MEETING AGENDA (AMENDED)

Board of Zoning Appeals

City Hall • 3800 Municipal Way • Hilliard, Ohio 43026
and Live-Streaming on YouTube

Thursday, December 15, 2022 | 7:00 pm

1. **Call to Order**
2. **Pledge of Allegiance to the Flag**
3. **Roll Call**
4. **Approval of the Meeting Minutes – November 17, 2022**
5. **Oath to Tell the Truth**
6. **Changes to the Agenda (requests for postponements, withdrawals, or change in order of cases)**
7. **New Cases:**

CASE 1: BZA-22-37 – KIMES RESIDENCE – 5190 NORWICH STREET
PARCEL NUMBERS: 050-000321 & 050-000293
APPLICANT: Hayden & Chelsea Kimes, 5190 Norwich Street, Hilliard, OH 43026.
REQUEST: Review & approval of a variance to Hilliard Code Section 1115.03 to reduce the required side yard from 5.0 feet to 3.5 feet for a 3,970-square-foot building and attached garage addition.

CASE 2: BZA-22-38 – SEGHI RESIDENCE – 4340 ALDER DRIVE
PARCEL NUMBER: 050-000760 (Avery Road Subdivision, Lot 138)
APPLICANT: Joel Seghi, 4340 Alder Drive, Hilliard, OH 43026.
REQUEST: Review and approval of variances to Hilliard Code Section 1109.03 to reduce the required front setback for an attached garage from 35 feet to ±21 feet and to reduce the required rear yard from 35 feet to 9 feet for a 648-square-foot building and attached garage addition.

CASE 3: BZA-22-39 – PETTIBONE RESIDENCE – 2893 HILLIARD ROME ROAD
PARCEL NUMBER: 050-002927; 050-002028
APPLICANT: Jason Pettibone, 2893 Hilliard Rome Road, Hilliard, OH 43026.
REQUEST: Review and approval of variance to Hilliard Code Section 1121.02(b)(6) to increase the height of an existing accessory structure from 14 feet to 16.5 feet.

CASE 4: BZA-22-40 – COLORADO MOUNTAIN SPORTS – 4445 CEMETERY ROAD
PARCEL NUMBER: 050-002824
APPLICANT: Cemetery Rd Holdings LLC, c/o Eric Bahgat, 4445 Cemetery Road, Hilliard, OH 43026.
REQUEST: Review and approval of a variances to Hilliard Code Section 1127.04 to approve a comprehensive site parking plan for a two-story, 3,240-square-foot building addition on 0.44-acre.

CASE 5: BZA-22-41 – COLLEY & SMITH RESIDENCE – 4375 KERR DRIVE
PARCEL NUMBER: 050-000811
APPLICANT: Joseph Colley & Jennifer Smith, 4375 Kerr Drive, Hilliard, OH 43026.
REQUEST: Review and approval of a variance under the provisions of Hilliard Code Section 1301.03 and the 2019 Residential Code of Ohio to increase the maximum size of the evaporator coil to a 3-ton horizontal system.

8. Communications

9. Adjournment

[END OF AGENDA | DECEMBER 15, 2022]

MEETING MINUTES

Board of Zoning Appeals

City Hall • 3800 Municipal Way • Hilliard, Ohio 43026
and Live-Streaming on YouTube

Thursday, November 17, 2022 | 7:00 pm

CALL TO ORDER
President Piper called the Regular Meeting of Board of Zoning Appeals to order at 7:00 PM.

PLEDGE OF ALLEGIANCE TO THE FLAG
President Piper led the Board and attendees in the Pledge of Allegiance.

ROLL CALL

Attendee Name:	Title:	Status:
President Matthew Piper	President	Present
Vice President Aaron Epling	Vice President	Present
Steve Donato	Member	Present
James Martin	Member	Present
Greg St. Clair	Member	Present
Arthur Steele	Member	Present
Bobby Stepp	Member	Present

Staff Members Present: Planning Director John Talentino; Planning Manager Carson Combs; Administrative Assistant/Acting Clerk Nicole Starrett.
Others Present: Assad Quathifachi applicant for BZA-22-34 and one other member of the public was present.

APPROVAL OF MEETING MINUTES – September 15, 2022
Mr. Greg St. Clair made a motion to approve the September 15, 2022, meeting minutes. The motion was seconded by President Matthew Piper.

Status:	Approved (7-0) by Voice Vote
Ayes:	

CHANGES TO THE AGENDA (requests for postponements, withdrawals, or change in order of cases)
Mr. Combs confirmed there were no changes to the agenda.

OATH TO TELL THE TRUTH
President Piper administered the Oath to Tell the Truth.

CHANGES TO THE AGENDA
There were no additions or corrections to the agenda.

NEW CASES:

CASE 1: BZA-22-34 – QUATHIFACHI / KROUROU RESIDENCE – 5217 SCIOTO DARBY ROAD
PARCEL NUMBER: 050-000893 (Mary K. Conklin Subdivision – Lot #20)
APPLICANT: Bouchra Krourou and Assad Qathifachi, 5217 Scioto Darby Road, Hilliard, OH 43026.
REQUEST: Review and approval of a variance to Hilliard Code Section 1109.03 to reduce the required rear yard from 35 feet to 9 feet for a 272-square-foot addition to an existing single-family home.

[Mr. Combs provided the staff report.]

BACKGROUND:

The site includes 0.157-acre located on the south side of Scioto Darby Road, approximately 100 feet northwest of Conklin Drive. The parcel is Lot #20 within the Mary K. Conklin Subdivision and is zoned R-2, Low/Medium Residential District. The subdivision was recorded in 1984 and includes lots that are generally 63' x 135' in size. Properties surrounding the site are zoned R-2 as part of the Conklin Subdivision, and residences on the north side of Scioto Darby Road are also residences zoned R-2 as part of the Luxair Addition subdivision. The property is adjacent to Reserve A, which is owned by the City of Hilliard and is the former location of a sanitary lift station. Application of the R-2 zoning classification has resulted in the need for many variances in the city's older neighborhoods to permit additions and other improvements. This is a request for variances to permit the construction of a 272-square foot home addition.

CONSIDERATIONS:

- The applicant is proposing to install a 272-square-foot addition to the rear of the 1,650-square-foot ranch-style home (total 1,922 square feet). Analysis of the property to applied zoning standards includes the following:

	R-2 Requirement	Existing Lot
Minimum Lot Size	11,200 sf	6970 sf
Minimum Lot Width	80 feet	73 feet

- The proposed addition would be centrally located off the rear of the home. The addition would comply with the required side yard setback of 10 feet. This lot within the subdivision has a more compact size and shape because of (1) the curvature of Conklin Drive and (2) the flag shape of Reserve A, which was included in the subdivision because of the location of a pump station for the sanitary main. As a result, the rear yard has much less depth and converges to a point. The proposed addition would be located 9 feet from the rear property line, which has a required setback of 35 feet. Based on the R-2 standards, the required rear setback extends to the midpoint of the side elevation facing Reserve A and almost to the front elevation of the side facing toward Conklin Drive.
- Maximum lot coverage for homes in the R-2 District are limited to a 30 percent for structures. Given the much smaller size of the lot, the proposed improvements still result in only a 27.6% percent lot coverage which is still under the R-2 maximum.
- As part of this application, staff determined that the property owner had installed a concrete driveway addition and placed an accessory structure within Reserve A. The City is working with the property owner to address the Code issues and the property owner has been cooperating.
- The original pump station and forced main within Reserve A was taken out of service long ago and replaced with gravity flow with the completion of the Luxair development on the other side of Scioto Darby Road. Given those changes, the reserve is not necessary, and the City is in the initial process to transfer the property while maintaining a utility easement to access the sanitary line and manholes. Expected in 2023, that transfer would significantly increase the backyard space of this site and add an additional 0.05-acre to the property.

STAFF RECOMMENDATION:

Staff finds that the proposed variance is generally consistent with the spirit and intent of the Zoning Code. As proposed, improvements to the residence will not adversely affect the character of the surrounding neighborhood, nor be a detriment to surrounding neighbors. Staff finds the proposed variances will not affect public services and alternative options have been evaluated. While the applicant could utilize the property without the addition, the proposed improvements should be highly encouraged in the City's older neighborhoods where investment is necessary to maintain quality for all residents. The R-2 District standards as applied to such older neighborhoods is not appropriate to the size and scale of lots and should be considered for revision as part of Zoning Code updates following the completion of the current Comprehensive Plan process. Staff, therefore, recommends that the proposed rear setback variance be approved with two conditions:

1) That a zoning certificate be obtained for the addition prior to the issuance of building permits; and
2) That all applicable building permits be obtained prior to construction.

[END OF REPORT | BZA-22-34]

Mr. Stepp inquired if any concerns were raised by nearby property owners. Mr. Combs clarified that notices were sent, and no comment had been received.

Mr. St. Clair inquired about the pump station on the adjacent reserve. Mr. Combs said that the original pump station was located at the current location of the shed and was taken out of commission when the adjacent subdivision was built and the line was converted to gravity flow. He noted that only an easement was necessary and staff was in the approval process to transfer the reserve, which would provide a larger backyard.

Mr. Martin inquired about the location of the addition. The applicant, Assad Quathifachi confirmed that the addition will be built in the location of the existing deck and that all new foundation will be provided.

With no comment from the public, Mr. Steele made a motion (seconded by President Piper) to approve a variance to Hilliard Code Section 1109.03 to reduce the required rear yard from 35 feet to 9 feet for a 272-square-foot addition to an existing single-family home with two conditions:

1) That a zoning certificate be obtained for the addition prior to the issuance of building permits; and
2) That all applicable building permits be obtained prior to construction.

Status:	Approved (7-0).
Mover:	Mr. Arthur Steele
Seconder:	President Matthew Piper
Ayes:	President Matthew Piper, Vice President Aaron Epling, Mr. Bobby Stepp, Mr. Greg St. Clair, Mr. James Martin, Mr. Steve Donato, and Mr. Arthur Steele.

PRESIDENT'S COMMUNICATION

There were no topics for discussion. Mr. Combs noted that there would be at least one case next month.

ADJOURNMENT – 7:09 PM

CERTIFICATION:

Carson Combs, Planning Manager
December 16, 2022

[END OF MINUTES | November 17, 2022]

STAFF REPORT

Board of Zoning Appeals

City Hall • 3800 Municipal Way • Hilliard, Ohio 43026
and Live-Streaming on YouTube

Thursday, December 15, 2022 | 7:00 pm

CASE 1: BZA-22-37 – KIMES RESIDENCE – 5190 NORWICH STREET
PARCEL NUMBERS: 050-000321 & 050-000293
APPLICANT: Hayden & Chelsea Kimes, 5190 Norwich Street, Hilliard, OH 43026.
REQUEST: Review & approval of a variance to Hilliard Code Section 1115.03 to reduce the required side yard from 5.0 feet to 3.5 feet for a 3,970-square-foot building and attached garage addition.

BACKGROUND:

The site consists of two parcels totaling 0.54 acre located on the northeast side of Norwich Street approximately 200 feet southeast of Hamilton Road. The Franklin County Auditor records indicate the 2,210-square-foot house was constructed in 1900. The site also includes a ±980-square-foot detached garage. On December 8, 2022, the Planning and Zoning Commission granted approval of an Old Hilliard District Plan for the proposed demolition of the detached garage and home addition. The applicant is now requesting approval of a side yard variance that would allow the project to move forward to building permits.

CONSIDERATIONS:

- *Comprehensive Plan*. The site is zoned OH-RD, Old Hilliard Residential District. Single-family residence is a permitted use in this zoning district. The Hilliard Comprehensive Plan recommends the site for medium-density residential housing. New infill development should follow the residential and architectural pattern that exists. Parking should be located as to not dominate the front of the structure and side-loaded or detached garages are preferred. Front porches and patios are strongly encouraged in this area. The proposed modifications adhere to these general recommendations.
- *Design Requirements*. According to Hilliard Code Section 1115.05, the architectural design of buildings must create and enhance the community image. Variations in façade elements shall be incorporated into all sides of the principal building to minimize the perceived mass and scale. The width of a principal building façade along a public street shall be a minimum of 60 percent of the lot width. Colors shall be neutral and natural tones with low reflectivity. Accent and trim colors must complement the effect of the primary building color. Bold, brash, intense, bright, fluorescent, black or metallic accent colors are prohibited, unless approved by the Planning and Zoning Commission for very limited application. All exterior colors should be subdued, with strong colors such as reds, blues, and golds, etc., should only be applied to trim and accent being avoided. Roof colors shall be muted and compatible with the dominant building color. Sloped roofs shall be a minimum 6/12 pitch and a maximum 12/12 pitch. **The Planning and Zoning Commission as part of its review found the proposed architecture to be an appropriate design.**
- *Zoning Standards*. The proposal includes the demolition of the rear half of the existing house and the existing detached garage. The proposed addition consists of a new wrap-around front porch, new first and second floors at the rear of the house and a 3-car garage on the southeast side of the house. The following table compares the proposal with applicable zoning standards. It should be noted that the existing home is set back 25.5 feet from the right-of-way and the upgraded porch will maintain the

existing setback with steps oriented toward the street. The new garage will also be set back approximately 58 feet from the Norwich Street right-of-way line so as to not dominate the front of the house consistent with the recommendations in the Comprehensive Plan. **The applicant is seeking a variance to reduce the required side yard from 5 feet to 3.5 feet for the proposed garage addition.** The attached garage would replace the existing accessory structure which is located on the property line (0-foot setback).

Zoning Standard	OH-RD District	Site
Front	0 to 25 feet	25.5 feet
Side (total side)	5 feet (12 feet)	26.8 feet (north) 0 feet (south current) 3.5 feet (south proposed)
Rear	25 feet	158 feet
Building Height	35 feet	±21 feet (est)
Min Building Size	1,300 sf	2,989 sf + existing home

- *Design Details.* The proposed two-story building addition includes 1,163 square feet on the first floor, 1,826 square feet on the second floor, and, on the southeast side of the house, a 981-square-foot attached garage and a new chimney. A new front porch is proposed along the entire front of the house and along a portion of the northwest side and will feature a standing seam metal roof. Exterior materials for the proposed addition include horizontal composite board siding (*Hardie Plank* 8-inch exposure – *Sherwin Williams* SW 7008 "Alabaster") in combination with composite board shingle siding (*Hardie Shingle Siding* SW 7008 "Alabaster"), standing seam metal roofing (Galvanized color) on the front porch and a portion or the rear elevation, and asphalt shingles (*Certainteed* Landmark Pro "Moire Black"). The chimney is shown with cultured stone (*Dutch Quality* "Kentucky Limestone" or "Tuscan Ridge"). The proposed roof pitch is 10/12, except on the front porch which ranges from 3/12 to 4.5/12. Proposed windows are white double-hung 2-over-2 panels consistent with those on the existing dwelling. The front door and side porch door are red (*Sherwin Williams* SW 7587 "Antique Red"), and all other exterior doors including the garage door are white (*Sherwin Williams* SW 7008 "Alabaster"). Shutters are blue (*Sherwin Williams* SW 6244 "Naval Blue") and gutters and downspouts are white. Exterior trim and soffits will match the siding color. **The Planning and Zoning Commission approved materials and colors as part of its review on December 8, 2022.**

STAFF RECOMMENDATION:

Staff finds that the proposed variance request is generally consistent with the spirit and intent of the Zoning Code and furthers the goals of the Hilliard Comprehensive Plan. As proposed, improvements to the residence will not adversely affect the character of the surrounding neighborhood, nor be a detriment to surrounding neighbors. Staff finds the proposed variances will not affect public services and alternative options have been evaluated. While the applicant could utilize the property without the addition, the proposed improvements will be architecturally compatible with the surrounding area and be an improvement to the general area. Based on these findings, staff recommends that the proposed setback variance be granted with three conditions:

1) That the garage is located not less than 50 feet from the Norwich Street right-of-way line;
2) That exterior materials and colors be used as proposed; and
3) That a building permit be obtained prior to construction.

[END OF REPORT | BZA-22-37]

ATTACHMENT

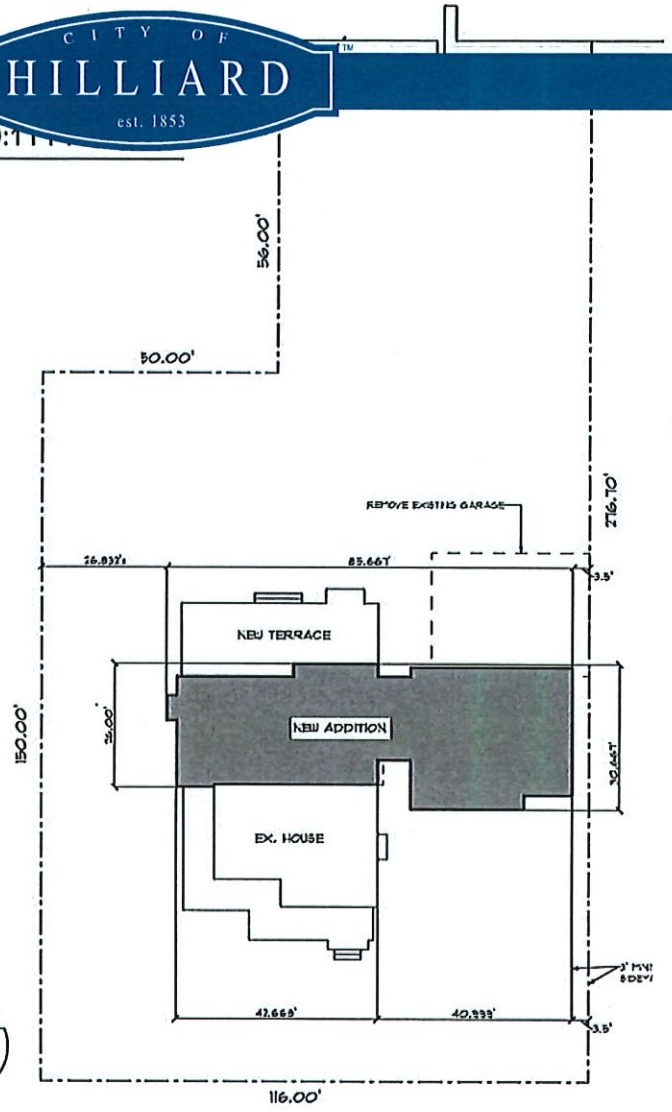

Norwich Street
11/30/2021
© All EagleView Technology Corporation

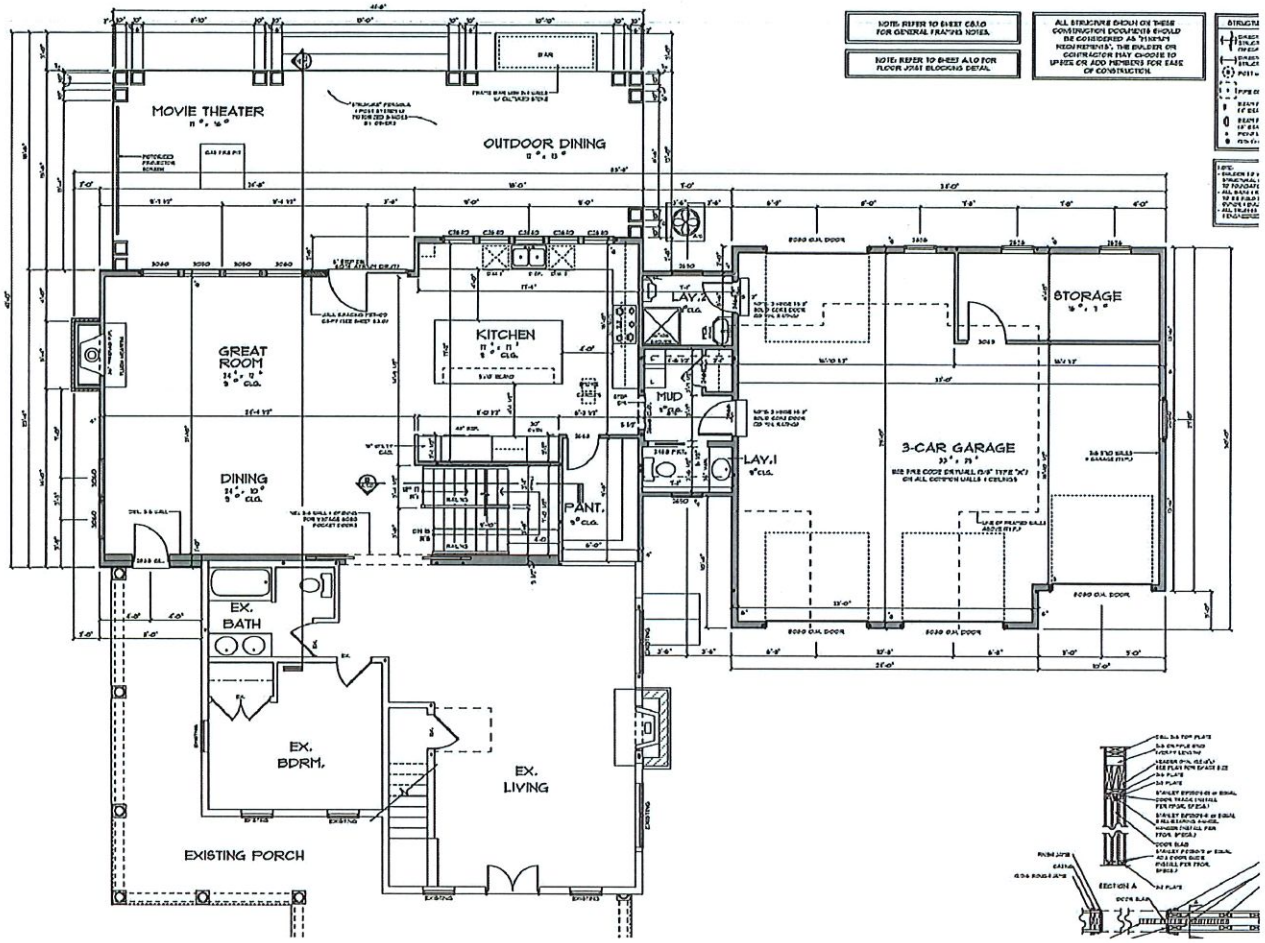
ATTACHMENT

CITY OF HILLIARD est. 1853

2022 3:59:11

PROPOSED ADDITION – FIRST FLOOR

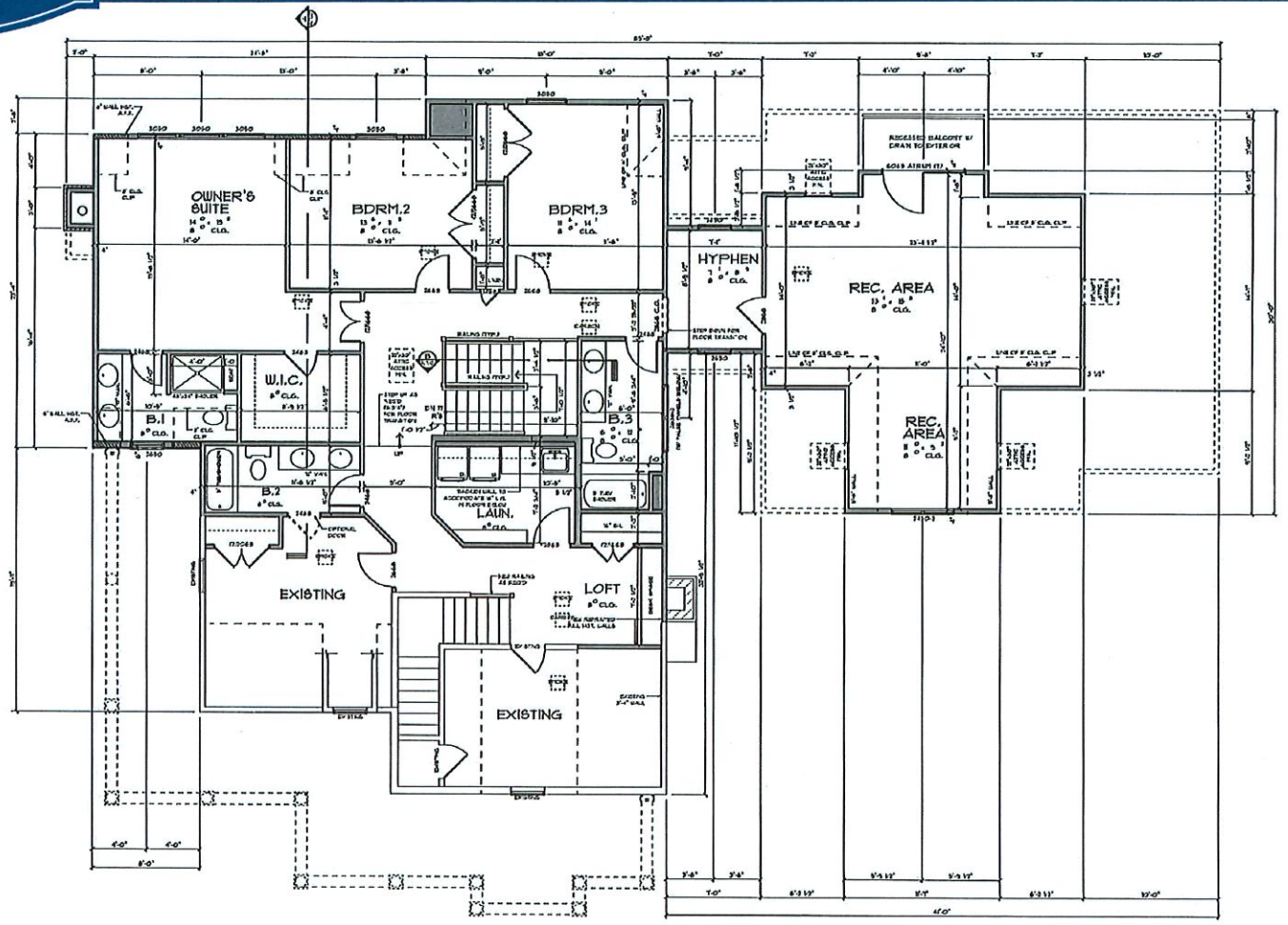




ATTACHMENT

CITY OF HILLIARD est. 1853

PROPOSED ADDITION – SECOND FLOOR



SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

ATTACHMENT

CITY OF HILLIARD est. 1853

ARCHITECTURAL ELEVATIONS

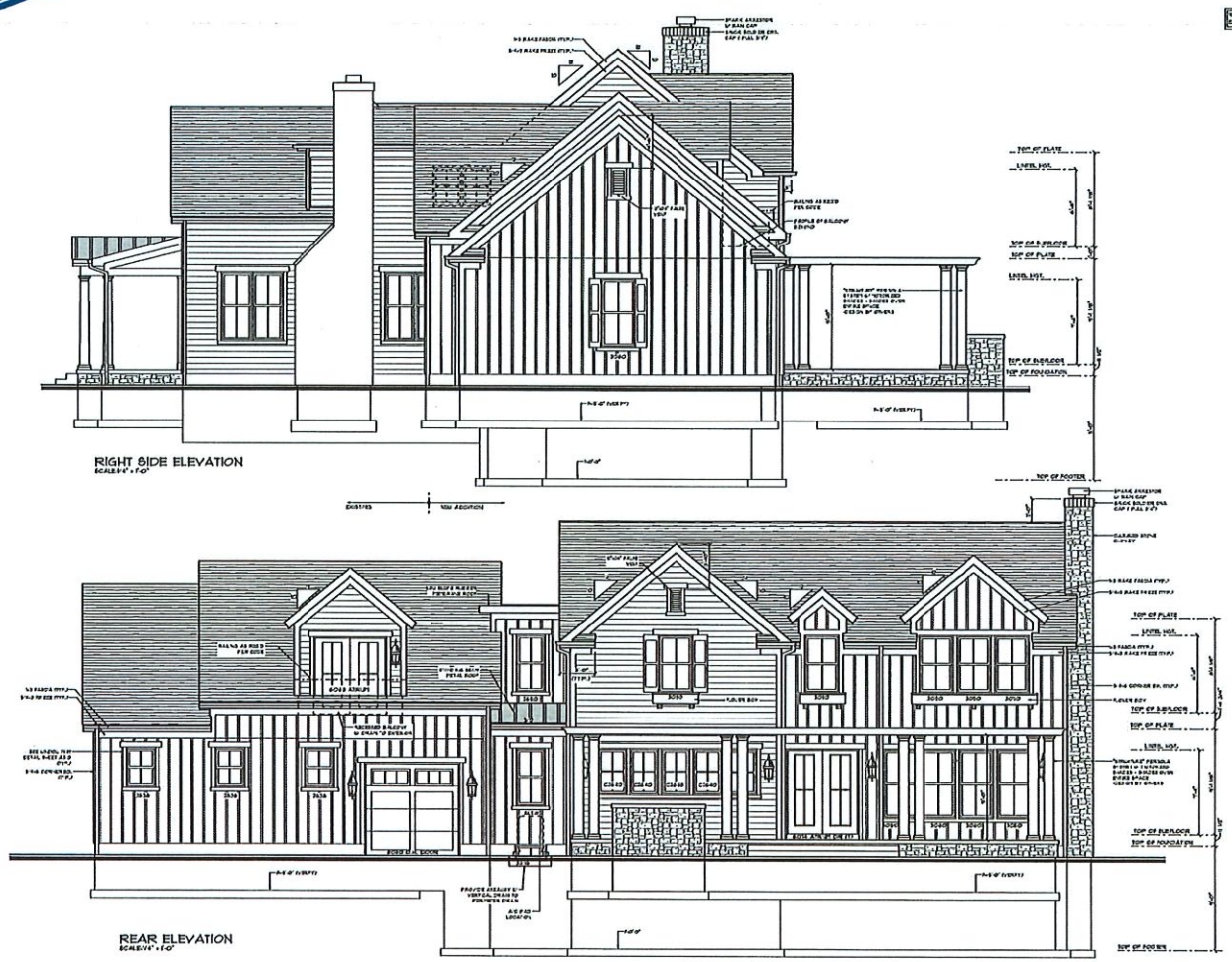
LEFT SIDE ELEVATION

FRONT ELEVATION

ATTACHMENT

CITY OF HILLIARD est. 1853

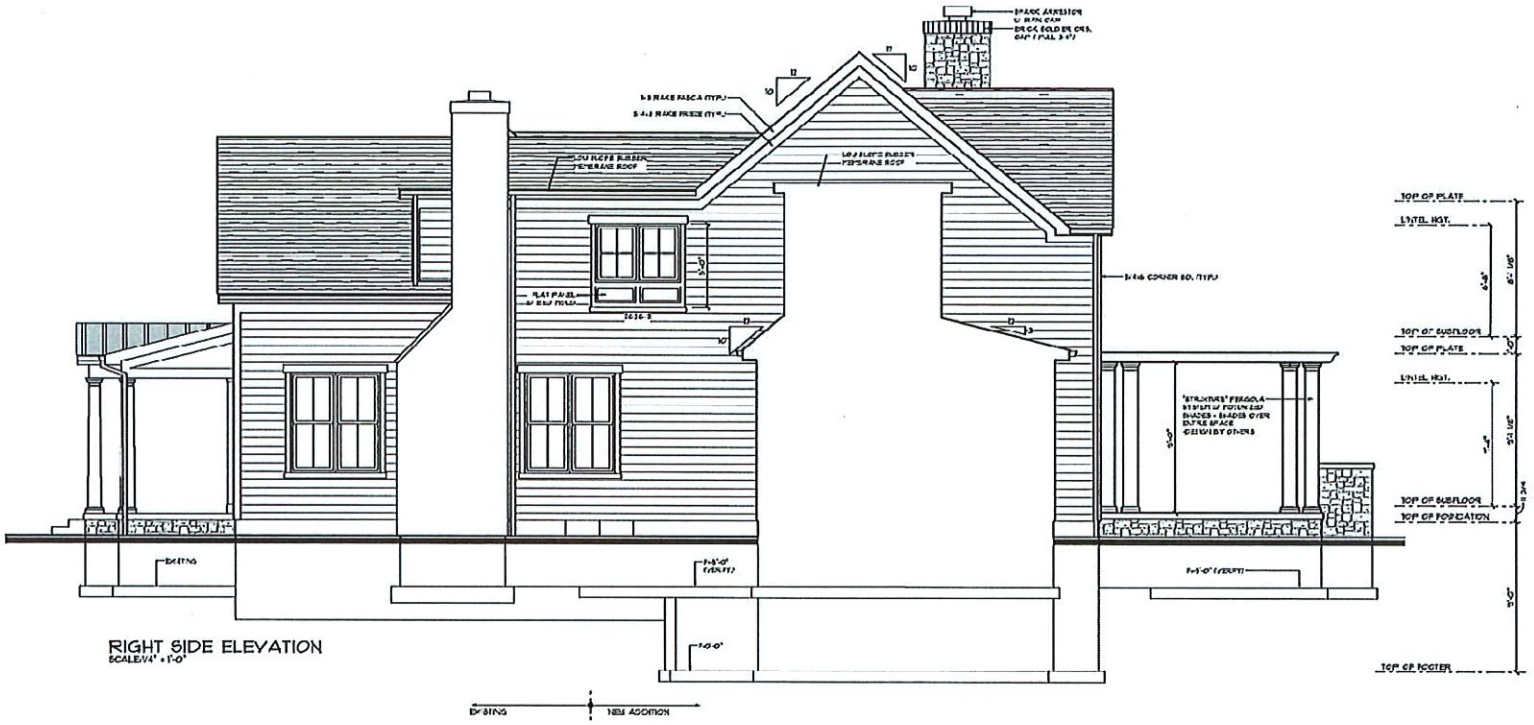
ARCHITECTURAL ELEVATIONS



ATTACHMENT

CITY OF HILLIARD est. 1853

ARCHITECTURAL ELEVATIONS



RIGHT SIDE ELEVATION
SCALE: 1/4" = 1'-0"

ATTACHMENT

CITY OF HILLIARD est. 1853

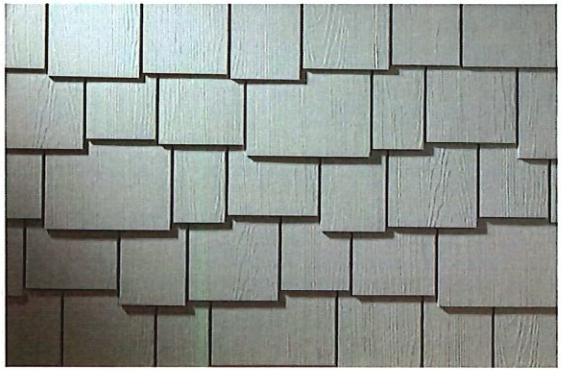
PROPOSED MATERIALS / DETAILS

Siding 1

Horizontal Siding
Hardie Plank Siding
8" Lap Exposure – Select Cedarmill
Sherwin Williams SW 7008 Alabaster

Siding 2

Shake Siding
Hardie Shingle Siding - Staggered Edge Panel
Sherwin Williams SW 7008 Alabaster
(areas to be determined as accent material on elevations)



Siding 2

Shake Siding
Hardie Shingle Siding - Straight Edge Panel (alt. selection)
Sherwin Williams SW 7008 Alabaster
(areas to be determined as accent material on elevations)

ATTACHMENT

CITY OF HILLIARD est. 1853

PROPOSED MATERIALS / DETAILS

Exterior Trim & Soffits

LP Smartside trim
Woodgrain finish
Sherwin Williams SW 7008 Alabaster

Window & Door Trim

LP Smartside trim
Woodgrain finish
Sherwin Williams SW 7008 Alabaster

Cultured Stone

Dutch Quality – Kentucky Limestone

Dutch Quality – Tuscan Ridge (Winter Point) (alt. selection)

Roofing

Certainteed Landmark Pro
Moire Black

Metal Roofing

Manufacturer: To be determined
Galvanized color

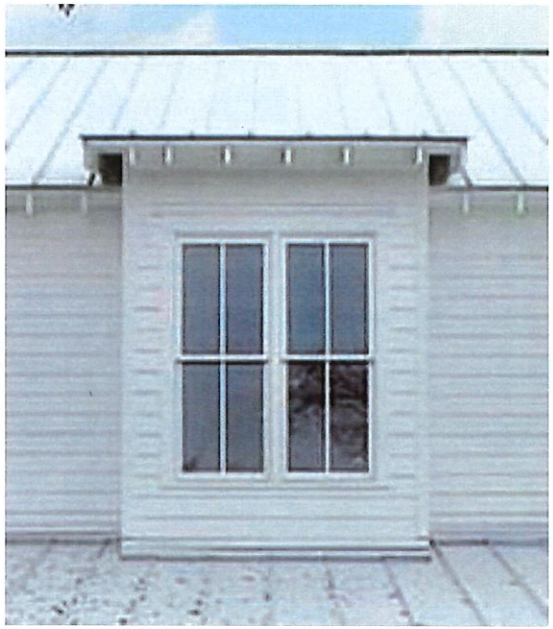
ATTACHMENT

CITY OF HILLIARD est. 1853

PROPOSED MATERIALS / DETAILS

Windows

White double hung windows with farmhouse grille
Manufacturer: To be determined



Doors

Front Door
Antique Salvage Vintage double door
Sherwin Williams SW 7587 Antique Red
(see plans for illustration)

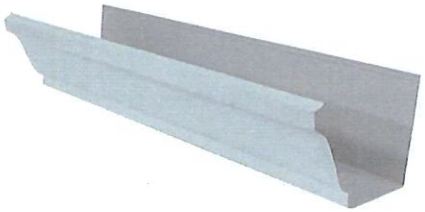
Side Porch Door
Full light glass door
Sherwin Williams SW 7587 Antique Red

Gable Vents

Fypon Decorative Gable Vent
Paint to match Alabaster siding/trim
(see plans for sizes)

Gutters & Downspouts

White



Exterior Light Fixtures

Keeping with the character of Old Hilliard
Model #G14796-BK (from Home Depot)

ATTACHMENT

CITY OF HILLIARD est. 1853

PROPOSED MATERIALS / DETAILS

All other exterior doors
Sherwin Williams SW 7008 Alabaster

Garage Doors
Manufacturer: To be determined
Carriage House style paneled doors (see plans for panel design)
Sherwin Williams SW 7008 Alabaster

Shutters

Atlantic Premium Shutters
Classic Collection
Faux Louver w/add'l rail
Sherwin Williams SW6244 Naval Blue

ATTACHMENT

RECORD OF ACTION

Planning & Zoning Commission

City Hall • 3800 Municipal Way • Hilliard, Ohio 43026
and Live-Streaming on YouTube

Thursday, December 8, 2022 | 7:00 pm

CASE 4: PZ-22-68 – KIMES RESIDENCE – 5190 NORWICH STREET
PARCEL NUMBERS: 050-000321 & 050-000293
APPLICANT: Hayden & Chelsea Kimes, 5190 Norwich Street, Hilliard, OH 43026.
REQUEST: Review & approval of an Old Hilliard District Plan under the provisions of Hilliard Code Chapter 1115 to permit a 3,970-square-foot building addition.

The Planning and Zoning Commission took the following action at this meeting:

MOTION:

Ms. Nixon made a motion to approve an Old Hilliard District Plan under the provisions of Hilliard Code Chapter 1115 to permit a 3,970-square-foot building addition with the following four conditions:

1) That a variance to reduce the minimum side yard from 5 feet to 3.5 feet is obtained from the Board of Zoning Appeals;
2) That the garage is located not less than 50 feet from the Norwich Street right-of-way line;
3) That exterior materials and colors are consistent with those proposed, subject to staff approval; and
4) That a building permit is obtained prior to construction.

Mr. Lewie seconded the motion.

VOTE:

Chairman Muether	Excused
Vice Chair Schneck	Yes
Mr. Gutknecht	Excused
Mr. Lewie	Yes
Ms. Nixon	Yes
Mr. Pannett	Yes
Mr. Uttley	Yes

STATUS:

Case #3: PZ-22-68 is approved (5-0) with four conditions.

CERTIFICATION:

Carson Combs, Planning Manager
December 9, 2022

[END OF RECORD]

CASE 2: BZA-22-38 – SEGHI RESIDENCE – 4340 ALDER DRIVE
PARCEL NUMBER: 050-000760 (Avery Road Subdivision, Lot 138)
APPLICANT: Joel Seghi, 4340 Alder Drive, Hilliard, OH 43026
REQUEST: Review and approval of variances to Hilliard Code Section 1109.03 to reduce the required front setback for an attached garage from 35 feet to ±21 feet and to reduce the required rear yard from 35 feet to 9 feet for a 648-square-foot building and attached garage addition.

BACKGROUND:

The site includes 0.225-acre located at the northeast corner of Alder Drive and Kerr Drive. The parcel is Lot #138 within the Avery Road Subdivision and is zoned R-2, Low/Medium Residential District. The subdivision plat was signed in 1955 and includes lots that are generally 60' x 120' in size. Properties surrounding the site are zoned R-2 as part of the same subdivision. The lot in question has more of a wedge shape with a front building line on two sides. Application of the R-2 zoning classification has resulted in the need for many variances in many of the city's older neighborhoods to permit additions and other improvements. This is a request for variances to construct a 648-square foot home addition that will include a laundry, bathroom, storage area and attached garage.

CONSIDERATIONS:

- *Proposal.* The applicant is proposing to construct a 648-square-foot addition on the side of an 1,150-square foot post-war ranch. The site currently includes a small ±160-square foot utility shed and a narrow, one-car paved driveway approximately seven feet in width, just wide enough to park a vehicle.
- *Zoning Standards.* This lot includes two street frontages and based on the orientation of the home has a very narrow lot depth. Analysis of the proposed addition as applied to zoning standards includes the following:

	R-2 Code	Site w. Addition
Minimum Lot Size	11,200 sf	9,825sf
Minimum Front Setback	25 ft (35 ft for garages)	21 feet
Minimum Side Setback	10 feet (20 total)	24 feet
Minimum Rear Setback	35 feet	9 feet
Maximum Lot Coverage	30%	18.3%
Minimum Floor Area	1,300 sf	1,150 sf

- *Building Addition.* The proposed addition is 24 feet in width and includes a depth of 28 feet. The garage and related room additions will extend the east end of the home in the current location of the asphalt driveway.
- *Front Setback.* R-2 standards require a front setback of 25 feet for the home and 35 feet for garages. The subdivision further has a platted building line of 25 feet from which a variance cannot be granted by the Board. **Staff recommends that the footprint be adjusted to meet the platting building line and that the variance request for the front setback be amended from 21 feet to 25 feet.**
- *Rear Setback.* R-2 standards require a rear setback of 35 feet. This setback requirement when combined with the front setback and platted building lines renders the lot virtually undevelopable. **Based on adjustments to the footprint to accommodate the front building line, staff recommends that the variance request for the rear setback also be adjusted from 9 feet to a minimum of 5 feet.**

- *Lot Coverage*. Maximum lot coverage for homes in the R-2 District are limited to a 30 percent for structures. Given the linear nature of the lot, the proposed improvements still result in only a 18.3% percent lot coverage which is significantly under the R-2 maximum.

STAFF RECOMMENDATION:

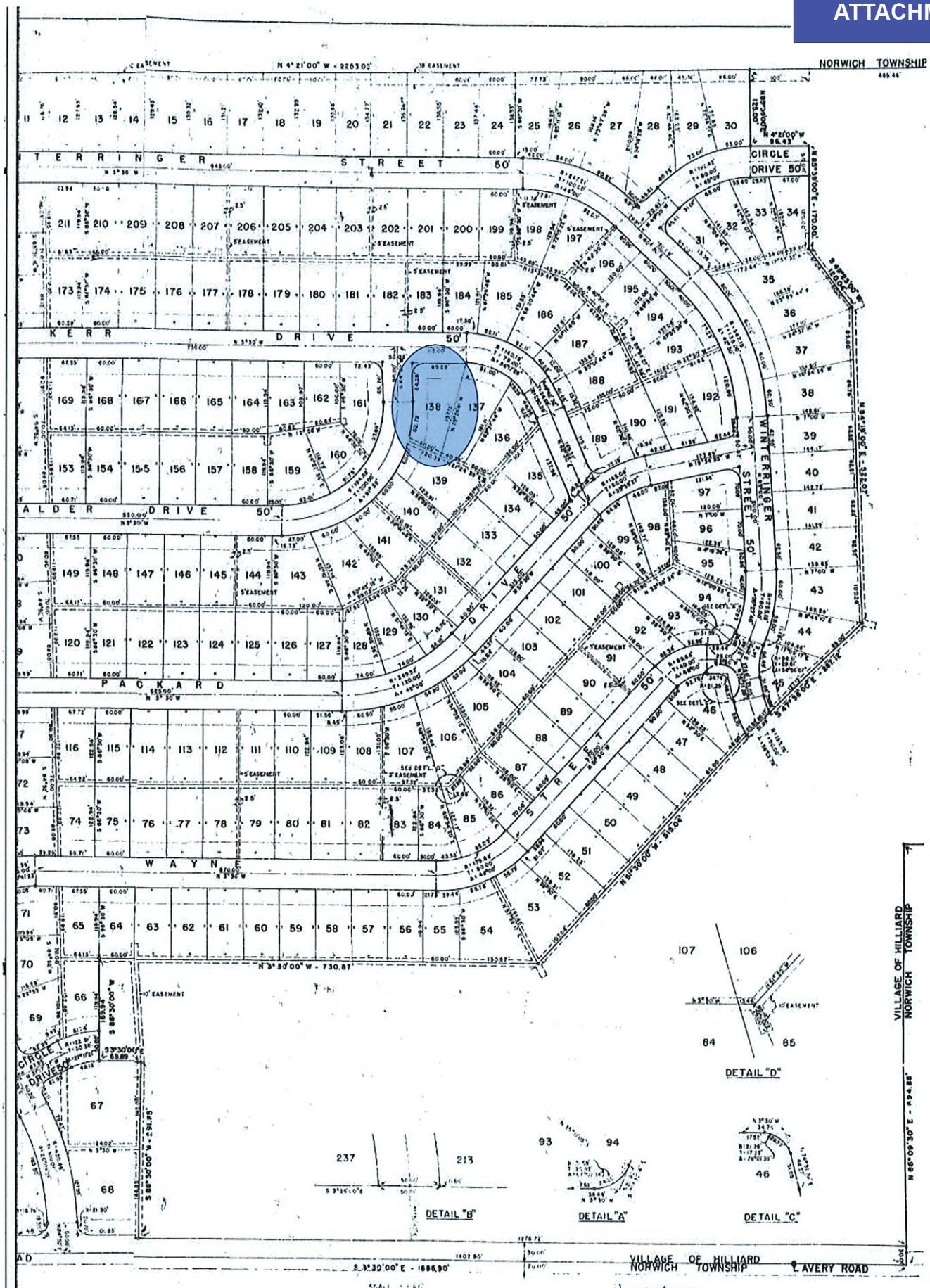
Staff finds that the proposed variance is generally consistent with the spirit and intent of the Zoning Code. As proposed, improvements to the residence will not adversely affect the character of the surrounding neighborhood, nor be a detriment to surrounding neighbors. Staff finds the proposed variances will not affect public services and alternative options have been evaluated. While the applicant could utilize the property without the addition, the proposed improvements should be highly encouraged in the City's older neighborhoods where investment is necessary to maintain quality for all residents. The R-2 District standards as applied to such older neighborhoods is not appropriate to the size and scale of lots. Staff, therefore, recommends that the proposed setback variances be approved with four conditions:

1) That the footprint of the proposed addition be modified to comply with the platted 25-foot building line;
2) That the resulting change in footprint modify the rear setback variance from 35 feet to ***5 feet*** and the front setback variance from 35 feet to ***25 feet***;
3) That a zoning certificate be obtained for the addition prior to the issuance of building permits; and
4) That all applicable building permits be obtained prior to construction.

[END OF REPORT | BZA-22-38]

ATTACHMENT

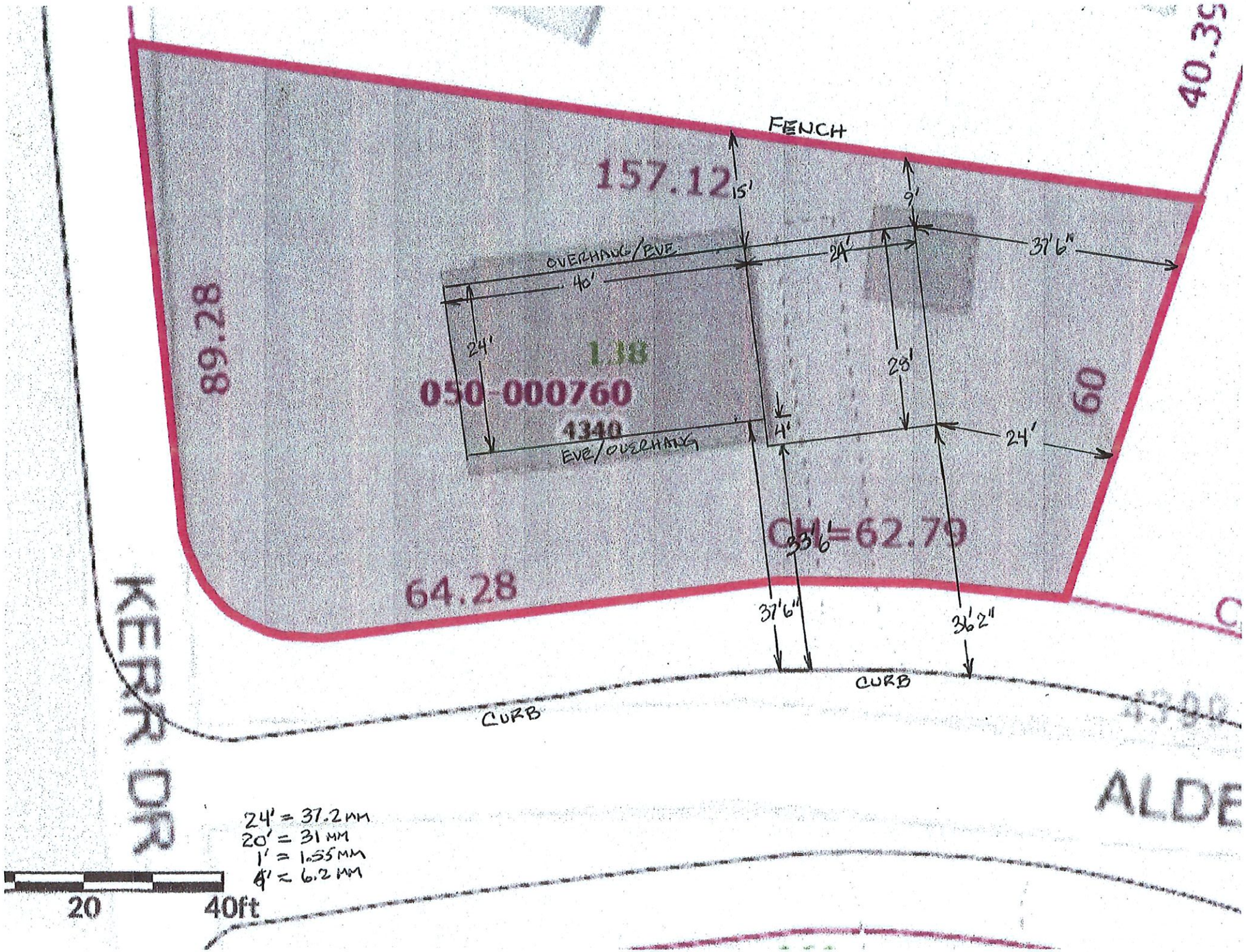
ATTACHMENT



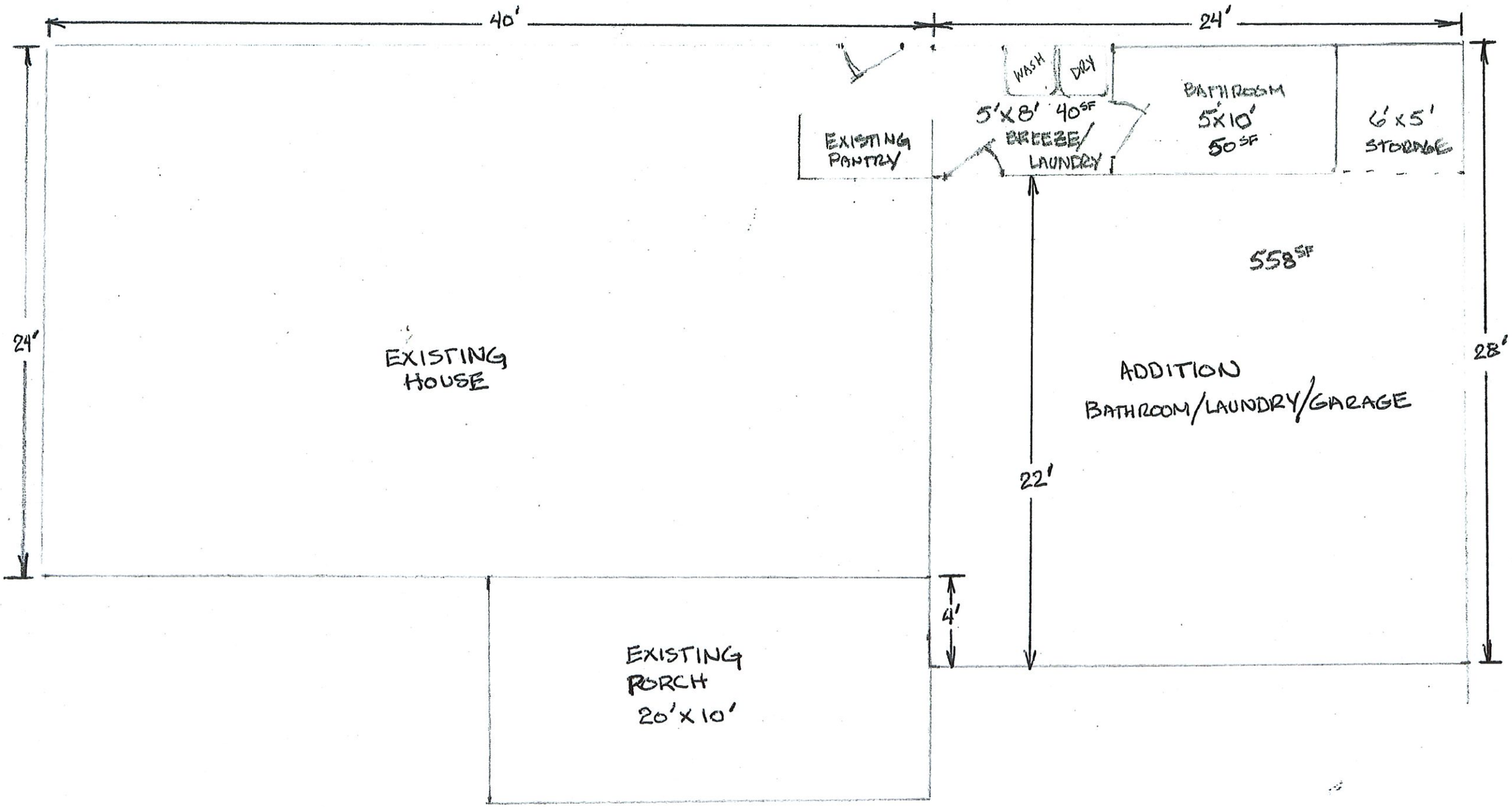
July 21st 1955
Received Original Tracing
Mary L. DeLong

AVERY ROAD SUBDIVISION

ATTACHMENT


FENCH
157.12
15'
9'
OVERHANG/EVE
40'
24'
37'6"
89.28
24'
1.38
050-000760
1340
EVE/OVERHANG
4'
28'
24'
60
CH=62.79
64.28
37'6"
36'2"
CURB
CURB
KERR DR
ALDE
40.35
24' = 37.2 MM
20' = 31 MM
1' = 1.55 MM
4' = 6.2 MM
20
40ft

ATTACHMENT


40'
24'
WASH
DRY
5'X8' 40SF
BREEZE/
LAUNDRY
BATHROOM
5'X10'
50SF
6'X5'
STORAGE
EXISTING
PANTRY
558SF
24'
EXISTING
HOUSE
ADDITION
BATHROOM/LAUNDRY/GARAGE
28'
22'
4'
EXISTING
PORCH
20'X10'

CASE 3: BZA-22-39 – PETTIBONE RESIDENCE – 2893 HILLIARD ROME ROAD
PARCEL NUMBER: 050-002927; 050-002028
APPLICANT: Jason Pettibone, 2893 Hilliard Rome Road, Hilliard, OH 43026
REQUEST: Review and approval of variance to Hilliard Code Section 1121.02(b)(6) to increase the height of an existing accessory structure from 14 feet to 16.5 feet.

BACKGROUND:

The site includes two parcels totaling 0.76-acre along the west side of Rome Hilliard Road, 200 feet south of Richlanne Drive and 150 feet north of Sutter Home Road. The property is zoned R-3, Moderate Density Residential District. Residential properties to the west and south are also zoned R-3 as part of Section 2 within the Sutton Place subdivision. Wayac Scales and Calibration is located to the north and is also zoned R-3. Across Hilliard Rome Road are residential properties that are zoned R-1, Low Density Residential District as part of the Richlanne Acres subdivision, as well as other properties zoned PUD, Planned Unit Development District as part of the *Hilliard Rome MOB & Office* PUD Concept Plan and Text (Ordinance 20-23). Uses across the street within the PUD include a residence and Professional Pediatrics.

This is a request to increase the height of an accessory structure (garage) to exceed the 14-foot maximum established in the accessory structure provisions of the Code.

CONSIDERATIONS:

- *Proposal.* The applicant is proposing to increase the height of an existing ±850-square-foot detached accessory garage located behind the primary structure. Section 1121.02(b)(6) of the Zoning Code limits the height of accessory structures to 14 feet. The proposed height expansion would result in a building height of 16.5 feet as measured by Code (to the mid-point of a gabled/pitched roof). No detailed information has been provided as to the purpose of the increased height.
- *Zoning Standards.* The property includes two parcels and is zoned R-3 and includes the following standards. The proposed improvements do not impact applicable zoning standards.

	R-3 Code	Site
Minimum Lot Size	11,200 sf	33,105 sf
Minimum Front Setback	30 feet	±20 feet (existing)
Minimum Side Setback	10 feet (20 total)	±40 feet (±80 total)
Minimum Rear Setback	30 feet	±150 feet
Maximum Lot Coverage	35%	±7.5%
Minimum Floor Area	1,200 sf	±1,610 sf

- *Accessory Structures.* The Zoning Code requires a minimum rear setback of 6 feet and a minimum side setback of 3 feet for detached accessory structures. The location of the existing garage complies with Code and would not be further impacted by increasing the height of the building, which is located adjacent to a commercial use.
- *Garage Use.* No proposed floor plan has been provided with details that would indicate the purpose for the increased building height, but the owner has verbally indicated a need for increased height. **Staff recommends that detailed floor plans be provided and that the elevations be modified to include taller garage doors that would justify the increase in permitted height.**
- *Enforcement Issues.* Code Enforcement has been working with the property owner to address multiple violations on the site. **The following issues were noted and should be addressed according to the**

timelines set forth in the Notice of Violation and should be resolved prior to obtaining a zoning certificate and/or building permit:

1. 8-foot chain link fence between the house and garage that does not comply with the 4-foot maximum height in a residential district;
2. Parking and storage of commercial vehicles and equipment within a residential district;
3. Storage container(s) and outdoor storage that are not permitted within a residential district;
4. Rubbish and other materials (metal piping) on site that do not comply with provisions of the property maintenance Code.

STAFF RECOMMENDATION:

Staff finds that the proposed variance is generally consistent with the spirit and intent of the Zoning Code. As proposed, improvements to the detached accessory garage will not adversely affect the character of the surrounding neighborhood, nor be a detriment to surrounding neighbors. Staff finds the proposed variances will not affect public services and alternative options have been evaluated. While the applicant could utilize the property without the addition, the proposed improvements could be appropriate should existing zoning and property maintenance issues be addressed. Staff, therefore, recommends that the proposed accessory structure height variance be approved with four conditions:

1) That all zoning code and property maintenance code violations be addressed prior to the issuance of a zoning certificate or building permit;
2) That detailed floor plans be provided and that the elevations be modified to include taller garage doors that would justify the increase in permitted height;
3) That a zoning certificate be obtained for the addition prior to the issuance of a building permit; and
4) That all applicable building permits be obtained prior to construction.

[END OF REPORT | BZA-22-39]

ATTACHMENT

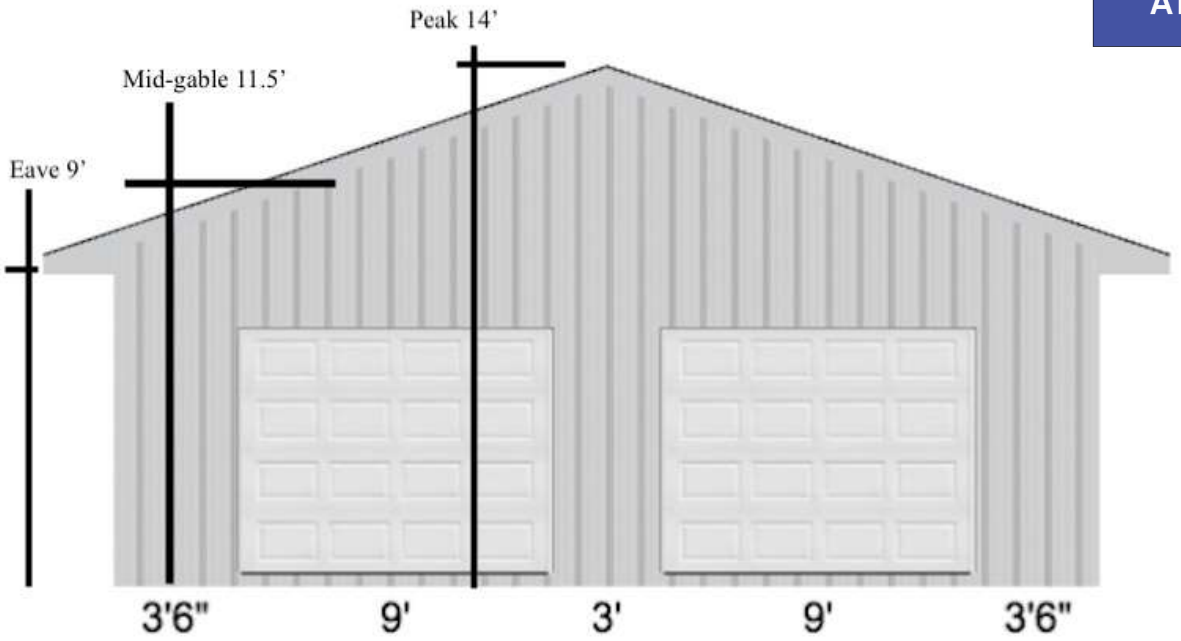

Sutter Home Road
Hilliard Rome Road
11/30/2021
© All EagleView Technology Corporatio

ATTACHMENT

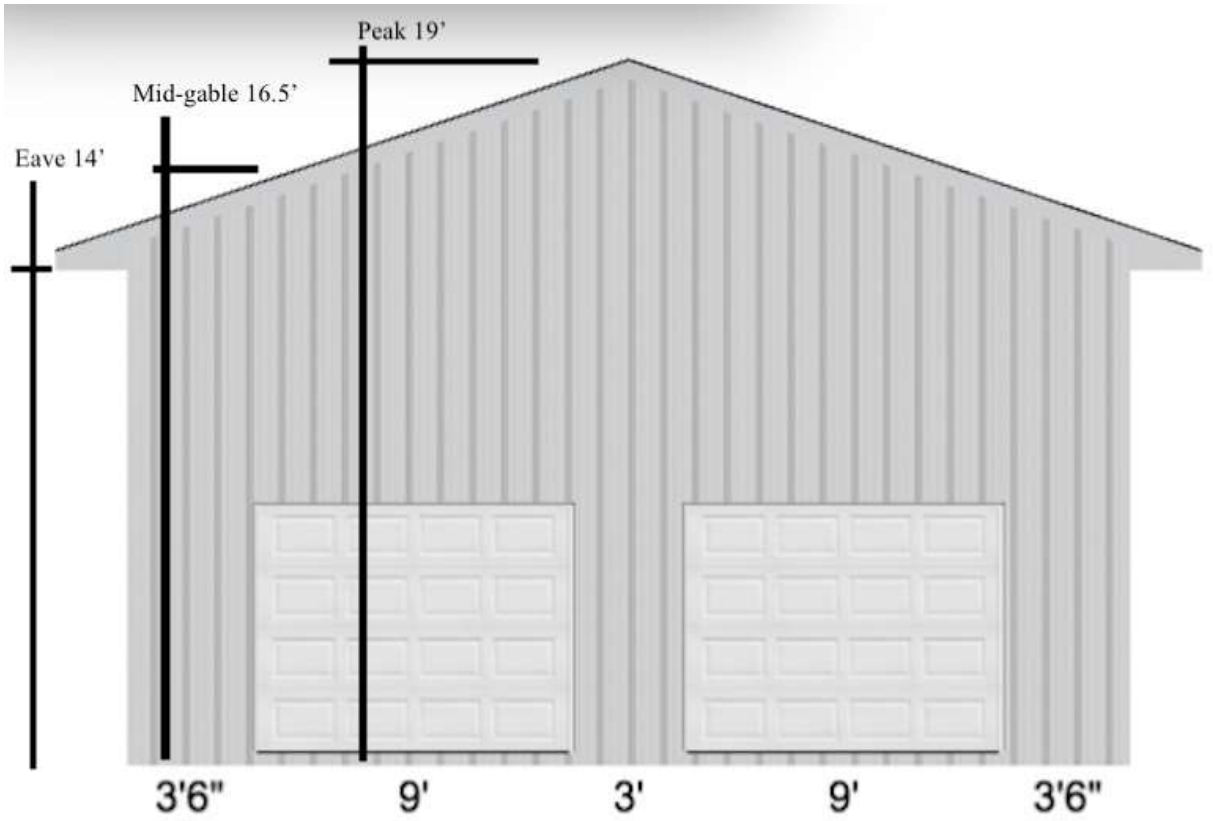
EXISTING GARAGE

ATTACHMENT

EXISTING GARAGE



PROPOSED HEIGHT INCREASE



CASE 4: BZA-22-40 – COLORADO MOUNTAIN SPORTS – 4445 CEMETERY ROAD
PARCEL NUMBER: 050-002824
APPLICANT: Cemetery Rd Holdings LLC, c/o Eric Bahgat, 4445 Cemetery Road, Hilliard, OH 43026.
REQUEST: Review and approval of a variances to Hilliard Code Section 1127.04 to approve a comprehensive site parking plan for a two-story, 3,240-square-foot building addition on 0.44-acre.

UPDATE:

Prior to the staff report being published, the applicant requested that the variance application be postponed to the next agenda. Staff recommends that this request is heard at the January 2023 meeting so that the applicant may provide additional information as requested.

ATTACHMENT

RECORD OF ACTION

Planning & Zoning Commission

City Hall • 3800 Municipal Way • Hilliard, Ohio 43026
and Live-Streaming on YouTube

Thursday, December 8, 2022 | 7:00 pm

CASE 2: PZ-22-43 – COLORADO MOUNTAIN SPORTS – 4445 CEMETERY ROAD
PARCEL NUMBER: 050-002824
APPLICANT: Cemetery Rd Holdings LLC, c/o Eric Bahgat, 4445 Cemetery Road, Hilliard, OH 43026.
REQUEST: Review and approval of a PUD Final Development Plan modification under the provisions of the Cemetery Road Properties Located Between Leap & Lacon Roads PUD Concept Plan and Text for a two-story, 3,240-square-foot building addition on 0.44-acre.

The Planning and Zoning Commission took the following action at this meeting:

MOTION:

As part of changes to the agenda, Mr. Lewie made a motion to postpone Case PZ-22-43 – Colorado Mountain Sports – 4445 Cemetery Road to the January 12, 2023, meeting.

Ms. Nixon seconded the motion.

VOTE:

Chairman Muether	Excused
Vice Chair Schneck	Yes
Mr. Gutknecht	Excused
Mr. Lewie	Yes
Ms. Nixon	Yes
Mr. Pannett	Yes
Mr. Uttley	Yes

STATUS:

Case #2: PZ-22-43 is postponed (5-0) to the January meeting by a voice vote.

CERTIFICATION:

Carson Combs, Planning Manager
December 9, 2022

[END OF RECORD]

CASE 5: BZA-22-41 – COLLEY & SMITH RESIDENCE – 4375 KERR DRIVE
PARCEL NUMBER: 050-000811 (Avery Road Subdivision)
APPLICANT: Joseph Colley & Jennifer Smith, 4375 Kerr Drive, Hilliard, OH 43026.
REQUEST: Review and approval of a variance under the provisions of Hilliard Code Section 1301.03 and the 2019 Residential Code of Ohio to increase the maximum size of the evaporator coil to a 3-ton horizontal system.

BACKGROUND:

The site includes 0.19-acre located at the northwest corner of Kerr Drive and Packard Drive. The parcel is Lot #89 within the Avery Road Subdivision and is zoned R-2, Low/Medium Residential District. The subdivision plat was signed in 1955 and includes lots that are generally 60' x 120' in size. Properties surrounding the site are zoned R-2 as part of the same subdivision. The property owner submitted for a 428-square-foot home addition to the home that met side yard requirements and did not expand further into the front or rear setbacks. The proposed addition, which includes an owner's suite and laundry, was granted a zoning certificate on February 14, 2022 (Z-21-86). The owner applied for building permits when the zoning certificate was approved and has provided a denial to the application submitted by Mr. Colley. Section 1301.03 of the Hilliard Codified Ordinances grants the Board of Zoning Appeals the authority to grant variances and to hear appeals to decisions made by the Chief Building Official (CBO) under the Residential Code of Ohio (RCO).

This is a variance request to the Ohio Residential Building Code to increase the maximum permitted size of an evaporator coil to a 3-ton Horizontal System.

REVIEW CRITERIA:

Section 1301.03 – Appeals and Variances

(a) The Board of Zoning Appeals (the "Board") shall have authority to grant variances and hear appeals to decisions of the Chief Building Official (CBO) under the Residential Code of Ohio (RCO) as hereinafter provided.

(b) Where, because of conditions peculiar to a particular building, it would be unreasonably difficult to meet the literal requirements of the RCO, a variance may be granted by the Board upon written application therefore. The application shall state in writing the reasons why the variance should be made. A variance may be granted only where it is evident that reasonable safety and sanitation is assured and may include conditions not generally specified by the RCO in order to achieve that end. The variance may include an expiration date. A copy of the variance shall be filed in the office of the CBO and a copy shall be given to the applicant.

(c) Whenever it is claimed that the true intent and meaning of the RCO has been wrongly interpreted or that the time allowed for compliance is unreasonable, the owner, his agent or the occupant, as the case may be, may file a notice of appeal from a decision or order of the CBO. The notice shall be in writing and filed within ten days after the decision or order of the CBO has been made. The Board, when appealed to, may modify the decision or order of the CBO. Its decision shall be final, subject however, to such remedy as any aggrieved person may have at law or in equity. The Board's decision shall be in writing and filed in the office of the CBO, and a certified copy shall be given to the appellant.

CONSIDERATIONS:

- *Proposal.* The applicant is proposing to utilize the following HVAC components that were reviewed by Building Standards. The proposed equipment was not approved based on RCO standards as listed in the

ACCA manual. The property owner is requesting a variance to the provisions of the Residential Building Code of Ohio as outlined in Hilliard Code Section 1301.03.

(1) Furnace – Goodman 40,000 BTU 96% AFUE 2 stage gas furnace
(2) Air Condenser – Goodman 1.5-ton 14 SEER air conditioner condenser
(3) Coil – Goodman 3-ton 17.5" horizontal evaporator cased coil

- *RCO Section 1401.3.* Section 1401.3 pertaining to equipment and appliance sizing indicates the following: "Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S (Air Conditioning Contractors of America - Residential Equipment Selection) or other approved sizing methodologies based on building loads calculated in accordance with ACCA Manual J (Air Conditioning Contractors of America - National Standard for Residential Load Calculation) or other approved heating and cooling calculation methodologies."
- *RCO Exceptions.* The RCO includes two exceptions to the sizing requirements that are specified in Section 1401.3:
  (1) "The specified equipment or appliance utilizes multistage technology or variable refrigerant flow technology and the loads calculated in accordance with the approved heating and cooling calculation methodology are within the range of the manufacturer's published capacities for that equipment or appliance." 2019 RCO 1401.03
  (2) "The specified equipment or appliance manufacturer's published capacities cannot satisfy both the total and sensible heat gains calculated in accordance with the approved heating and cooling calculation methodology and the next larger standard size unit is specified." 2019 RCO 1401.03
- *Requested Variance*. The applicant has indicated through submitted information that manufacturer information indicates that the 3-ton coil is necessary for Goodman units that sit horizontally. Manufacturer information also indicates that "…in many situations, a condenser that is paired with the condenser is going to be smaller than this coil. This is intentional to maintain the overall unit's efficiency." The applicant has also received notice from the contractor that the specified equipment is the smallest that is available by the manufacturer in that model. Since this is a request to vary from the Residential Code of Ohio, staff recommends that any approval by the Board include an acknowledgement from the applicant that they are clearly aware they are requesting deviation from adopted industry standards and that they take on all potential liability and any ramifications as to their selection of HVAC equipment for their residence.

STAFF RECOMMENDATION:

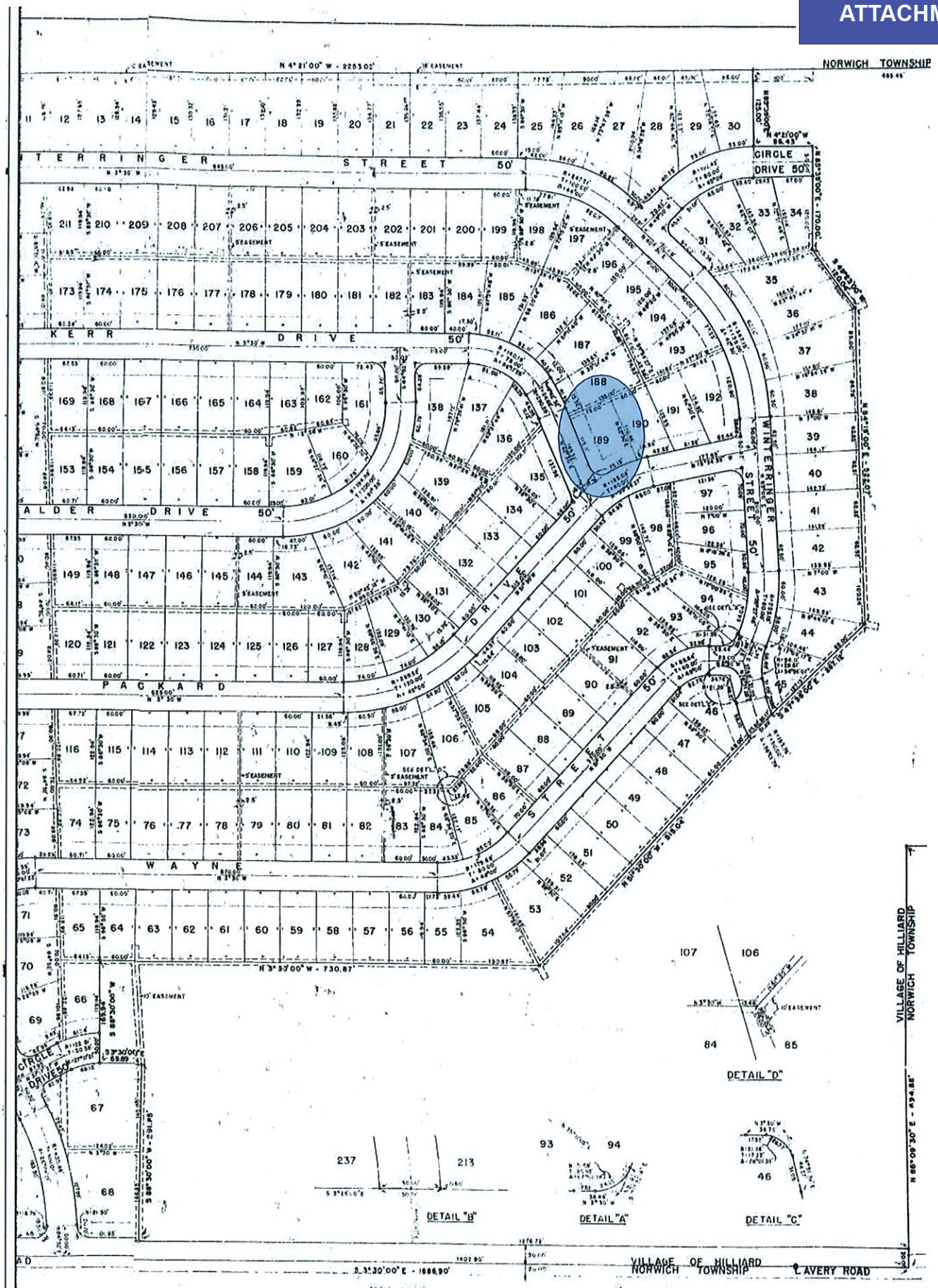
Planning staff finds that the proposed variance is generally consistent with the spirit and intent of the Code. As proposed, the proposed use of mechanicals complies with the specifications set forth by the manufacturer and staff, therefore recommends that the proposed building code variance be approved with three conditions:

1) That the applicant acknowledges the request is a deviation from the Residential Building Code of Ohio and assumes any and all liability due to the proposed equipment and installation methods;
2) That the applicant shall disclose said information regarding the variance to any future homebuyer as part of required real estate disclosures; and
3) That a building permit be obtained prior to installation.

[END OF REPORT | BZA-22-41]

ATTACHMENT

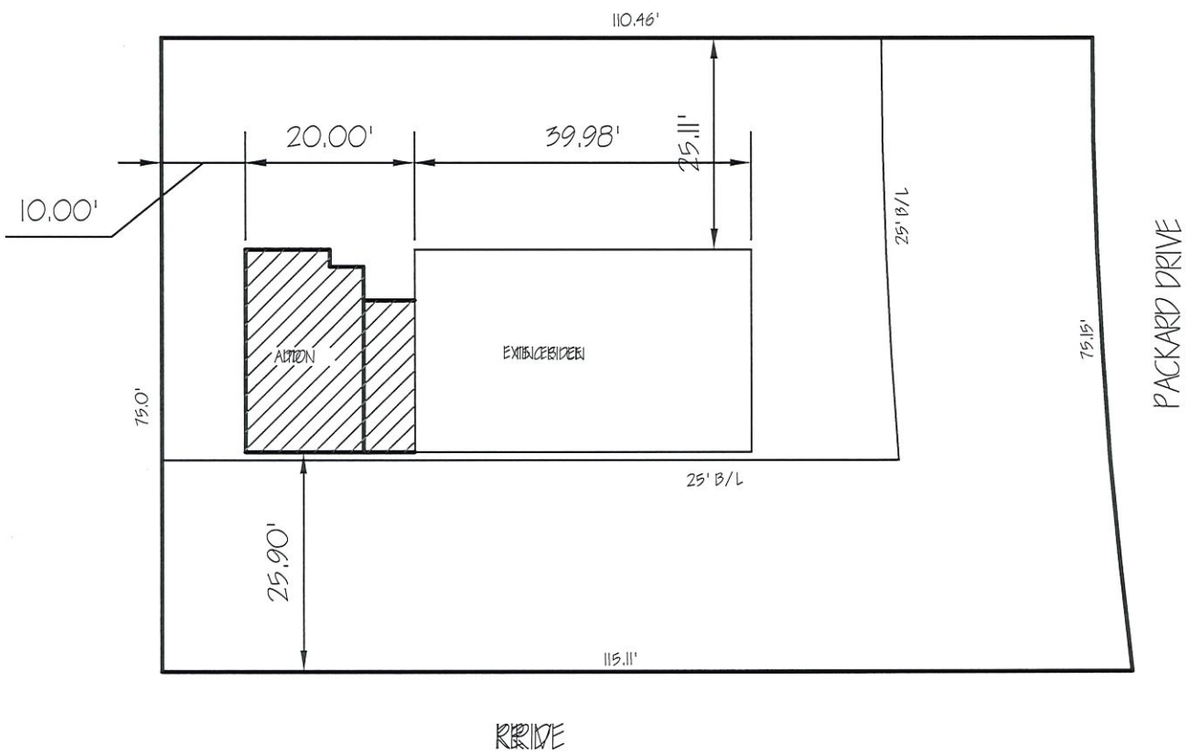
ATTACHMENT



July 21st 1955
Received Original Tracing
Mary L. DeLong

AVERY ROAD SUBDIVISION

ATTACHMENT



SITE PLAN

1" = 10'-0"

House Plans by Chateaux Designs

Chateaux Designs 740–819–8206

SPECIFICATIONS

GENERAL NOTES

1. Dimensional lumber used for all framing except trusses, studs, sole plates, and cap plates shall be SPRUCE PINE FIR No. 2 or better. (North)
2. Areas to receive tile or marble floors may need to be stiffened beyond minimum code requirements to prevent cracking - builder and installer shall determine same.
3. Dimensional lumber used for wall studs, sole plates, and cap plates shall be Spruce Pine Fir No.2 or better. (North)
4. All dimensional lumber shall have a maximum moisture content of 19%
5. Where the term "G & N" is noted on the plan set it means glue and nail. Gluing shall conform to the information stated below. Nailing shall apply enough clamping force to hold the glued mating surfaces in contact until the glue attains full strength.
6. Where gluing of wood members is specified the glue that is to be used is Titebond Construction Adhesive" as manufactured by Franklin International or equal.
7. Where gluing is specified it shall be completed as follows:
   A. Place continuous bead(s) of glue on one of the surfaces to be glued.
   B. Nail so that surfaces are held tightly together until glue attains full strength.
   C. Wipe away any excess glue which is expelled if it's appearance will be unacceptable in the finished structure.
8. The following fastening schedule outlines the minimum requirements and shall be used in conjunction with the complete fastening schedule in the current code.
   (RSN = ring shank nail CWN = common wire nail)
   A. Sub floor to joists: fasten with glue and 1-8d RSN @ 6" c/c.
   B. Sole plates to sub floor: glue and 1-16d CWN @ 8" c/c.
   C. Studs to sole plate: fasten with 2-16d CWN.
   D. Studs to cap plates: fasten with 2-16d CWN.
   E. Stud-to-stud and plate-to-plate: 2-10d CWN @ 6" c/c.
   F. Roof sheathing to trusses: 8d CWN @ 4" c/c.
   • G. Roof trusses to walls: Simpson Strong-Tie anchor H2.5.
   H. Multiple 2x lintels: G & N with 16d CWN's as required.
   I. Multiple LVL beams: Fasten per manufacturer recommendations
   J. Roof trusses to LVL: Simpson Anchor H2.10.
9. Where "LVL", "LSL" or "PAL" is noted on the drawings the products used must meet the following criteria:
   - MICROLAM (LVL) M.O.E. = 1,900,000 psi.
     - Fb = 2600 psi
   - TIMBERSTRAND (LSL) M.O.E. = 1,300,000 psi.
     - Fb = 1100 psi
   - PARALLAM (PAL) M.O.E. = 2,000,000 psi.
     - Fb = 2900 psi
10. For all elements of construction not specifically noted on these drawings shall comply with the Local Governing Codes, Requirements, and Regulations.
11. - Steel "W" beams shall be ASTM A992, Fy= 50k.s.i.
12. - Schedule 40 pipe columns shall be ASTM A53, Fy= 35 k.s.i.

• APPLICABLE ONLY WHERE IT IS REQUIRED BY LOCAL CODE

WALL CONSTRUCTION

1. All structural members shall be fastened in accordance with chapter 6 of the building code in affect.
2. Engineered data sheets for built-up beams shall be provided prior to framing inspection.
3. All headers in exterior walls to be (2) 2x8 U.N.O. On plans.
4. Fire blocking shall be provided to cut off all concealed draft openings (both vertical and horizontal) to form an effective fire barrier between stories, and between a top story and the roof space.
5. All wind shear bracing shall be as shown on floor plans see coded note.
6. Masonry veneer shall be anchored to the supporting wall with corrosion resistant metal ties.
7. Each tie shall be spaced not more than 32" on center horizontally and shall support not more than 2 2/3 sq. Ft. Of wall area.
8. The veneer shall be separated from the sheathing by an air space of a minimum of 1" but not more than 4 1/2".
9. Flashing shall be located beneath the first course of masonry above finished ground level above the foundation wall or slab, and at other points of support.
10. Weep holes shall be provided in the outside wythe of masonry walls at a max. spacing of 33" on center. Weep holes shall be a min. of 3/16" in diameter located immediately above the flashing.
11. Wall studs shall be 2x4's @ 16" c/c or 2x6's @ 16" c/c/ and shall be one piece full height. Provide a minimum of 2 studs at each side of all openings through all walls unless noted otherwise.

FLOOR CONSTRUCTION

1. Joists under parallel load bearing partitions shall be doubled or a beam of adequate size to support the load shall be provided.
2. The ends of eachheaderbeam, or girder shall have a minimum of 1 1/2" OF load bearing on wood or metal and a minimum of 3" on masonry or concrete.
3. Pre-engineered floor joists, and or trusses shall be engineered by the manufacturer. engineered data sheets shall be provided prior to framing inspection.
4. Drilling and notching of pre-engineered floors shall be done per manufacturers recommendations.
5. Sub flooring shall be 3/4" tongue and groove (T & G) exterior grade.
6. Draftstopping shall be provided as required when there is a usable space above and below the concealed space of a floor/ceiling assembly.

ELECTRICAL

1. All electrical shall be installed in accordance with the N.E.C. in affect in this jurisdiction.
2. A minimum of one 20-ampere laundry branch circuit shall be provided to supply the laundry receptacle outlet(s). This circuit shall have no other outlets.
3. All dwelling unit bedroom(s) branch circuits shall be protected by an arc-fault circuit interrupter providing protection to the entire circuit.

PLANNING

1. All interior and exterior stairways shall be provided with a means to illuminate the stair, including the landing and the treads.
2. Ceiling heights in basements without habitable spaces shall not be less than 7 feet 0 inches clear except for under beams, girders, ducts or other obstructions where the clear height shall be 6 feet 8 inches.
3. Garage floor surfaces shall be sloped to facilitate the movement of liquids toward the main vehicle entry.
4. The dimensions of a window well serving an E.E.O. window shall provide a min. net clear area of 9 square feet with a minimum horizontal projection and width of 36 inches.
5. Hazardous glazing shall be located in the following locations: in all doors including sliding glass doors and sidelights; glazing in doors and enclosures for hot tubs, whirlpools, bathtubs and showers; glazing in walls above bath or within a 24" arc of a door in a closed position or otherwise noted on these plans.
6. Openings between the garage and the residence shall be equiped with either solid wood doors 1 3/4 inches in thickness or 20-minute fire-rated doors.
7. Every sleeping room shall have at least one operable window or exterior door approved for emergency escape or rescue with a min. Net clear opening hgt. Of 24 inches and a width of 20 inches.
8. A minimum 3' x 3' landing shall be provided at all exterior doors with (1) riser.
9. The maximum riser height shall be 8-1/4" and the minimum tread depth shall be 9" with a nosing of not less than 3/4" but not more than 1 1/4" at stairs with solid risers unless noted otherwise on plans.
10. The greatest riser height and tread depth within any flight of stairs shall not exceed the smallest one by more than 3/8"
11. Winder stair treads at a point not more than 12" from the side where the treads are narrower shall not be less than 9" and the minimum depth of any tread shall not be less than 6"
12. Enclosed accessible space under stairs shall have walls, under stair surfaces and any soffits protected with 1/2" gypsum board.
13. Handrails shall be provided at all stairs with (4) or more risers. Handrails shall have a minimum hgt. Of 34" and a maximum hgt. Of 38" from the nosing of the treads.
14. Handrails shall have a circular cross section with a diameter of 1 1/4" to 2". Or a noncircular cross section with a perimeter dimension of at least 4" but not more than 6 1/4" and a largest cross-section dimension not exceeding 2 1/4"
15. Porches, balconies or raised floor surfaces located more than 30" above the floor or grade shall have guardrails not less than 36" in hgt. Open sides of stairs with a total rise of more than 30" above the floor shall have guardrails not less than 34" in hgt. from the nosing of the stair.
16. Required guardrails shall have intermediate rails or ornamental closures which do not allow the passage of a 4" sphere. The triangular opening formed by the riser, tread, and bottom rail shall not allow the passage of a 6" sphere.
17. Required smoke detectors shall be hardwired and interconnected with a battery back-up. In rooms with cathedral or sloped ceilings the location of the smoke detector shall be 3' horizontally from the highest point or per the manufacturers recommendations.
18. House address numbers shall be posted. 4 inches in height and visible from the curb line.
19. Foam plastic shall be separated from the interior of the building by a minimum 1/2" gypsum board. The gypsum board shall be installed using a mechanical system.
20. Wall and ceiling finishes shall have a flame spread index of not greater than 200
21. All exposed insulation materials installed in floor, roof, and wall assemblies: crawl spaces and attics, shall have a flame spread index not to exceed 25 with an accompanying smoke developed index not to exceed 450 when tested in accordance with ASTM E 84.
22. Moisture vapor retarder shall be provided in all frame walls with a max. Perm rating of 1.0 on the warm in winter side of the thermal insulation.
23. Sills and sleepers on a concrete or masonry slab which is in direct contact with the ground shall be preservatively treated or decay resistant heartwood of redwood, black locust, or cedars.
24. Wood columns shall be approved wood of natural decay resistance or approved pressure preservatively treated wood.
25. Protection against radon shall be installed as required per local jurisdiction.
26. The maximum length of a 4" diameter clothes dryer exhaust duct shall not exceed 25 feet from the dryer location to wall or roof termination.

ROOF CONSTRUCTION

1. Trusses shall be pre-engineered by the manufacturer, all truss data and layout sheets shall be provided prior to framing inspection.
2. Rafters shall be nailed to ceiling joists to form a continuous tie between exterior walls where joists are parallel to the rafters. Where not parallel rafters shall be tied with a rafter tie, located as near the plate as practical. Rafter ties shall be spaced not more than 4 feet on center. Rafters shall be framed to ridge board or to each other with a gusset plate as a tie.
3. Ridge board shall be at least 1" nominal thickness and not less in depth than the cut end of the rafter. At all valleys and hips there shall be a valley or hip rafter not less than 2" nominal thickness and not less in depth than the cut end of the rafter. Hip and valley rafters shall be supported at the ridge by a brace to a load bearing partition or be designed to carry and distribute the specific load at that point.
4. Roof assemblies shall have rafter or truss ties provided at load bearing locations.
5. Roof sheathing shall be supported with blocking or edge clips when rafters or trusses are 24" on center or greater.
6. Slopes less than four in twelve shingles shall be installed over (2) layers of #15 felt applied parallel to eaves with 19" top lap and 12" end lap, with end laps located at least 6 feet from end laps in preceding course.
7. Roof sheathing shall be 1/2" plywood or 7/16" OSB exterior grade. Provide plywood clips at unsupported edges midway between members.
8. Trusses shall be designed by a Structural Engineer registered in the State of Ohio. trusses shall be designed in accordance with the National Design Specification for wood and the Truss Plate Institute Recommended Practice of Design TPI-85. Roof trusses shall be designed for the following loads:

FOUNDATIONS & CONCRETE

1. The assumed soil bearing capacity shall be 1500 psf U.N.O.
2. The finished grade shall fall a minimum of 6" in the first 10 feet from building perimeter.
3. All concrete shall have a minimum 28 day compressive strength of 3000 psi except as noted. Concrete exposed to the weather and in a horizontal position in the final structure shall have a minimum 28 day compressive strength of 4500 psi and shall contain 5-7% entrained air. Concrete shall not contain calcium chloride. Basement slabs shall be a minimum 3 1/2". Porches, steps and garage floor slabs shall be a minimum 4".
4. All concrete work shall comply with:
   a. ACI 301-84 "Specifications for Structural Concrete for Buildings" (revised 1987)
   b. ACI 318-83 "Building Code Requirements for Reinforced Concrete" (revised 1986)
5. All footings shall be as follows: (based on 1500 psf soil bearing)

nominal wall thickness	footing depth	footing width
8"	8"	16"
10"	8"	18"
12"	8"	20"

6. Masonry fireplace footings shall be a pad type footing which shall extend 6 (min.) past all faces of the fireplace foundation and shall be 12" (min.) deep.
7. Footings shall extend below the frost line of the Local Governing minimum accepted frost depth. (see design criteria this sheet)
8. Foundation anchorage shall be min. 1/2" diameter bolts and shall extend a minimum 7" into poured concrete and 15" into masonry. Bolts shall be spaced 6'-0" on center max. And 12" from corners max.
9. Approved anchor straps shall be installed per manufacturers recommendations.
10. Backfill shall not be placed against the wall until the wall has sufficient strength and has been anchored to the floor above, or has been sufficiently braced to prevent damage by the backfill.
11. All surfaces of steel columns shall be given a shop coat of rust -inhibitive paint unless treated to provide corrosion resistance.
12. Crawl space shall be provided with continuously operated mechanical ventilation at a rate of 1.0 cfm per 50 sq. Ft. Of crawl space minimum with approved vapor barrier over base course.
13. All anchor bolts shall conform to ASTM A307.
14. All reinforcing steel shall be grade 60.
15. Center footings on column centerlines.
16. Encase all steel columns, bearing plates, and anchor bolts below grade with a minimum 3" concrete cover.

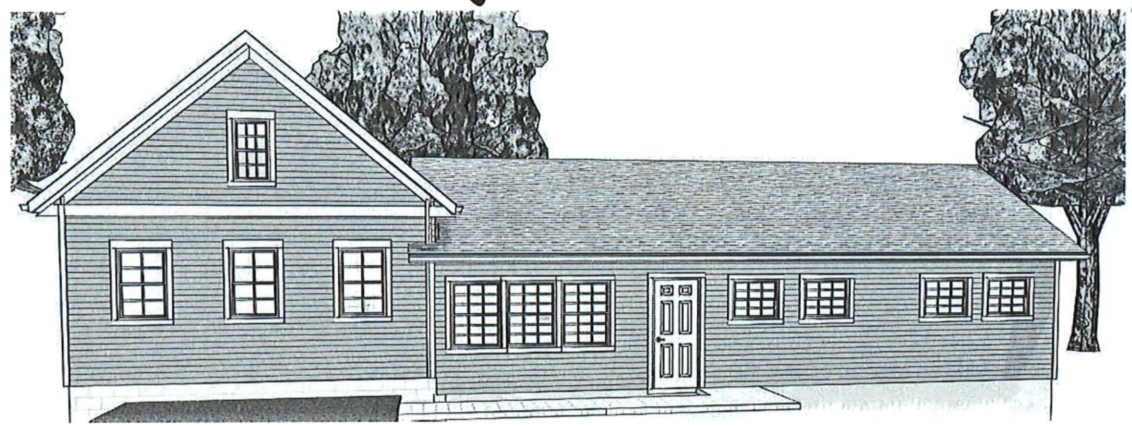
HEATING & COOLING

1. All HVAC work shall be installed in accordance with the 2019 RCO Code in affect in this jurisdiction.
2. When heating and cooling equipment is located in an equipment room, an unobstructed working space shall comply per. section M1305.1.1 of the 2019 RCO code.
3. Fuel burning heating and cooling equipment shall be provide with a volume or 50 cubic ft. per 1000 Btu/h. or an air supply shall be provided to proper fuel combustion.
4. An approved drain shall be provided to dispose of condensate from the cooling coil. condensate drains shall terminate outside of the building, or to a floor drain, plumbing fixture, sump or approved location.

FIREPLACES

1. Chimneys shall extend a minimum of 2 feet higher than any portion of the the chimney passes through the roof.
2. A portion of a chimney located in the interior of the building or within the exterior wall of the building shall have a minimum air space clearance to combustibles of 2".
3. Chimneys located entirely outside the exterior walls of the building, including chimneys that pass through the soffit or cornice, shall have a minimum air space clearance of 1" the airspace shall not be filled, except to provide fire blocking
[4.] Hearth extensions shall extend a minimum of 16" in front of, and a minimum of 8", beyond each side of the fireplace opening less than 6 square feet and 20" and 12" respectivly for 6 square feet or larger.
5. Wood or combustible materials shall not be placed within 2" of the outside front, back, or side surface of a masonry fireplace, including the smoke chamber, and not less than 6" from the inside surface of the nearest flue lining.
6. Factory built fireplaces shall be installed in accordance with the manufactures recommendations and a copy shall be provided prior to inspection.
7. Factory built or masonry fireplaces shall be provided with an exterior air supply to assure proper fuel combustion.

Addition to Colley Residence



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PRELIMINARY — ONLY FOR REVIEW BY HOME OWNER - NOT THE FINISHED PRODUCT
ESTIMATING — COMPARE PRICES FOR CONSTRUCTION
CONSTRUCTION — FOR BUILDING PURPOSES

DRAWING INFO:

DESIGN LOADS
(RCO 2013 EDITION)

WALLS:	S.P.F. WOOD STUDS
FLOOR JOIST:	TJI FLOOR JOIST OR NOTED OTHERWISE
FLOORS:	
1ST FLOOR	40 LL + 10 DL
2ND FLOOR	30LL + 10DL
BALCONY/DECKS:	40 LL + 10 DL
(ADD 50 PSF IN AREA W/ HOT TUB)	
ROOF TRUSS DEIGN:	
Top chord live load	= 25 psf.
Top chord dead load	= 10 psf.
Bottom chord live load	= 0 psf.
Bottom chord dead load	= 10 psf.
SNOW (PF/PG)	19.3 / 25.0
WIND SPEED:	70 MPH. 20.1 PSF

SEISMIC CONDITIONS BY ZONE:	A
ICE SHIELD REQUIRED:	YES
FLOOD HAZARDS:	A. 7/16/79 B. 4/22/91
WINTER DESIGN TEMP.	5° F
WEATHERING:	SEVERE
FROST DEPTH:	36"
TERMITE:	YES
DECAY:	YES
ASSUMED SOIL:	1500 PSF
MEAN ACTUAL TEMP.	50.1 F.
AIR FREEZING INDEX.	1500
CONCRETE FLOORS W/ AIR:	
BASEMENT	4000 PSI
GARAGE	4000 PSI

LIGHT & VENTILATION SCHEDULE

ROOM NAME	ROOM SQFT.	WINDOW TYPE	REQUIRED GLAZING SQ. FT.	ACTUAL GLAZING SQ. FT.	REQUIRED VENT SQ. FT.	ACTUAL VENT SQ. FT.	TEMPERED GLAZING	BEDROOM NET. CLEAR OPG	BEDROOM EGRESS SQ. FT
STUDY/DEN	33	SINGLE HUNG	2.6	54	6.2	7			
GREAT ROOM	360	SINGLE HUNG	28.8	45	14.4	23			
KITCHEN •	68	SINGLE HUNG	12.44	-	6.7	-			
BEDROOM #2	32	SINGLE HUNG	10.36	5	5.23	13		32.5" X 25.93"	MIN. 5.7 SQFT
BEDROOM #3	33	SINGLE HUNG	6.34	5	6.2	13		32.5" X 25.93"	MIN. 5.7 SQFT
OWNER'S SUITE	346	SINGLE HUNG	27.68	45	13.84	23		32.5" X 25.93"	MIN. 5.7 SQFT
OWNER'S BATH •	30	SINGLE HUNG	10.4	5	5.23	13	TEMP.		

NOTE: THIS SCHEDULE IS FOR LIGHT AND VENTILATION IT IS NOT INTENDED FOR COMPLETE WINDOW TAKEOFF.

AREAS GIVEN ARE ROOMS THAT MAY NOT HAVE A PERMANENT ARTIFICAL LIGHT SOURCE

ALL BEDROOMS SHALL HAVE AN EGRESS WINDOW MINIMUM NET CLEAR OPENING OF 5.7 SQFT. MINIMUM NET CLEAR HEIGHT SHALL BE 24" AND THE MINIMUM NET CLEAR WIDTH SHALL BE 20".

ALL WINDOWS OVER MASTER BATH PLATFORM TUB SHALL BE TEMPERED.

• PROVIDE ARTIFICAL LIGHTING AND MECHANICAL VENTILATION PER SECT. 303

BUILDING SQFT INF

FIRST FLOOR: 428 SQFT

TOTAL SQFT: 428 SQFT

Addition to Colley Residence
4375 Kerr Drive
Hillard, Ohio

NOTE:
PLUMBING AND HVAC PLANS AND SPEC PROVIDED BY OTHER

DISCLAIMER NOTE:

WHOM EVER USES THESE PLANS AGREE TO THE FOLLOWING:

CHATEUX DESIGNS WILL NOT ASSUME LIABILITY FOR ANY DAMAGES DUE TO ERRORS, OMISSIONS, OR DEFICENCES ON THESE PLANS.

OWNER OR BUILDER MUST COMPLY WITH ALL LOCAL BUILDING CODE PRIOR TO COMMENCEMENT OF ANY WORK.

DATE: 12-2-2021

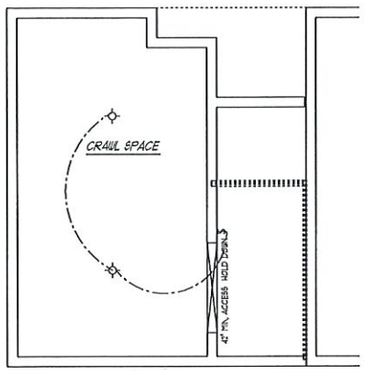
REVISED:

SHEET #

0-0

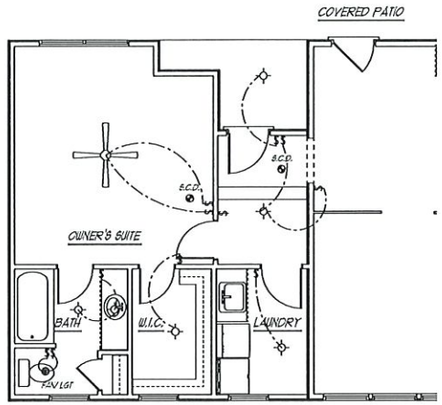
ATTACHMENT

ATTACHMENT



ELECTRICAL CRAWL SPACE 1/4" = 1'-0"

ELECTRICAL LAYOUT FOR BIDDING AND PERMIT ONLY
FINAL LAYOUT PER OWNER AND BUILDER



ELECTRICAL FLOOR PLAN 1/4" = 1'-0"

ELECTRICAL LAYOUT FOR BIDDING AND PERMIT ONLY
FINAL LAYOUT PER OWNER AND BUILDER

SECTION 314
SMOKE ALARMS

314.1 *Listing, Installation, and Technology.* All smoke alarms shall be listed in accordance with UL 217 and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72. *On each level within each dwelling unit smoke alarms utilizing photoelectric and ionization technologies shall be installed. Separate or dual-sensing smoke alarms may be used. A smoke alarm located in accordance with Section 314.3(2) shall include photoelectric technology.*

Exception: *A system meeting the requirements of Section 314.2 is not required to include both technologies.*

314.2 Smoke detection systems. Household fire alarm systems installed in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detector and audible notification device installed as required by this section for smoke alarms, shall be permitted. The household fire alarm system shall provide the same level of smoke detection and alarm as required by this section for smoke alarms. Where a household fire warning system is installed using a combination of smoke detector and audible notification device(s), it shall become a permanent fixture of the occupancy and owned by the homeowner. *The system shall be maintained in accordance with NFPA 72.*

Exception: Where separate smoke alarms are provided meeting all other requirements of this section, the smoke detection system is not required to be a permanent fixture of the occupancy or owned by the homeowner.

ELECTRICAL NOTES:

1. ALL BEDROOM OUTLETS TO HAVE ARC-FAULT CIRCUIT INTERRUPTERS.
2. ALL OUTLETS WITHIN 6' OF SINKS IN THE GARAGE/BASEMENT, AND ON THE EXTERIOR SHALL BE G.F.I. PROTECTED
3. ELECTRICAL RECEPTACLES SHALL BE INSTALLED ALONG THE WALL SO THAT NO POINT IS MORE THAN 6'-0" FROM AN OUTLET ON ANY WALL 2'-0" OR MORE IN LENGTH, AND AT EACH KITCHEN COUNTER THAT IS 8' OR LESSER. PER NEC. 210.52
4. A MIN. 20 AMP BRANCH CIRCUIT SHALL BE PROVIDED SOLEY TO SUPPLY THE LAUNDRY RECEPTACLES PER NEC. 210.11(C)(1)
5. PROVIDE ONE RECEPTACLE AT FRONT AND ONE AT BACK OF DWELLING PER NEC. 210.52
6. PROVIDE ONE RECEPTACLE WITHIN 25'-0" OF ALL HVAC UNITS PER NEC. 210.63

All Kitchen - Bath - Laundry - Garage & Exterior Outlets Are GFCI Protected

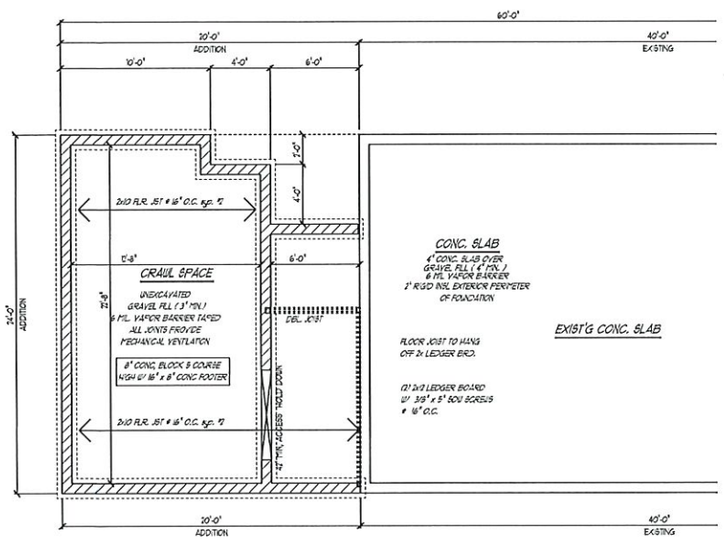
WALL LEDGEN

- NEW 8" CONC. BLOCK
- EXISTING 8" BLOCK FOUNDATION
- NEW 2x6 EXTERIOR WALLS
- NEW 2x4 INTERIOR WALL
- EXISTING INTERIOR WALL

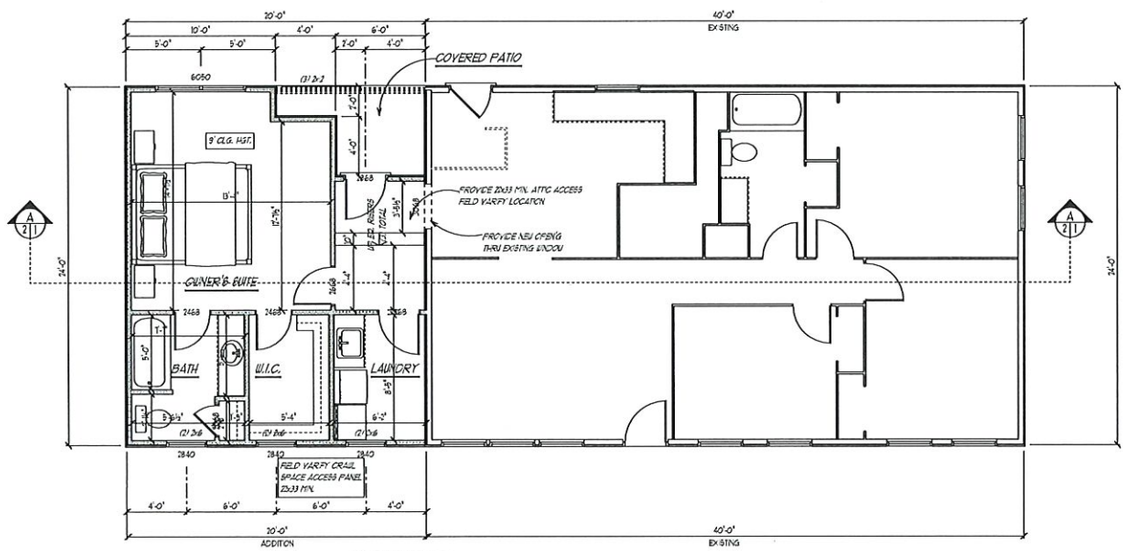
SYMBOL LEGEND

- 110 V DUAL OUTLET
- 110 SWITCHED OUTLET
- 110 WEATHERPROOF OUTLET
- 110 GROUND FAULT INTERRUPT OUTLET
- 220 V RECEPTACLE
- LIGHT SWITCH
- 3 WAY LIGHT SWITCH
- 4 WAY LIGHT SWITCH
- SMOKE / CARBON DETECTOR
- CEILING LIGHT
- WALL "SCONCE" LIGHT
- CEILING LIGHT - FULL GLASS
- RECESSED CAN LIGHT
- EXHAUST FAN/LIGHT COMBO
- EXHAUST FAN
- TELEPHONE OUTLET
- DISPOSAL
- CABLE OUTLET
- TRIPLE LIGHT
- 200 AMP ELECTRIC SERVICE PANEL
- SMOKE AND CARBON MONOXIDE DETECTOR COMBO

All Outlets & Switches Are ARC Fault Protected



FOUNDATION PLAN 1/4" = 1'-0"



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

Addition to
Colley Residence
4375 Kerr Drive
Hillard, Ohio

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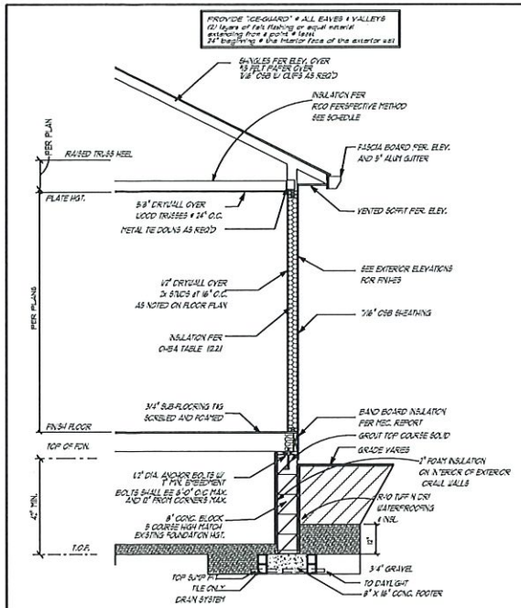
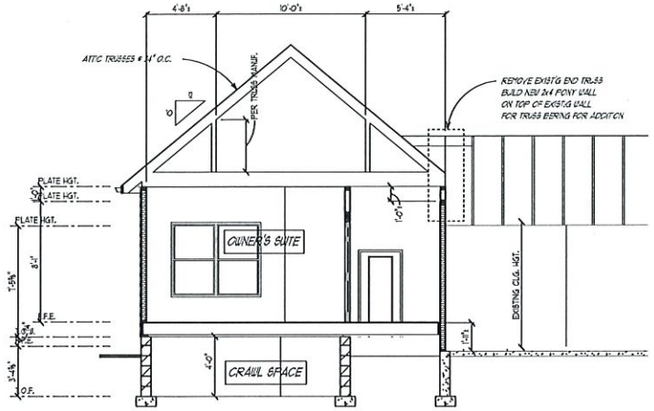
DATE: 10-3-2021
REVISED:

SHEET #
1-1

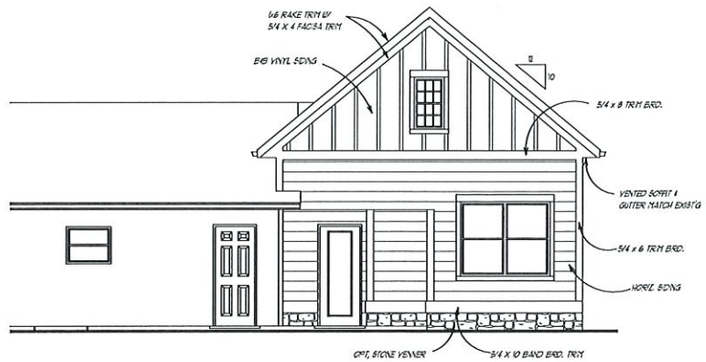
ATTACHMENT



TYP. WALL SECTION 1/4" = 1'-0"



A / 2-1 BUILDING SECTION 1/4" = 1'-0"



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

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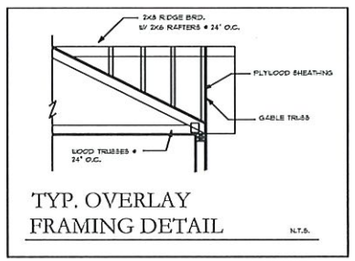
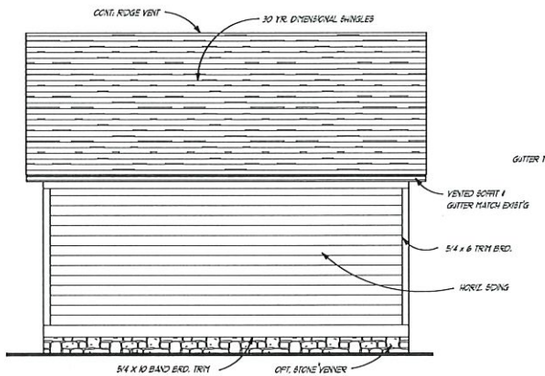
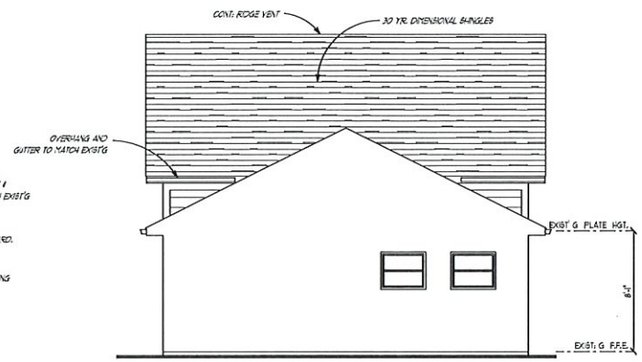


TYP. OVERLAY
FRAMING DETAIL N.T.S.

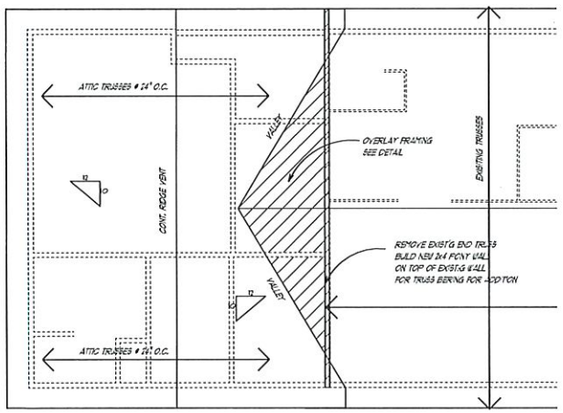


LEFT ELEVATION 1/4" = 1'-0"

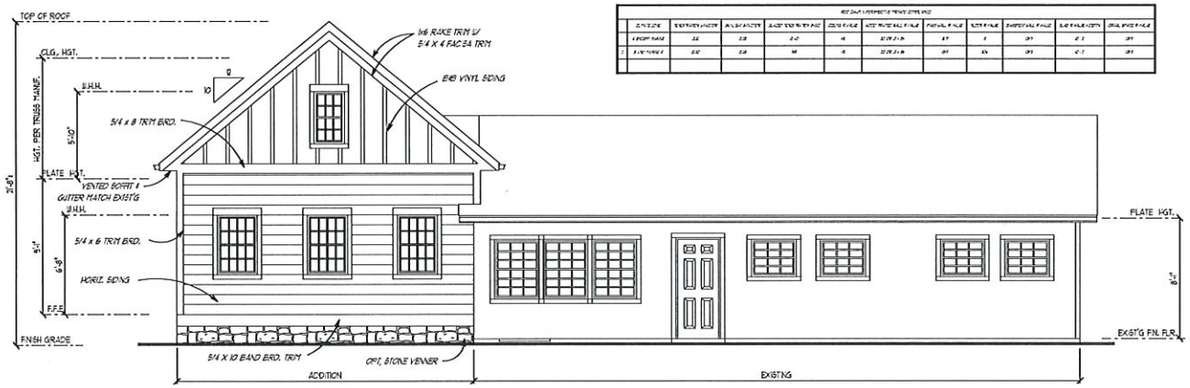


RIGHT ELEVATION 1/4" = 1'-0"

ROOF NOTES:
1. N.S.I. OVER HANGS TO MATCH EXISTING



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



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

Addition to
Colley Residence
4375 Kerr Drive
Hillard, Ohio

DISCLAIMER NOTE:
EACH EVERY USER THESE PLANS AGREE TO THE FOLLOWING:
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DATE: 03-2021
REVISED:

SHEET # 2-1

ATTACHMENT

3800 Municipal Way, Hilliard, OH 43026
614.334.2557 | www.hilliardohio.gov | building@hilliardohio.gov
BUILDING STANDARDS DIVISION

RESIDENTIAL PHASED (PARTIAL) PLAN APPROVAL

Keep this document on the building site, with the approved plans, until all work is complete and a final Certificate of Occupancy has been issued by the building department.

PROJECT NUMBER:
DATE: November 10, 2022
ADDRESS: 4375 KERR DR
APP #: RBLD-22-26
PROJECT: Addition
AREA: 428
OWNER: COLLEY JOSEPH SMITH JENNIFER, 4375 , HILLIARD , OH 43026
APPLICANT: joseph colley, 4375 Kerr Dr, Hilliard, OH 43026

APPROVED WORK: FOOTINGS, FOUNDATIONS, FRAMING AND ROUGH ELECTRICAL
Provide, for review, drawings. letters or other documents indicating revisions or additional work to bring the following items into code compliance. Indicate the revisions with a circle or cloud in a contrasting color on resubmitted documents. Send revisions as attachments through the applicant portal or through Residential Building Permit at hilliardoh.viewpointcloud.com. All documents must be in unlocked pdf format.

I ADDITIONAL INFORMATION / CORRECTIONS REQUIRED:

A. Provide Heating and cooling equipment sized in accordance with ACCA manual S and loads calculated in accordance with ACCA Manual J or other approved method. Equipment selected far exceeds the calculated loads and needs to be resized to meet the requirements of ACCA Manual S [1401.3 RCO]

II NOTES:

A. This Phased Plans Approval is per the 2019 Residential Code of Ohio Section 105.1.4 and is issued for the convenience of the owner. The holder of such approval for the foundation or other parts of a building or structure shall proceed at the holder's risk with the building operation and without the assurance that an approval for the entire structure will be granted. Such approvals shall be issued for various stages in sequence of construction provided that all information and data required by the code for that portion of the building or structure has been submitted. **The holder of a phased plan approval may proceed only to the point for which approval has been given.**

B. **ADJUDICATION ORDER:** In accordance with 109.1 of the OBC, as required by 3781.031 of the Revised Code, you have the right to appeal items in this letter to the State Board of Building Appeals if requested within 30 days from the mailing date of this order. You have the right to be represented by council, present arguments, either oral or in writing, present evidence and examine witnesses appearing for or against you. Please contact this office if you wish to file an appeal.

C. This approval is conditional upon proceeding with construction in accordance with the approved construction documents. The building official shall be notified of any changes from the approved construction documents. Such changes shall be submitted and approved by the building department prior to their implementation; Sections 105.2, 106, 107.4.2, & 107.6.1 of the Ohio Building Code. (OBC). The approval is invalid if construction work has not commenced within 12 months. One extension shall be granted for an additional 12-month period if requested by the owner at least 10 days in advance of the expiration of the approval and upon payment of a fee not to exceed $100.00. (OBC 105.3) If in the course of construction, work is delayed or suspended for more than 6 months, the approval is invalid. Two extensions shall be granted for 6 months each if requested by the owner at least 10 days in advance of the expiration of the approval and upon payment of a fee for each extension of not more than $100.00. (OBC 105.4)

D. These plans have been reviewed only for compliance with the 2019 Residential Code of Ohio and other codes incorporated in the RCO, each as in effect on the date of original submission. There may be additional regulations applicable under municipal, state or federal statutes. **Inspections shall be made as work required by the plans approval is completed in accordance with Ohio Building Code Section 108.2. No building or structure, in whole or in part, shall be used or occupied until the building official has issued an approval in the form of a Certificate of Occupancy in accordance with the Ohio Building Code Section 111.1.**

Reviewed,

Michael Hulsey

Michael Hulsey, Architect

Plans Examiner, Chief Building Official

ATTACHMENT

5 December 2022

Joe Colley, Jennnifer Smith

4375 Kerr Drive

To whom it may concern;

I am looking for help with these final plans for the addition on our home. Admittedly, this project has far exceeded the cost and time that we budgeted, but we are still working diligently. I have built many things in my life, but I have never been on the administrative side to deal with permitting, variances, all the things of that nature, please excuse the mess!

This is the one portion of this job that I honestly did not want to do, and wanted to contract out. I had three different companies out, two of which put a bid in at around $17,000 (!), the other two simply stated they didnt have the time until next spring to complete, so I decided to tackle on my own.

Finally, I located a company in Utah, which would draw plans at a reasonable price. They sized this system for me and provided me with all plans to complete the work myself. After I sent them the denial letter, the did send me a reply stating that they have never had an issue with this size system, for this scope of work, and basically told me "good luck", so, here I am trying to figure all of this out.

Attached are all of the documents that they provided. I also attached a file from HVAC direct, which would be the actual system I would like to purchase for this project. The equipment is all the same size proposed from the engineering company, just the condensor and furnace have different variations at the end of the model number. I am hoping to get approved for this system if it meets standards. On page 4 of this attachment, it states that the 3 ton coil is installed for units that are installed horizontally for optimum efficiency. My system will be installed horizontally.

Rather than selling during the housing boom, we chose to stay in Hilliard due to the great school system, recreation, and myself having lived here for around 15 years. Our family of 5 quickly outgrew this small home, we are just trying to better our living situation and give everyone their own space. I have contracted COVID twice in the last 6 weeks, this last round has greatly effected my health and I am still fighting residual side effects. Jenny is working all the extra shifts she can as a trauma nurse so we can make ends meet and still finish the home, and I am working 3-5 days as my health allows. Our original deadline was Halloween, then Thanksgiving, now Christmas, and what a great Christmas present it would be to the children.

Ill stop rambling now, im just asking to please help us finish this project. I have single handedly built everything wth the help of one good friend, im tired, ill, and exhausted.

Thank you

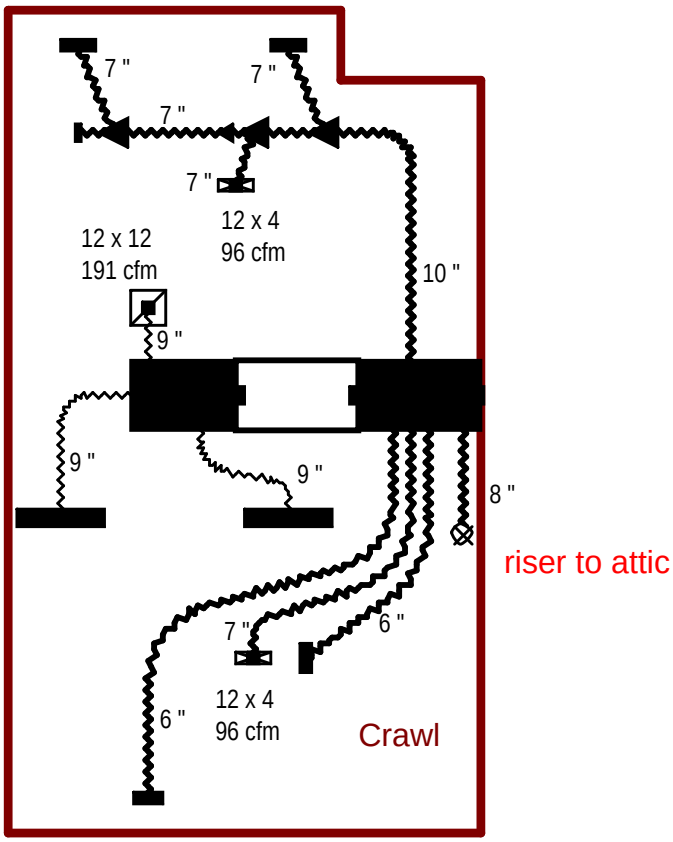
ATTACHMENT

Joe Colley

865.244.8391

ATTACHMENT

Crawlspace



Job #: 4216 rev
Performed by Dana Morley for:
Colley Home Addition
4375 Kerr Drive
Hilliard, OH 43026

hsjoec112@live.com

Perfect Home Hvac Design

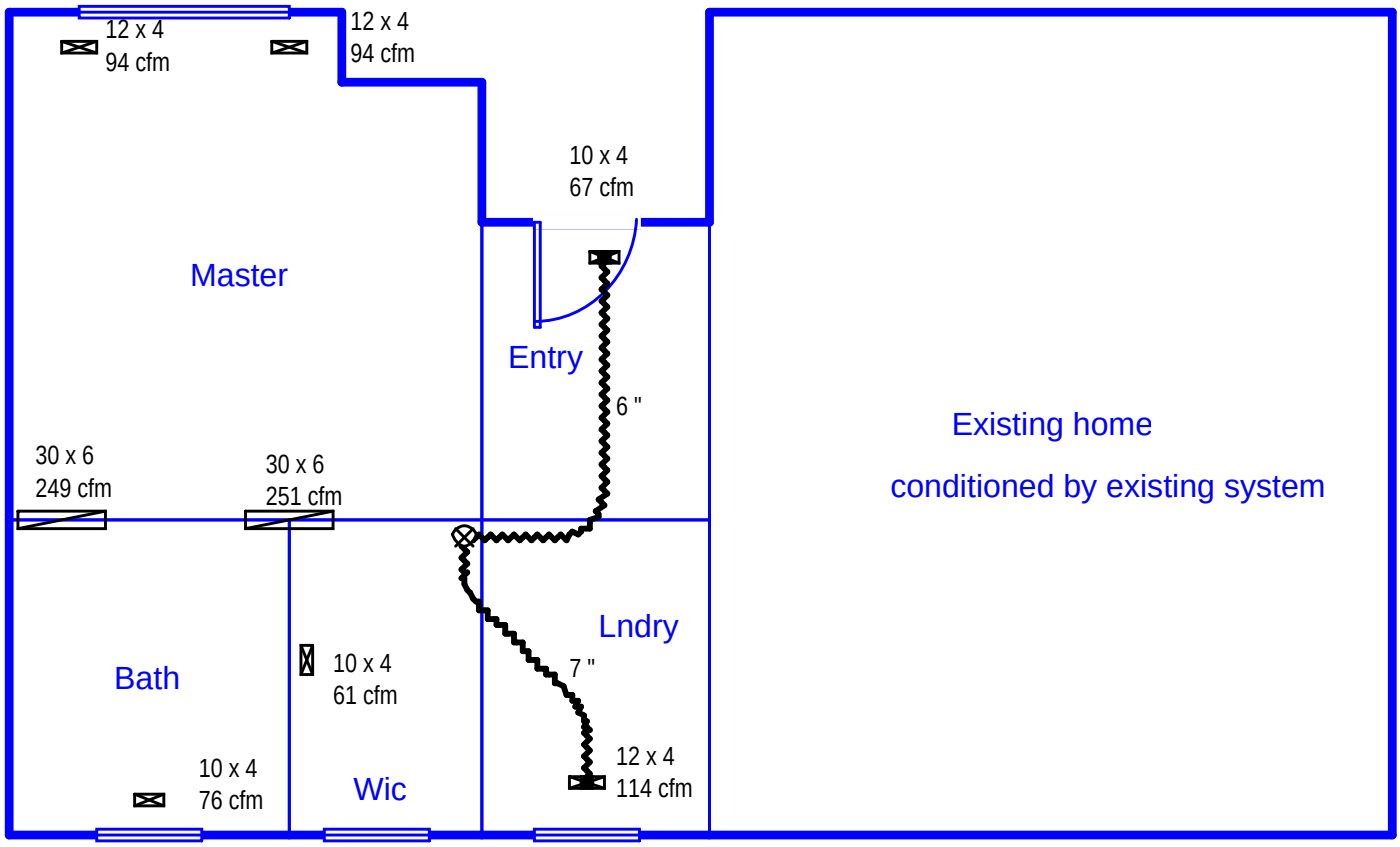
890 North Main Street
Bountiful, UT 84010
Phone: 801-300-5118
www.perfect-home-hvac-design.com

Scale: 1 : 66

Right-Suite® Universal 2022
22.0.04 RSU12322
2022-Nov-07 12:50:29
...Design files\Colley, Joe rev.rup

ATTACHMENT

First level



Job #: 4216 rev **Performed by Dana Morley for:** Colley Home Addition 4375 Kerr Drive Hilliard, OH 43026 hsjoec112@live.com	**Perfect Home Hvac Design** 890 North Main Street Bountiful, UT 84010 Phone: 801-300-5118 www.perfect-home-hvac-design.com	Scale: 1 : 66 Page 2 Right-Suite® Universal 2022 22.0.04 RSU12322 2022-Nov-07 12:50:29 ...Design files\Colley, Joe rev.rup

OVERVIEW

The Goodman CHPF3636B6 evaporator coil is designed for any installations that the coil needs to sit on its side, in the horizontal position. With its enhanced comfort and superior efficiency design, the CHPF3636B6 is an inexpensive yet quality choice for you.

ATTACHMENT

QUICK FACTS

- 3 ton evaporator coil
- Installable in the horizontal configuration
- Usable with either a heat pump or an AC-only condenser
- Works with R410A or R22 refrigerant
- Low air leakage
- Check flowrater expansion device for use in any application

3 Tons

At an output of 3 tons, the Goodman CHPF3636B6 evaporator coil is ready for almost any horizontal installation at that size. In many situations, a condenser that is paired with the condenser is going to be smaller than this coil. This is intentional and is to maintain the overall unit's efficiency.

Please note that for this coil to function, a furnace or blower and a condenser is required, all sold separately. This coil is not designed to replace a coil in a single-piece air handler.

Warranty

From: Dana Morley
Sent: Friday, November 18, 2022 16:52
To: Joe Colley
Subject: Re: revised hvac design

ATTACHMENT

Joe, the equipment specified is the smallest available in this model and by this manufacturer.

Your loads are very small.

I cannot choose smaller equipment that does not exist in conventional equipment.

I am amazed the Inspector does not know this? It is common to base system design as I have done. .

The furnace is a 40K unit and ductwork is based upon the blower output of this unit. Manufacturer does not make a smaller unit in this model.

The air conditioner is a 1.5 ton unit - they do not make a 1-ton unit.

These are conventional units. Once again smallest available.

Only other thing we could do would be to go with a heat pump from Mitsubishi (or other). They do have smaller all electric units.

Good luck with your Inspector.

I don't know what else to say.

Dana

PHHD

ATTACHMENT

Huge Savings on orders over $4,000. Use coupon code: HURRY and save big!

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HVACDIRECT.com

Toggle Nav

By: Goodman **Model:** GSX140181 / CHPF3636B6 / GMEC960403AN / TX2N4A / SST-AB-R6 **IN STOCK - READY TO SHIP** **ID:** 20871

★★★★★ SEE REVIEWS (2)

Your Low Price **$3,426.95**

As low as $158.13 / MONTH *

FREE SHIPPING

Requires: Plastic / PVC Flue Vent Piping

Furnace *

1x **40,000 BTU 96% AFUE 2 Stage Goodman Gas Furnace - Upflow/Horizontal (Ships in 2-3 Weeks)**

VIEW ITEM

+ $1,532.00

Air Condenser *

1x **1.5 Ton 14 SEER Goodman Air Conditioner Condenser (In Stock - Ready to Ship)**

VIEW ITEM

+ $1,244.00

Coil *

1x **3 Ton 17.5" Goodman Horizontal Evaporator Cased Coil (In Stock - Ready to Ship)**

VIEW ITEM

+ $418.00

TXV *

1x **Goodman 1.5 to 2 Ton TXV Kit - R-410A (In Stock - Ready to Ship)**

VIEW ITEM

+ $88.00

Required Transition *

1x **14" to 17.5" Furnace to Coil Transition (In Stock - Ready to Ship)**

VIEW ITEM

+ $144.95

ADD TO CART

ACCESSORIES FOR THIS PRODUCT

Lowest Price Guarantee Award Winning Support

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Patio Heaters | Grill Accessories | Outdoor Kitchens | Fire Pits & Tables | BBQ Grills & Accessories

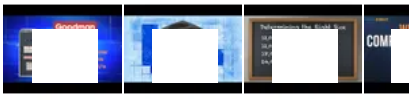
MORE VIEWS









ESCRIPTION

is Goodman system provides 1.5 Ton of cooling, 40,000 BTU of heating, and acheives 14.5 SEER. These features make it a perfect choice for your next system.

e Goodman GMEC960403AN furnace features a two stage gas valve and multi-speed blower motor that can be installed in either upflow or horizontal nfigurations. This furnace also features a X13 blower motor that saves electricity during the heating and cooling months. This direct current motor uses less ectricity than the standard multi-speed furnace blower. This furnace also includes a patented aluminized-steel tubular heat exchanger and durable Silicon tride Hot Surface Ignition system. These furnaces are run-tested for heating or combination heating and cooling applications. With a heavy-gauge, reinforced, sulated steel cabinet and durable baked enamel finish, this unit can be installed in a variety of locations. Not intended for use in mobile homes.

e Goodman GMEC960403AN furnace has a 96% AFUE rating which means that for every every $1.00 you spend, 96 cents goes towards heating your home.

rnace Features

- Operates as a natural gas furnace out of the box and can be easily converted to a propane furnace with optional propane conversion kit.
- X13 blower motor with brushless DC design and a permanent-magnet rotor which allows much more efficient operation furnace in both heating and cooling months
- Patented TuffTube™ dual-diameter tubular furnace heat exchanger with lifetime limited warranty plus 10-year furnace replacement limited warranty (with online registration)
- gas valve with revolutionary new Dual$aver control technology allows installer to turn on two-stage operation with the flip of a dipswitch

ATTACHMENT

- Goodman Silicon Nitride igniter with patented adaptive learning routine for maximum igniter life
- Integrated furnace electronic furnace control board with self-diagnostics, low voltage terminal block, and separate terminals for electronic air cleaner and 24-volt humidifiers
- Goodman has furnace control board stores the last five diagnostic codes in memory; simple push-button activation outputs the fault history to a flashing red LED
- Low constant fan mode allows the homeowner to activate the lowest available heating speed to circulate air quietly and efficiently throughout the home during the off cycle
- Furnaces' self-adjusting feature automatically adjusts furnace to high or low stage based on outside temperature without outdoor temperature sensor
- Quiet single-speed, induced-draft blower
- Complies with California NOx emissions standards

oodman AC - The **GSX140181** Goodman Air Conditioner Condenser uses the chlorine-free refrigerant R-410A to help prevent damage to the Ozone Layer. This conditioner 1.5 TON is equipped with sound-dampening features to provide operating sound levels are among the lowest in the heating and cooling industry. sing high-quality components,the **Goodman GSX140181** air conditioner condenser an be either 14 or 15 SEER depending on which indoor unit it is paired with. it is installed with the manufacturer-recommended evaporator coil, variable speed furnace, variable speed air handler, or variable speed modular blower, and so sometimes a thermostatic expansion valve (TXV), it is a 15 SEER system.

ease note that this product is regulated by DOE Efficiency Standards.

- R-410A chlorine-free refrigerant
- Factory-installed filter dryer
- Copper tube/enhanced aluminum fin coil
- Service valves with sweat connections and easy-access gauge ports
- Contactor with lug connection
- Ground lug connection
- AHRI Certified; ETL Listed
- Goodman brand louvered sound control top design
- Steel louver coil guard
- Heavy-gauge galvanized-steel cabinet
- Baked-on powder-paint finish with 500-hour salt-spray approval
- Top and side maintenance access
- Single-panel access to controls with space provided for field-installed accessories
- When properly anchored, meets the 2010 Florida Building Code unit integrity requirements for hurricane-type winds

his unit cannot be shipped or installed in the following states: Arizona, California, Nevada, and New Mexico
ick here to see the unit that is available in these states.
r more information about state efficiency requirements, please click here.

0,000 BTU 96% AFUE 2 Stage Goodman Gas Furnace - Upflow/Horizontal

VERVIEW

As a high-efficiency system, the GMEC960403AN Goodman gas furnace features many money saving features. The two-stage, multi-speed furnace uses a superior heat exchanger for better heat transfers to your home. Considered one of the best efficiencies on the market, the GMEC960403AN is a good way to go if you want to lower your gas bill.

UICK FACTS

- This furnace is ideal to heat a smaller house (depending on climate)
- 40,000 BTU 96% AFUE natural gas furnace
- Requires plastic/PVC flue venting
- Can be used in the upflow or horizontal orientation
- Can be converted to an LP furnace with an optional conversion kit (sold separately)
- Innovative design for electrical efficiency, safety, and lower sound output

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ATTACHMENT

1.5 Ton 14 SEER Goodman Air Conditioner Condenser

OVERVIEW

The Goodman brand has been focused on providing efficiency and comfort where it matters most while still being an inexpensive brand. With its superior components and a standard efficiency, the Goodman GSX140181 air conditioner condenser is a popular choice for homeowners around the United States.

QUICK FACTS

- Ideal size to cover a small house in ideal climates
- 1.5 ton, 14 SEER AC-only condenser
- Fully charged for up to 15' of line set

READ MORE +

3 Ton 17.5" Goodman Horizontal Evaporator Cased Coil

OVERVIEW

The Goodman CHPF3636B6 evaporator coil is designed for any installations that the coil needs to sit on its side, in the horizontal position. With its enhanced comfort and superior efficiency design, the CHPF3636B6 is an inexpensive yet quality choice for you.

QUICK FACTS

- 3 ton evaporator coil
- Installable in the horizontal configuration
- Usable with either a heat pump or an AC-only condenser

READ MORE +

Goodman 1.5 to 2 Ton TXV Kit - R-410A

Goodman's TXV valves are designed to improve the reliability and efficiency of your central split system. With the TX2N4A, you can be assured that your one-and-a-half or two ton system is getting the proper refrigerant flow, even through changing conditions. Since this valve is installed externally, it is easy to service and maintain. If you're looking to improve the efficiency and performance of your system, the TX2N4A is a good start.

Product Compatible With

- Goodman GSX130181 Air Conditioners
- Goodman GSX130241 Air Conditioners
- Goodman DSXC160241 Air Conditioners

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14" to 17.5" Furnace to Coil Transition

This pre-assembled transition is a perfect for when the width of the furnace and width of the coil is different. This transition is designed for a 14" to 17.5" transition. This transition is quick and easy to install and eliminates block-offs for maximum efficiency.

Features:

- Pre-assembled – a perfect fit for most coil furnace matchups
- Compliments all system brands & models
- Used in closet, up-flow, horizontal, attic & basement applications
- Quick & easy to install

READ MORE +

PRODUCT SPECIFICATIONS

60,000 BTU 96% AFUE 2 Stage Goodman Gas Furnace - Upflow/Horizontal	
Weight (in lbs)	112.000000
Exhaust Flue Requirement	Plastic / PVC
Manufacturer	Goodman
Furnace Efficiency / AFUE	96%
Heating BTU	40,000
Blower Motor	Multi-Speed - ECM
Maximum CFM	1200
Configuration	Upflow/Horizontal
Exhaust Pipe	PVC
Flue Location	Right
Energy Star	Yes
Electrical	115 V. 1 Phase 60 Hz
Burner Stages	Two
Fuel Type	Gas
Height	34.5"
Width	14"
Depth	28.75"
Warranty	Lifetime Heat Exchanger, 10 Years Unit Replacement, and 10 Years Parts with Online Registration

esources	• GMEC96 Installation Manual • GMEC96 Specifications Sheet • GMEC96 Owner's Manual • GMEC96 Service Manual • GMEC96 Replacement Parts Manual • GMEC96 Brochure • Goodman Furnace Warranty You will need Adobe® Acrobat® Reader to view PDF documents.
afety nformation	This gas appliance requires a trained technician to install. Improperly connecting gas lines or improperly connecting a gas flue or venting may result in death. By purchasing this item, you are agreeing that you are using a trained technician to install this gas appliance. We will not be responsible for any injury or property damage arising from improper service or service procedures. Whoever installs or services this unit assumes responsibility for any personal injury or property damage which may result. Many jurisdictions require a license to install this equipment. PROPOSITION 65 WARNING
.5 Ton 14 SEER Goodman Air Conditioner Condenser	
/eight (in lbs)	146.000000
lanufacturer	Goodman
ooling BTU	18,000
ecibel Level dBA)	71
nergy Star	No
efrigerant	R410A
EER	14
ondenser tages	Single Stage
ompressor ype	Rotary
iquid Line	3/8"
iquid Valve Size	3/8"
uction Valve ize	3/4"
lectrical	208 / 230 V. 1 Phase 60 Hz
lax Breaker ize	30 amps
lin. Breaker ize	12 amps
onnage	1.5 Ton
leight	27.5"
/idth	26"
epth	26"
/arranty	10 Years with Online Registration

ATTACHMENT

esources	• Goodman Installation Manual • Goodman Specifications • Goodman Brochure • Goodman Warranty Information • Goodman Service Instructions • Goodman Kit Instructions • Goodman Parts Manual You will need AdobeÂ® AcrobatÂ® Reader to view PDF documents.
afety nformation	PROPOSITION 65 WARNING
Ton 17.5" Goodman Horizontal Evaporator Cased Coil	
Veight (in lbs)	50.000000
lanufacturer	Goodman
onfiguration	Horizontal
efrigerant	R410A or R22
iquid Line	3/8"
uction Line	7/8"
onnage	3 Ton
tyle	A-Coil
eight	21.125"
Vidth	17.5"
epth	26"
Varranty	10 Years with Online Registration
esources	• Goodman Installation Manual • Goodman Specifications • Goodman Parts Manual • Goodman Warranty You will need AdobeÂ® AcrobatÂ® Reader to view PDF documents.
afety nformation	PROPOSITION 65 WARNING
oodman 1.5 to 2 Ton TXV Kit - R-410A	
Veight (in lbs)	2.500000
lanufacturer	Goodman
efrigerant	R410A
afety nformation	PROPOSITION 65 WARNING
4" to 17.5" Furnace to Coil Transition	
Veight (in lbs)	20.000000
lanufacturer	McDaniel Metals
eight	8 inches
Vidth	17.75 inches
e	21 inches

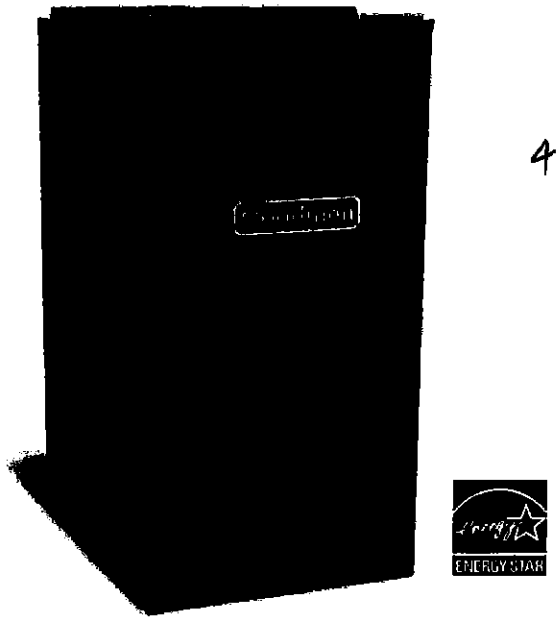
ATTACHMENT

Goodman
Air Conditioning & Heating

GMEC96

HEATING INPUT: 30,000–120,000 BTU/H

TWO-STAGE, MULTI-SPEED ECM GAS FURNACE UP TO 96% AFUE



40000 BTU

Contents

Standard Features

- Energy-efficient, multi-speed ECM blower motor
- Heavy-duty, aluminized-steel tubular heat exchanger
- Stainless-steel secondary heat exchanger
- Two-stage gas valve provides quiet, economical heating
- Durable Silicon Nitride igniter
- Quiet two-speed induced draft blower
- Self-diagnostic control board with constant memory fault code history output to a LED
- Color-coded low-voltage terminals with provisions for electronic air cleaner and humidifier
- Low continuous fan speed options offer quiet air circulation
- All models comply with California 40 ng/J Low NOx emissions standard
- For installation in California's South Coast Air Quality Management District (SCAQMD) only: This furnace does not meet the SCAQMD Rule 1111 14 ng/J NOx emission limit, and thus is subject to a mitigation fee of up to $450. This furnace is not eligible for the SCAQMD Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.
- AHRI Certified; ETL Listed

Cabinet Features

- Designed for multi-position installation — upflow, horizontal left or right
- Certified for direct vent (2-pipe) or non-direct vent (1-pipe)
- Easy-to-install top venting with optional side venting
- Convenient left or right connection for gas and electrical service
- Cabinet air leakage (Q_{Leak}) ≤ 2%
- Heavy-gauge steel cabinet with durable finish
- Fully insulated heat exchanger and blower section
- Airtight solid bottom or side return with easy-cut tabs for effortless removal in bottom air-inlet applications

LIFETIME HEAT EXCHANGER LIMITED WARRANTY* | 10 YEAR UNIT REPLACEMENT LIMITED WARRANTY* | 10 YEAR PARTS LIMITED WARRANTY*

Intertek

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001 =

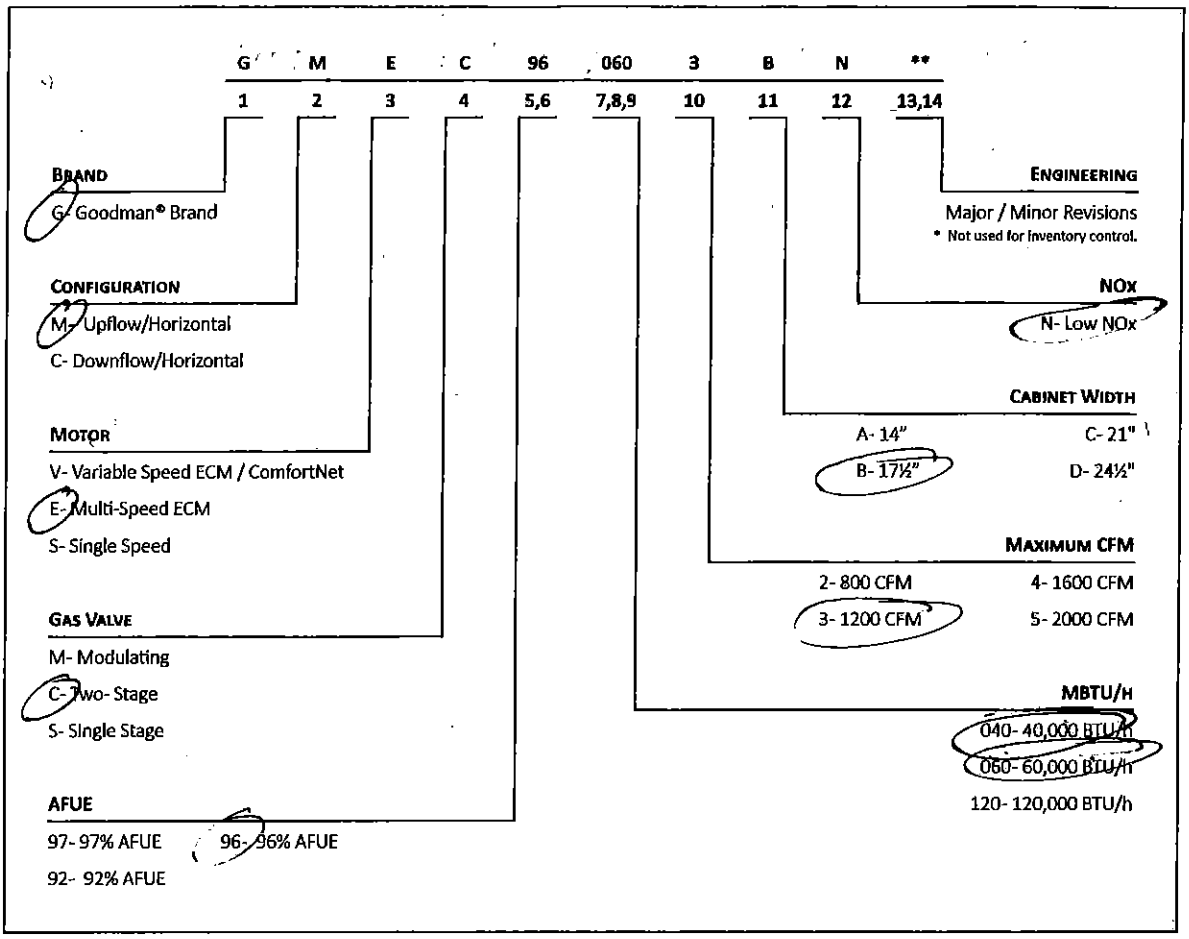
COMPANY WITH ENVIRONMENTAL SYSTEM CERTIFIED BY DNV GL = ISO 14001 =

BBB

* Complete warranty details available from your local dealer or at www.goodmanmfg.com. To receive the Lifetime Heat Exchanger Limited Warranty (good for as long as you own your home), 10-Year Unit Replacement Limited Warranty and 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec.

ATTACHMENT

NOMENCLATURE



	GMEC96 0303ANA	GMEC96 0403ANA	GMEC96 0603ANA	GMEC96 0302BNA	GMEC96 0402BNA	GMEC96 0603BNB	GMEC96 0803BNA	GMEC96 0804CNA	GMEC96 1004CNA	GMEC96 1005CNA	GMEC96 1205DNA
HEATING DATA											
High Fire Input[1]	30,000	40,000	60,000	30,000	40,000	60,000	80,000	80,000	100,000	100,000	120,000
High Fire Output[1]	28,800	38,400	57,600	28,800	38,400	57,600	76,800	76,800	96,000	96,000	115,200
Low-Fire Input[1]	21,000	28,000	42,000	21,000	28,000	42,000	56,000	56,000	70,000	70,000	84,000
Low-Fire Output[1]	20,160	26,880	40,320	20,160	26,880	40,320	53,760	53,760	67,200	67,200	80,640
AFUE[2]	96	96	96	96	96	96	96	96	96	96	96
Temp. Rise Range (°F)	20-50	20-50	30-60	20-50	20-50	35-65	35-65	25-55	35-65	35-65	35-65
Vent Diameter[3]	2"-3"	2"-3"	2"-3"	2"-3"	2"-3"	2"-3"	2"-3"	2"-3"	2"-3"	2"-3"	2"-3"
No. of Burners	2	2	3	2	2	3	4	4	5	5	6
CIRCULATOR BLOWER											
Available AC @ 0.5" ESP	1.5-2	1.5-3	1.5-3	1.5-2	1.5-3	1.5-3	1.5-3	2.5-4	1.5-4	3-5	3-5
Size (D x W)	11" x 6"	11" x 6"	11" x 6"	10" x 8"	10" x 8"	11" x 8"	11" x 8"	11" x 10"	11" x 10"	11" x 10"	11" x 11"
Horsepower @ 1075 RPM	1/2	1/2	1/2	1/2	1/2	1/2	1/2	3/4	1	1	1
Speed	5	5	5	5	5	5	5	5	5	5	5
FILTER SIZE (IN²) (QTY)	(1) 16 x 25 (side) or (1) 14 x 25 (bottom)	(1) 16 x 25 (side) or (1) 14 x 25 (bottom)	(1) 16 x 25 (side) or (1) 14 x 25 (bottom)	(1) 16 x 25 (side or bottom)	(1) 16 x 25 (side or bottom)	(1) 16 x 25 (side or bottom)	(1) 16 x 25 (side or bottom)	(1) 16 x 25 (side or bottom)	(1) 16 x 25 (side or bottom)	(1) 20 x 25 (bottom) or (2) 16 x 25 (side)	(1) 20 x 25 (bottom) or (2) 16 x 25 (side)
ELECTRICAL DATA											
Min. Circuit Ampacity[4]	8.6	8.6	8.6	8	8	8	8	11.6	13.3	13.3	13.3
Max. Overcurrent (amps)[5]	15	15	15	15	15	15	15	15	15	15	15
SHIPPING WEIGHT (LBS)	106	106	110	111	112	115	118	123	140	140	154

1 Natural Gas BTU/h

2 DOE AFUE based upon Isolated Combustion System (ICS)

3 Installer must supply one or two PVC pipes: one for combustion air (optional) and one for the flue outlet (required). Vent pipe must be either 2" or 3" in diameter, depending upon furnace input, number of elbows, length of run and installation (1 or 2 pipes). The optional Combustion Air Pipe is dependent on installation/code requirements and must be 2" or 3" diameter PVC.

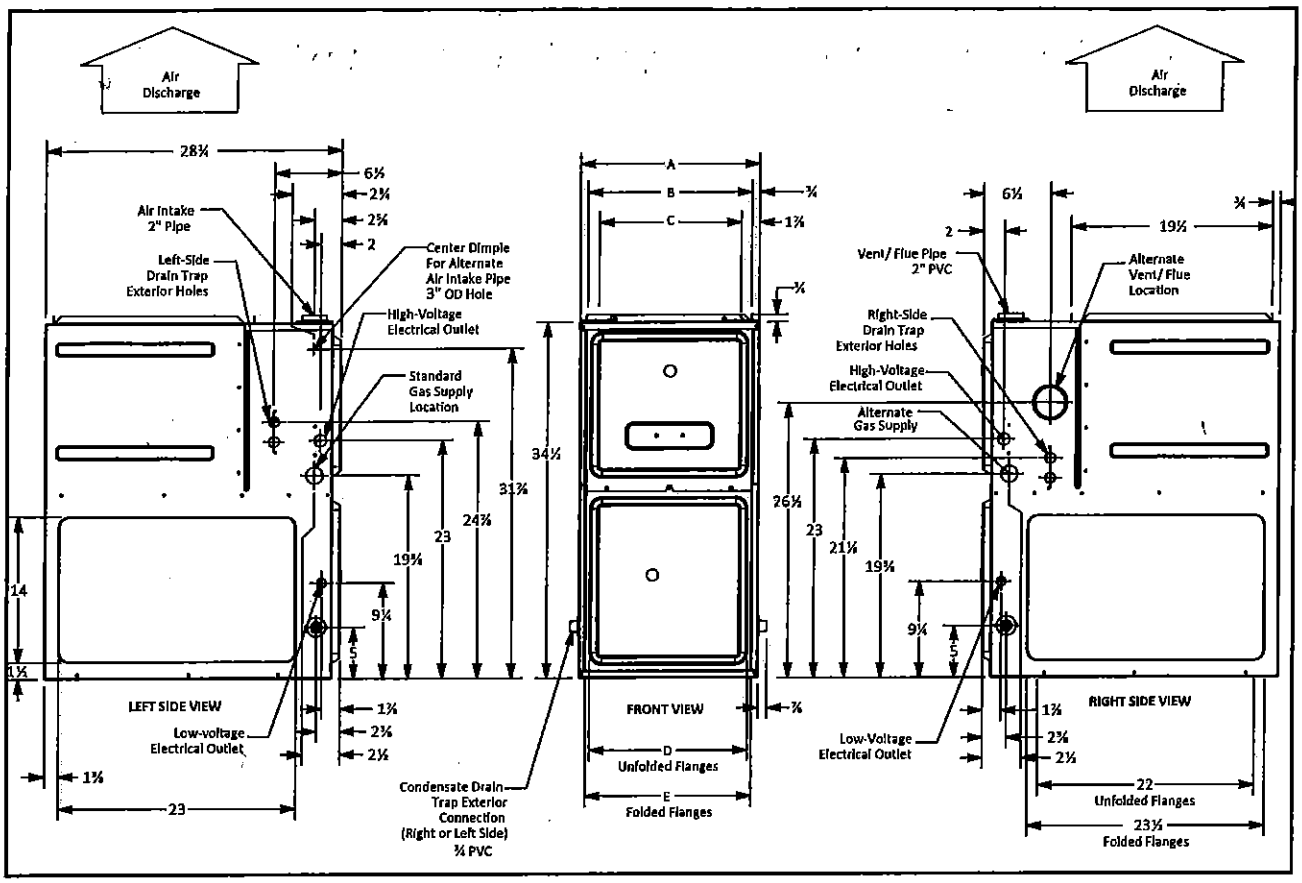
4 Minimum Circuit Ampacity = (1.25 x Circulator Blower Amps) + ID Blower amps. Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

5 Maximum Overcurrent Protection Device refers to maximum recommended fuse or circuit breaker size. May use fuses or HACR-type circuit breakers of the same size as noted.

NOTES

- All furnaces are manufactured for use on 115 VAC, 60 Hz, single-phase electrical supply.
- Gas Service Connection ½" FPT
- Important: Size fuses and wires properly and make electrical connections in accordance with the National Electrical Code and/or all existing local codes.
- For bottom return: Failure to unfold flanges may reduce airflow by up to 18%. This could result in performance and noise issues.
- For servicing or cleaning, a 24" front clearance is required. Unit connections (electrical, flue and drain) may necessitate greater clearances than the minimum clearances listed above. In all cases, accessibility clearance must take precedence over clearances from the enclosure where accessibility clearances are greater.

DIMENSIONS



		AIR DISCHARGE			AIR RETURN
MODEL	A	B	C	D	E
GMEC960303ANA	14"	12½"	10½"	8⅝"	10⅛"
GMEC960403ANA	14"	12½"	10½"	8⅝"	10⅛"
GMEC960603ANA	14"	12½"	10½"	8⅝"	10⅛"
GMEC960302BNA	17½"	16"	13⅞"	12⅛"	13⅝"
GMEC960402BNA	17½"	16"	13⅞"	12⅛"	13⅝"
GMEC960603BNB	17½"	16"	13⅞"	12⅛"	13⅝"
GMEC960803BNA	17½"	16"	13⅞"	12⅛"	13⅝"
GMEC960804CNA	21"	19½"	17⅜"	16"	17½"
GMEC961004CNA	21"	19½"	17⅜"	16"	17½"
GMEC961005CNA	21"	19½"	17⅜"	16"	17½"
GMEC961205DNA	24½	23"	20⅞"	19⅜"	20⅞"

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS

POSITION	SIDES	REAR	FRONT	BOTTOM	FLUE	TOP
Upflow	0"	0"	3"	C	0"	1"
Horizontal	6"	0"	3"	C	0"	6"

C = If placed on combustible floor, the floor MUST be wood ONLY.

COOLING

DIPSWITCH SETTING: Switch Bank 2 Switch 1 2 3	STATIC	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
		CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
	G	721	679	635	591	552	505	463	422
**OFF OFF OFF	Ylo	914	874	841	805	772	732	696	657
	Y	1070	1040	1005	975	942	915	883	849
ON OFF OFF	Ylo	653	597	552	507	460	410	366	326
	Y	914	874	841	805	772	732	696	657
ON ON OFF	Ylo	653	597	552	507	460	410	366	326
	Y	1070	1040	1005	975	942	915	883	849
OFF OFF ON	Ylo	914	874	841	805	772	732	696	657
	Y	1191	1168	1135	1112	1081	1055	1024	998
OFF ON ON	Ylo	653	597	552	507	460	410	366	326
	Y	721	679	635	591	552	505	463	422
ON OFF ON	Ylo	1191	1168	1135	1112	1081	1055	1024	998
	Y	1091	1061	1026	996	962	936	903	869
ON ON ON	Ylo	1191	1168	1135	1112	1081	1055	1024	998
	Y	653	597	552	507	460	410	366	326

** Factory Default

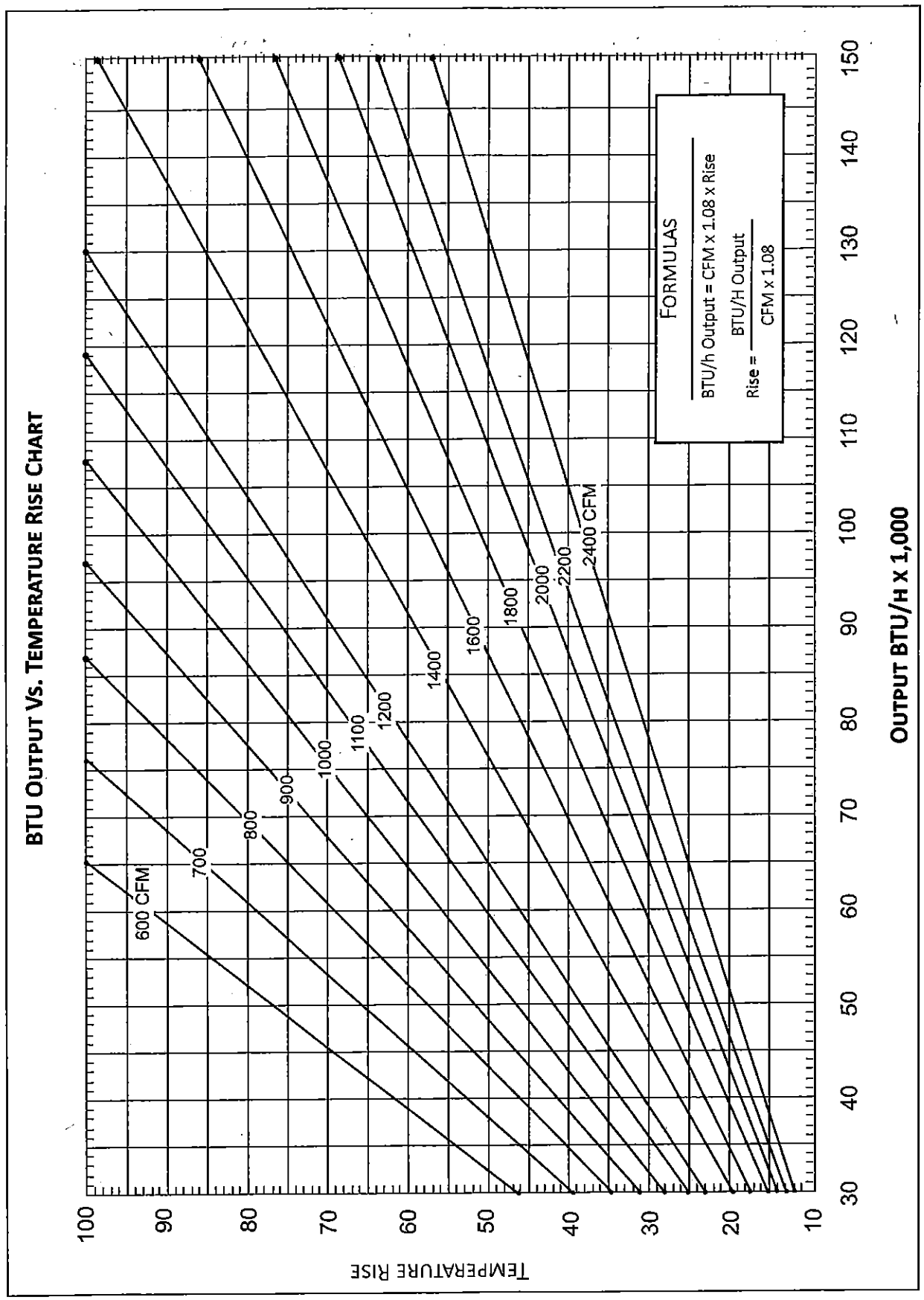
HEATING

DIPSWITCH SETTING: Switch Bank 3 Switch 1 2 3	STATIC	0.1		0.2		0.3		0.4		0.5		0.6	0.7	0.8
		CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	CFM	CFM
**OFF OFF	W1	721	48	679	N/A	635	N/A	591	N/A	552	N/A	505	463	422
	W2	1191	29	1168	30	1135	31	1112	31	1081	32	1055	1024	998
ON OFF	W1	653	N/A	597	N/A	552	N/A	507	N/A	460	N/A	410	366	326
	W2	1191	29	1168	30	1135	31	1112	31	1081	32	1055	1024	998
ON ON	W1	653	N/A	597	N/A	552	N/A	507	N/A	460	N/A	410	366	326
	W2	914	38	874	40	841	41	805	43	772	45	732	696	657
OFF ON	W1	914	38	874	40	841	41	805	43	772	45	732	696	657
	W2	1070	33	1040	34	1005	35	975	36	942	37	915	883	849

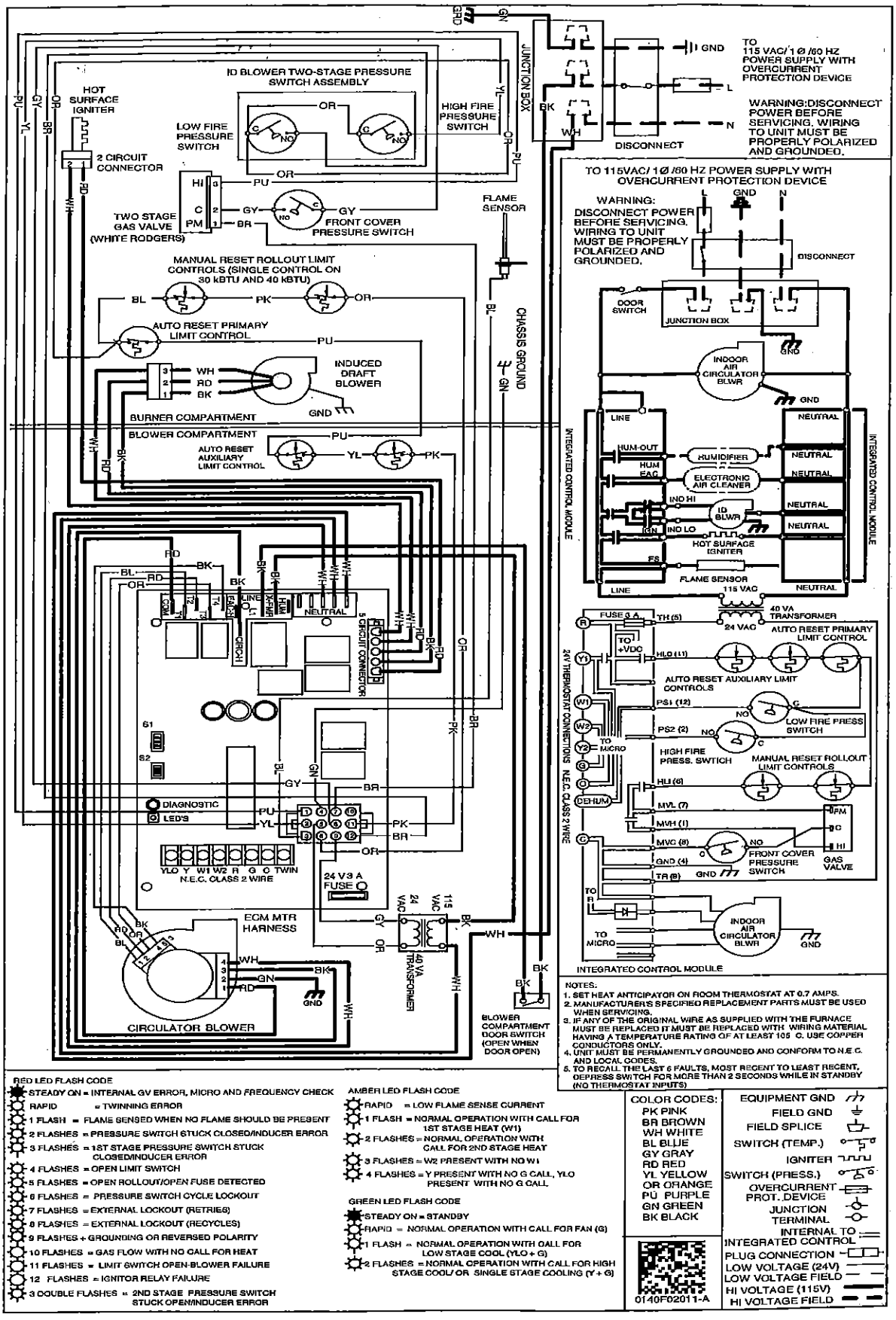
** Factory Default

NOTES

- All furnaces ship as high speed for cooling. Installer must adjust blower speed as needed.
- For most jobs, about 400 CFM per ton when cooling is desirable.
- INSTALLATION IS TO BE ADJUSTED TO OBTAIN TEMPERATURE RISE WITHIN THE RANGE SPECIFIED ON THE RATING PLATE.


BTU OUTPUT VS. TEMPERATURE RISE CHART
FORMULAS
BTU/h Output = CFM x 1.08 x Rise
Rise = BTU/H Output / CFM x 1.08
600 CFM
700
800
900
1000
1100
1200
1400
1600
1800
2000
2200
2400 CFM
TEMPERATURE RISE
OUTPUT BTU/H x 1,000
100 90 80 70 60 50 40 30 20 10
30 40 50 60 70 80 90 100 110 120 130 140 150

WIRING DIAGRAM — GMEC96******AA



NOTES:
1. SET HEAT ANTICIPATOR ON ROOM THERMOSTAT AT 0.7 AMPS.
2. MANUFACTURER'S SPECIFIED REPLACEMENT PARTS MUST BE USED WHEN SERVICING.
3. IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE FURNACE MUST BE REPLACED IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 105 °C. USE COPPER CONDUCTORS ONLY.
4. UNIT MUST BE PERMANENTLY GROUNDED AND CONFORM TO N.E.C. AND LOCAL CODES.
5. TO RECALL THE LAST 6 FAULTS, MOST RECENT TO LEAST RECENT, DEPRESS SWITCH FOR MORE THAN 2 SECONDS WHILE IN STANDBY (NO THERMOSTAT INPUTS)

RED LED FLASH CODE
- STEADY ON = INTERNAL GV ERROR, MICRO AND FREQUENCY CHECK
- RAPID = TWINNING ERROR
- 1 FLASH = FLAME SENSED WHEN NO FLAME SHOULD BE PRESENT
- 2 FLASHES = PRESSURE SWITCH STUCK CLOSED/INDUCER ERROR
- 3 FLASHES = 1ST STAGE PRESSURE SWITCH STUCK CLOSED/INDUCER ERROR
- 4 FLASHES = OPEN LIMIT SWITCH
- 5 FLASHES = OPEN ROLLOUT/OPEN FUSE DETECTED
- 6 FLASHES = PRESSURE SWITCH CYCLE LOCKOUT
- 7 FLASHES = EXTERNAL LOCKOUT (RETRIES)
- 8 FLASHES = EXTERNAL LOCKOUT (RECYCLES)
- 9 FLASHES = GROUNDING OR REVERSED POLARITY
- 10 FLASHES = GAS FLOW WITH NO CALL FOR HEAT
- 11 FLASHES = LIMIT SWITCH OPEN-BLOWER FAILURE
- 12 FLASHES = IGNITOR RELAY FAILURE
- 3 DOUBLE FLASHES = 2ND STAGE PRESSURE SWITCH STUCK OPEN/INDUCER ERROR

AMBER LED FLASH CODE
- RAPID = LOW FLAME SENSE CURRENT
- 1 FLASH = NORMAL OPERATION WITH CALL FOR 1ST STAGE HEAT (W1)
- 2 FLASHES = NORMAL OPERATION WITH CALL FOR 2ND STAGE HEAT
- 3 FLASHES = W2 PRESENT WITH NO W1
- 4 FLASHES = Y PRESENT WITH NO G CALL, YLO PRESENT WITH NO G CALL

GREEN LED FLASH CODE
- STEADY ON = STANDBY
- RAPID = NORMAL OPERATION WITH CALL FOR FAN (G)
- 1 FLASH = NORMAL OPERATION WITH CALL FOR LOW STAGE COOL (YLO + G)
- 2 FLASHES = NORMAL OPERATION WITH CALL FOR HIGH STAGE COOL OR SINGLE STAGE COOLING (Y + G)

COLOR CODES:
PK PINK
BR BROWN
WH WHITE
BL BLUE
GY GRAY
RD RED
YL YELLOW
OR ORANGE
PU PURPLE
GN GREEN
BK BLACK

EQUIPMENT GND
FIELD GND
FIELD SPLICE
SWITCH (TEMP.)
IGNITER
SWITCH (PRESS.)
OVERCURRENT PROT. DEVICE
JUNCTION TERMINAL
INTERNAL TO INTEGRATED CONTROL
PLUG CONNECTION
LOW VOLTAGE (24V)
LOW VOLTAGE FIELD
HI VOLTAGE (115V)
HI VOLTAGE FIELD

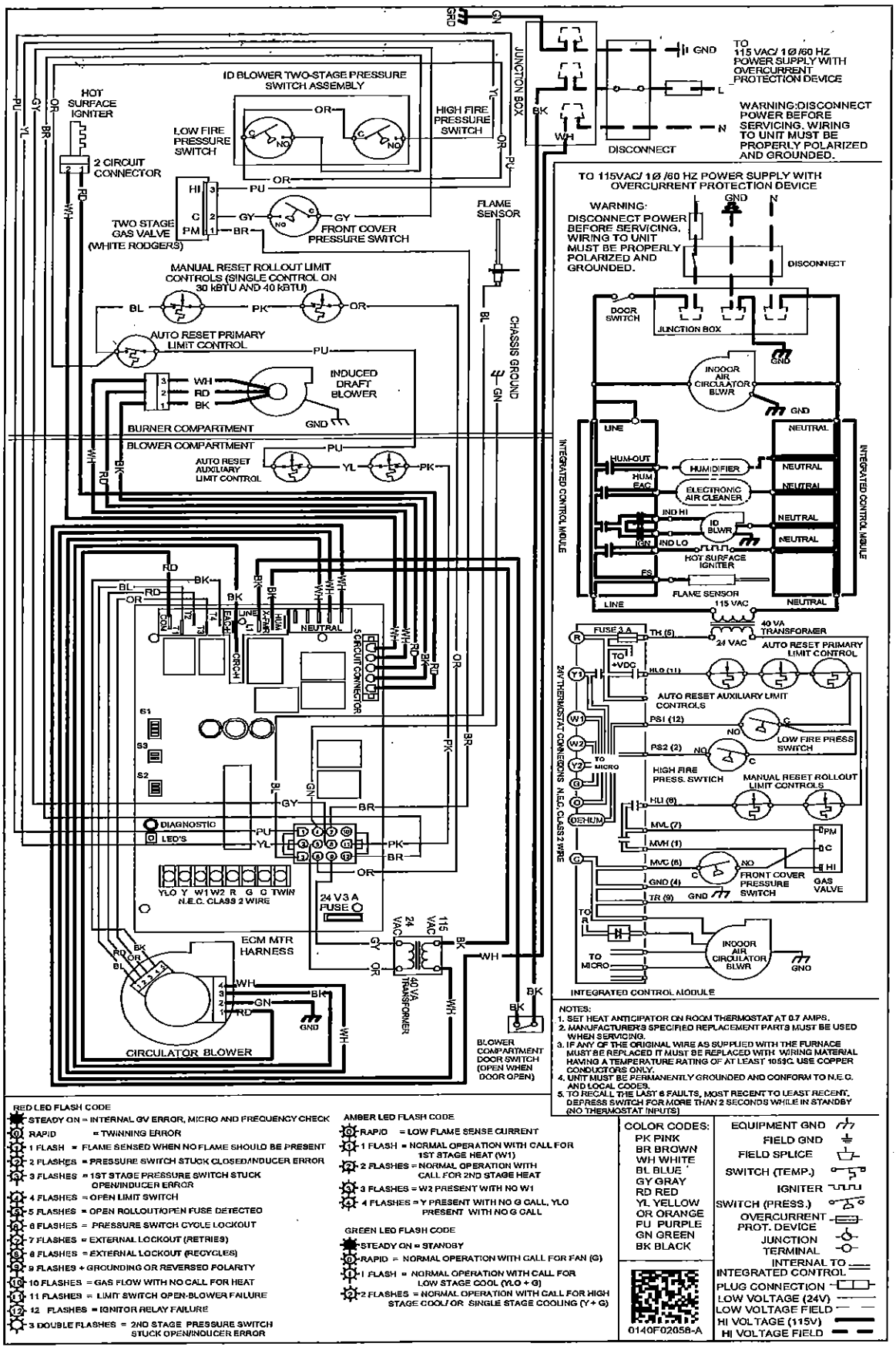
0140F02011-A

High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

WARNING

Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

WIRING DIAGRAM —GMEC96******AB



NOTES:
1. SET HEAT ANTICIPATOR ON ROOM THERMOSTAT AT 0.7 AMPS.
2. MANUFACTURER'S SPECIFIED REPLACEMENT PARTS MUST BE USED WHEN SERVICING.
3. IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE FURNACE MUST BE REPLACED IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 105ºC. USE COPPER CONDUCTORS ONLY.
4. UNIT MUST BE PERMANENTLY GROUNDED AND CONFORM TO N.E.C. AND LOCAL CODES.
5. TO RECALL THE LAST 6 FAULTS, MOST RECENT TO LEAST RECENT, DEPRESS SWITCH FOR MORE THAN 2 SECONDS WHILE IN STANDBY (NO THERMOSTAT INPUTS)

RED LED FLASH CODE
- STEADY ON = INTERNAL 6V ERROR, MICRO AND FREQUENCY CHECK
- RAPID = TWINNING ERROR
- 1 FLASH = FLAME SENSED WHEN NO FLAME SHOULD BE PRESENT
- 2 FLASHES = PRESSURE SWITCH STUCK CLOSED/INDUCER ERROR
- 3 FLASHES = 1ST STAGE PRESSURE SWITCH STUCK OPEN/INDUCER ERROR
- 4 FLASHES = OPEN LIMIT SWITCH
- 5 FLASHES = OPEN ROLLOUT/OPEN FUSE DETECTED
- 6 FLASHES = PRESSURE SWITCH CYCLE LOCKOUT
- 7 FLASHES = EXTERNAL LOCKOUT (RETRIES)
- 8 FLASHES = EXTERNAL LOCKOUT (RECYCLES)
- 9 FLASHES = GROUNDING OR REVERSED POLARITY
- 10 FLASHES = GAS FLOW WITH NO CALL FOR HEAT
- 11 FLASHES = LIMIT SWITCH OPEN-BLOWER FAILURE
- 12 FLASHES = IGNITOR RELAY FAILURE
- 3 DOUBLE FLASHES = 2ND STAGE PRESSURE SWITCH STUCK OPEN/INDUCER ERROR

AMBER LED FLASH CODE
- RAPID = LOW FLAME SENSE CURRENT
- 1 FLASH = NORMAL OPERATION WITH CALL FOR 1ST STAGE HEAT (W1)
- 2 FLASHES = NORMAL OPERATION WITH CALL FOR 2ND STAGE HEAT
- 3 FLASHES = W2 PRESENT WITH NO W1
- 4 FLASHES = Y PRESENT WITH NO G CALL, YLO PRESENT WITH NO G CALL

GREEN LED FLASH CODE
- STEADY ON = STANDBY
- RAPID = NORMAL OPERATION WITH CALL FOR FAN (G)
- 1 FLASH = NORMAL OPERATION WITH CALL FOR LOW STAGE COOL (YLO + G)
- 2 FLASHES = NORMAL OPERATION WITH CALL FOR HIGH STAGE COOL OR SINGLE STAGE COOLING (Y + G)

COLOR CODES:
PK PINK, BR BROWN, WH WHITE, BL BLUE, GY GRAY, RD RED, YL YELLOW, OR ORANGE, PU PURPLE, GN GREEN, BK BLACK

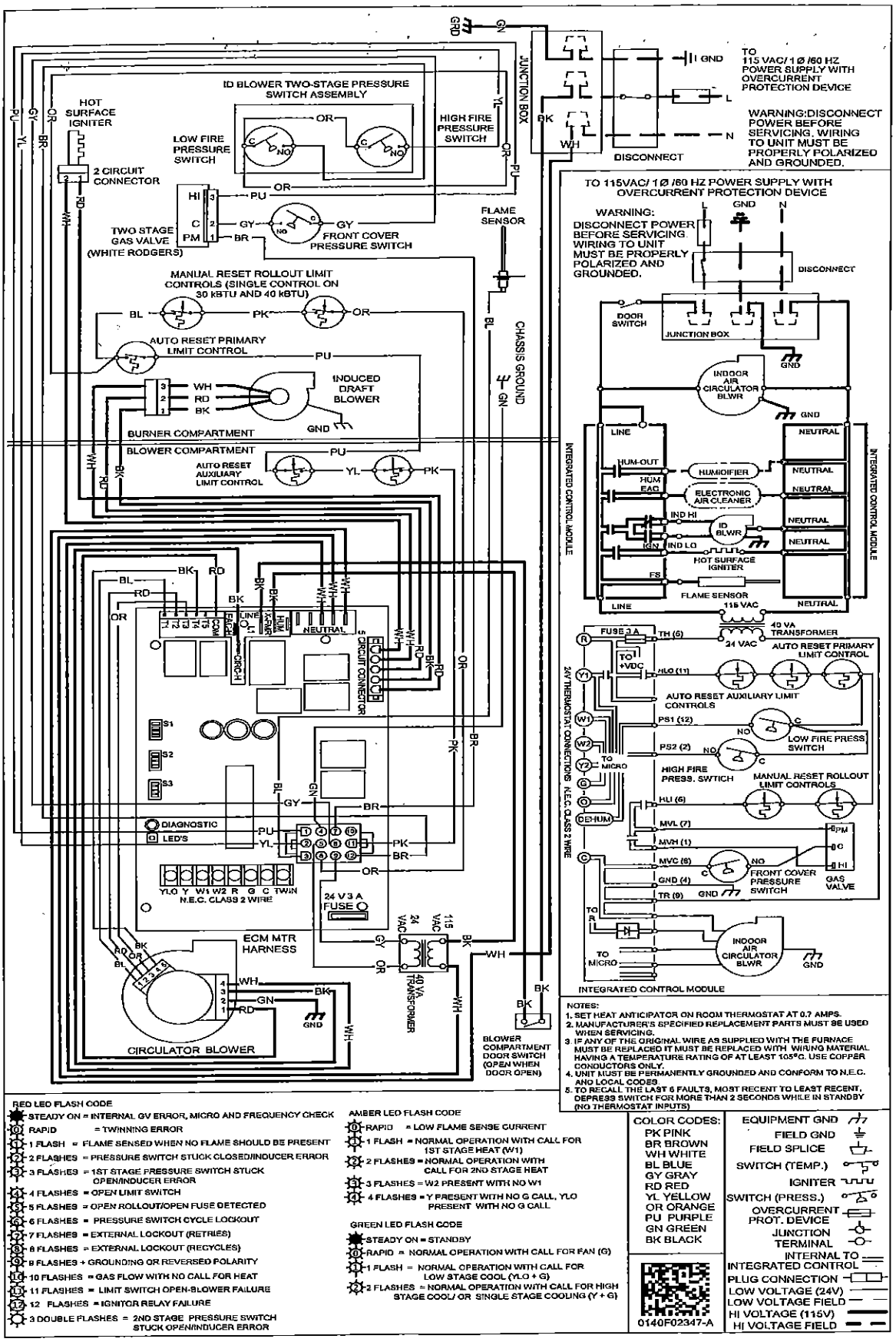
EQUIPMENT GND, FIELD GND, FIELD SPLICE, SWITCH (TEMP.), IGNITER, SWITCH (PRESS.), OVERCURRENT PROT. DEVICE, JUNCTION TERMINAL, INTERNAL TO INTEGRATED CONTROL, PLUG CONNECTION, LOW VOLTAGE (24V), LOW VOLTAGE FIELD, HI VOLTAGE (115V), HI VOLTAGE FIELD

0140F02058-A

WARNING

High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.



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COLOR CODES:
PK PINK
BR BROWN
WH WHITE
BL BLUE
GY GRAY
RD RED
YL YELLOW
OR ORANGE
PU PURPLE
GN GREEN
BK BLACK

0140F02347-A

EQUIPMENT GND
FIELD GND
FIELD SPLICE
SWITCH (TEMP.)
IGNITER
SWITCH (PRESS.)
OVERCURRENT PROT. DEVICE
JUNCTION TERMINAL
INTERNAL TO INTEGRATED CONTROL
PLUG CONNECTION
LOW VOLTAGE (24V)
LOW VOLTAGE FIELD
HI VOLTAGE (115V)
HI VOLTAGE FIELD

WARNING

High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

MODEL	DESCRIPTION	GMEC96 0303ANA	GMEC96 0403ANA	GMEC96 0603ANA	GMEC96 0302BNA	GMEC96 0402BNA	GMEC96 0603BNB	GMEC96 0803BNA
CVENT-2	Concentric Vent Kit (2")	√	√	√	√	√	√	√
CVENT-3	Concentric Vent Kit (3")	√	√	√	√	√	√	√
RF000142	Drain Kit-Horizontal Left Vertical Flue	√	√	√	√	√	√	√
EFR02	External Filter Rack with 16"x25" Permanent Filter	√	√	√	√	√	√	√
0170K00000S	Flush Mount Vent Kit- 3" or 2"	√	√	√	√	√	√	√
0170K00001S	Flush Mount Vent Kit- 2"	√	√	√	√	√	√	√
AFE18-60A	Fossil Fuel (Dual Fuel) Kit	√	√	√	√	√	√	√
HASFK	High-Altitude Natural Gas Kit	N/A	TBD	TBD	N/A	HASFK-1	HASFK-1	HASFK-2
HASFK	High-Altitude LP Gas Kit	N/A	TBD	TBD	N/A	HASFK-1	HASFK-1	HASFK-2
LPLP03	Low LP Gas Pressure Switch	√	√	√	√	√	√	√
LPM-08	LP Conversion Kits	---	√	√	---	√	√	√
LPM-30	LP Conversion Kit	√	---	---	√	---	---	---

MODEL	DESCRIPTION	GMEC96 0804CNA	GMEC96 1004CNA	GMEC96 1005CNA	GMEC96 1205DNA
CVENT-2	Concentric Vent Kit (2")	√	√	√	
CVENT-3	Concentric Vent Kit (3")	√	√	√	√
RF000142	Drain Kit-Horizontal Left Vertical Flue	√	√	√	√
EFR02	External Filter Rack with 16"x25" Permanent Filter	√	√	√	---
0170K00000S	Flush Mount Vent Kit- 3" or 2"	√	√	√	√
0170K00001S	Flush Mount Vent Kit- 2"	√	√	√	√
AFE18-60A	Fossil Fuel (Dual Fuel) Kit	√	√	√	√
HASFK	High-Altitude Natural Gas Kit	HASFK-2	HASFK-2	HASFK-3	HASFK-3
HASFK	High-Altitude LP Gas Kit	HASFK-2	HASFK-2	HASFK-2	HASFK-2
LPLP03	Low LP Gas Pressure Switch	√	√	√	√
LPM-08	LP Conversion Kits	√	√	√	√
LPM-30	LP Conversion Kit	---	---	---	---

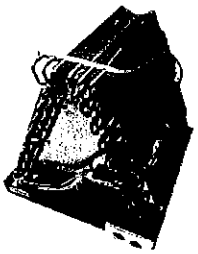
ATTACHMENT

Goodman
Air Conditioning & Heating

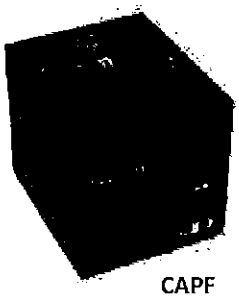
Indoor Coils

CAUF, CAPF, CAPT, CHPF, and CSCF

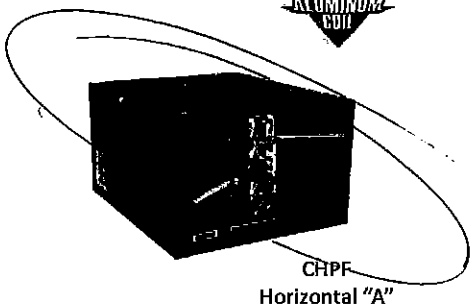
Cased, Painted Upflow/Downflow, Uncased Upflow/Downflow, Horizontal "A", and Horizontal Slab Indoor Coils



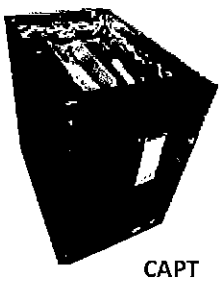
CAUF
Uncased



CAPF
Cased



CHPF
Horizontal "A"



CAPT
Cased with Internal TXV

CSCF
Horizontal Slab

Standard Features

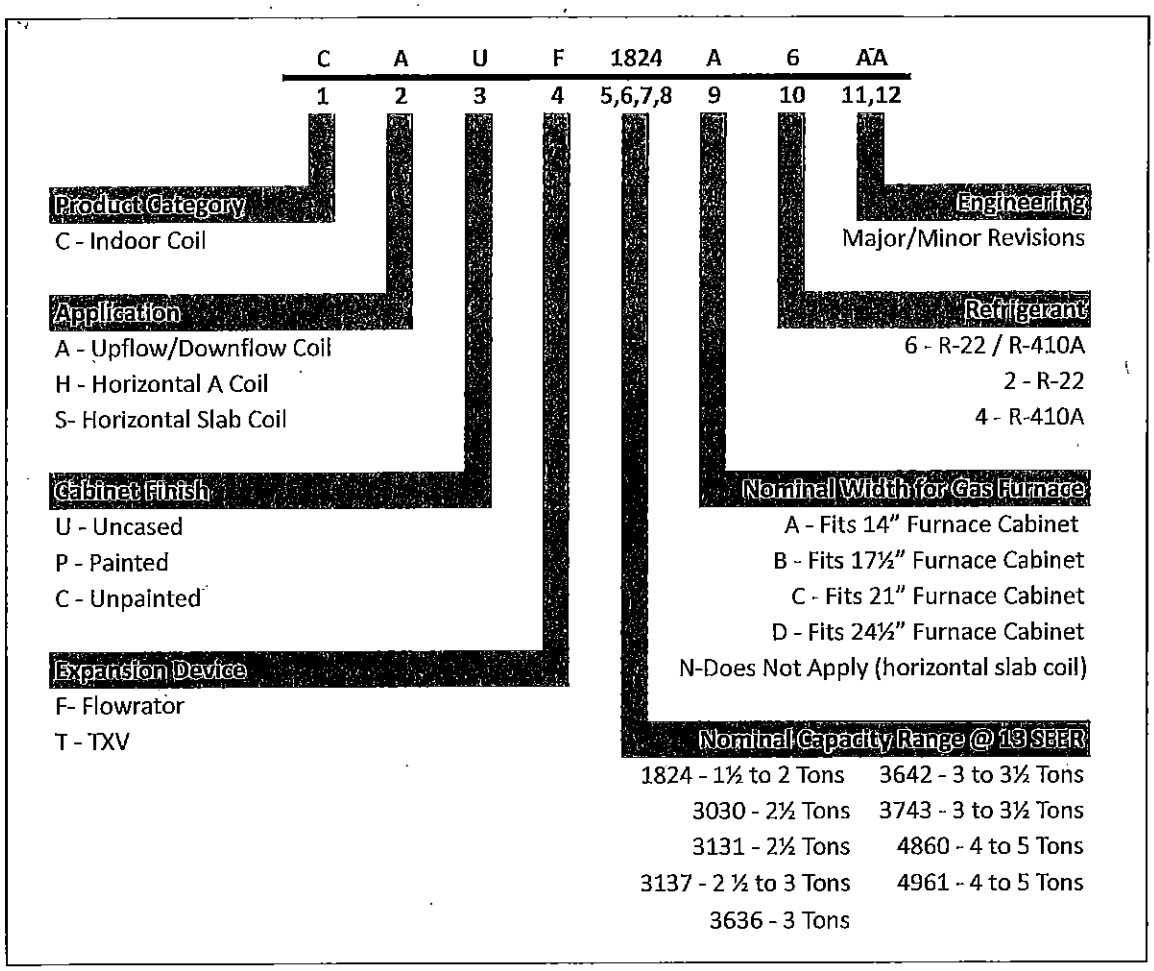
- All-Aluminum evaporator coil
- Optimized for use with R-410a refrigerant
- Some models suitable for use with R-410a or R-22 refrigerant
- CAPT models feature factory-installed thermal expansion valves for cooling and heat pump applications
- Check flowrator for cooling and heat pump applications
- Vertical and horizontal models available
- 21" depth for easier attic access
- Split seam front for easy access
- Foil-faced insulation covers the internal casing to reduce cabinet condensation
- Galvanized, leather grain-embossed finish
- Rust resistant, thermoplastic drain pans featuring a low water-retention design
- DecaBDE-free thermoplastic drain pan with secondary drain connections
- UV-resistant drain pan
- AHRI certified; ETL listed

Note: Do not use these coils on oil furnaces or any applications where the temperature on the drain pan may exceed 300°F. If these coils are applied with an oil furnace or another application where high temperatures threaten or jeopardize the durability of the drain pan, you must replace the factory-installed drain pan with a high-temperature drain pan. High-temperature drain pan kits are available as field-installed accessories.

10 YEAR PARTS LIMITED WARRANTY* R-410A REFRIGERANT

* Complete warranty details available from your local dealer or at www.goodmanmfg.com. To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec.

NOMENCLATURE



CHPF — CASED HORIZONTAL "A" INDOOR COIL

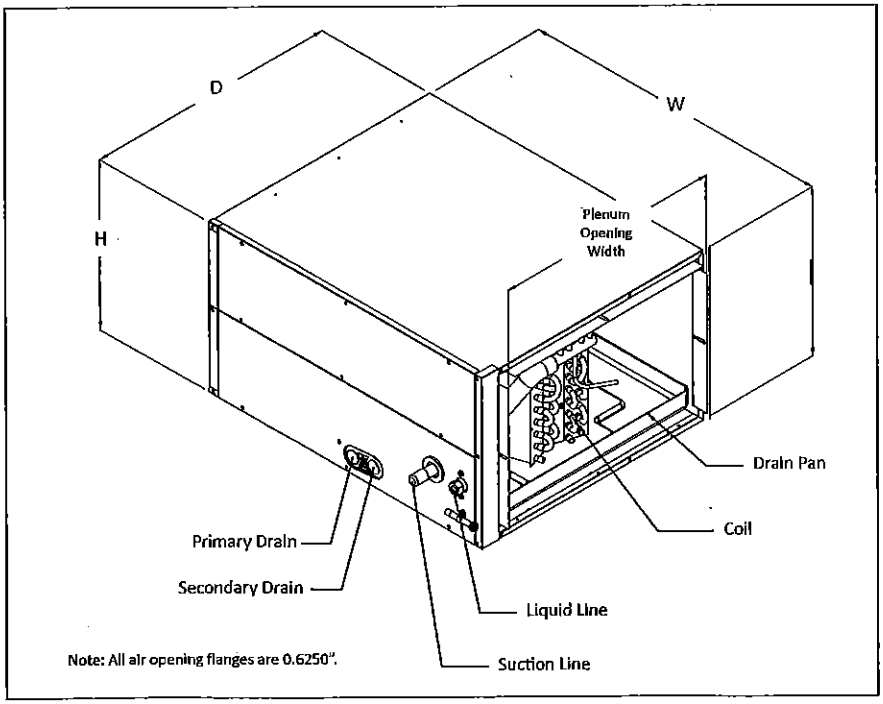
SPECIFICATIONS

MODEL	CABINET DIMENSIONS			PLENUM		NOMINAL TONS	CONNECTION		PISTON SIZE[2]	SHIP WEIGHT (LBS)
	D	W	H	D	H		LIQUID	SUCTION		
CHPF1824A6	21⅛"	26"	14"	19"	13"	1½-2	⅜"	¾"	.059	36
CHPF2430B6	21⅛"	26"	17½"	19"	16½"	2-2½	⅜"	¾"	.065	55
CHPF3636B6	21⅛"	26"	17½"	19"	16½"	3	⅜"	¾"	.074	50
CHPF3642C6	21⅛"	26"	21"	19"	20"	3-3½	⅜"	¾"	.076	63
CHPF3642D6	21⅛"	26"	24½"	19"	23½"	3-3½	⅜"	⅞"	.078	66
CHPF3743C6	21⅛"	26"	21"	19"	20"	3-3½	⅜"	⅛"	.076	63
CHPF3743D6	21⅛"	26"	24½"	19"	23½"	3-3½	⅜"	⅞"	.078	63
CHPF4860D6	21⅛"	26"	24½"	19"	23½"	4-5	⅜"	¾"	.093	77

[1] (ft^2) [2] Shipped with Coil

Note: For a properly matched system and piston sizing information, refer to Amana piston kit chart of the corresponding Amana® outdoor unit.

DIMENSIONS



AIRFLOW DATA FOR CHPF

AIR QUANTITY (SCFM) VS. PRESSURE DROP (IN. WC)

	SCFM	600	700	800	900	1000	1100	1200	1300	1400								
CHPF 1824A6*	Wet	0.132	0.179	0.222	0.272	0.327	0.381	0.456	0.522	0.605								
	Dry	0.126	0.165	0.206	0.249	0.302	0.354	0.414	0.478	0.563								
	SCFM	600	700	800	900	1000	1100	1200	1300	1400	1500	1600						
CHPF 2430B6*	Wet	0.106	0.124	0.152	0.184	0.218	0.258	0.301	0.350	0.406	0.460	0.514						
	Dry	0.101	0.122	0.145	0.174	0.209	0.247	0.288	0.333	0.381	0.428	0.484						
	SCFM	600	700	800	900	1000	1100	1200	1300	1400	1500	1600						
CHPF 3636B6*	Wet	0.107	0.131	0.167	0.199	0.239	0.291	0.338	0.389	0.439	0.494	0.552						
	Dry	0.102	0.126	0.152	0.184	0.220	0.259	0.303	0.349	0.401	0.458	0.516						
	SCFM	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200		
CHPF 3642C6*	Wet	0.083	0.103	0.126	0.151	0.178	0.208	0.240	0.274	0.310	0.346	0.383	---	---	---	---		
	Dry	0.073	0.096	0.120	0.144	0.169	0.196	0.224	0.254	0.286	0.319	0.354	---	---	---	---		
CHPF 3642D6*	Wet	0.030	0.040	0.040	0.050	0.060	0.070	0.080	0.080	0.090	0.100	0.110	0.130	0.140	0.150	0.160		
	Dry	0.040	0.050	0.060	0.070	0.080	0.080	0.090	0.100	0.110	0.120	0.120	0.120	0.150	0.160	0.180		
	SCFM	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200		
CHPF 3743C6*	Wet	0.133	0.153	0.176	0.201	0.228	0.258	0.290	0.324	0.360	0.396	0.433	---	---	---	---		
	Dry	0.123	0.146	0.170	0.194	0.219	0.246	0.274	0.304	0.336	0.369	0.404	---	---	---	---		
CHPF 3743D6*	Wet	0.101	0.105	0.115	0.125	0.145	0.165	0.185	0.215	0.235	0.265	0.295	0.315	0.355	0.375	0.405		
	Dry	0.072	0.095	0.105	0.115	0.135	0.155	0.185	0.205	0.225	0.255	0.275	0.305	0.335	0.365	0.395		
	SCFM	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200			
CHPF 4860D6*	Wet	0.101	0.121	0.131	0.161	0.181	0.201	0.231	0.261	0.291	0.321	0.361	0.391	0.431	0.471			
	Dry	0.101	0.121	0.141	0.161	0.181	0.201	0.221	0.251	0.281	0.311	0.341	0.371	0.411	0.441			

AIRFLOW DATA FOR CSCF

AIR QUANTITY (SCFM) VS. PRESSURE DROP (IN. WC)

	SCFM	500	600	700	800	900	1000	1100	1200									
CSCF18 24N6D*	Wet	0.104	0.143	0.176	0.212	0.255	0.292	0.321	0.344									
	Dry	0.048	0.067	0.086	0.108	0.132	0.159	0.186	0.206									
	SCFM			700	800	900	1000	1100	1200	1300	1400							
CSCF30 36N6D*	Wet			0.062	0.076	0.092	0.109	0.131	0.156	0.186	0.209							
	Dry			0.032	0.043	0.055	0.068	0.082	0.099	0.114	0.131							
	SCFM				800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
CSCF36 42N6D*	Wet				0.045	0.063	0.081	0.099	0.116	0.132	0.148	0.166	0.183	0.202	0.22	0.236	0.259	0.278	0.291
	Dry				0.039	0.051	0.064	0.077	0.092	0.105	0.121	0.138	0.15	0.175	0.191	0.214	0.23	0.251	0.262
	SCFM				800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
CSCF48 60N6D*	Wet				0.051	0.068	0.085	0.103	0.12	0.137	0.154	0.173	0.192	0.212	0.233	0.255	0.278	0.299	0.319
	Dry				0.043	0.056	0.069	0.084	0.099	0.115	0.132	0.149	0.167	0.185	0.207	0.227	0.249	0.272	.282**

** Maximum SCFM = 2146

ATTACHMENT

Goodman®
Air Conditioning & Heating

GSX14

Split System Air Conditioner
14 SEER / 12.2 EER

Cooling Capacity: 18,000 - 60,000 BTU/h

Contents

1.5 TON
14 SEER

Standard Features

- Energy-efficient compressor
- Factory-installed filter drier
- Copper tube/aluminum fin coil
- Service valves with sweat connections and easy-access gauge ports
- Contactor with lug connection
- Ground lug connection
- AHRI Certified
- ETL Listed

Cabinet Features

- Goodman® brand louvered sound control top design
- Steel louver coil guard
- Heavy-gauge galvanized-steel cabinet
- Attractive Architectural Gray powder-paint finish with 500-hour salt-spray approval
- Top and side maintenance access
- Single-panel access to controls with space provided for field-installed accessories
- When properly anchored, meets the 2010 Florida Building Code unit integrity requirements for hurricane-type winds (Anchor bracket kits available.)

10 YEAR PARTS LIMITED WARRANTY* | R-410A REFRIGERANT

* Complete warranty details available from your local dealer or at www.goodmanmfg.com. To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Quebec.

BBB ACCREDITED BUSINESS | BETTER VALUE

NOMENCLATURE

G	S	X	14	036	1	AA
1	2	3	4,5	6,7,8	9	10,11

Goodman® Brand

G	Standard-Feature Set
S	High-Feature Set
D	2-Stage High-Feature Set

Product Category

S	Split System

Unit Type

X	Condenser R-410A
Z	Heat Pump R-410A

Efficiency

13	13 SEER	16	16 SEER
14	14 SEER	18	18 SEER

Nominal Capacity

018	1½ Tons	030	2½ Tons	042	3½ Tons
019	1½ Tons	031	2½ Tons	048	4 Tons
024	2 Tons	036	3 Tons	060	5 Tons
025	2 Tons	037	3 Tons	061	5 Tons

Electrical

1	208/230 V, 1 Phase, 60 Hz
2	220/240 V, 1 Phase, 50 Hz
3	208/230 V, 3 Phase, 60 Hz

Engineering *

Major/ Minor Revisions

* Neither revision is used for order entry or inventory management.

SPECIFICATIONS

	GSX14 0181K*	GSX14 0191K*	GSX14 0241K*	GSX14 0251K*	GSX14 0301K*	GSX14 0311K*
CAPACITIES						
Nom Cool (BTU/h)	18,000	18,000	24,000	24,000	30,000	30,000
SEER/EER	14 / 12	14 / 12.2	14 / 12	14 / 12.2	14 / 12	14 / 12.2
Decibels	71	71	71	71	72	72
COMPRESSOR						
RLA	9.0	9.0	10.9	10.9	12.8	12.8
LRA	48	47.5	62.9	62.9	64	67.8
CONDENSER FAN MOTOR						
Hp	1/8	1/8	1/12	1/8	1/6	1/6
FLA	0.7	0.7	0.6	0.7	1.1	1.1
REFRIGERATION SYSTEM						
Refrigerant Line Size [1]						
Liquid Line Size ("O.D.)	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"
Suction Line Size ("O.D.)	¾"	¾"	¾"	¾"	¾"	¾"
Refrigerant Connection Size						
Liquid Valve Size ("O.D.)	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"
Suction Valve Size ("O.D.) [2 3]	¾"	¾"	¾"	¾"	¾"	¾"
Valve Type	Sweat	Sweat	Sweat	Sweat	Sweat	Sweat
Charge	68	68	70	70	80	90
Included piston:	0.052	0.053	0.057	0.057	0.065	0.063
ELECTRICAL DATA						
Voltage-Phase (60 Hz)	208/230-1	208/230-1	208/230-1	208/230-1	208/230-1	208/230-1
Minimum Circuit Ampacity [4]	12	12	14.2	14.3	17.1	17.1
Max. Overcurrent Protection [5]	20 amps	30 amps	25 amps	25 amps	25 amps	25 amps
Min/Max Volts	197/253	197/253	197/253	197/253	197/253	197/253
Conduit	½" or ¾"	½" or ¾"	½" or ¾"	½" or ¾"	½" or ¾"	½" or ¾"
EQUIPMENT WEIGHT	131	131	131	131	154	154
SHIPPING WEIGHT	146	146	146	146	172	172

[1] Line sizes denoted for 25' line sets, tested and rated in accordance with AHRI Standard 210/240.
For other line-set lengths or sizes, refer to the installation & Operating instructions and/or the long line-set guidelines.

[2] Installer will need to supply ¾" to ⅞" adapters for suction line connections.

[3] Installer will need to supply ⅞" to 1⅛" adapters for suction line connections.

[4] Wire size should be determined in accordance with National Electrical Codes; extensive wire runs will require larger wire sizes

[5] Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.

NOTES

- Always check the S&R plate for electrical data on the unit being installed.
- Unit is charged with refrigerant for 15' of ⅜" liquid line. System charge must be adjusted per Installation Instructions Final Charge Procedure.

			OUTDOOR AMBIENT TEMPERATURE																							
			65				75				85				95				105				115			
			ENTERING INDOOR WET BULB TEMPERATURE																							
IDB	AIRFLOW		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71
70	525	MBh	18.3	18.6	19.1	-	18.1	18.4	19.0	-	17.7	17.9	18.5	-	16.8	17.1	17.7	-	15.8	16.1	16.6	-	14.9	15.2	15.7	-
		S/T	0.57	0.50	0.37	-	0.58	0.51	0.38	-	0.60	0.53	0.40	-	0.62	0.55	0.42	-	1.00	0.57	0.44	-	1.00	0.62	0.49	-
		ΔT	20	18	15	-	20	18	15	-	20	19	15	-	20	18	15	-	20	18	15	-	21	19	16	-
		KW	1.09	1.09	1.09	-	1.22	1.22	1.21	-	1.36	1.36	1.35	-	1.51	1.51	1.50	-	1.68	1.68	1.67	-	1.87	1.87	1.87	-
		Amps	4.0	4.0	4.0	-	4.6	4.6	4.6	-	5.2	5.2	5.2	-	5.9	5.9	5.9	-	6.7	6.7	6.7	-	7.6	7.6	7.6	-
		HI PR	243	244	246	-	282	283	284	-	322	323	325	-	365	366	368	-	412	413	415	-	462	463	464	-
		LO PR	122	123	126	-	129	131	134	-	136	137	140	-	141	143	146	-	147	148	151	-	153	155	158	-
	600	MBh	18.6	18.8	19.4	-	18.4	18.6	19.2	-	17.9	18.2	18.7	-	17.1	17.3	17.9	-	16.1	16.3	16.9	-	15.2	15.4	16.0	-
		S/T	0.63	0.56	0.43	-	0.64	0.57	0.44	-	0.66	0.59	0.46	-	0.68	0.61	0.48	-	1.00	0.63	0.50	-	1.00	0.68	0.55	-
		ΔT	19	17	14	-	19	17	14	-	19	17	14	-	19	17	14	-	19	17	13	-	20	18	15	-
		KW	1.10	1.10	1.10	-	1.22	1.22	1.22	-	1.36	1.36	1.36	-	1.51	1.51	1.51	-	1.68	1.68	1.68	-	1.88	1.88	1.88	-
		Amps	4.0	4.0	4.0	-	4.6	4.6	4.6	-	5.2	5.2	5.2	-	5.9	5.9	5.9	-	6.7	6.7	6.7	-	7.6	7.6	7.6	-
		HI PR	245	246	248	-	284	285	286	-	324	325	327	-	367	368	370	-	414	415	417	-	464	465	466	-
		LO PR	115	119	129	-	118	122	133	-	122	126	138	-	126	130	141	-	128	132	144	-	131	135	148	-
	675	MBh	18.8	19.1	19.6	-	18.7	18.9	19.5	-	18.2	18.5	19.0	-	17.4	17.6	18.2	-	16.4	16.6	17.2	-	15.5	15.7	16.3	-
		S/T	0.66	0.59	0.46	-	0.67	0.60	0.47	-	0.69	0.62	0.49	-	1.00	0.64	0.51	-	1.00	0.66	0.53	-	1.00	0.71	0.58	-
		ΔT	18	16	13	-	18	16	13	-	18	16	13	-	18	16	13	-	18	16	12	-	19	17	14	-
		KW	1.10	1.10	1.10	-	1.23	1.23	1.23	-	1.37	1.37	1.37	-	1.52	1.52	1.52	-	1.69	1.69	1.69	-	1.89	1.89	1.88	-
		Amps	4.1	4.0	4.0	-	4.6	4.6	4.6	-	5.3	5.3	5.2	-	6.0	5.9	5.9	-	6.7	6.7	6.7	-	7.6	7.6	7.6	-
		HI PR	247	248	250	-	286	287	288	-	326	327	329	-	369	370	372	-	416	417	419	-	466	467	468	-
		LO PR	126	127	130	-	133	134	138	-	139	141	144	-	145	146	150	-	150	152	155	-	157	159	162	-
75	525	MBh	18.3	18.6	19.1	20.0	18.2	18.4	19.0	19.8	17.7	17.9	18.5	19.3	16.9	**17.1**	17.7	18.5	15.9	16.1	16.7	17.5	14.9	15.2	15.7	16.6
		S/T	0.70	0.62	0.50	0.36	0.70	0.63	0.50	0.37	1.00	0.65	0.53	0.39	1.00	**0.67**	0.54	0.41	1.00	0.69	0.57	0.43	1.00	1.00	0.61	0.48
		ΔT	24	22	19	15	24	22	19	15	25	23	19	16	24	**22**	19	15	24	22	19	15	25	23	20	16
		KW	1.09	1.09	1.09	1.10	1.22	1.22	1.21	1.22	1.36	1.36	1.35	1.36	1.51	**1.51**	1.50	1.51	1.68	1.67	1.67	1.68	1.87	1.87	1.87	1.88
		Amps	4.0	4.0	4.0	4.0	4.6	4.6	4.6	4.6	5.2	5.2	5.2	5.2	5.9	**5.9**	5.9	5.9	6.7	6.7	6.7	6.7	7.6	7.6	7.6	7.6
		HI PR	243	244	246	250	282	283	285	289	322	323	325	329	365	**366**	368	372	412	413	415	419	462	463	465	469
		LO PR	122	123	126	132	129	131	134	139	136	137	140	145	141	**143**	146	151	147	148	151	156	153	155	158	163
	600	MBh	18.6	18.8	19.4	20.2	18.4	18.7	19.2	20.0	17.9	18.2	18.7	19.6	17.1	**17.4**	17.9	18.7	16.1	16.4	16.9	17.7	15.2	15.4	16.0	16.8
		S/T	0.75	0.68	0.55	0.42	0.76	0.69	0.56	0.42	1.00	0.71	0.58	0.45	1.00	**0.73**	0.60	0.47	1.00	0.75	0.62	0.49	1.00	1.00	0.67	0.54
		ΔT	23	21	18	14	23	21	18	14	23	22	18	14	23	**21**	18	14	23	21	18	14	24	22	19	15
		KW	1.10	1.10	1.10	1.10	1.22	1.22	1.22	1.23	1.36	1.36	1.36	1.37	1.51	**1.51**	1.51	1.52	1.68	1.68	1.68	1.69	1.88	1.88	1.88	1.89
		Amps	4.0	4.0	4.0	4.1	4.6	4.6	4.6	4.6	5.2	5.2	5.2	5.3	5.9	**5.9**	5.9	6.0	6.7	6.7	6.7	6.7	7.6	7.6	7.6	7.6
		HI PR	246	247	248	253	284	285	287	291	324	325	327	331	367	**368**	370	374	414	415	417	421	464	465	467	471
		LO PR	124	125	128	133	131	132	136	141	137	139	142	147	143	**144**	148	153	148	150	153	158	155	157	160	165
	675	MBh	18.9	19.1	19.7	20.5	18.7	18.9	19.5	20.3	18.2	18.5	19.0	19.9	17.4	**17.6**	18.2	19.0	16.4	16.6	17.2	18.0	15.5	15.7	16.3	17.1
		S/T	0.79	0.71	0.59	0.45	0.79	0.72	0.59	0.46	1.00	0.74	0.62	0.48	1.00	**0.76**	0.63	0.50	1.00	0.78	0.65	0.52	1.00	1.00	0.70	0.57
		ΔT	22	20	17	13	22	20	17	13	23	21	17	14	22	**20**	17	13	22	20	17	13	23	21	18	14
		KW	1.10	1.10	1.10	1.11	1.23	1.23	1.23	1.24	1.37	1.37	1.37	1.37	1.52	**1.52**	1.52	1.53	1.69	1.69	1.68	1.69	1.89	1.88	1.88	1.89
		Amps	4.0	4.0	4.0	4.1	4.6	4.6	4.6	4.7	5.3	5.3	5.2	5.3	6.0	**5.9**	5.9	6.0	6.7	6.7	6.7	6.8	7.6	7.6	7.6	7.7
		HI PR	248	249	250	255	286	287	289	293	326	327	329	333	369	**370**	372	376	416	417	419	423	466	467	469	473
		LO PR	126	127	130	135	133	134	138	143	139	141	144	149	145	**146**	150	155	150	152	155	160	157	159	162	167

IDB: Entering Indoor Dry Bulb Temperature

Shaded area reflects ACCA (TVA) conditions

kW = Total system power

High and low pressures are measured at the liquid and suction service valves.

Amps = outdoor unit amps (comp.+fan)

GSX140181K* + CA*F3636*6**+ EEP + TXV (CONT.)

			OUTDOOR AMBIENT TEMPERATURE																							
			65				75				85				95				105				115			
			ENTERING INDOOR WET BULB TEMPERATURE																							
IDB	AIRFLOW		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71
80	525	MBh	18.4	18.7	19.2	20.1	18.3	18.5	19.1	19.9	17.8	18.0	18.6	19.4	17.0	17.2	17.8	18.6	15.9	16.2	16.8	17.6	15.0	15.3	15.8	16.7
		S/T	0.82	0.74	0.62	0.5	1.00	0.75	0.62	0.49	1.00	0.77	0.64	0.5	1.00	0.79	0.66	0.53	1.00	1.00	0.68	0.6	1.00	1.00	0.73	0.60
		ΔT	28	27	23	19	28	27	23	19	29	27	23	20	28	27	23	19	28	26	23	19	29	27	24	20
		KW	1.09	1.09	1.09	1.1	1.22	1.22	1.21	1.22	1.36	1.36	1.35	1.4	1.51	1.51	1.50	1.51	1.68	1.68	1.67	1.7	1.87	1.87	1.87	1.88
		Amps	4.0	4.0	4.0	4.0	4.6	4.6	4.6	4.6	5.2	5.2	5.2	5.2	5.9	5.9	5.9	5.9	6.7	6.7	6.7	6.7	7.6	7.6	7.6	7.6
		HI PR	244	245	247	251	282	283	285	289	322	324	325	329	366	367	369	373	412	414	415	419	462	463	465	469
		LO PR	122	124	127	132	130	131	134	140	136	138	141	146	142	143	146	151	147	149	152	157	154	155	158	164
	600	MBh	18.7	18.9	19.5	20.3	18.5	18.8	19.3	20.1	18.0	18.3	18.8	19.7	17.2	17.5	**18.0**	18.8	16.2	16.4	17.0	17.8	15.3	15.5	16.1	16.9
		S/T	1.00	0.80	0.67	0.5	1.00	0.81	0.68	0.54	1.00	0.83	0.70	0.6	1.00	0.85	**0.72**	0.58	1.00	1.00	0.74	0.6	1.00	1.00	0.79	0.65
		ΔT	27	25	22	18	27	25	22	18	28	26	22	19	27	25	**22**	18	27	25	22	18	28	26	23	19
		KW	1.10	1.10	1.10	1.1	1.22	1.22	1.22	1.23	1.36	1.36	1.36	1.4	1.51	1.51	**1.51**	1.52	1.68	1.68	1.68	1.7	1.88	1.88	1.88	1.89
		Amps	4.0	4.0	4.0	4.1	4.6	4.6	4.6	4.6	5.2	5.2	5.2	5.3	5.9	5.9	**5.9**	6.0	6.7	6.7	6.7	6.7	7.6	7.6	7.6	7.6
		HI PR	246	247	249	253	284	285	287	291	325	326	327	332	368	369	**371**	375	415	416	417	422	464	465	467	471
		LO PR	124	126	129	134	132	133	136	141	138	140	143	148	143	145	**148**	153	149	150	153	159	156	157	160	165
	675	MBh	18.9	19.2	19.8	20.6	18.8	19.0	19.6	20.4	18.3	18.6	19.1	19.9	17.5	17.7	18.3	19.1	16.5	16.7	17.3	18.1	15.6	15.8	16.4	17.2
		S/T	1.00	0.83	0.70	0.6	1.00	0.84	0.71	0.57	1.00	0.86	0.73	0.6	1.00	1.00	0.75	0.62	1.00	1.00	0.77	0.6	1.00	1.00	0.82	0.69
		ΔT	26	25	21	17	26	24	21	17	27	25	21	18	26	24	21	17	26	24	21	17	27	25	22	18
		KW	1.10	1.10	1.10	1.1	1.23	1.23	1.23	1.24	1.37	1.37	1.37	1.4	1.52	1.52	1.52	1.53	1.69	1.69	1.69	1.7	1.89	1.89	1.88	1.89
		Amps	4.1	4.1	4.0	4.1	4.6	4.6	4.6	4.7	5.3	5.3	5.3	5.3	6.0	6.0	5.9	6.0	6.7	6.7	6.7	6.8	7.6	7.6	7.6	7.7
		HI PR	248	249	251	255	286	287	289	293	327	328	329	334	370	371	373	377	417	418	419	424	466	467	469	473
		LO PR	126	128	131	136	134	135	138	143	140	141	145	150	145	147	150	155	151	152	155	161	158	159	162	167
85	525	MBh	18.7	19.0	19.5	20.4	18.6	18.8	19.4	20.2	18.1	18.3	18.9	19.7	17.3	17.5	18.1	18.9	16.3	16.5	17.1	17.9	15.3	15.6	16.1	17.0
		S/T	1.00	0.84	0.71	0.58	1.00	0.85	0.72	0.58	1.00	1.00	0.74	0.61	1.00	1.00	0.76	0.62	1.00	1.00	0.78	0.64	1.00	1.00	1.00	0.69
		ΔT	32	30	27	23	32	30	27	23	32	30	27	23	32	30	27	23	32	30	26	23	33	31	28	24
		KW	1.09	1.09	1.09	1.10	1.22	1.22	1.22	1.23	1.36	1.36	1.36	1.37	1.51	1.51	1.51	1.52	1.68	1.68	1.68	1.69	1.88	1.88	1.87	1.88
		Amps	4.0	4.0	4.0	4.0	4.6	4.6	4.6	4.6	5.2	5.2	5.2	5.3	5.9	5.9	5.9	5.9	6.7	6.7	6.7	6.7	7.6	7.6	7.6	7.6
		HI PR	245	246	248	252	283	284	286	290	324	325	326	331	367	368	370	374	414	415	416	421	463	464	466	470
		LO PR	124	126	129	134	132	133	136	141	138	140	143	148	144	145	148	153	149	150	154	159	156	157	160	165
	600	MBh	19.0	19.2	19.8	20.6	18.8	19.1	19.6	20.4	18.3	18.6	19.1	20.0	17.5	17.8	18.3	19.1	16.5	16.8	17.3	18.1	15.6	15.8	16.4	17.2
		S/T	1.00	0.90	0.77	0.63	1.00	0.90	0.77	0.64	1.00	1.00	0.80	0.66	1.00	1.00	0.82	0.68	1.00	1.00	0.84	0.70	1.00	1.00	1.00	0.75
		ΔT	31	29	26	22	31	29	26	22	31	29	26	22	31	29	26	22	31	29	25	22	32	30	26	23
		KW	1.10	1.10	1.10	1.11	1.23	1.23	1.22	1.23	1.37	1.36	1.36	1.37	1.52	1.52	1.51	1.52	1.69	1.68	1.68	1.69	1.88	1.88	1.88	1.89
		Amps	4.0	4.0	4.0	4.1	4.6	4.6	4.6	4.6	5.3	5.2	5.2	5.3	5.9	5.9	5.9	6.0	6.7	6.7	6.7	6.7	7.6	7.6	7.6	7.7
		HI PR	247	248	250	254	285	287	288	292	326	327	328	333	369	370	372	376	416	417	418	423	465	467	468	472
		LO PR	126	127	131	136	133	135	138	143	140	141	144	150	145	147	150	155	151	152	155	160	157	159	162	167
	675	MBh	19.3	19.5	20.1	20.9	19.1	19.4	19.9	20.7	18.6	18.9	19.4	20.3	17.8	18.1	18.6	19.4	16.8	17.0	17.6	18.4	15.9	16.1	16.7	17.5
		S/T	1.00	0.93	0.80	0.66	1.00	1.00	0.81	0.67	1.00	1.00	0.83	0.69	1.00	1.00	0.85	0.71	1.00	1.00	0.87	0.73	1.00	1.00	1.00	0.78
		ΔT	30	28	25	21	30	28	25	21	30	28	25	21	30	28	25	21	30	28	24	21	31	29	26	22
		KW	1.11	1.11	1.10	1.11	1.23	1.23	1.23	1.24	1.37	1.37	1.37	1.38	1.52	1.52	1.52	1.53	1.69	1.69	1.69	1.70	1.89	1.89	1.89	1.90
		Amps	4.1	4.1	4.1	4.1	4.6	4.6	4.6	4.7	5.3	5.3	5.3	5.3	6.0	6.0	6.0	6.0	6.7	6.7	6.7	6.8	7.6	7.6	7.6	7.7
		HI PR	249	250	252	256	287	289	290	294	328	329	330	335	371	372	374	378	418	419	420	425	467	469	470	474
		LO PR	128	129	133	138	135	137	140	145	142	143	146	152	147	149	152	157	153	154	157	162	159	161	164	169

IDB: Entering Indoor Dry Bulb Temperature

Shaded area reflects AHRI conditions

kW = Total system power

High and low pressures are measured at the liquid and suction service valves.

Amps = outdoor unit amps (comp.+fan)

ATTACHMENT

PERFORMANCE DATA

GSX140181K* / CA*F3636*6** W/.052" ORIFICE CONDITIONS: 80 °F IBD, 67 °F IWB @ 600 CFM				
OUTDOOR TEM. ° F.	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75	19,300	13,124	6,176	1,220
80	19,050	13,142	5,908	1,290
85	18,800	13,160	5,640	1,360
90	18,400	13,060	5,340	1,435
95	**18,000**	**12,960**	**5,040**	**1,510**
100	17,500	12,770	4,730	1,595
105	17,000	12,580	4,420	1,680
110	16,550	12,650	3,901	1,780
115	16,100	12,719	3,381	1,880
TVA CONDITIONS @ 95° OD DB, 75° ID DB 63° ID WB				
95°	**17,400**	**12,700**	**4,700**	**1,510**

GSX140191K* / CA*F3636*6** W/.053" ORIFICE CONDITIONS: 80 °F IBD, 67 °F IWB @ 550 CFM				
OUTDOOR TEM. ° F.	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75	18,900	13,041	5,859	1,160
80	18,650	13,145	5,506	1,225
85	18,400	13,248	5,152	1,290
90	18,000	13,136	4,864	1,360
95	**17,600**	**13,024**	**4,576**	**1,430**
100	17,100	12,820	4,280	1,530
105	16,600	12,616	3,984	1,590
110	16,150	12,667	3,484	1,680
115	15,700	12,717	2,983	1,770
TVA CONDITIONS @ 95° OD DB, 75° ID DB 63° ID WB				
95°	**17,000**	**12,750**	**4,250**	**1,430**

GSX140241K* / CA*F3636*6** W/.057" ORIFICE CONDITIONS: 80 °F IBD, 67 °F IWB @ 700 CFM				
OUTDOOR TEM. ° F.	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75	24,877	16,961	7,916	1,554
80	24,568	17,040	7,528	1,644
85	24,260	17,120	7,140	1,735
90	23,730	16,961	6,769	1,833
95	**23,200**	**16,802**	**6,397**	**1,931**
100	22,552	16,564	5,988	2,040
105	21,904	16,326	5,578	2,149
110	21,312	16,393	4,919	2,278
115	20,721	16,461	4,260	2,406
TVA CONDITIONS @ 95° OD DB, 75° ID DB 63° ID WB				
95°	**22,400**	**16,802**	**5,598**	**1,931**

GSX140251K* / CA*F3636*6** W/.057" ORIFICE CONDITIONS: 80 °F IBD, 67 °F IWB @ 700 CFM				
OUTDOOR TEM. ° F.	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75	25,500	17,085	8,415	1,570
80	25,200	17,258	7,943	1,660
85	24,900	17,430	7,470	1,750
90	24,350	17,283	7,067	1,850
95	**23,800**	**17,136**	**6,664**	**1,950**
100	23,150	16,893	6,257	2,060
105	22,500	16,650	5,850	2,170
110	21,900	16,739	5,162	2,300
115	21,300	16,827	4,473	2,430
TVA Conditions @ 95° OD DB, 75° ID DB 63° ID WB				
95°	**23,000**	**16,790**	**6,210**	**1,950**

GSX140301K* / CA*F3642*6** W/.065" ORIFICE CONDITIONS: 80 °F IBD, 67 °F IWB @ 1000 CFM				
OUTDOOR TEM. ° F.	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75	30,900	21,630	9,270	1,960
80	30,500	21,651	8,849	2,070
85	30,100	21,672	8,428	2,180
90	29,450	21,492	7,958	2,300
95	**28,800**	**21,312**	**7,488**	**2,420**
100	28,000	20,992	7,008	2,550
105	27,200	20,672	6,528	2,680
110	26,450	20,745	5,706	2,840
115	25,700	20,817	4,883	3,000
TVA Conditions @ 95° OD DB, 75° ID DB 63° ID WB				
95°	**27,800**	**20,850**	**6,950**	**2,420**

GSX140311K* / CA*F3137*6** W/.063" ORIFICE CONDITIONS: 80 °F IBD, 67 °F IWB @ 1000 CFM				
OUTDOOR TEM. ° F.	TOTAL BTU/H	SENSIBLE BTU/H	LATENT BTU/H	TOTAL WATTS
75	30,700	22,718	7,982	1,920
80	30,300	22,871	7,430	2,025
85	29,900	23,023	6,877	2,130
90	29,250	22,809	6,442	2,245
95	**28,600**	**22,594**	**6,006**	**2,360**
100	27,800	22,232	5,568	2,490
105	27,000	21,870	5,130	2,620
110	26,250	21,900	4,350	2,770
115	25,500	21,930	3,570	2,920
TVA Conditions @ 95° OD DB, 75° ID DB 63° ID WB				
95°	**27,600**	**20,080**	**5,520**	**2,360**

OUTDOOR UNIT	INDOOR UNITS		COOLING RATINGS				CFM	AHRI #
	COILS/AIR HANDLERS	FURNACES	TOTAL[1]	SENS.[1]	SEER[2]	EER[3]		
GSX14 0181K*	ASPT24B14A*		18,000	13,000	14.50	12.00	605	7515631
	ASPT30C14A*		18,400	13,300	14.50	12.00	580	7515632
	AVPTC24B14A*		18,000	13,000	14.50	12.00	600	7515633
	AVPTC30C14A*		18,400	13,300	14.50	12.00	615	7515634
	AWUF31XX16A*		17,400	12,500	14.50	11.50	600	7515635
	AWUF32XX16A*		17,400	12,500	14.50	11.50	600	7515636
	CA*F3636*6D*+EEP+TXV		17,800	12,800	14.00	11.50	600	7515637
	CA*F3636*6D*+MBVC1200**-1A*+TXV		17,800	12,800	14.50	11.50	600	7515659
	CA*F3636*6D*+TXV	G*VC960403BNA*	18,000	13,000	14.50	11.50	615	7515654
	CA*F3636*6D*+TXV	G*EC960603BNA*	17,800	12,800	14.50	11.50	500	7515651
	CA*F3636*6D*+TXV	G*EC960302BNA*	17,800	12,800	14.50	11.50	575	7515649
	CA*F3636*6D*+TXV	G*EC960402BNA*	17,800	12,800	14.50	11.50	575	7515650
	CA*F3636*6D*+TXV	A*VC80604B*B*	18,000	13,000	14.50	11.50	620	7515642
	CA*F3636*6D*+TXV	G*VC960603BNA*	18,000	13,000	14.50	11.50	625	7515655
	CA*F3636*6D*+TXV	A*VC960603BNA*	18,000	13,000	14.50	11.50	625	7515644
	CA*F3636*6D*+TXV	G*E80603B*B*	18,000	13,000	14.50	11.50	670	7515648
	CA*F3636*6D*+TXV	A*VC960803BNA*	18,000	13,000	14.50	11.50	620	7515645
	CA*F3636*6D*+TXV	A*EC960803BNA*	17,800	12,800	14.50	11.50	540	7515641
	CA*F3636*6D*+TXV	G*EC960803BNA*	17,800	12,800	14.50	11.50	540	7515652
	CA*F3636*6D*+TXV	G*VC960803BNA*	18,000	13,000	14.50	11.50	620	7515656
	CA*F3636*6D*+TXV	A*EC960302BNA*	17,800	12,800	14.50	11.50	575	7515638
	CA*F3636*6D*+TXV	A*VM970603BNA*	18,000	13,000	14.50	11.50	625	7515646
	CA*F3636*6D*+TXV	A*EC960603BNA*	17,800	12,800	14.50	11.50	500	7515640
	CA*F3636*6D*+TXV	G*VC80604B*B*	18,000	13,000	14.50	11.50	620	7515653
	CA*F3636*6D*+TXV	A*EC960402BNA*	17,800	12,800	14.50	11.50	575	7515639
	CA*F3636*6D*+TXV	G*VM970804CNA*	18,000	13,000	14.50	11.50	620	7515658
	CA*F3636*6D*+TXV	G*VM970603BNA*	18,000	13,000	14.50	11.50	625	7515657
	CA*F3636*6D*+TXV	A*VM970804CNA*	18,000	13,000	14.50	11.50	620	7515647
	CA*F3636*6D*+TXV	A*VC960403BNA*	18,000	13,000	14.50	11.50	615	7515643
	CA*F3743*6D*+EEP+TXV		18,000	13,000	14.50	11.50	600	7515660
	CAPT3743*4A*	G*VM970804CNA*	18,000	13,000	14.50	11.50	620	7515682
	CAPT3743*4A*	A*EC960803BNA*	17,800	12,800	14.50	11.50	540	7515665
	CAPT3743*4A*	A*VM970804CNA*	18,000	13,000	14.50	11.50	620	7515671
	CAPT3743*4A*	G*VC80604B*B*	18,000	13,000	14.50	11.50	620	7515677
	CAPT3743*4A*	G*EC960803BNA*	17,800	12,800	14.50	11.50	540	7515676
	CAPT3743*4A*	G*VC960403BNA*	18,000	13,000	14.50	11.50	615	7515678
	CAPT3743*4A*	G*VM970603BNA*	18,000	13,000	14.50	11.50	625	7515681
	CAPT3743*4A*	A*VC960403BNA*	18,000	13,000	14.50	11.50	615	7515667
	CAPT3743*4A*	G*E80603B*B*	18,000	13,000	14.50	11.50	670	7515672
	CAPT3743*4A*	G*EC960402BNA*	17,800	12,800	14.50	11.50	575	7515674
	CAPT3743*4A*	A*EC960302BNA*	17,800	12,800	14.50	11.50	575	7515662
	CAPT3743*4A*	A*EC960603BNA*	17,800	12,800	14.50	11.50	500	7515664
	CAPT3743*4A*	A*VC960603BNA*	18,000	13,000	14.50	11.50	625	7515668
	CAPT3743*4A*	G*EC960603BNA*	17,800	12,800	14.50	11.50	500	7515675
	CAPT3743*4A*	G*EC960302BNA*	17,800	12,800	14.50	11.50	575	7515673
	CAPT3743*4A*	G*VC960603BNA*	18,000	13,000	14.50	11.50	625	7515679
	CAPT3743*4A*	G*VC960803BNA*	18,000	13,000	14.50	11.50	620	7515680
	CAPT3743*4A*	A*EC960402BNA*	17,800	12,800	14.50	11.50	575	7515663
	CAPT3743*4A*	A*VC960803BNA*	18,000	13,000	14.50	11.50	620	7515669
	CAPT3743*4A*	A*VC80604B*B*	18,000	13,000	14.50	11.50	620	7515666
	CAPT3743*4A*	A*VM970603BNA*	18,000	13,000	14.50	11.50	625	7515670
	CAPT3743*4A*+EEP		17,800	12,800	14.00	11.50	550	7515661
	CAPT3743*4A*+MBVC1200**-1A*		17,400	12,500	14.50	12.00	535	7515683

See Notes on Page 30.

Outdoor Unit	Indoor Units		Cooling Ratings				CFM	AHRI #
	Coils/Air Handlers	Furnaces	Total[1]	Sens.[1]	SEER[2]	EER[3]		
GSX14 0181K* (cont.)	CHPF2430B6C*+EEP+TXV		17,800	12,800	14.00	11.50	600	7515684
	CHPF2430B6C*+MBVC1200**-1A*+TXV		17,800	12,800	14.50	11.50	600	7515685
	CHPF2430B6C*+TXV	A*VC80604B*B*	18,000	13,000	14.50	11.50	620	7515686
	CHPF2430B6C*+TXV	G*VC80604B*B*	18,000	13,000	14.50	11.50	620	7515687
	CHPF3636B6C*+EEP+TXV		18,000	13,000	14.50	11.50	600	7515688
	CHPF3636B6C*+TXV	G*VC960603BNA*	18,000	13,000	14.50	11.50	625	7515704
	CHPF3636B6C*+TXV	G*EC960402BNA*	17,800	12,800	14.50	11.50	575	7515700
	CHPF3636B6C*+TXV	A*VC960603BNA*	18,000	13,000	14.50	11.50	625	7515694
	CHPF3636B6C*+TXV	A*EC960402BNA*	17,800	12,800	14.50	11.50	575	7515690
	CHPF3636B6C*+TXV	A*EC960302BNA*	17,800	12,800	14.50	11.50	575	7515689
	CHPF3636B6C*+TXV	G*VM970603BNA*	18,000	13,000	14.50	11.50	625	7515706
	CHPF3636B6C*+TXV	A*EC960603BNA*	17,800	12,800	14.50	11.50	500	7515691
	CHPF3636B6C*+TXV	A*VC960803BNA*	18,000	13,000	14.50	11.50	620	7515695
	CHPF3636B6C*+TXV	G*EC960803BNA*	17,800	12,800	14.50	11.50	540	7515702
	CHPF3636B6C*+TXV	G*VC960803BNA*	18,000	13,000	14.50	11.50	620	7515705
	CHPF3636B6C*+TXV	A*VC960403BNA*	18,000	13,000	14.50	11.50	615	7515693
	CHPF3636B6C*+TXV	A*VM970804CNA*	18,000	13,000	14.50	11.50	620	7515697
	CHPF3636B6C*+TXV	G*EC960603BNA*	17,800	12,800	14.50	11.50	500	7515701
	CHPF3636B6C*+TXV	G*VM970804CNA*	18,000	13,000	14.50	11.50	620	7515707
	CHPF3636B6C*+TXV	G*E80603B*B*	18,000	13,000	14.50	11.50	670	7515698
	CHPF3636B6C*+TXV	A*VM970603BNA*	18,000	13,000	14.50	11.50	625	7515696
	CHPF3636B6C*+TXV	G*VC960403BNA*	18,000	13,000	14.50	11.50	615	7515703
	CHPF3636B6C*+TXV	A*EC960803BNA*	17,800	12,800	14.50	11.50	540	7515692
	CHPF3636B6C*+TXV	G*EC960302BNA*	17,800	12,800	14.50	11.50	575	7515699
	CSCF3036N6D*+EEP+TXV		17,800	12,800	14.00	11.50	600	7515708
	CSCF3036N6D*+TXV	G*VM970603BNA*	18,000	13,000	14.50	11.50	625	7515727
	CSCF3036N6D*+TXV	G*EC960402BNA*	17,800	12,800	14.50	11.50	575	7515721
	CSCF3036N6D*+TXV	G*VC960403BNA*	18,000	13,000	14.50	11.50	615	7515724
	CSCF3036N6D*+TXV	G*VM970804CNA*	18,000	13,000	14.50	11.50	620	7515728
	CSCF3036N6D*+TXV	A*EC960603BNA*	17,800	12,800	14.50	11.50	500	7515713
	CSCF3036N6D*+TXV	G*EC960803BNA*	17,800	12,800	14.50	11.50	540	7515723
	CSCF3036N6D*+TXV	A*VM970603BNA*	18,000	13,000	14.50	11.50	625	7515718
	CSCF3036N6D*+TXV	G*VC960803BNA*	18,000	13,000	14.50	11.50	620	7515726
	CSCF3036N6D*+TXV	G*VC960603BNA*	18,000	13,000	14.50	11.50	625	7515725
	CSCF3036N6D*+TXV	A*VC960403BNA*	18,000	13,000	14.50	11.50	615	7515715
	CSCF3036N6D*+TXV	G*EC960302BNA*	17,800	12,800	14.50	11.50	575	7515720
	CSCF3036N6D*+TXV	A*EC960803BNA*	17,800	12,800	14.50	11.50	540	7515714
	CSCF3036N6D*+TXV	A*VC960603BNA*	18,000	13,000	14.50	11.50	625	7515716
	CSCF3036N6D*+TXV	A*EC960402BNA*	17,800	12,800	14.50	11.50	575	7515712
	CSCF3036N6D*+TXV	A*VC960803BNA*	18,000	13,000	14.50	11.50	620	7515717
	CSCF3036N6D*+TXV	A*EC960302BNA*	17,800	12,800	14.50	11.50	575	7515711
	CSCF3036N6D*+TXV	A*VC80604B*B*	18,000	13,000	14.50	11.50	620	7515709
	CSCF3036N6D*+TXV	G*VC80604B*B*	18,000	13,000	14.50	11.50	620	7515710
	CSCF3036N6D*+TXV	A*VM970804CNA*	18,000	13,000	14.50	11.50	620	7515719
	CSCF3036N6D*+TXV	G*EC960603BNA*	17,800	12,800	14.50	11.50	500	7515722
	CSCF3642N6D*+EEP+TXV		18,000	13,000	14.50	11.50	600	7515729

[1] BTU/h

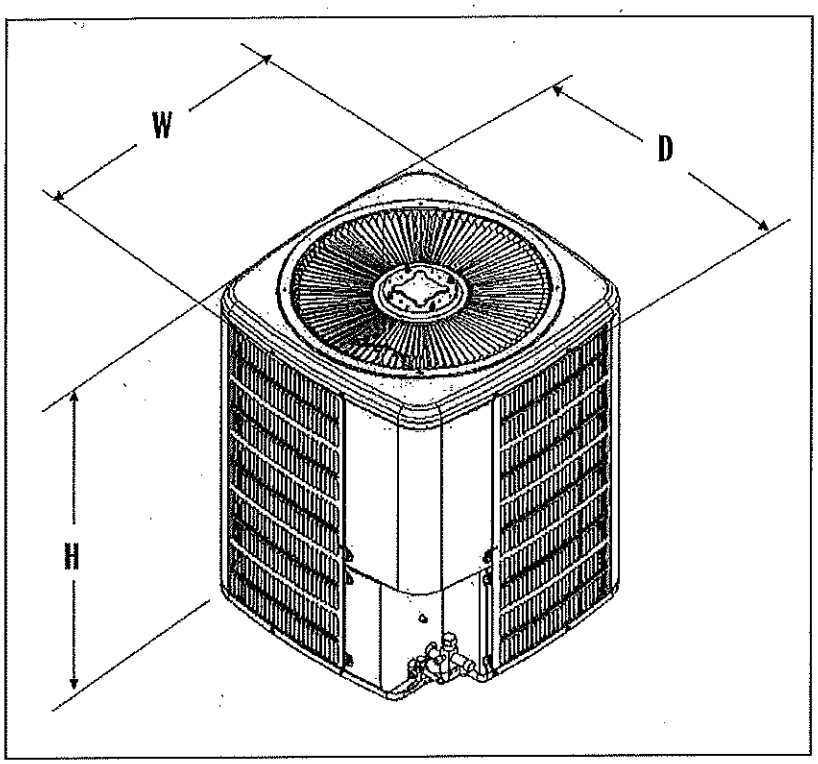
[2] Seasonal Energy Efficiency Ratio; Certified per AHRI 210/240 @ 80°F/ 67°F/ 95°F

[3] Energy Efficiency Ratio @ 80°F/ 67°F/ 95°F

NOTES

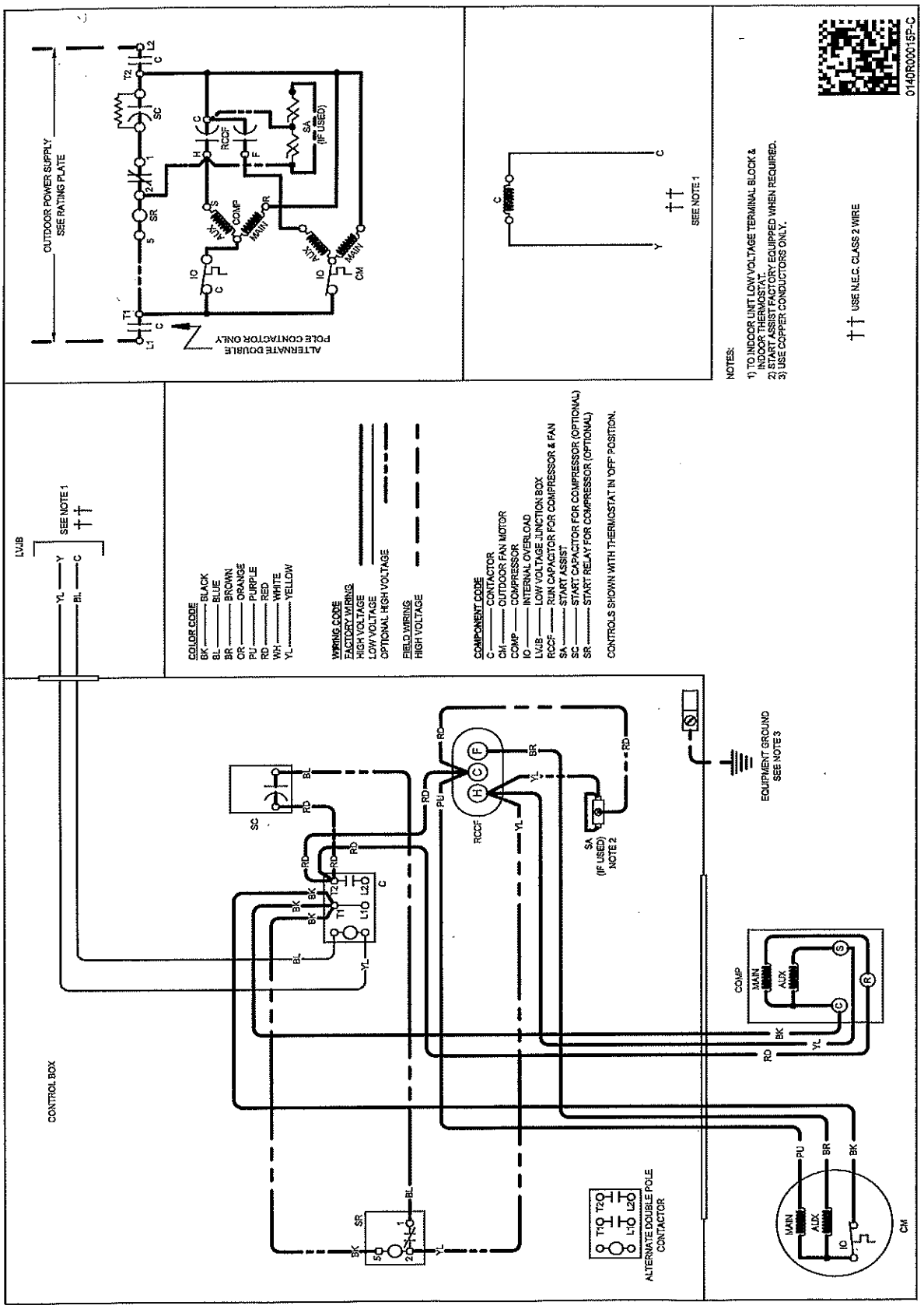
- Always check the S&R plate for electrical data on the unit being installed.
- When matching the outdoor unit to the indoor unit, use the piston supplied with the outdoor unit or that specified on the piston kit chart supplied with the indoor unit.
- EEP - Order from Service Dept. Part No. B13707-38 or new Solid State Board B13707-35S. Part No. B13707-38 is not interchangeable with B13707-35S. The Goodman Gas Furnace contains the EEP cooling time delay

DIMENSIONS



MODEL	DIMENSIONS		
	W"	D"	H"
GSX140181**	26	26	27½
GSX140191**	26	26	27½
GSX140241**	26	26	27½
GSX140251**	26	26	27½
GSX140301**	29	29	32½
GSX140311**	29	29	32½
GSX140361**	29	29	32½
GSX140371**	29	29	32½
GSX140421**	29	29	36¼
GSX140481**	35½	35½	36¼
GSX140601**	35½	35½	38¼

WIRING DIAGRAM



WARNING — **High Voltage:** Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

Wiring is subject to change. Always refer to the wiring diagram or the unit for the most up-to-date wiring.

ACCESSORIES

MODEL #	DESCRIPTION	GSX14 018/19**	GSX14 024/25**	GSX14 030/31**	GSX14 036/37**	GSX14 042**	GSX14 048**	GSX14 060**
ABK-20	Anchor Bracket Kit ^			X	X	X	X	X
ABK-21	Anchor Bracket Kit ^	X	X					
ASC-01	Anti-Short Cycle Kit	X	X	X	X	X	X	X
CSR-U-1	Hard-start Kit		X	X	X			
CSR-U-2	Hard-start Kit	X				X	X	X
CSR-U-3	Hard-start Kit						X	X
FSK01A[1]	Freeze Protection Kit	X	X	X	X	X	X	X
LSK02A[2]	Liquid Line Solenoid Kit	X	X	X	X	X	X	X
TX2N4[2]	TXV Kit	X						
TX2N4A[2]	TXV Kit	X	X					
TX3N4[2]	TXV Kit			X	X			
TX5N4[2]	TXV Kit					X	X	X

^ Contains 20 brackets; four brackets needed to anchor unit to pad

[1] Installed on indoor coil

[2] Field-installed, non-bleed, expansion valve kit — Condensing units and heat pumps with reciprocating compressors require start-assist components when used in conjunction with an indoor coil using a non-bleed thermal expansion valve refrigerant metering device.