AND HANDLING
- Deliver all materials in original packaging, unopened with no visible damage.
 - Protect materials and finish from damage during handling and installation.
- 1.4 PROJECT CONDITIONS
- Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer for optimum results.
 - Field Measurements: Verify actual measurements and openings by field measurements before fabrication. Show recorded measurements on shop drawings.
 - Allow at least 24 hours for materials to adapt to conditions at project site prior to installation.
- 1.5 WARRANTY
- Upon completion of work, provide a written Manufacturer's Limited Warranty for products installed as part of this project to the Original Owner.
- 1.6 MANUFACTURERS
- Acceptable Manufacturer:
 - LP Corporation
 - Or Equal
- 1.7 MATERIALS
- Manufactured PVC foam trim and sheets are free foam PVC that is homogeneous and free of voids, cracks and foreign inclusions and other defects. Edges must be square.
- 1.8 ACCESSORIES
- Fasteners:
 - Use corrosion resistant fasteners.
 - Use only fasteners recommended by manufacturer.
 - Adhesives:
 - Glue all trim joints with a compatible cellular PVC cement/adhesive.
 - Glue joints should be secured with a fastener and / or fastened on each side of the joint to allow adequate bonding time.
 - Surfaces to be glued should be smooth, clean and in complete contact with each other.
 - Sealants:
 - Use urethane, polyurethane or acrylic based sealants without silicone.
- 1.9 PREPARATION
- Protect surrounding and adjacent work as required to prevent damage to preceding work during execution of this work.
 - Perform all preparation necessary for a successful installation of products as specified in manufacturer's installation instructions.
- 1.10 INSTALLATION
- Full compliance with Manufacturer's instructions in all aspects of tasks required by this work.
 - Finishing:
 - For small blemishes, file holes with an approved exterior sanding block.
 - For larger holes or gaps, fill with an approved urethane acrylic sealant.
 - Follow paint manufacturer's recommendations for applying paint.
 - Adhesives:
 - Install compatible adhesives at PVC to PVC joints and for fastening in accordance with manufacturer's recommendations for proper installation of products.
- 1.11 PROTECTION
- Install temporary protective materials necessary to prevent significant damage to materials installed in this work. Remove protection when required to permit project completion.
- 1.12 CLEANING
- Remove all labels and protection materials.
 - Clean all surfaces following manufacturer's recommendations prior to final project completion.
 - Do not use harsh cleaning materials or methods that would damage finish.

END OF SECTION 06660

DIVISION 7 THERMAL PROTECTION

SECTION 07140 COLD FLUID-APPLIED WATERPROOFING

- 1.1 SECTION INCLUDES
- Waterproofing membrane, sheet flashing and accessories, including:
 - Geomembrane protection course.
 - Drainage panels.
 - Substrate preparation.
- 1.2 QUALITY ASSURANCE
- Installer Qualifications: Engage an experienced installer who is certified in writing and approved by waterproofing manufacturer for the installation of the specified waterproofing system.
- 1.3 DELIVERY, STORAGE, AND HANDLING
- Deliver materials to site labeled with manufacturer's name, product brand name and type, date of manufacture, shelf life, and directions for storing and mixing with other components.
 - Store materials as required by waterproofing manufacturer in clean, dry, protected location and within temperature range required by waterproofing manufacturer. Protect stored materials from direct sunlight.
 - Remove and replace material that cannot be applied within its stated shelf life.
- 1.4 PROJECT CONDITIONS
- Protect adjacent areas that will be waterproofed. Where necessary, apply masking to prevent staining of surfaces to be painted adjacent to other finish surfaces.
 - Perform work only when existing and forecast weather conditions are within manufacturer's recommendations for material and application method used.
- 1.5 WARRANTY
- General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents, and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
 - Warranty Period: 3 years after date of Substantial Completion.
 - Warranty does not include failure of waterproofing due to failure of substrate or formation of new joints and cracks in substrate that exceed 1/16 inch (1.6 mm) in width.
- 1.6 MANUFACTURERS
- Acceptable Manufacturer: Epro Waterproofing Systems
P. O. Box 347
Derby, KS 67037
Toll Free Tel: 800-882-1896
Email: eproserv@aol.com
 - Or Equal
 - Single Source: Obtain all waterproofing materials and system components from a single manufacturer.
- 1.7 WATERPROOFING SYSTEMS
- Foundation Walls: Use specified materials in following assembly:
 - First Course: High performance fluid-applied membrane waterproofing, 60 mils nominal thickness average when dry, minimum 60 mils (1.5 mm).
 - Second Course: Polyethylene geomembrane, minimum 6 mils thickness.
 - Third Course for Vertical Structures 30 Feet High or Less: Polyethylene drainage panel.
 - High Performance Fluid-Applied Membrane Waterproofing: Epro ECOLINE, single course, high build, cold-applied, waterborne polymer modified asphalt emulsion; capable of spray, roller, and brush application at ambient temperatures; non-toxic and odorless; with the following properties when cured:
 - Spray-Applied: ECOLINE-S.
 - EXAMINATION
 - PREPARATION
 - Clean and prepare substrate according to manufacturer's recommendations. Provide clean, dust-free, and dry substrate for waterproofing application.

DIVISION 7 THERMAL PROTECTION

SECTION 07140 COLD FLUID-APPLIED WATERPROOFING (Cont)

- 1.10 WATERPROOFING APPLICATION
- Mix and apply materials in accordance with manufacturer's instructions.
 - Install geomembrane courses over nominally cured fluid-applied membrane no later than recommended by manufacturer and before starting subsequent construction operations.
 - Overlap geomembrane course seams and treat over lap as recommended by manufacturer and secure with specified tape; install geomembrane to sheet flashing as recommended by manufacturer.
 - Drainage Panels: Place and secure panels to substrate according to manufacturer's instructions. Use adhesives and adhesive strips (sheet flashing that does not penetrate waterproofing as recommended by manufacturer. Overlap edges of dimpled core and ends of geo-textile to maintain continuity. Protect installed panels during subsequent construction.
 - Install drainage strip at foot of each wall, on top of footing, extending to subdrainage system or to daylight at lower grade elevation.
 - Patch deficient test areas with additional waterproofing to achieve specified minimum dry thickness extending minimum of 1 inch (25 mm) beyond the test perimeter.
- 1.11 CURING, PROTECTING, AND CLEANING
- Cure waterproofing according to manufacturer's recommendations, taking care to prevent contamination and damage during application stages and curing.
 - Clean spillage and soling from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION

SECTION 07210 - BUILDING INSULATION

- 1.1 SECTION REQUIREMENTS
- Surface-Burning Characteristics: ASTM E 84, and as follows:
 - Flame-Spread Index: 25 or less where exposed; otherwise, as indicated in Part 2 "Insulation Products" Article.
 - Smoke-Developed Index: 450 or less.
- 1.2 INSULATION PRODUCTS
- Extruded-Polyethylene Board Insulation: ASTM C 578, Type IV with flame-spread index of 75 or less.
 - Mineral-Fiber-Blanket Insulation: ASTM C 665, Type 1, unfaced with fibers manufactured from glass with flame-spread index of 25 or less.
- 1.3 ACCESSORIES
- Vapor Retarder: Polyethylene.
 - Eave Ventilation Troughs: Preformed, rigid fiberglass or plastic sheets designed to fit between roof framing members and to provide cross-ventilation between attic spaces and vented eaves.
- 1.4 INSTALLATION
- Install insulation in areas and in thicknesses indicated or required to produce R-values indicated. Cut and fit tightly around obstructions and fill voids with insulation.
 - Extend vapor retarder to extremities of areas to be protected from vapor transmission. Secure in place with adhesives or other anchorage. Locate seams at framing members, overlap, and seal with tape.

END OF SECTION 07210

SECTION 07461 - COMPOSITE FIBER SIDING

- 1.1 SECTION REQUIREMENTS
- A. SECTION INCLUDES
- Siding panels.
 - Accessories and trim.
- 1.2 QUALITY ASSURANCE
- Installer: Provide installer with not less than three years of experience with products similar to those specified.
- 1.3 DELIVERY, STORAGE, AND HANDLING
- Store products off the ground, on a flat surface, and under a roof or separate waterproof covering.
- 1.4 WARRANTY
- Register manufacturer's warranty, made out in Owner's name, with copy to Owner.
- 1.5 MANUFACTURER
- ALG BUILDING PRODUCTS.
 - Requests for substitutions will be considered in accordance with provisions of the contract documents.
- 1.6 PANELS
- Horizontal Siding: LP SMARTSIDE LAP SIDING.
 - Style: Smooth lap siding.
 - Width: 4"
 - Color: TBD
- 1.7 ACCESSORIES
- Trim: COMPOSITE Fiber board, cut from siding material; cut edges primed.
 - Provide the following trim:
 - Starter strip for lap siding.
 - Outside corners, butt to siding.
 - Sealant: Paintable, 100 percent acrylic latex caulk complying with ASTM C 920.
 - Sheet Metal Flashing: Minimum 26 gauge hot-dipped galvanized steel sheet, or aluminum.
 - Nails: Length as required to penetrate minimum 1-1/4 inch into solid backing; hot dipped, galvanized or stainless steel.
 - Building Wrap: Tyvek house wrap.
 - Finish Paint: 100 percent acrylic latex.
- 1.8 INSTALLATION
- Install in accordance with manufacturer's instructions and drawing details.
- 1.9 CLEANING
- As completion of work, remove debris caused by siding installation from project site.
 - Touch-up, repair or replace damaged products before Substantial Completion.

SECTION 07311 - ASPHALT SHINGLES

- 1.1 ASPHALT SHINGLES
- Fiberglass Shingles: ASTM D 3462 and as follows:
 - Multi-Strip Asphalt Shingles: MATCH EXISTING
- 1.2 ACCESSORIES
- Self-Adhering Sheet Underlayment - Ice and Water Shield: ASTM D 1970, SBS-modified asphalt; or slip-resisting-polyethylene surfaced; with release paper backing; cold applied.
 - Asphalt Roofing Cement: ASTM D 4586, Type II, asbestos free.
 - Roofing Nails: Aluminum, stainless-steel, or hot-dip galvanized steel shingle nails, minimum 0.120-inch diameter, of sufficient length to penetrate 3/4 inch into solid wood decking or extend at least 1/8 inch through OSB or plywood sheathing.
 - Sheet Metal Flashing and Trim:
 - Sheet Metal: Aluminum.
 - Fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual."
 - Drp Edge: Brake-formed sheet metal with at least a 2-inch roof deck flange and a 1-1/2-inch fascia flange with a 3/8-inch drip at lower edge.
 - Open-Valley Flashing: Fabricate with 1-inch high inverted-V profile at center of valley and equal flange widths of 10 inches.
 - Gutters: match existing profile
- 1.3 INSTALLATION
- Comply with recommendations in ARMA's "Residential Asphalt Roofing Manual" and asphalt shingle recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual."
 - Apply self-adhering sheet underlayment at eaves and rakes from edges of roof to at least 36 inches inside exterior wall line.
 - Apply self-adhering sheet underlayment at valleys extending 18 inches (450 mm) on each side.
 - Install valleys complying with ARMA and NRCA instructions. Construct closed valleys sheet metal open valleys.
 - Install metal flashings and other sheet metal to comply with requirements in Division 7 Section "Sheet Metal Flashing and Trim," recommendations in ARMA's "Residential Asphalt Roofing Manual," and asphalt shingle recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual."
 - Install first and remaining courses of asphalt shingles stair-stepping diagonally across roof deck with manufacturer's recommended offset pattern at succeeding courses, maintaining uniform exposure.

END OF SECTION 07311

New Residence for
JON HANSEN
Kane Conns
1170 East Kane Place
Milwaukee, Wisconsin



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Sheet Number
SPECIFICATIONS

SP-1

Date 03-10-16
Project Number: 158001

DIVISION 7 THERMAL PROTECTION

SECTION 07920 - JOINT SEALANTS

- 1.1 SECTION REQUIREMENTS
- A. Submittals: Product Data and color Samples.
- B. Environmental Limitations: Do not proceed with installation of joint sealants when ambient and substrate temperature conditions are outside limits permitted by joint sealant manufacturer or are below 40 deg F (4.4 deg C).
- 1.2 JOINT SEALANTS
- A. Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under service and application conditions.
- B. Sealant for General Exterior Use Where Another Type Is Not Specified:
 1. Single-component, neutral-curing silicone sealant, ASTM C 920, Type S; Grade NS; Class 25; Uses T, NT, M, G, A, and O.
- C. Sealant for Use in Interior Joints in Ceramic Tile and Other Hard Surfaces in Kitchens and Toilet Rooms and Around Plumbing Fixtures:
 1. Single-component, mildew-resistant silicone sealant, ASTM C 920, Type S; Grade NS; Class 25; Uses NT, G, A, and O; formulated with fungicide.
- D. Acoustical Sealant for Exposed Interior Joints:
 1. Nonsag, paintable, nonstaining, latex sealant complying with ASTM C 834.
- E. Acoustical Sealant for Concealed Joints:
 1. Nondrying, nonhardening, nonskinning, nonstaining, gumable, synthetic-rubber sealant recommended for sealing interior concealed joints to reduce transmission of airborne sound.
- 1.3 JOINT SEALANT BACKING
- A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer.
- B. Cylindrical Sealant Backings: ASTM C 1330, of size and density to control sealant depth and otherwise conform to manufacturer's installation performance.
- C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint.
- 1.4 INSTALLATION
- A. Comply with ASTM C 1193.
- B. Comply with ASTM C 919 for use of joint sealants in acoustical applications.

END OF SECTION 07920

DIVISION 8 DOORS AND WINDOWS

SECTION 08211 - FLUSH WOOD DOORS

- 1.1 SECTION REQUIREMENTS
- A. Quality Standard: NWWDA 1.5.1-A.
- B. Fire-Rated Wood Doors: Labeled by a testing and having jurisdiction based on testing per NFPA 252 at atmospheric pressure.
- 1.2 FLUSH WOOD DOORS
- A. Doors for Opaque Finish: Premium grade.
 1. Faces: Medium-density overlay.
- B. Interior Veneer-Faced Solid-Core Doors: Five or Seven-ply, particleboard cores.
- C. Fire-Rated Solid-Core Doors: Core construction to provide fire rating indicated, faces and grade to match non-fire-rated doors.
 1. Composite blocking where required to eliminate through-bolting hardware.
 2. Laminated-edge construction.
- D. Formed-steel edges and astragals for pairs of fire-rated doors.
- 1.3 FABRICATION AND FINISHING
- A. Factory fit doors to suit frame-opening sizes indicated and to comply with referenced quality standard.
 1. Comply with NFPA 80 for fire-resistance-rated doors.
- B. Factory machine doors for hardware that is not surface applied.
- C. Cut and trim openings to comply with referenced standards.
 1. Trim light openings with moldings indicated.
 2. Factory install louvers in prepared openings.
- 1.4 INSTALLATION
- A. Comply with WDMA's "How to Store, Handle, Finish, Install, and Maintain Wood Doors."
- B. Install fire-rated doors to comply with NFPA 80.
- C. Align and fit doors in frames with uniform clearances and bevels. Machine doors for hardware. Seal cut surfaces after fitting and machining.
- D. Repair, refinish, or replace factory-finished doors damaged during installation, as directed by architect.

END OF SECTION 08211

SECTION 08361 - SECTIONAL OVERHEAD DOORS - WOOD

- 1.1 SECTIONAL OVERHEAD DOORS
- A. Products:
 1. Timbercraft doors by Designer Doors 702 Troy Street, River Falls, WI 54022, 800.241.0525
- B. Panels: Wood stiles, rails and panels. Fabricated with waterproof glue and either primed mortise-and-tenon or dovetail construction.
 1. Door Size 8'-0" x 8'-0"
 2. Style: Swing Look
 3. Material: Western Cedar with V groove
 4. Windows: 2 rows-curved top.
 5. Field Stained.
- C. Glazed Panel Inserts: 6-mm clear float glass.
- D. Operation: Electrical.
 1. Opener: Phantom Belt Drive; opener 1/2 HP DC motor
 2. Provide (1) remote control for each door.
 3. Provide (1) digital wireless keypad entry system for each door.
- E. Tracks, Supports, and Hardware: Manufacturer's standard.
- 1.2 INSTALLATION
- A. Install door, track, and operating equipment complete with necessary hardware, jamb and head mold strips, anchors, inserts, hangers, and equipment supports.
- B. Fasten vertical track assembly to framing at not less than 24 inches o.c. Hang horizontal track from structural overhead framing with angle or channel hangers. Provide bracing and reinforcement as required for rigid installation of track and door.
- C. Lubricate bearings and sliding parts; adjust doors to operate easily, free from warp, twist, or distortion and fitting weathertight for entire perimeter.
- D. Test and adjust controls and safeties.

END OF SECTION 08361

SECTION 08362 - SECTIONAL OVERHEAD DOORS - METAL

- 1.1 SECTIONAL OVERHEAD DOORS
- A. Products:
 1. Manufacturer: Overhead Door Company
 2. Collection: Courtyard
 3. Model: I 63T
 4. Color: White
- B. Operation: **Electrical**
 1. Odyssey 1000 belt
- C. Tracks, Supports, and Hardware: Manufacturer's standard.
- 1.2 INSTALLATION
- A. Install door, track, and operating equipment complete with necessary hardware, jamb and head mold strips, anchors, inserts, hangers, and equipment supports.
- B. Fasten vertical track assembly to framing at not less than 24 inches (600 mm) o.c. Hang horizontal track from structural overhead framing with angle or channel hangers. Provide bracing and reinforcement as required for rigid installation of track and door.
- C. Lubricate bearings and sliding parts; adjust doors to operate easily, free from warp, twist, or distortion and fitting weathertight for entire perimeter.
- D. Test and adjust controls and safeties.

END OF SECTION 08362

DIVISION 8 DOORS AND WINDOWS

SECTION 08521 - METAL-CLAD WOOD WINDOWS

- 1.1 SECTION INCLUDES
- A. Awning Windows
- B. Casement Windows
- C. Double-Hung Windows
- 1.2 DELIVERY, STORAGE AND HANDLING
- A. Deliver windows materials and components in manufacturer's original, unopened, undamaged containers with identification labels intact.
- B. Store windows as recommended by manufacturer.
- 1.4 WARRANTY
- A. Manufacturer standard warranty indicating that the window unit will be free from material and workmanship defects from the date of substantial completion for the time periods indicated below:
 1. Window Unit: 20 years
 2. Glaz Finish: 20 years against peeling, checking, cracking, chalking or color change
 3. Glazing Insulated Glass: 20 years against seal breakage
- 1.5 MANUFACTURER
- A. JELD-WEN Windows and Doors
- B. Hardware:
 1. Awning Windows with manufacturer standard hardware Finish: TBD
 2. Double-Hung Windows with manufacturer standard hardware Finish: TBD
- C. Glazing
 1. Insulated Glass standard:
 - a. Air Space: Argon
 2. Exterior Insect Screen
 3. Material: Charcoal fiberglass screen cloth (18 by 16 mesh) set in painted roll formed aluminum frame.
- a. Frame Color: TBD
- E. Interior Insect Screen
 1. Material: Charcoal fiberglass screen cloth (18 by 16 mesh) set in painted roll formed aluminum frame.
- a. Finish: TBD
- 1.6 CONSTRUCTION ACCESSORIES
- A. Flashing
 1. Provide flashing per manufacturer's recommendation
- B. Sealants
 1. Refer to Joint Sealant Section
 2. Interior: Primejeld
- D. Exterior: 0.050 thick extruded aluminum cladding with fluoropolymer (70% Kynar 500), 3-coat finish in accordance with ANA# 42605.
 1. Standard Color: TBD
- 1.7 GENERAL
- A. Install windows in accordance with manufacturer's installation guidelines and recommendations.
- 1.8 CLEANING
- A. Remove Preserve® film from glass.
- B. Clean the exterior surface and glass with mild soap and water.
- 1.9 PROTECTION
- A. Protect installed windows from damage.
- END OF SECTION
- SECTION 081614 - FIBERGLASS EXTERIOR DOORS
- A. Fiberglass Exterior Doors
- B. Glazing
- 1.2 SUBMITTALS
- A. Product Data: Submit door manufacturer current product literature, including installation instruction.
- 1.3 DELIVERY, STORAGE AND HANDLING
- A. Deliver doors, materials and components in manufacturer's original, unopened, undamaged containers with identification labels intact.
- B. Store doors as recommended by manufacturer.
- 1.4 WARRANTY
- A. Manufacturer standard warranty indicating that doors will be free from material and workmanship defects from the date of substantial completion for the time periods indicated below:
 - 1.5 MANUFACTURER
 - A. JELD-WEN Windows and Doors
- 1.6 FIBERGLASS DOORS
- A. Series: Architectural Fiberglass Panel Exterior Door
- B. Style: Craftsman 3-light
- C. Finish: TBD
- D. Glass: Low E insulated.
- E. Hardware:
 1. Entry Locksets:
 - a. Exterior escutcheon plate
 - b. Mortise lock
 - c. Interior escutcheon plate
 2. Style and Finish: TBD
- 1.7 CONSTRUCTION ACCESSORIES
- A. Flashing
1. Per manufacturer's recommendations
- B. Sealants
 1. Refer to Joint Sealants
- 1.8 GENERAL
- A. Install doors in accordance with manufacturer's installation guidelines and recommendations.
- 1.9 PROTECTION
- A. Protect installed doors from damage.

SECTION 08710 - DOOR HARDWARE

- 1.1 SECTION REQUIREMENTS
- A. Submittals: Hardware Schedule.
- B. Deliver keys to Owner.
- C. For fire-rated openings provide hardware tested and listed by UL or FMG (NFPA 80). On exit devices provide UL or FMG label indicating "Fire Exit Hardware."
- 1.2 HARDWARE
- A. Manufacturers:
 1. See Schedule below
- 1.3 INSTALLATION
- A. Mount hardware in locations recommended by the Door and Hardware Institute, unless otherwise indicated.
- 1.4 HARDWARE SCHEDULE
- A. HINGES-INTERIOR DOORS
 1. ACCEPTABLE MANUFACTURERS: LAWENCE BROTHERS, SARGENT MANUFACTURING, STANLEY WORKS.
 2. PROVIDE (20 HINGES FOR DOORS UP TO 60" TALL, (3) HINGES FOR DOORS BETWEEN 61" AND 90", (4) HINGES FOR DOORS OVER 90" TALL
- B. SELF CLOSING HINGES-INTERIOR DOORS
 1. ACCEPTABLE MANUFACTURERS: LAWENCE BROTHERS, SARGENT MANUFACTURING, STANLEY WORKS.
 2. PROVIDE (20 HINGES FOR DOORS UP TO 60" TALL, (3) HINGES FOR DOORS BETWEEN 61" AND 90", (4) HINGES FOR DOORS OVER 90" TALL
- C. LOCKS AND LATCHES
 1. ACCEPTABLE MANUFACTURERS: SCHLAGE LOCK CO. STANLEY WORKS
 2. PROVIDE LEVER DESIGN HANDLES
- D. DEADBOLTS
 1. ACCEPTABLE MANUFACTURERS: SCHLAGE LOCK CO. STANLEY WORKS
- E. DOOR GASKETS
 1. ACCEPTABLE MANUFACTURERS: HAGAR COMPANIES, NATIONAL GUARD PRODUCTS, REISE ENTERPRISES
 2. AT FIRE RATED ASSEMBLIES COMPLY WITH NFPA 80 USING PRODUCTS THAT ARE LISTED AND LABELED ACCORDING TO UL 018 OR NFPA 252.
- F. WALL STOP
 1. ACCEPTABLE MANUFACTURERS: STANLEY WORKS OR EQ
 2. FINISH BRUSHED NICKLE

END OF SECTION 08710

DIVISION 9 FINISHES

SECTION 09260 - GYPSUM BOARD ASSEMBLIES

- 1.1 SECTION REQUIREMENTS
- A. Submittals: Product Data.
- B. Fire-Resistance-Rated Assemblies: Provide materials and construction identical to those tested in assemblies per ASTM E 119 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.
- 1.2 PANEL PRODUCTS
- A. Provide in maximum lengths available to minimize end-to-end butt joints.
- B. Gypsum Wallboard for general use: ASTM C 36, in thickness indicated, with manufacturer's standard edges. Regular type, unless otherwise indicated. Type X where indicated. Sag-resistant type for ceiling surfaces.
- C. Water-Resistant Gypsum Backing Board for use at sinks and toilets in bathrooms and kitchens: ASTM C 630, in thickness indicated. Regular type, unless otherwise indicated. Type X where required for fire-resistance-rated assemblies and where indicated.
- D. Cementitious Backer Units for use behind ceramic tile: ANSI A118.9.
- 1.3 ACCESSORIES
- A. Trim Accessories: ASTM C 1047, formed from galvanized or aluminum-coated steel sheet, rolled end.
 1. Provide cornerbead at outside corners, unless otherwise indicated.
 2. Glazing
 3. Provide control joints where indicated.
- B. Aluminum Accessories: Extruded-aluminum accessories indicated with manufacturer's standard corrosion-resistant primer.
- C. Joint-Treatment Materials: ASTM C 475.
 1. Joint Tape: Paper, unless otherwise recommended by panel manufacturer.
 2. Joint Compounds: Setting-type compounds.
- D. Cementitious Backer Unit Joint-Treatment Materials: Products recommended by cementitious backer unit manufacturer.
- E. Acoustical Sealant for Exposed and Concealed Joints: Nonsag, paintable, nonstaining latex sealant complying with ASTM C 834.
- F. Sound-Attenuation Blankets: ASTM C 665, Type 1 (unfaced).
- G. Miscellaneous Materials: Auxiliary materials for gypsum board construction that comply with referenced standards.
- 1.5 INSTALLATION
- A. Install and finish gypsum panels to comply with ASTM C 840 and GA-216.
 1. Isolate gypsum board assemblies from abutting structural and masonry work. Provide edge trim and acoustical sealant.
 2. Single-Layer Fastening Methods: Fasten gypsum board to supports with screws.
 3. Multi-Layer Fastening Methods: Fasten base layers and face layer separately to supports with screws.
- B. STC-Rated Assemblies: Comply with ASTM C 919 for location of edge trim and closing off sound-flanking paths around or through gypsum board assemblies.
- C. Fire-Resistance-Rated Assemblies: Comply with requirements of listed assemblies.
- D. Cementitious Backer Units: Comply with ANSI A118.11.
- E. Finishing Gypsum Board Assemblies:
 1. Unless otherwise indicated, provide sand finish: Embed tape and apply separate first, fill, and finish coats of joint compound to tape, fasteners, and trim flanges.
 2. At concealed areas, unless a higher level of finish is required for fire-resistance-rated assemblies, provide Level 1 finish: Embed tape at joints.
 3. At substrates for tile, provide Level 2 finish: Embed tape and apply separate first coat of joint compound to tape, fasteners, and trim flanges.

END OF SECTION 09260

SECTION 09660 - CARPET

- 1.1 CARPET
- A. Products: TBD
- 1.2 CARPET CUSHION
- B. Fiber Cushion
- 1.3 INSTALLATION
- A. Comply with CR1 104, Section 1.1, "Stretch-in Utilizing Tackless Strip."
- B. Comply with CR1 104, Section 1.2, "Carpet on Stairs."

END OF SECTION 09660

DIVISION 9 FINISHES

SECTION 09310 - CERAMIC TILE

- 1.1 SECTION REQUIREMENTS
- A. Submittals: Product Data and Samples.
- 1.2 CERAMIC TILE
- A. Ceramic tile that complies with standard grade requirements in ANSI A137.1.
 1. Specifications for Ceramic Tile.
 2. Ceramic Floor Allowances: See Finish List for Allowances
 3. Tile trim units that match characteristics of adjoining flat tile.
 4. Where indicated, protect exposed surfaces of tile against adherence of mortar and grout by factory precoating them with a hot-applied continuous film of petroleum paraffin wax. Do not coat unexposed tile surfaces.
- 1.3 INSTALLATION MATERIALS
- A. Setting and Grouting Materials: Comply with material standards in ANSI's "Specifications for the Installation of Ceramic Tile" that apply to materials and methods indicated.
 1. Thin-Set Mortar Type: Dry-set portland cement.
 2. Grout Type: Standard cement, unless otherwise indicated.
 3. Grout Color: To be Determined
 4. Setting-Bed Accessories: ANSI A108.1A.
 5. Cementitious Backer Units: Complying with ANSI A118.9, of thickness indicated.
 6. Waterproofing Membranes for Thin-Set Installations: ANSI A118.10, polymer sheet product.
 7. In-floor Electric Heat: Thermostat Corp. ThermoTile Mats with 120V programmable thermostat with 10 ft floor sensor
- 1.4 INSTALLATION
- A. Comply with tile installation standards in ANSI's "Specifications for the Installation of Ceramic Tile" that apply to materials and methods indicated.
- B. Comply with TCA's "Handbook for Ceramic Tile Installation."
 1. Over Wood Subfloors: TCA F144 (thin-set mortar bonded to cementitious backer units over wood subfloor).
 2. Wall Tile Installation Method(s):
 1. Over Gypsum Board: TCA W243 (thin-set mortar bonded to gypsum board).
 2. Over Cementitious Backer Units: TCA B412 (bathtub walls: thin-set mortar bonded to cementitious backer units).
 3. At showers, tubs, and where indicated, provide cementitious backer units and treat joints to comply with ANSI A108.11.
 4. Lay tile in grid pattern, unless otherwise indicated. Align joints where adjoining tiles on floor, base, walls, and trim are the same size.
 5. Perform cutting and drilling of tile without marking visible surfaces. Carefully grind cut edges of abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.

END OF SECTION 09310

SECTION 09640 - WOOD FLOORING

- 1.1 SECTION REQUIREMENTS
- A. Submittals: Product Data and material Samples.
- 1.2 WOOD FLOORING
- A. Engineered-Wood Strip or Plank Flooring: ANSI/HPVA LF.
 1. Supplier: Mannington Mills
 2. Products: American Classic Collection
 - a. Species: TBD
 - b. Thickness: 3/8 inch.
 - c. Construction: solid wood.
 - d. Width: 5 inches.
 - e. Length: Manufacturer's standard.
 - f. Edges: T&G.
 - g. Finish: MANUFACTURER'S STANDARD FINISH.
- 1.3 ACCESSORY MATERIALS
- A. Vapor Retarder: ASTM D 4397, polyethylene sheet not less than 6.0 mils
- 1.4 INSTALLATION
- A. Resilient Floor Tile: 26, Type I, No. 15, asphalt-saturated felt.
- 1.5 SECTION REQUIREMENTS
- A. Submittals: Product Data and Samples.
 1. Deliver Materials: Deliver to Owner 1 box for every 50 boxes or fraction thereof, of each type and color of resilient floor tile installed.
- 1.6 WOOD FLOORING
- A. Products: ARMSTRONG EXCELON STONETEX SERIES, but not less than
 1. Color and Pattern: TBD/MA's "Installing Hardwood Flooring."
 2. Size: 12 by 12 inch/3/8 at walls and other obstructions and terminations of flooring
- 1.7 RESILIENT STAIR NOSINGS
 1. Products: ARMSTRONG EXCELON STONETEX SERIES, nailed to solid-wood subfloor.
 2. Color and Pattern: TBD, of asphalt-saturated felt.
- 1.8 INSTALLATION ACCESSORIES
- A. Trovablock Leveling and Patching Compound: Latex-modified, portland cement- or blended hydraulic cement-based formulation provided or approved by flooring manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by manufacturer to suit resilient products and substrate conditions indicated.
- C. Metal Edge Strips: Extruded aluminum in maximum available lengths to minimize joints.
- 1.5 INSTALLATION
- A. Prepare concrete substrates according to ASTM F 710. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
- B. Lay out tiles so tile widths at opposite edges of room are equal and are at least one-half of a tile.
- C. Match tiles for color and pattern by selecting tiles from cartons in same sequence as manufactured and packaged. Lay in basket-weave pattern with grain direction alternating in adjacent tiles.

SECTION 09910 - PAINTING

- 1.1 SECTION REQUIREMENTS
- A. Summary: Paint exposed surfaces, new and existing, unless otherwise indicated.
 1. Paint the back side of access panels.
 2. Do not paint prefinished items, items with an integral finish, operating parts, and labels, unless otherwise indicated.
- B. Submittals: Product Data and Samples.
- C. Obtain block fillers and primers for each coating system from same manufacturer as finish coats.
- D. Extra Materials: Deliver to Owner 1 gal. of each color and type of finish coat paint used on Project, in containers, properly labeled and sealed.
- 1.2 PAINT
- A. All paint is to be low VOC
- B. BRANDS:
 1. Dovec # Reynolds Co. (Dovec).
 2. Glidden Co. (The) (Glidden).
 3. Benjamin Moore & Co. (Moore).
 4. PPG Industries, Inc. (PPG).
 5. Pratt & Lambert, Inc. (P & L).
 6. Sherwin-Williams Co. (S-W).
 7. Hallinan Lindsay
- B. Material Compatibility: Provide materials that are compatible with one another and with substrates.
- C. Material Quality: Manufacturer's best-quality paint material of coating types specified that are formulated and recommended by manufacturer for application indicated.
- 1.3 PREPARATION
- A. Remove hardware lighting fixtures and similar items that are not to be painted. Mask items that cannot be removed. Reinstall items in each area after painting is complete.
- B. Clean and prepare all surfaces in an area before beginning painting in that area. Schedule painting so cleaning operations will not damage newly painted surfaces.
- 1.4 APPLICATION
- A. Apply coatings by brush, roller, spray or other applicators according to coating manufacturer's written instructions.
 1. Use brushes only for exterior painting and where the use of other applicators is not practical.
 2. Use rollers for finish coat on interior walls and ceilings.
- B. Pigmented (Opaque) Finishes: Completely cover surfaces to provide a smooth, opaque surface of uniform appearance. Provide a fresh free of cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections.
- 1.5 EXTERIOR PAINT APPLICATION SCHEDULE
- A. Concrete, Stucco, and Masonry:
 1. Low-Luster Acrylic: Two coats over primer.
- B. Smooth Wood/PVC:
 1. Eggshell Acrylic Enamel: Two coats over primer.
- 1.6 INTERIOR PAINT APPLICATION SCHEDULE
- A. Gypsum Board:
 1. Eggshell Acrylic Enamel: Two coats primer.
- B. Woodwork and Hardboard:
 1. Semigloss, Acrylic Enamel: Two coats primer.

END OF SECTION 09910

DIVISION 10 SPECIALTIES

SECTION 10520 - FIRE PROTECTION SPECIALTIES

- 1.1 SECTION REQUIREMENTS
- A. Submittals: Product Data.
- B. Fire Extinguishers: NFPA 10, listed and labeled for the type, rating, and classification of extinguisher.
- 1.2 FIRE EXTINGUISHERS AND CABINETS
- A. Portable Fire Extinguishers
 1. Products: JI, Industries
 - a. Cores: Model 5K rated for ABC fires
 - b. Manufacturer's standard hanging bracket.
- B. Broom (1). Locate per Owner's instructions
- 1.3 INSTALLATION
- A. Install brackets at heights indicated or, if not indicated, at heights to comply with applicable regulations of authorities having jurisdiction.

SECTION 10601 - TOILET AND BATH ACCESSORIES

- 1.1 SECTION REQUIREMENTS
- A. Submittals: Product Data.
- 1.2 MATERIALS
- A. Stainless Steel: ASTM A 666, Type 304, No. 4 finish (astin), 0.031 2-inch minimum nominal thickness, unless otherwise indicated.
- B. Chromium Plating: ASTM B 456, Service Condition Number SC 2 (moderate service).
- C. Mirror Glass: ASTM C 1036, Type I, Class 1, Quality 42, nominal 6.0 mm thick, with silvering, electropolished copper coating, and protective organic coating complying with F5 DD-M-41.1.
- D. Galvanized Steel Mounting Devices: ASTM A 153/A 153M, hot-dip galvanized after fabrication and at heights indicated.
- E. Fasteners: Screws, bolts, and other devices of same material as accessory unit, tamper and theft resistant when exposed, and of galvanized steel when concealed.
- 1.3 TOILET AND BATH ACCESSORIES
- A. Allowances
 1. BATHROOM: \$175.00 per BATHROOM materials only
 - a. Toilet tissue dispenser
 - b. Towel Bar 24"
 - c. Towel Ring
 2. Master Bath SHOWER ROOM: \$50.00 per SHOWER ROOM materials only
 - a. Towel Bar 24"
 3. Master Bath ROOM: \$175.00 per Master Bathroom materials only.
 - a. Toilet tissue dispenser
 - b. Towel Bar 24"
 - c. Towel Ring
 - d. Medicine Cabinet
- 1.4 INSTALLATION
- A. Install accessories using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.
 1. Install TOWEL bars to withstand a downward load of at least 250 lbf when tested according to method in ASTM F 446.
- B. Adjust accessories for unencumbered, smooth operation and verify that mechanisms function properly. Replace damaged or defective items. Remove temporary labels and markings.

END OF SECTION 10601

DIVISION 15 MECHANICAL

SECTION 15410 - PLUMBING FIXTURES

- 1.1 SECTION REQUIREMENTS
- A. Submittals: Product Data for each type of plumbing fixture.
- B. Comply with requirements of Public Law 102-486, "Energy Policy Act," regarding water flow rate and water consumption of plumbing fixtures.
- C. Comply with applicable standards below:
 1. National Sanitation Foundation Construction: NSF 61.
- 1.2 WATER CLOSET
- A. Vitreous-China Water Closet: Elongated, siphon-jet type, floor-mounted
 1. Products: See Plumbing List
 2. Accessories and connections: provide all required accessories and connections for complete installation
- 1.3 LAVATORY
- A. Under Mount Sng.
 1. Products: See Plumbing List
 2. Accessories and connections: provide all required accessories and connections for complete installation
- 1.4 INSTALLATIONS
- A. Install fixtures with flanges and gasket seals.
- B. Fasten floor-mounted fixtures to substrate. Fasten fixtures having holes for securing fixture to wall construction, to reinforcement built into walls.
- C. Fasten counter-mounting plumbing fixtures to casework.
- D. Secure supplies to supports or substrate within pipe space behind fixture.
- E. Set shower receptors in leveling bed of cement grout.
- F. Install individual supply inlets, supply stops, supply risers, and tubular brass traps with cleanouts at fixture.
- G. Install water-supply stop valves in accessible locations.
- H. Install escutcheons at wall, floor, and ceiling penetrations in exposed, finished locations and within cabinets and millwork. Use deep-pattern escutcheons where required to conceal protruding pipe fittings.
- I. Seal joints between fixtures and walls, floors, and counters using sanitary-type, one-part, mildew-resistant, silicone sealant. Match sealant color to fixture color.
- J. Install piping connections between plumbing fixtures and piping systems and plumbing equipment.

END OF SECTION 15410

DIVISION 16 ELECTRICAL

SECTION 16500 - LIGHTING

- 1.1 SECTION REQUIREMENTS
- A. Submittals: Product Data for each luminaire, including lamps.
 1. Coordinate ceiling-mounted luminaires with ceiling construction, mechanical work, and security and fire-protection features mounted in ceiling space and on ceiling.
- 1.2 LUMINAIRES
- A. See Lighting Schedule for types and allowances
- 1.3 INSTALLATION
- A. Set units level, plumb, and square with ceiling and walls, and secure.
 1. Lamps: Where specific lamp descriptions are not indicated, lamp units according to manufacturer's written instructions.

END OF SECTION 16500

New Residence for
JON HANSEN
Kane Conns
1170 East Kane Place
Milwaukee, Wisconsin



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Sheet Number
SPECIFICATIONS

SP-2

Date
Project Number:

03-10-16
158001

DIVISION 1 GENERAL CONDITIONS

SECTION 01 100 - SUMMARY
 1.1 SUMMARY OF WORK
 A. Project: New Residence for Jon Hansen Kane Commons 1170 East Kane Place Milwaukee, Wisconsin
 B. OWNER Jon Hansen 1550 East Royall Place Apt 1004 Milwaukee, Wisconsin 53202
 C. Architect: Russell E. LaFrombois, III, LLC 229 East Wisconsin Avenue Suite 701 Milwaukee, Wisconsin
 D. The Work consists of the construction of a new residence as described in the Contract Documents.

SECTION 01 200 - PRICE AND PAYMENT PROCEDURES
 1.1 ALLOWANCES
 A. xx
 1.2 ALTERNATES
 A. xx
 B. xx
 C. xx
 1.3 UNIT PRICES: NO UNIT PRICES REQUIRED.
 A. xx

1.4 CONTRACT MODIFICATION PROCEDURES
 A. On Owner's approval of a proposal from Contractor, Architect will issue a Change Order on AIA Document G701, for all changes to the Contract Sum or the Contract Time.
 B. When Owner and Contractor disagree on the terms of a proposal, Architect may issue a Construction Change Directive on AIA Document G714, instructing Contractor to proceed with the change. Construction Change Directive will contain a description of the change and designate the method to be followed to determine changes to the Contract Sum or the Contract Time.
 1.5 PAYMENT PROCEDURES
 A. Submit a Schedule of Values WITH BID. In Schedule of Values, break down the Contract Sum into at least one line item for each Specification Section. Correlate the Schedule of Values with Contractor's Construction Schedule.
 B. Submit 3 copies of each application for payment on AIA Document G702/G03, according to the schedule established in Owner/Contractor Agreement.
 1. For the second Application for Payment through the Application for Payment submitted at Substantial Completion, submit partial releases of liens from each subcontractor or supplier for whom amounts were included in the previous Application for Payment.
 2. Submit final Application for Payment after completion of Project closeout procedures with release of liens and supporting documentation. Include consent of surety to final payment and insurance certificates.

END OF SECTION 01 200

SECTION 01 300 - ADMINISTRATIVE REQUIREMENTS
 1.1 PROJECT MANAGEMENT AND COORDINATION
 A. Coordinate construction to ensure efficient and orderly installation of each part of the Work.
 B. Conduct progress meetings at Project site every week. Notify Owner and Architect of meeting dates and times. Require attendance of each subcontractor or other entity concerned with current progress or involved with planning or coordination of future activities.
 1. Record minutes and distribute to parties involved, including Owner and Architect.
 1.2 SUBMITTAL PROCEDURES
 A. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 1. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
 2. Architect will not accept submittals from sources other than Contractor unless previously agreed to.
 3. Identify deviations from the Contract Documents.
 4. Submit three copies of each submittal.
 B. Place a permanent label or title block on each submittal for identification. Include the following information on the label:
 1. Project name.
 2. Date.
 3. Name and address of Contractor.
 4. Name and address of subcontractor or supplier.
 5. Number and title of appropriate Specification Section.
 C. Architect will review each action submittal, mark as appropriate to indicate action taken, and return copies less those retained. Compliance with specified requirements remains Contractor's responsibility.

1.3 ACTION SUBMITTALS
 A. Product Data: Mark each copy to show applicable choices and options. Include the following:
 1. Data indicating compliance with specified standards and requirements.
 2. Notation of coordination requirements.
 3. For equipment data, include rated capacities, dimensions, weights, required clearances, and furnished specialties and accessories.
 B. Shop Drawings: Submit Project-specific information drawn to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data. Submit 3 reproducible print at least 8-1/2 by 11 inches but no larger than 24 by 36 inches. Architect will return one print. Include the following:
 1. Dimensions, profiles, methods of attachment, large scale details, and other information, as appropriate for the Work.
 2. Identification of products and materials.
 3. Notation of coordination requirements.
 4. Notation of dimensions established by field measurement.
 C. Samples: Submit Samples finished as specified and identical with the material proposed. Where variations are inherent in the material, submit sufficient units to show full range of the variations. Include name of manufacturer and product name on label.
 1.4 INFORMATION SUBMITTALS
 A. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements.

END OF SECTION 01 300
SECTION 01 500 - TEMPORARY FACILITIES AND CONTROLS
 1.1 SECTION REQUIREMENTS
 A. Use Charges: Contractor shall pay use charges for temporary utilities.
 B. Temporary Utilities: At earliest feasible time, when acceptable to Owner, change over from use of temporary service to use of permanent service.
 1.2 EQUIPMENT
 A. Heating Equipment: Unless Owner authorizes use of permanent heating system, provide vented, self-contained heaters with thermostatic control.
 1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
 2. Heating Units: Listed and labeled, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use for type of fuel being consumed.
 1.3 TEMPORARY UTILITIES
 A. General: Engage appropriate local utility company to install temporary service or connect to existing service. Where utility company provides only part of the service, provide the remainder.
 B. Sanitary Facilities: CONTRACTORS MUST PROVIDE TOILET FACILITIES. THESE MUST REMAIN CLEAN AND IN PROPER WORKING ORDER AT ALL TIMES. NO COOKING SHALL BE ALLOWED IN THE BUILDING.
 1.4 TEMPORARY FACILITIES
 A. Collect waste daily and, when containers are full, legally dispose of waste off-site.
 1. Handle hazardous, dangerous, or unsanitary waste materials in separate closed waste containers. Dispose of material according to applicable laws and regulations and the soil management plan. Abide by management's requirements at all times.
 2. See Contract for requirements for recycling and other requirements for environmentally sound construction practices.
 B. Provide temporary enclosures for protection of construction and workers from inclement weather and to protect adjacent units and public spaces from dirt and dust.
 1.5 TEMPORARY CONTROLS
 A. Provide temporary barricades, warning signs, and lights to protect the public and construction personnel from construction hazards.
 1. Enclose construction areas with fences with lockable entrance gates, to prevent unauthorized access.
 1.6 TERMINATION AND REMOVAL
 A. Remove temporary facilities and controls before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

END OF SECTION 01 500

DIVISION 1 GENERAL CONDITIONS

SECTION 01 600 - PRODUCT REQUIREMENTS
 1.1 SECTION REQUIREMENTS
 A. Provide products of same kind from a single source. The term "product" includes the terms "material," "equipment," "system," and similar terms.
 B. Product Substitutions: Substitutions include products and methods of construction differing from that required by the Contract Documents and proposed by Contractor after award of the Contract.
 1. Submit four copies of each request for product substitution.
 2. Submit requests within 10 days after signing the Contract.
 3. Submit requests in time to permit processing of request and subsequent submittals, if any, sufficiently in advance of when materials are required in the Work. Do not submit unapproved substitutions on Shop Drawings or other submittals.
 4. Identify product to be replaced and provide complete documentation showing compliance of proposed substitution with applicable requirements. Include a full comparison with the specified product, a list of changes to other Work required to accommodate the substitution, and any proposed changes in the Contract Sum or the Contract Time should the substitution be accepted.
 5. Architect will review the proposed substitution and notify Contractor of its acceptance or rejection.
 C. Comparable Product Submittal:
 1. Submit four copies of each request for approval of products as comparable to basis-of-design products. Submit requests in time to permit processing of request and subsequent submittals, if any, sufficiently in advance of when materials are required in the Work. Do not submit unapproved products on Shop Drawings or other submittals.
 2. Identify product to be replaced and provide complete documentation showing compliance of proposed product with applicable requirements. Include a full comparison with the specified product.
 3. Architect will review the proposed product and notify Contractor of its acceptance or rejection.
 D. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 2. Deliver products to Project site in manufacturer's original sealed container or packaging, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 3. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
 4. Store materials in a manner that will not endanger Project structure.
 5. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.

1.2 PRODUCT OPTIONS
 A. Provide products that comply with the Contract Documents, are undamaged, and are new at the time of installation.
 1. Provide products complete with accessories, trim, finish, and other devices and components needed for a complete installation and the intended use and effect.
 B. Select products to comply with all of the following that are applicable:
 1. Where only a single product or manufacturer is named, provide the item indicated. No substitutions will be permitted.
 2. Where two or more products or manufacturers are named, provide one of the items indicated. No substitutions will be permitted.
 3. Where products or manufacturers are specified by name, accompanied by the term "available products" or "available manufacturers," provide one of the named items or comply with provisions for "comparable product" to obtain approval for use of an unnamed product or manufacturer.
 4. Where a single product is named as the "basis-of-design" together with the names of other manufacturers, provide the named product or comply with provisions for "comparable product submittal" to obtain approval for use of a product of one of the other named manufacturers.
 5. Where a product is described with required characteristics, provide a product that complies with those characteristics.
 6. Where compliance with performance requirements is specified, provide products that comply and are recommended in writing by the manufacturer for the application.
 7. Where compliance with codes, regulations, or standards, is specified, select a product that complies with the codes, regulations, or standards referenced.
 C. Unless otherwise indicated, Architect will select color, pattern, and texture of each product from manufacturer's full range of options that includes both standard and premium items.

END OF SECTION 01 600

CONSTRUCTION NOTES APPLIES TO ALL CONTRACTORS

A. ALL CONTRACTORS SHALL COORDINATE WORK WITH OWNER
 B. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND PAY ALL REQUIRED FEES.
 C. CONTRACTOR SHALL GUARANTEE ALL LABOR AND MATERIALS FOR ONE (1) YEAR.
 D. CONTRACTOR SHALL SUPERVISE AND DIRECT ALL WORK USING HIS BEST SKILL AND ATTENTION. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS AND METHODS TECHNIQUES AND SEQUENCES OF PROCEDURES, FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
 E. CONTRACTOR SHALL EXAMINE SITE, FIELD VERIFY ALL DIMENSIONS AND FIELD CONDITIONS PRIOR TO SUBMITTAL OF BID. COORDINATE ALL SITE VISITS WITH THE BUILDING OWNER/TEENANT. CONTRACTOR SHALL BECOME FAMILIAR WITH CONDITIONS AFFECTING THE WORK PRIOR TO BEGINNING OF WORK.
 F. DIMENSIONS INDICATED IN CONTRACT DOCUMENTS SHALL GOVERN. DO NOT SCALE DRAWINGS. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO THE CONTINUATION OF WORK.
 G. IN CASE OF CONFLICT BETWEEN DRAWINGS, LARGER SCALE DRAWINGS SHALL TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS.
 H. DEFINITIONS
 1. "ALIGN" SHALL MEAN TO ACCURATELY LOCATE FINISH FACES IN THE SAME PLANE.
 2. "SIMILAR" MEANS COMPARABLE CHARACTERISTICS FOR THE CONDITION NOTED. VERIFY DIMENSIONS AND ORIENTATION ON PLANS AND ELEVATIONS.

PATCHING AND CUTTING APPLIES TO ALL CONTRACTORS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
 B. This Section includes procedural requirements for cutting and patching.
 C. Related Sections include the following:
 1. "Selective Demolition" for demolition of selected portions of the building for alterations.
 2. Requirements in this Section apply to mechanical and electrical installations.
 D. DEFINITIONS
 1. Cutting: Removal of existing construction necessary to permit installation or performance of other Work.
 2. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.
 F. Inform Owner and Architect of cutting and patching including the following information:
 1. **Extent:** Describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided.
 2. **Changes to Existing Construction:** Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements.
 3. **Products:** List products to be used and firms or entities that will perform the Work.
 4. **Dates:** Indicate when cutting and patching will be performed.
 5. **Utilities:** List utilities that cutting and patching procedures will disturb or affect. List utilities that will be relocated and those that will be temporarily out of service. Indicate how long service will be disrupted.
 G. Materials: General: Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of existing materials.
 H. Cutting: Cut existing construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original installer's written recommendations.
 I. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements.

CLOSEOUT REQUIREMENTS APPLIES TO ALL CONTRACTORS

CLOSEOUT SUBMITTALS
 A. Record Drawings: Maintain a set of the Contract Drawings as Record Drawings. Mark to show installation that varies from the Work originally shown.
 B. Operation and Maintenance Data: Organize data into three-ring binders with identification on front and spine of each binder and pocket folders for folded sheet information. Include the following:
 1. Manufacturer's operation and maintenance brochures.
 2. Emergency instructions.
 3. Spare parts list.
 4. Wiring diagrams.
 5. Copies of warranties.

FINAL CLEANING
 A. Clean each surface or item as follows before requesting inspection for certification of Substantial Completion:
 1. Remove labels that are not permanent.
 2. Clean transparent materials, including mirrors. Remove excess glazing compounds. Replace chipped or broken glass.
 3. Clean exposed finishes to a dust-free condition, free of stains, films, and foreign substances. Leave concrete floors broom clean.
 4. Vacuum carpeted surfaces and wax resilient flooring.
 5. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 6. Clean the site. Sweep paved areas; remove stains, spills, and foreign deposits. Rake grounds to a smooth, even-textured surface.

CLOSEOUT PROCEDURES
 A. Substantial Completion: Before requesting Substantial Completion inspection, complete the following:
 1. Advise Owner of pending insurance changeover requirements.
 2. Submit specific warranties, maintenance agreements, and similar documents.
 3. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 4. Submit Record Drawings, operation and maintenance manuals, and similar final record information.
 5. Deliver spare parts, extra materials, and similar items.
 6. Changeover locks and transmit keys to Owner.
 7. Complete startup testing of systems and instruction of operation and maintenance personnel.
 8. Remove temporary facilities and controls.
 9. Advise Owner of changeover information related to Owner's occupancy, operation, and maintenance.
 10. Complete final cleaning requirements, including touchup painting.
 11. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

PLUMBING NOTES

A. PLUMBING SHALL BE DESIGN BUILD. PLUMBING WORK SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH THE STATE OF WISCONSIN UNIFORM DWELLING CODE SPS 325.
 B. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING SEPARATE PERMIT. FEE FOR PERMIT SHALL BE INCLUDED IN BID.
 C. PLUMBING DEVICES, PIPING, CONTROL DEVICES, AND OTHER DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL AND STATE REQUIREMENTS AND MANUFACTURER'S INSTRUCTIONS.
 D. SUBMITTALS
 1. PLUMBING PLANS
 2. PLUMBING RISER DIAGRAMS FOR ALL NEW WORK FOR OWNER REVIEW.
 3. FIXTURE CUT SHEETS AND SPECIFICATIONS FOR OWNER REVIEW.
 D. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING PLUMBING REQUIREMENTS FOR THE SCOPE OF THE WORK AND RECONFIGURE EXISTING SYSTEMS AS REQUIRED TO ACCOMMODATE REVISED AREAS.
 E. WORK SHALL INCLUDE BUT IS NOT LIMITED TO:
 1. FURNISH AND INSTALL ALL PLUMBING FIXTURES. FIXTURES SHALL INCLUDE BUT NOT LIMITED TO:
 a. WATER EFFICIENT FIXTURES WITH FAUCET AERATORS OF 1.5 GPM OR LESS FOR KITCHEN SINKS.
 b. TOILETS
 c. HANDHELD SHOWER HEAD
 d. ALL FLOOR DRAININGS
 e. SUMP CROCK
 2. PLUMBING CONTRACTOR SHALL PROVIDE ALL SUPPLY AND WASTE REQUIRED CONNECTIONS FOR NEW EQUIPMENT, TOILET ROOM FIXTURES
 3. FURNISH AND INSTALL NEW HOT WATER HEATER FOR PLUMBING NEEDS
 4. COORDINATE WITH HVAC CONTRACTOR FOR POSSIBLE TIES TO GEOTHERMAL SYSTEM
 F. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR CONCRETE AND ROOF CUTTING AND PATCHING AS REQUIRED FOR INSTALLATION OF NEW FIXTURES.
 G. PLUMBING CONTRACTOR SHALL PROVIDE ALL NECESSARY INFORMATION TO THE GENERAL CONTRACTOR REGARDING INSTALLATION REQUIREMENTS FOR FIXTURES FOR INSTALLATION INTO CASEWORK OR OTHER BUILT-IN ITEMS.
 H. PLUMBING SUPPLY LINES SHALL BE P.E.X. AS ALLOWED BY CODE.
 I. PLUMBING WASTE LINES SHALL BE PVC.
 J. PLUMBING CONTRACTOR SHALL SUBMIT PLANS, FIXTURE CUT SHEETS AND SPECIFICATIONS TO OWNER AND ARCHITECT FOR REVIEW.
 K. PLUMBING CONTRACTOR SHALL PARTICIPATE IN THE FOCUS ON ENERGY PROGRAM FOR THE PROJECT AND COMPLY WITH ALL REQUIREMENTS FOR THE WISCONSIN ENERGY STAR® HOMES PROGRAM. PLUMBING CONTRACTOR SHALL, AS REQUESTED, ATTEND DESIGN COORDINATION MEETINGS, PROVIDE TECHNICAL ASSISTANCE AND COMPLETE SUBMITTALS FOR THE FOCUS ON ENERGY AND/OR THE WISCONSIN ENERGY STAR HOMES® PROGRAM.

HVAC NOTES

A. HVAC SHALL BE DESIGN BUILD. HVAC WORK SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH THE STATE OF WISCONSIN UNIFORM DWELLING CODE SPS 323.
 B. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING SEPARATE PERMIT THE COST OF WHICH SHALL BE INCLUDED IN THE BID.
 C. HVAC DEVICES, ALL DUCTING, CONTROL DEVICES, AND OTHER DEVICES SHALL BEAR APPROVAL OF UNDERWRITERS LABORATORIES AND SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL AND STATE REQUIREMENTS AND MANUFACTURER'S INSTRUCTIONS.
 D. SUBMITTALS
 1. HVAC PLANS
 2. EQUIPMENT LAYOUT FOR OWNER REVIEW.
 3. FIXTURE CUT SHEETS AND SPECIFICATIONS FOR OWNER REVIEW.
 E. HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING MECHANICAL REQUIREMENTS FOR THE SCOPE OF THE WORK AND RECONFIGURE EXISTING SYSTEMS AS REQUIRED TO ACCOMMODATE REVISED AREAS.
 F. SCOPE OF WORK SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING:
 1. GEOTHERMAL CONNECTION & EQUIPMENT AS REQUIRED TO INTERFACE WITH HEAT, AIR CONDITIONING, GROUND SOURCE HEAT PUMPS SHALL BE HIGH EFFICIENCY WITH ENERGY STAR® RATING OR BETTER.
 2. UP TO 3 ZONES FOR ITEM
 3. NEW BRANCH DUCTWORK REQUIRED, ALL DIFFUSERS, GRILLES, CONTROLS, AND FOR BALANCING MECHANICAL SYSTEM.
 5. UNLESS NOTED, MOUNTING HEIGHT OF THERMOSTATS SHALL 52 INCHES AFF. THERMOSTATS SHALL BE LOCATED NEXT TO SWITCHES UNLESS OTHERWISE NOTED. LOCATIONS OF THERMOSTATS SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION.
 G. THE HVAC CONTRACTOR SHALL PARTICIPATE IN THE FOCUS ON ENERGY PROGRAM FOR THE PROJECT AND COMPLY WITH ALL REQUIREMENTS FOR THE WISCONSIN ENERGY STAR® HOMES PROGRAM. THE HVAC CONTRACTOR SHALL SELECT HIGH EFFICIENCY EQUIPMENT THAT COMPLIES WITH FOCUS ON ENERGY REQUIREMENTS FOR INCENTIVES. THE HVAC CONTRACTOR SHALL, AS REQUESTED, ATTEND DESIGN COORDINATION MEETINGS, PROVIDE DOCUMENTATION, TECHNICAL ASSISTANCE AND COMPLETE SUBMITTALS FOR THE FOCUS ON ENERGY AND/OR THE WISCONSIN ENERGY STAR HOMES® PROGRAM.

ELECTRICAL NOTES

A. ELECTRICAL SHALL BE DESIGN BUILD. ELECTRICAL WORK SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH THE STATE OF WISCONSIN UNIFORM DWELLING CODE SPS 324.
 B. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING SEPARATE PERMIT. FEE FOR PERMIT SHALL BE INCLUDED IN BID.
 C. ELECTRICAL DEVICES AND ALL WIRING FOR ELECTRICAL OUTLETS, CONTROL DEVICES, OR OTHER ELECTRICAL DEVICES SHALL BEAR APPROVAL OF UNDERWRITERS LABORATORIES.
 D. SUBMITTALS
 1. ELECTRICAL PLANS
 2. FIXTURE CUT SHEETS AND SPECIFICATIONS FOR OWNER REVIEW.
 E. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ELECTRICAL REQUIREMENTS FOR THE SCOPE OF THE WORK AND THAT ADEQUATE POWER IS AVAILABLE TO THE MODIFIED SPACES. ACCOMMODATE REVISED AREAS.
 F. WORK SHALL INCLUDE BUT IS NOT LIMITED TO:
 1. PROVIDE ELECTRICAL OUTLETS AS REQUIRED BY CODE.
 2. PROVIDE LIGHTING AS REQUIRED BY CODE.
 3. COORDINATE ELECTRICAL REQUIREMENTS OF ALL MECHANICAL AND PLUMBING FIXTURES/EQUIPMENT.
 4. COORDINATE ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT.
 G. ELECTRICAL ITEMS ARE SHOWN FOR LOCATION ONLY. ELECTRICAL SUBCONTRACTOR SHALL BE RESPONSIBLE FOR CIRCUITING AND SWITCHING IN ACCORDANCE WITH CODE.
 H. INDICATED DIMENSIONS ARE TO THE CENTERLINE OF THE RECEPTACLE OR CLUSTER OF RECEPTACLES, UNLESS OTHERWISE NOTED. WHERE ELECTRICAL RECEPTACLES, TELEPHONE/DATA RECEPTACLES, ETC. ARE SHOWN ADJACENT, LOCATE AS CLOSELY AS POSSIBLE AT AN DIMENSION LINES SHOWN.
 I. STANDARD ELECTRICAL WALL RECEPTACLES SHALL BE MOUNTED VERTICALLY, AT 18" MIN. ABOVE UNFINISHED FLOOR TO CENTER OF BOX UNLESS OTHERWISE NOTED.
 J. RECEPTACLES SHALL NOT BE INSTALLED BACK TO BACK.
 K. ALL LIGHT FIXTURES SHALL BE FULLY OPERATIONAL. REPLACE LAMPS, REPAIR BALLAST, AND CLEAN OR REPLACE LENSES AS REQUIRED.
 L. WHERE WALL MOUNTED PHONE, AND CABLE OUTLETS ARE SHOWN, THE CONTRACTOR SHALL PROVIDE PULL STRINGS AND RINGS. PHONE, DATA AND CABLE WIRING AND TERMINATIONS SHALL BE BY TENANT. COORDINATE WITH LANDLORD'S STANDARDS FOR TELEPHONE DATA AND CABLE CONNECTIONS

STRUCTURAL NOTES

GENERAL NOTES
 1. VERIFY ALL CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO FABRICATION OF ANY MATERIAL OR PERFORMING ANY WORK.
 2. WHERE DRAWINGS AND SPECIFICATIONS LANGUAGE DISAGREE, SPECIFICATIONS SHALL TAKE PRECEDENT.
 3. LOADS:
 ROOF LOADS: 16 PSF (DEAD) 30 PSF (LIVE) = 46 PSF (TOTAL)
 DECK LOADS: 21 PSF (DEAD) 40 PSF (LIVE) = 61 PSF (TOTAL)
 FLOOR LOADS: 16 PSF (DEAD) 40 PSF (LIVE) = 56 PSF (TOTAL)
WOOD NOTES
 1. ALL CONSTRUCTION SHALL BE EXECUTED IN CONFORMANCE WITH THE REQUIREMENTS OF THE FOLLOWING:
 PLYWOOD: US PRODUCT STANDARDS PS 1-83
 SOFT WOOD PLYWOOD STRUCTURE ICDB U.N.O.
 SHEATHING SHALL BE AS FOLLOWS U.N.O.
 ROOF: 5/8" OSB
 WALLS: 5/8" OSB
 PLYWOOD UNDERLAYMENT: 3/4" TONGUE AND GROOVE.
 2. LAY ALL STRUCTURAL PLYWOOD ON ROOF AND FLOORS WITH FACE GRAIN PERPENDICULAR TO SUPPORTS UNLESS NOTED OTHERWISE. PROVIDE "H" CLIPS AT MID SPAN BETWEEN ADJOINING SHEETS.
 3. PRESSURE TREATED DOUGLAS FIR - 1988 UBC STANDARD NO. 25-1.2
 4. ALL STRUCTURAL WOOD SHALL CONFORM WITH THE FOLLOWING SPECIFICATIONS:
 DOUGLAS FIRE - COAST REGION - WGLS GRADING RULES #16
 BEAMS JOISTS AND POSTS - DF #1 STRUCTURAL
 STUDS AND BLOCKING - DF #1 STRUCTURAL U.N.O.
 PLATES - DF #1
 5. ALL WOOD IN DIRECT CONTACT WITH EARTH OR CONCRETE SHALL BE PRESSURE TREATED
 6. BEARING AND SHEAR WALLS SHALL HAVE DOUBLE TOP FLATE LAPPED AT WALL AND PARTITION INTERSECTION WITH (3) 1GD NAILS, STAGGER SPLICES OF UPPER AND LOWER TOP PLATES
 7. PROVIDE SOLID BLOCKING BETWEEN JOISTS AND RAFTERS AT ALL SUPPORTS
 8. HOLES FOR BOLTS IN WOOD SHALL BE PORED WITH A BIT OF THE SAME NOMINAL DIAMETER AS THE BOLT PLUS 1/16"
 9. HOLES FOR LAG SCREWS SHALL BE FIRST BORED TO THE SAME NOMINAL DIAMETER AND DEPTH AS THE SHANK AND THE REST NO LARGER THAN THE ROOF OF THE THREAD.
 10. LAG SCREWS AND WOOD SCREWS SHALL BE SCREWED AND NOT DRIVEN INTO PLACE. SOAP MAY BE USED TO LUBRICATE SCREWS.
 11. ALL BOLTS AND LAG SCREWS SHALL BE PROVIDED WITH METAL WASHERS UNDER HEADS AND NUTS WHICH BEAR ON WOOD (APPLIES ALSO TO INSERTED EXPANDING FASTENERS, RED HEAD ETC).
BOLT DIAMETER MACHINE WASHER STEEL PLATE WASHER
 5/8" DIA 2 3/4" DIA X 1 1/16" 2 1/2" X 2 1/2" X 1/4"
 3/4" DIA 3" DIA X 7/16" 3" X 3" X 5/16"
 7/8" DIA 3 1/2" DIA X 7/16" 3 1/2" X 3 1/2" X 3/8"
 1" DIA 4" DIA X 1/2" 3 3/4" X 3 3/4" X 3/8"
 12. ALL BOLTS AND LAG SCREWS SHALL BE TIGHTENED ON INSTALLATION AND RETIGHTENED BEFORE CLOSING IN OR AT THE COMPLETION OF THE JOB (IF EXPOSED)
 13. CONNECTOR HARDWARE MODEL NUMBERS ARE THOSE FOR THE SIMPSON STRONG TIE COMPANY. EQUIVALENT CONNECTORS WITH I.C.B.O. ACCEPTANCE MAY BE SUBSTITUTED. ALL JOIST HANGERS SHALL BE SIMPSON U STANDARD UNLESS NOTED OTHERWISE.
 14. ALL NAILS FOR STRUCTURAL WORK SHALL BE COMMON WIRE NAILS CONFORMING TO THE FOLLOWING MINIMUM SIZES:
 2D 0.131" DIAMETER X 2 1/2"
 10D 0.148" DIAMETER X 3"
 10DSHORTS 0.148" DIAMETER X 1 5/8" + THICKNESS OF SPLICE
 16D 0.162" DIAMETER X 3 1/2"
 20D 0.192" DIAMETER X 4"
 PATTERNS AND SCHEDULES SHALL BE IN ACCORDANCE WITH THE WISCONSIN UNIFORM DWELLING CODE CHAPTER 321 "FASTENING SCHEDULE"

CONCRETE NOTES
 1. ALL CONCRETE WALLS SHALL BE 4000 PSI IN 28 DAYS
 2. CONCRETE SLABS SHALL BE 4000 PSI IN 28 DAYS
 3. REINFORCEMENT FOR CONCRETE WALLS SHALL BE ASTM A615 GR. 60
 4. REINFORCEMENT FOR SLABS ON GRADE SHALL BE WWM 66 1.4 X 1.4 MID THICKNESS OF SLAB.

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BUILDING DATA

APPLICABLE CODES
 xx

New Residence for JON HANSEN

Kane Commons
 1170 East Kane Place
 Milwaukee, Wisconsin

NUMBER	NAME	DATE
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C1	SITE PLAN AND DETAILS	03-10-16
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Sheet Number DRAWING INDEX AND GENERAL NOTES T1

Date 03-10-16
 Project Number: 158001



HOUSE DOWN THE BLOCK



HOMES EAST OF SITE



HOMES ACROSS THE STREET FROM SITE





HOMES EAST OF SITE



HOMES EAST OF SITE



HOMES ACROSS THE STREET FROM SITE





**HOMES ACROSS THE STREET
LOOKING WEST FROM SITE**



**HOMES ACROSS THE
STREET TO THE WEST
OF SITE**



**KANE COMMONS
HOMES**



New Residence for
JON HANSEN
1170 East Kane Place, Milwaukee Wisconsin
PH-3

04/11/16



**KANE COMMONS HOMES
LOOKING WEST**



PROPOSED NEW HOME

