



CITY OF WESTFIELD, IN
Advisory Planning Commission Meeting Agenda_03_21_2016

Monday, March 21, 2016 at 07:00 PM

BOARD OR COMMISSION: Advisory Plan Commission (APC)

MEETING DATE: Monday, March 21, 2016 at 07:00 PM

MEETING PLACE: Westfield City Hall- Assembly Room

THE FOLLOWING AGENDA IS SUBJECT TO CHANGE AT THE DISCRETION OF THE WESTFIELD-WASHINGTON TOWNSHIP ADVISORY PLAN COMMISSION

OPENING OF MEETING

Note the Presence of a Quorum

Approval of Minutes - March 7, 2016

Documents: [March 7, 2016 APC Minutes](#)

Review APC Rules & Procedures

ITEMS OF BUSINESS

1603-SPP-05, 1603-ODP-05 & 1603-DDP-06

Culver's

17651 Sun Park Drive

Custard Kings by Weihe Engineering requests Primary Plat, Overall Development Plan and Detailed Development Plan review for a 4,658 square foot +/- restaurant on approximately 0.99 acre +/- within the Culver's Sun Park Planned Unit Development (PUD) District.

Documents: [Exhibit 1: Staff Report](#) | [Exhibit 2: Location Map](#) | [Exhibit 3: Primary Plat](#) | [Exhibit 4: Development Plan](#) | [Exhibit 5: Site Plan](#) | [Exhibit 6: Landscape Plan](#) | [Exhibit 7: Elevations](#)

1603-ODP-06 & 1603-SPP-06

Harmony – Section 4

North of 151st Street, between Ditch Road and Towne Road

Estridge Development Management requests an amendment to the previously approved Overall Development Plan and Primary Plat for single-family residential lots on approximately 138.8 acres +/-, located in the Harmony PUD District.

Documents: [Exhibit 1 - Staff Report](#) | [Exhibit 2 - Location Map](#) | [Exhibit 3 - Overall](#)

[Development Plan](#) | [Exhibit 4 - Primary Plat](#) | [Exhibit 5 - Landscape Plan](#) | [Exhibit 6 - Harmony PUD Ordinance 12-14](#) | [Exhibit 7 - Harmony PUD Ordinance 14-55](#) | [Exhibit 8 - Harmony PUD Ordinance 15-18](#)

1603-PUD-03

Spring Mill Station Northeast Quadrant PUD

16201 Spring Mill Road

Kroger Limited Partnership by EMH&T requests an amendment to the Spring Mill Station Northeast Quadrant PUD District to permit a Monument Sign on an Outlot.

Documents: [Exhibit 1: Staff Report](#) | [Exhibit 2: Location Map](#) | [Exhibit 3: Proposed Sign Location](#) | [Exhibit 4: Proposed Sign Elevations](#) | [Exhibit 5: Amendment Ordinance](#)

1506-ZC-02

Bent Creek Commitment Modification

Northwest corner of 159th Street and Towne Road

Langston Residential Development, LLC by Nelson & Frankenberger requests a modification to the commitments associated with the rezoning of property from the AG-SF1: Agriculture/Single-Family Rural District to the SF2: Single-Family Low Density District, as approved by Ordinance 04-43, for Bent Creek.

Documents: [Exhibit 1: Staff Report](#) | [Exhibit 2: Location Map](#) | [Exhibit 3: Commitment Modification](#) | [Exhibit 4: Ordinance 04-43](#) | [Resolution to Modify Commitments](#)

1603-DDP-07 [PUBLIC HEARING]

Riverview Hospital

Northeast Corner of US31 and SR 32

Riverview Hospital by American Structurepoint, Inc. requests Detailed Development Plan review for a 100,000 square foot +/- building on approximately 8.53 acres +/- on Lot 1 in the Gateway Northeast Quadrant Subdivision in the Junction Planned Unit Development (PUD) District.

Documents: [Exhibit 1: Staff Report](#) | [Exhibit 2: Location Map](#) | [Exhibit 3: Site Plan](#) | [Exhibit 4: Elevations](#) | [Exhibit 5: Landscape Plan](#) | [Exhibit 6: Lighting Plan](#) | [Exhibit 7: Comparison Exhibit](#)

1506-ODP-16 & 1506-SPP-15 [CONTINUED]

Bent Creek

Northwest corner of 159th Street and Towne Road

Langston Residential Development, LLC by Nelson & Frankenberger requests Overall Development Plan and Primary Plat approval of 158 single-family lots on approximately 129.74 acres +/-, located in the SF2: Single-Family Low Density District with Zoning Commitments.

1602-CPA-01 [CONTINUED]

The Conservancy Addendum

The Conservancy Task Group requests approval of The Conservancy Addendum, an addendum to the Westfield-Washington Township Comprehensive Plan.

1601-ODP-01 & 1601-SPP-01 [CONTINUED]

The Trails

East of Oak Ridge Road, South of State Road 32

Edge Rock Development, LLC by TERRA Site Development, Inc. requests Overall Development Plan and Primary Plat approval of two (2) lots on approximately 13.75 acres +/- located in the Trails PUD District.

1512-PUD-27 [CONTINUED]

Bridgewater PUD Amendment – Bridgewater Marketplace

Northwest corner of 146th Street and Gray Road

KRG Bridgewater, LLC by Bose McKinney & Evans LLP request an amendment to the Bridgewater PUD District Ordinance to allow a discount store, in excess of 10,000 square feet of gross floor area but not to exceed 20,000 square feet of gross floor area, to locate within the Bridgewater Marketplace retail center.

REPORTS/COMMENTS

APC Members

City Council Liaison

BZA Liaison

ECD Staff

ADJOURNMENT

Location Map Riverview Westfield Detailed Development Plan (1603-DDP-07)

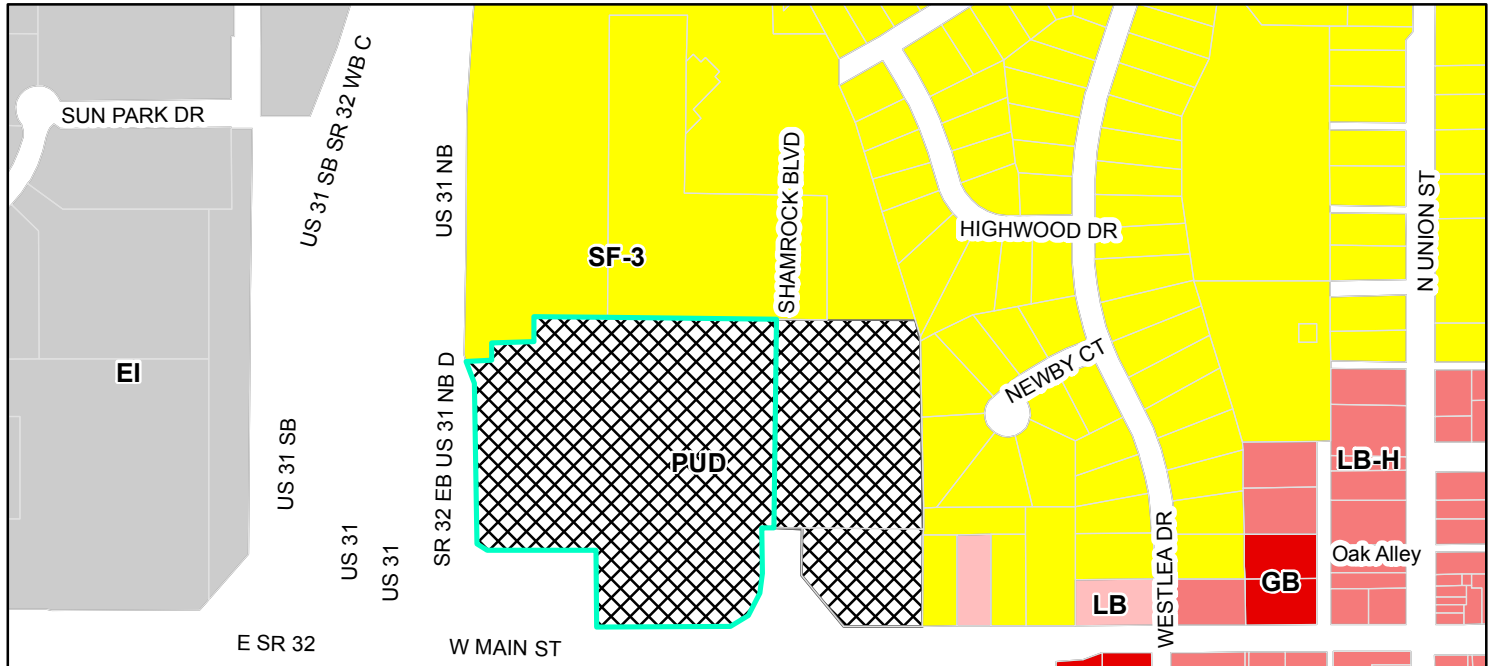


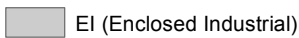
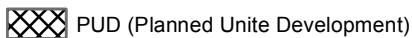
Aerial Location Map

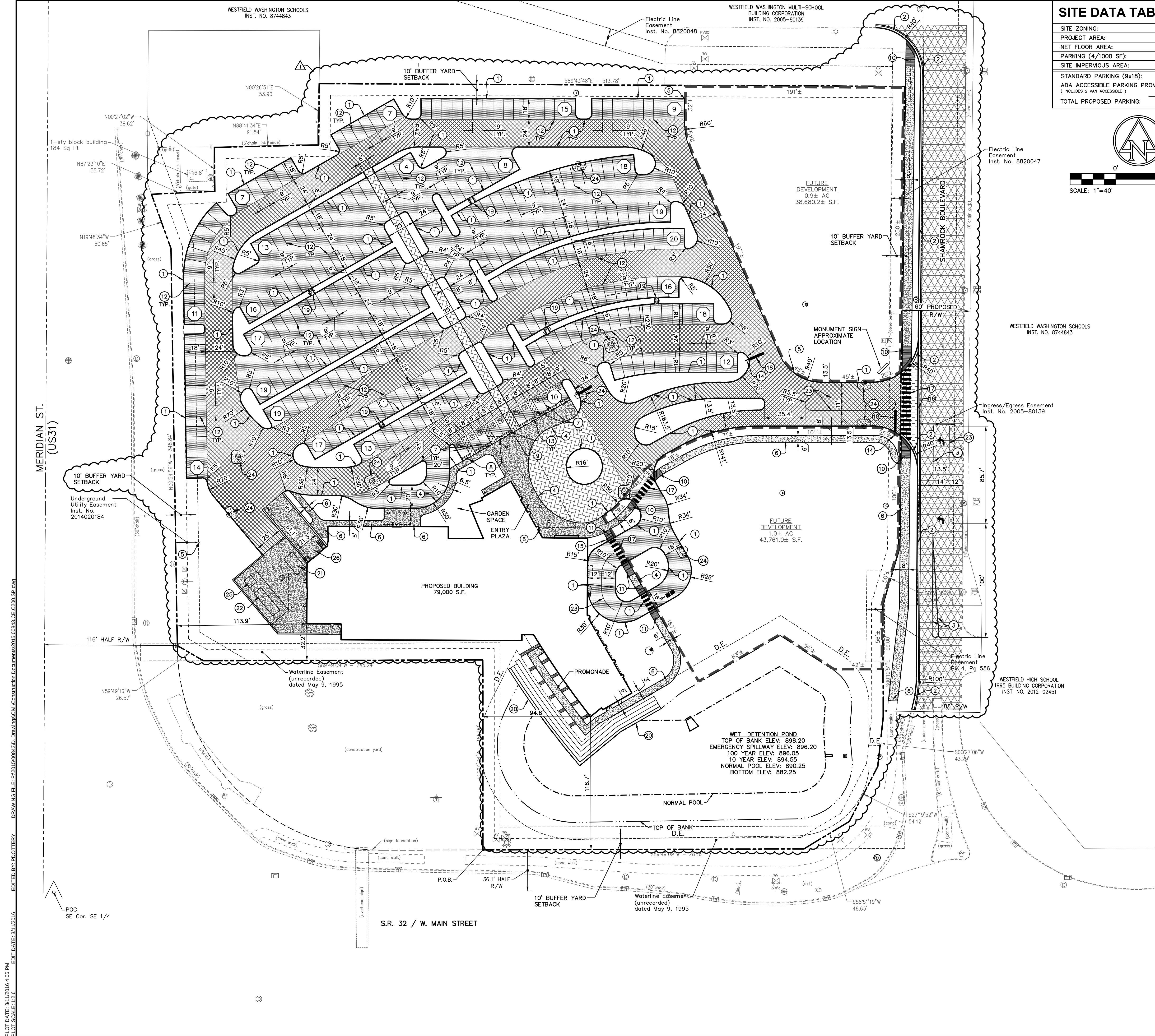
 Site



Zoning Map



 Parcel	Zoning	 GB (General Business)	 LB-H (Local Business - Historical)
 EI (Enclosed Industrial)	 LB (Local Business)	 PUD (Planned Unit Development)	
		 SF-3 (Single Family - 3)	



SITE DATA TABLE

SITE ZONING:	PUD
PROJECT AREA:	8.49± ACRES
NET FLOOR AREA:	79,000 SF
PARKING (4/1000 SF):	316
SITE IMPERVIOUS AREA:	± ACRES
STANDARD PARKING (9x18):	292
ADA ACCESSIBLE PARKING PROVIDED (8x18):	10 (INCLUDES 2 VAN ACCESSIBLE)
TOTAL PROPOSED PARKING:	302



SCALE: 1"=40'

SHEET KEYNOTES

- 6" CONCRETE CURB
- 6" COMBINED CONCRETE CURB & GUTTER
- 4" DOUBLE YELLOW, PAINT LINE
- COMBINED CONCRETE CURB AND WALK
- CURB TAPER
- CONCRETE SIDEWALK
- ADA PARKING SPACE (4" BLUE PAINT STRIPE)
- POLE MOUNTED ADA ACCESSIBLE PARKING SIGN
- SIDEWALK CURB RAMP TYPE 'A'
- SIDEWALK CURB RAMP TYPE 'G'
- SIDEWALK CURB RAMP TYPE 'H'
- PARKING SPACE (4" WHITE PAINT STRIPE)
- PRECAST CONCRETE WHEEL STOPS
- STOP SIGN
- DO NOT ENTER SIGN
- DEPRESSED CONCRETE CURB
- 24" PEDESTRIAN CROSSWALK, WHITE, PAINT
- 24" STOP BAR, WHITE, PAINT LINE
- 3" CONCRETE FLUME
- RETAINING WALL (BY OTHERS)
- TRASH COMPACTOR
- CONCRETE PAD FOR GENERATOR (REFER TO ARCHITECTURAL PLANS FOR DETAILS)
- 4" PAINT LINE, WHITE
- CONCRETE COLLAR
- TRANSFORMER PAD
- DEPRESSED LOADING DOCK

SITE LEGEND

- LIGHT DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- RIGHT OF WAY PAVEMENT
- CONCRETE PAVEMENT
- DECORATIVE PAVEMENT (REFER TO LANDSCAPE PLANS FOR DETAILS)
- 1 1/2" MILL & 1 1/2" RESURFACE TRAFFIC (COST TO BE DEDUCTED FROM IMPACT FEES)
- ADA ACCESSIBLE PARKING SPACE
- PARKING STALL COUNT

EXISTING LEGEND

- BEHIND THE CURB INLET
- BEEHIVE INLET
- BUSH
- CURB INLET
- DRAINAGE MANHOLE
- ELECTRIC HANDHOLE
- ELECTRIC METER BOX
- FIRE HYDRANT
- FIRE PLUG
- FIRE VALVE SHUT OFF
- GAS VALVE
- INLET
- LID
- LIGHT POLE
- POST
- POWER POLE
- RIGHT OF WAY MONUMENT
- SPRINKLER CONTROL VALVE
- SANITARY MANHOLE
- STAND PIPE
- SPIGOT
- TELEPHONE HANDHOLE
- TELEPHONE MANHOLE
- TELEPHONE MARKER SIGN
- TELEPHONE PEDESTAL
- TRANSFORMER
- TREE
- TRAFFIC HANDHOLE
- WELL
- WATER METER
- WATER VALVE
- BURIED ELECTRIC LINE
- BURIED GAS LINE
- BURIED TELEPHONE LINE
- BURIED UNKNOWN UTILITY
- BURIED WATER LINE
- TOP OF RIM ELEVATION
- INVERT ELEVATION
- PLASTIC PIPE
- PLASTIC PIPE
- REINFORCED CONCRETE PIPE
- CORRUGATED PLASTIC PIPE

GENERAL NOTES:

- CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
- CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
- SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.
- THIS SITE DOES NOT LIE WITHIN A FLOODWAY OR FLOODPLAIN PER FEMA MAP PANEL 18057C0120G FOR HAMILTON COUNTY INDIANA, LAST REVISED NOVEMBER 19, 2014.

CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
— INDIANA UNDERGROUND —

AMERICAN STRUCTUREPOINT INC.

7260 Shadeland Station | Indianapolis, Indiana 46256
TEL 317.547.5580 | FAX 317.543.0270
www.structurepoint.com

DETAILED DEVELOPMENT PLANS FOR RIVERVIEW HOSPITAL

NORTHEAST CORNER OF US-31 AND SR-32 WESTFIELD, INDIANA

APPROVAL PENDING
NOT FOR CONSTRUCTION

CERTIFIED BY

ISSUANCE INDEX

DATE:
01/29/2016

PROJECT PHASE:
DEVELOPMENT PLANS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE
1	REVIEW COMMENTS	03/11/16

Project Number 2015.00843

SITE PLAN

C200



AMERICAN
STRUCTUREPOINT
INC.



AXON VIEW
Riverview Health - Westfield





AMERICAN
STRUCTUREPOINT
INC.



STREET VIEW
Riverview Health - Westfield

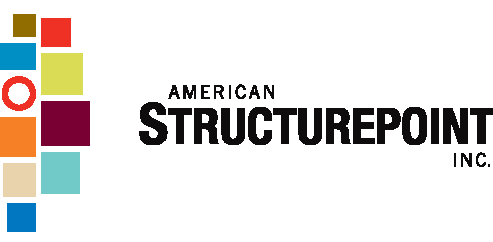
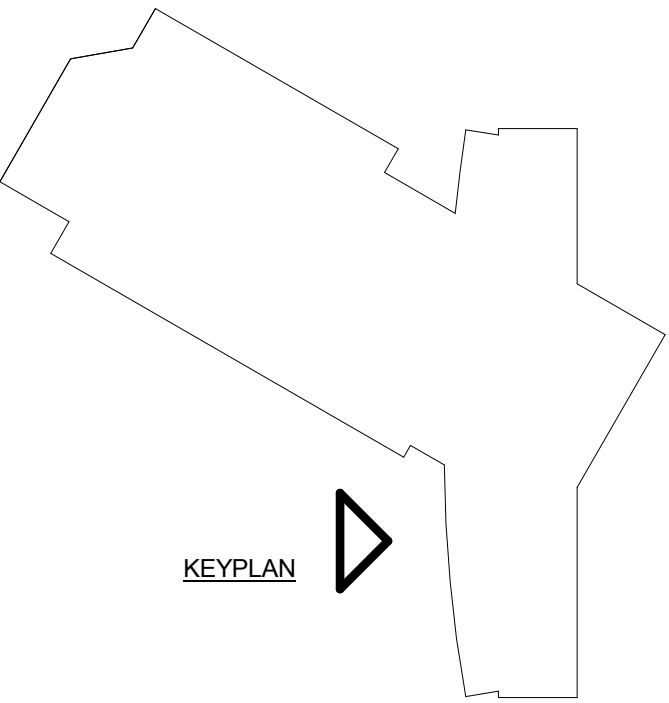


2 WEST ELEVATION/SECTION
1" = 10'-0"

KEYED ELEVATION NOTES (NOTED WITH 1)

- 1 TERRA COTTA RAINSCREEN - B.O.D. TERREAL PITERAK XS18
- 2 NATURAL STONE VENEER
- 3 PREFINISHED ALUMINUM CURTAINWALL SYSTEM - B.O.D. KAWNEER 1600UT
- 4 PREFINISHED ALUMINUM CURTAINWALL ENTRY SYSTEM - B.O.D. KAWNEER 1600UT
- 5 PREFINISHED ALUMINUM STOREFRONT SYSTEM - B.O.D. KAWNEER 601UT
- 6 PREFINISHED ALUMINUM STOREFRONT ENTRY SYSTEM - B.O.D. KAWNEER 601UT
- 7 INSULATED HOLLOW METAL DOOR AND FRAME
- 8 PENTHOUSE METAL PANEL - B.O.D. CITADEL 'RV'
- 9 PREFINISHED METAL COLUMN COVER - B.O.D. SOBOTEK 'SL2000'
- 10 METAL WALL PANEL SYSTEM - B.O.D. SOBOTEK 'SL2000'
- 11 INSULATED OVERHEAD DOOR
- 12 PREFINISHED ALUMINUM CANOPY W/ TRANSLUCENT ROOF CLADDING - B.O.D. STRUCTURES UNLIMITED WITH KALWALL CLADDING
- 13 PREFINISHED METAL PARAPET COPING - B.O.D. SOBOTEK 'SL2000'
- 14 EXTENDED MULLION CAP
- 15 WALL MOUNTED WATER FEATURE
- 16 PREFINISHED METAL CANOPY
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- 28 SLIDING GATE TO MATCH METAL FENCING - B.O.D. BASTEEL CUSTOM SYSTEM
- 29 DRIVE THROUGH PHARMACY WINDOW
- 30 ACID ETCHED GLAZING, TYPE 1
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- 32 ACID ETCHED GLAZING, TYPE 3
- 33 ACID ETCHED GLAZING, TYPE 4
- 34 SCUPPER, PREFINISHED CONDUCTOR BOX & DOWNSPOUT
- 35

WEST FACADE			
	SQ. FT.	% OF FACADE	% OF NON-GLAZED FACADE
Curtain Wall	15,482	71.79%	-
Limestone	2,516	11.67%	41.36%
Terra Cotta	1,110	5.15%	18.25%
Metal Panel	2,457	11.39%	40.39%



RIVERVIEW WESTFIELD

NORTHEAST CORNER
OF US-31 AND SR-32
WESTFIELD, IN

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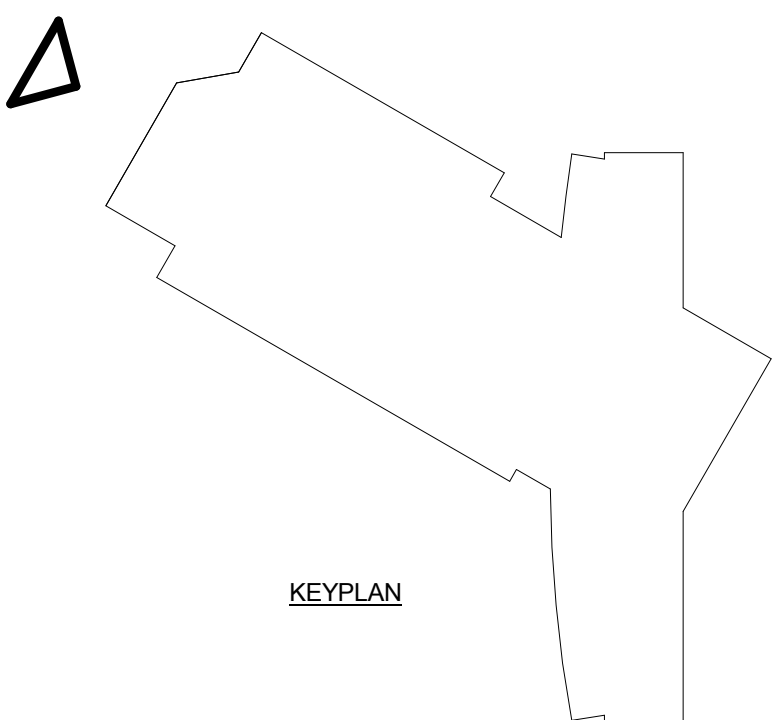
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2015.00843

EXTERIOR
ELEVATIONS

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1 WEST ELEVATION
1" = 10'-0"





2 **NORTHEAST ELEVATION**
1" = 10'-0"

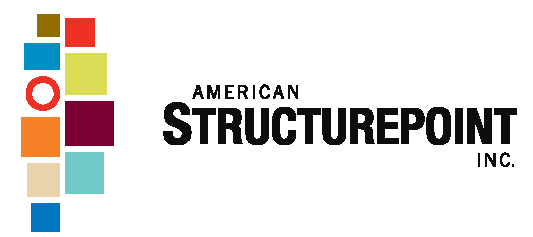
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NORTH FACADE		
SQ. FT.	% OF FACADE	% OF NON-GLAZED FACADE
Curtain Wall	1,455	15.43%
Limestone	4,438	46.12%
Terra Cotta	3,446	35.81%
Metal Panel	253	2.63%



1 **NORTH ELEVATION**
1" = 10'-0"



RIVERVIEW WESTFIELD

NORTHEAST CORNER
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WESTFIELD, IN

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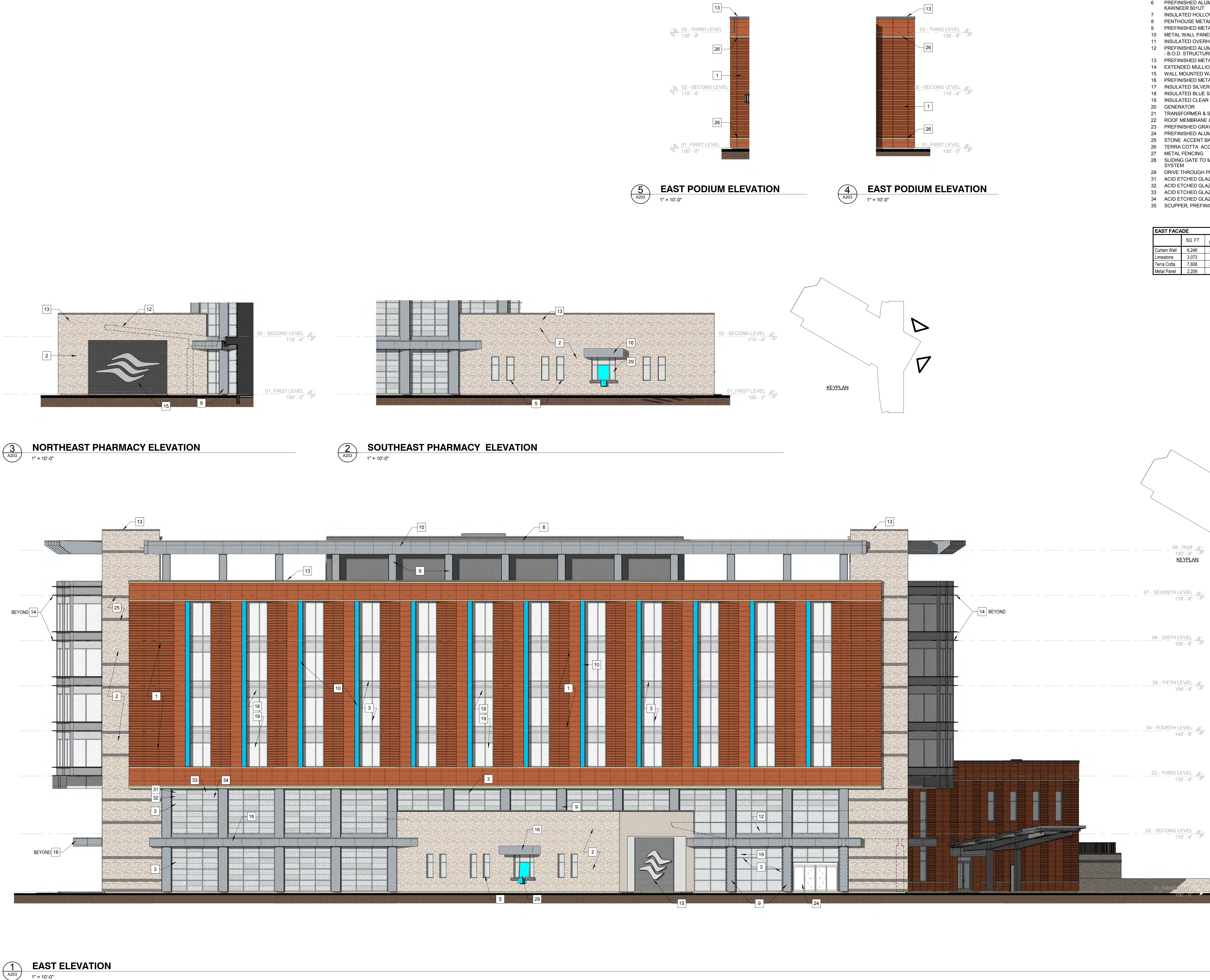
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EXTERIOR
ELEVATIONS

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EAST FACADE			
	SQ. FT.	% OF FACADE	% OF NON-GLAZED FACADE
Curtain Wall	6,246	32.64%	
Limestone	3,073	16.09%	23.84%
Terra Cotta	7,606	39.75%	59.02%
Metal Panel	2,209	11.54%	17.14%



RIVERVIEW WESTFIELD
NORTHEAST CORNER
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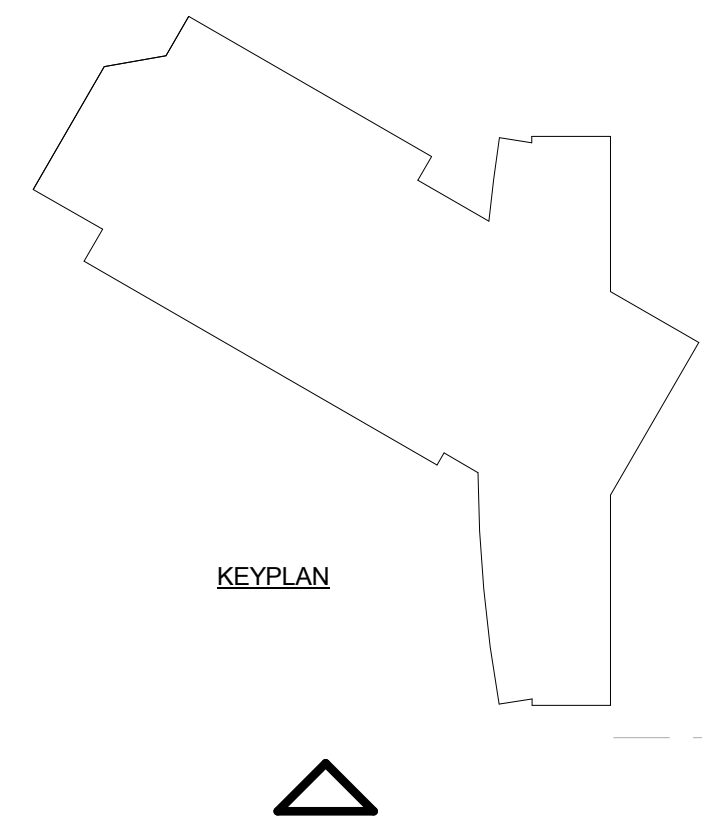
REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2015.00843

EXTERIOR
ELEVATIONS

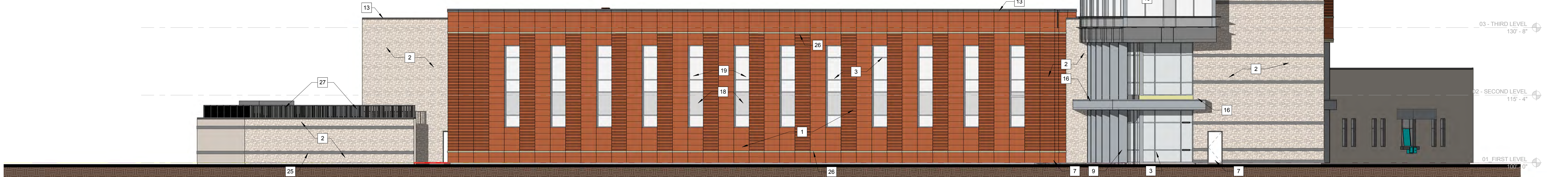
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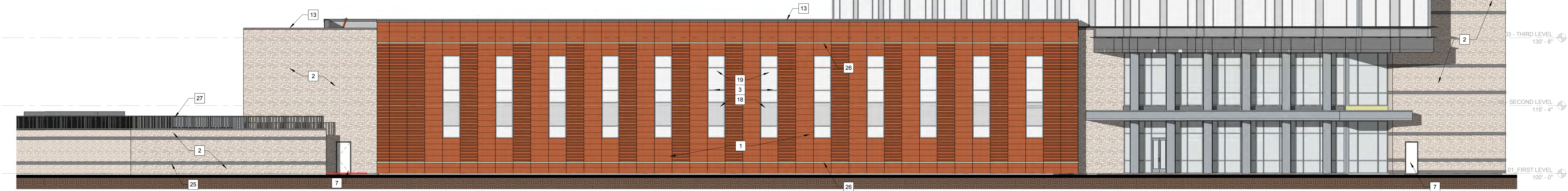
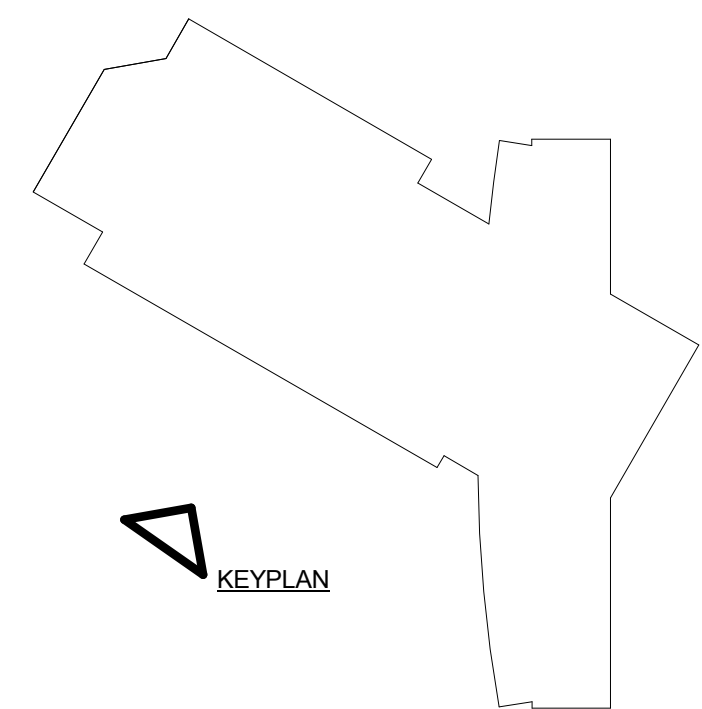


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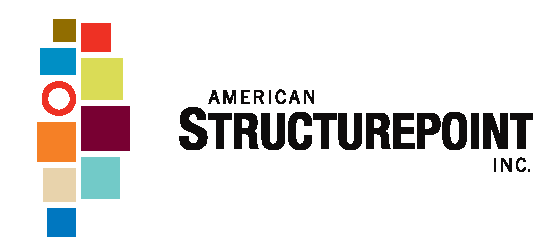
SOUTH FACADE			
	SQ. FT.	% OF FACADE	% OF NON-GLAZED FACADE
Curtain Wall	2,259	22.33%	
Limestone	3,853	38.48%	49.54%
Terra Cotta	3,752	37.08%	47.74%
Metal Panel	214	2.12%	2.72%



2 SOUTHEAST ELEVATION
1" = 10'-0"



1 SOUTH ELEVATION
1" = 10'-0"



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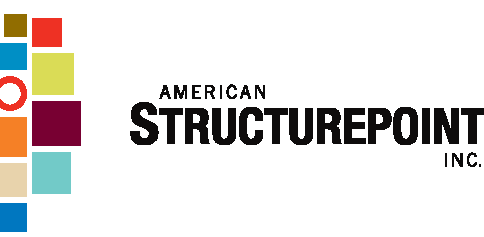
ISSUANCE INDEX	
DATE:	3/11/2016
PROJECT PHASE:	DEVELOPMENT PLANS

REVISION SCHEDULE		
NO.	DESCRIPTION	DATE

Project Number 2015.00843

EXTERIOR
ELEVATIONS

A204



RIVERVIEW WESTFIELD
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NO.	DESCRIPTION	DATE

Project Number 2015.00843

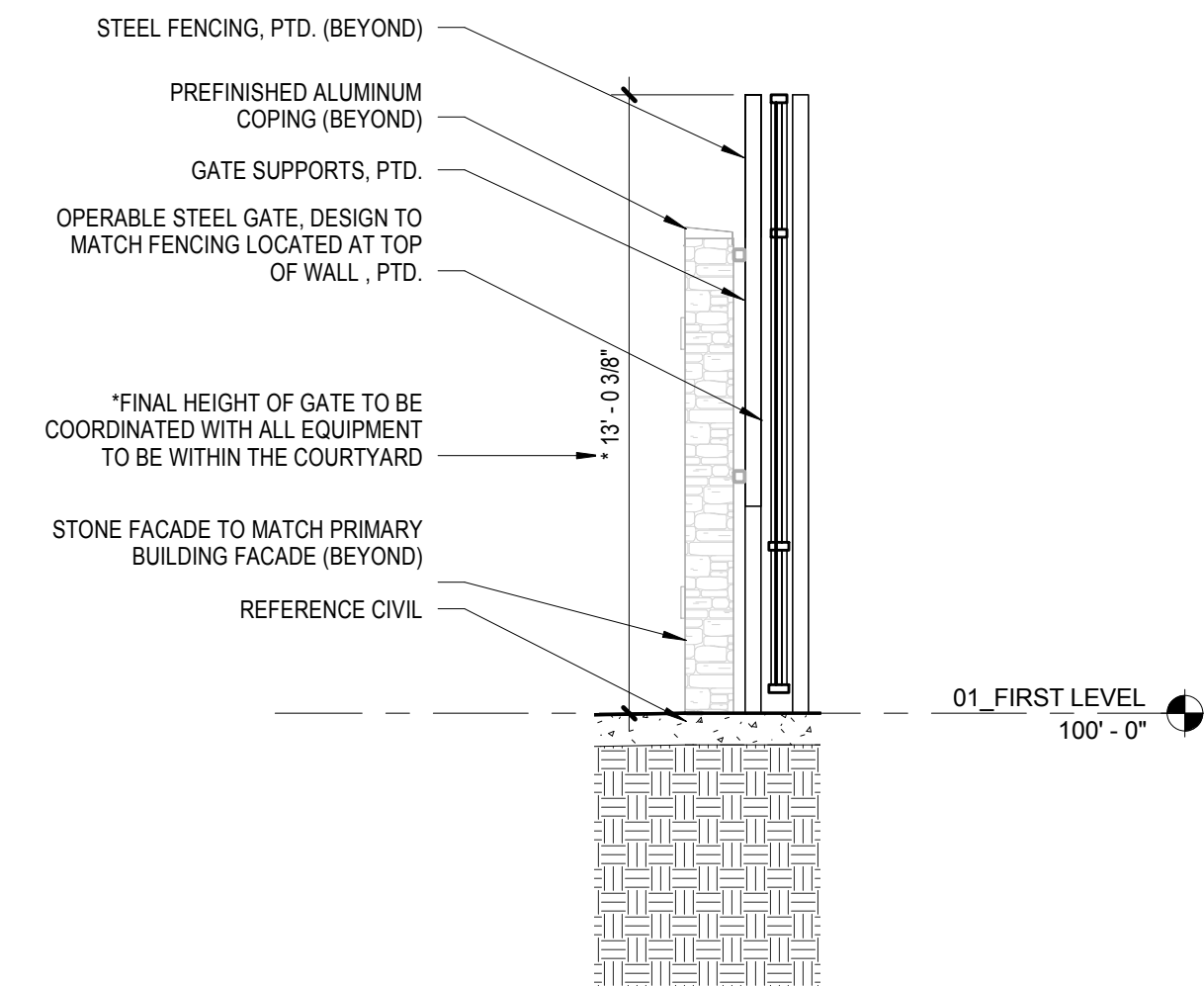
TAC Response

AS-TAC

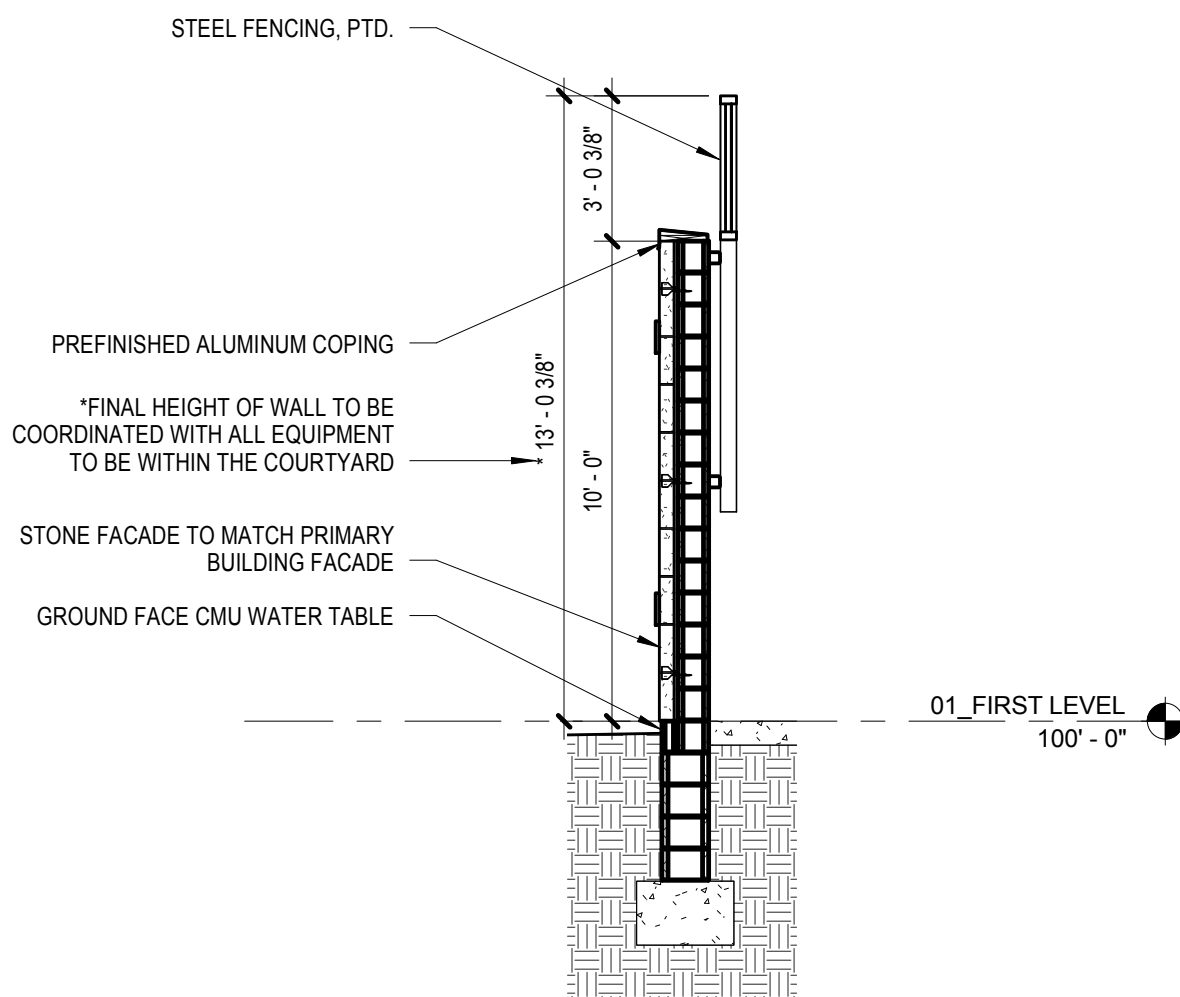


GENERAL: LANDSCAPING NOT SHOWN FOR CLARITY

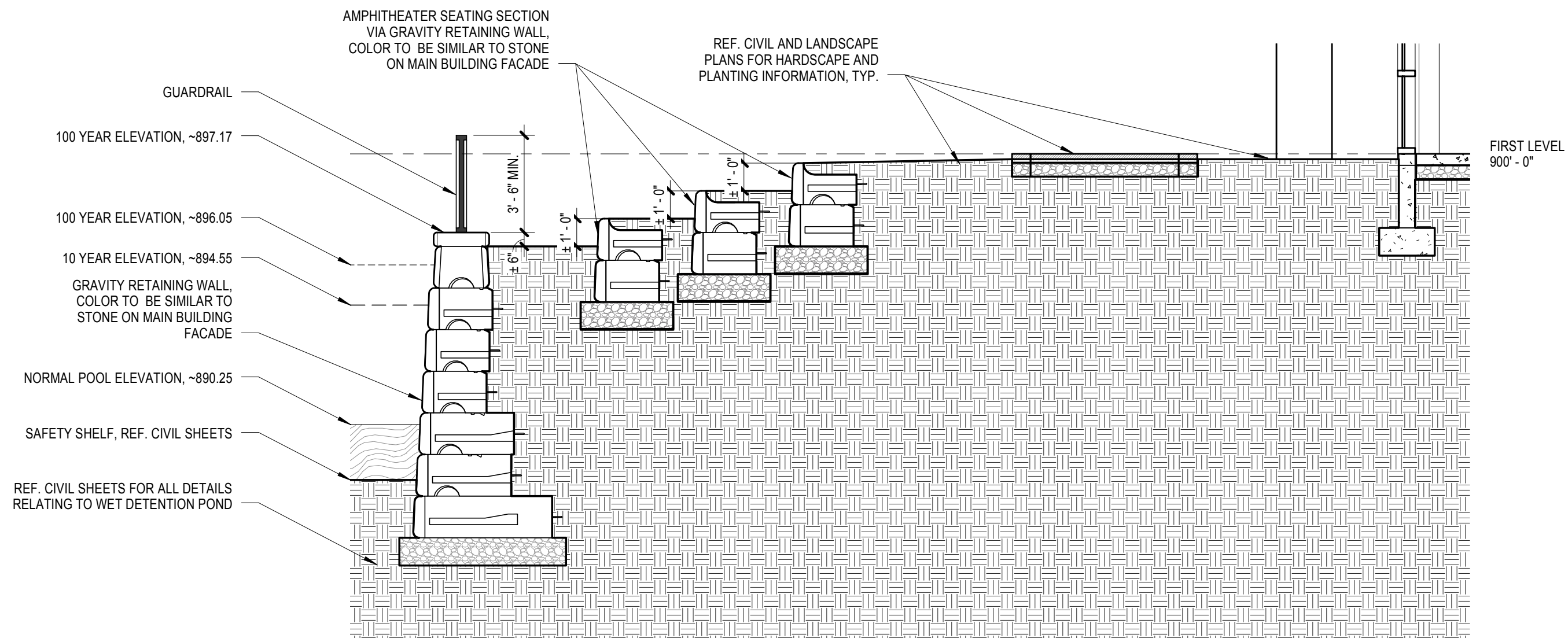
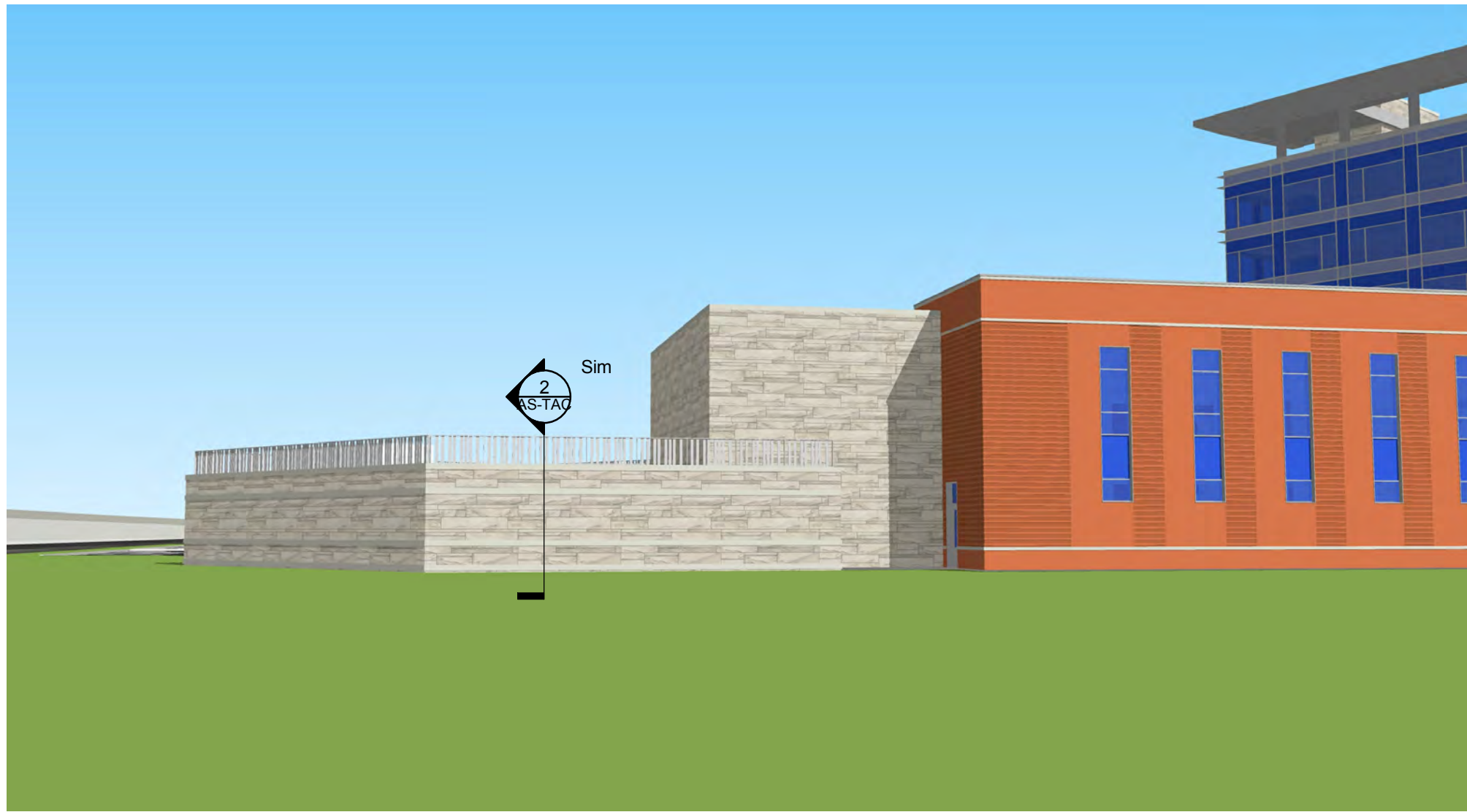
4 AS-TAC Loading Area Enclosure



3 AS-TAC Mechanical Screen Gate
1/4" = 1'-0"



2 AS-TAC Mechanical Screen
1/4" = 1'-0"



1 AS-TAC Retaining Wall
1/4" = 1'-0"

CONCEPT PLANT SCHEDULE RIVERVIEW

	ORNAMENTAL TREE Amelanchier x grandiflora 'Autumn Brilliance' / 'Autumn Brilliance' Serviceberry Cercis canadensis / Eastern Redbud Multi-trunk Cornus florida 'Cherokee Princess' / Cherokee Princess Dogwood Crataegus viridis 'Winter King' / 'Winter King' Hawthorn	65
	EVERGREEN TREE Juniperus virginiana / Eastern Red Cedar Picea abies / Norway Spruce Picea pungens / Colorado Spruce	31
	COLUMNAR TREE Acer freemanii 'Armstrong' / Freeman Maple Liquidambar styraciflua 'Slender Silhouette' / Columnar Sweet Gum Liriodendron tulipifera 'Fastigiata' / Tulip Tree	12
	BUFFER CANOPY TREE Acer saccharum 'Green Mountain' TM / Green Mountain Sugar Maple Cercidiphyllum japonicum / Katsura Tree Liriodendron tulipifera / Tulip Tree Quercus bicolor / Swamp White Oak	33
	PARKING LOT CANOPY TREE Acer saccharum 'Green Mountain' TM / Green Mountain Sugar Maple Gleditsia triacanthos inermis 'Shademaster' TM / Shademaster Locust Nyssa sylvatica / Sour Gum Zelkova serrata 'Village Green' / Sawleaf Zelkova	38
	STREET TREE Cercidiphyllum japonicum / Katsura Tree	4
	LARGE ORNAMENTAL FLOWERING TREE -	1
	MEDIUM SHRUBS Fothergilla gardenii 'Mt. Airy' / Dwarf Witchalder Itea virginica 'Henry's Garnet' / Henry's Garnet Sweetspire Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	572
	LARGE SHRUBS Aesculus parviflora / Bottlebrush Buckeye Viburnum dentatum 'Arrowwood' / Arrowwood Viburnum	71
	FERN Matteuccia struthiopteris / Ostrich Fern	6
	MEDIUM SHRUB (WET-TO-MESIC) Asclepias tuberosa / Butterfly Milkweed Baptisia alba / Wild Indigo	112
	WETLAND EDGE Elymus virginicus / Virginia Wild Rye Iris virginica / Blue Flag Iris Juncus effusus / Soft Rush Lobelia cardinalis / Cardinal Flower Mimulus ringens / Monkeyflower Sagittaria lancifolia / Duck Potato Scirpus atrovirens / Dark Green Bulrush	5,826 sf
	WET-TO-MESIC PRAIRIE Echinacea purpurea / Purple Coneflower Liatris aspera / Rough Blazing Star Lobelia siphilitica / Great Lobelia Panicum virgatum / Switch Grass Rudbeckia hirta / Black-eyed Susan Schizachyrium scoparium / Little Bluestem Grass Sorghastrum nutans / Indian Grass Sporobolus heterolepis / Prairie Dropseed	9,165 sf
	WOODLAND (MIX 1) Aquilegia canadensis / Canadian Columbine Athyrium filix-femina / Common Lady Fern Liriope spicata / Creeping Lily Turf Mertensia virginica / Virginia Bluebells	1,403 sf
	ORNAMENTAL GRASSES Calamagrostis x acutiflora 'Karl Foerster' / Feather Reed Grass Deschampsia cespitosa / Tufted Hair Grass Schizachyrium scoparium / Little Bluestem Grass Sporobolus heterolepis / Prairie Dropseed	20,698 sf
	WOODLAND (MIX 2) Asarum canadense / Canadian Wild Ginger Carex pensylvanica / Pennsylvania Sedge Liriope spicata / Creeping Lily Turf	1,083 sf
	LAWN Hydroseed Seeded Lawn / Drought Tolerant Fescue Blend	123,397 sf
	RAIN GARDEN Asclepias tuberosa / Butterfly Milkweed Lobelia cardinalis / Cardinal Flower Rudbeckia subtomentosa / Sweet Black-eyed Susan Schizachyrium scoparium / Little Bluestem Grass Sporobolus heterolepis / Prairie Dropseed	2,389 sf

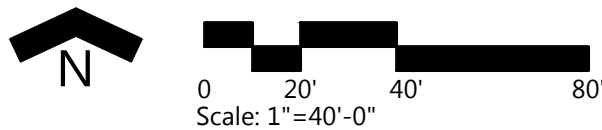
- NOTES:
- Trees are a minimum of 10' from SSD and storm sewers.
 - Trees are a minimum of 4' away from sidewalks and trails to the extent possible.
 - Street trees are chosen from the City of Westfield's Street Tree List

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	DETAIL
	Concrete Paving	
	Asphalt Paving	
	Special Concrete Paving	
	Bike Rack	
	Entry Plaza	
	Bench	
	Garden Space	
	Promenade	
	Specimen Tree	
	Planter as Bollard	

REQUIRED LANDSCAPING

Minimum Lot Requirements: Institutional Land Use	Required: 17 shade trees/acre 3 orn. or evergreen trees/acre 10 shrubs/acre	Required: 87 shade trees 26 orn./evg trees 85 shrubs	Proposed: 17 shade trees 96 orn./evg trees 755 shrubs
Foundation Plantings: 1/40 lf of facade 1/12 lf of Front facade	295/40 = 7 720/12 = 60	7 trees or shrubs 60 trees or shrubs	18 shrubs 100 shrubs
External Street Frontage: Min. 10' width	3 shade or evergreen trees/100 lf 2 ornamental trees/100 lf 25 shrubs/100 lf	31 trees 21 trees 262 shrubs	35 trees 26 trees 285 shrubs
Buffer Yards: None Required		Not Applicable	Not Applicable
Parking Area Landscaping: Minimum Area Parking Islands	10% (164,000 sf total) Max. 200 lf between islands	16,400 sf (10%) 1 tree, 4 shrubs per island	18,150 sf (11%) 36 trees, 21 orn. trees, 212 shrubs
Perimeter Parking Area	1 tree/ 30 lf 1 shrub/ 3 lf	16 trees 155 shrubs	11 trees 173 shrubs



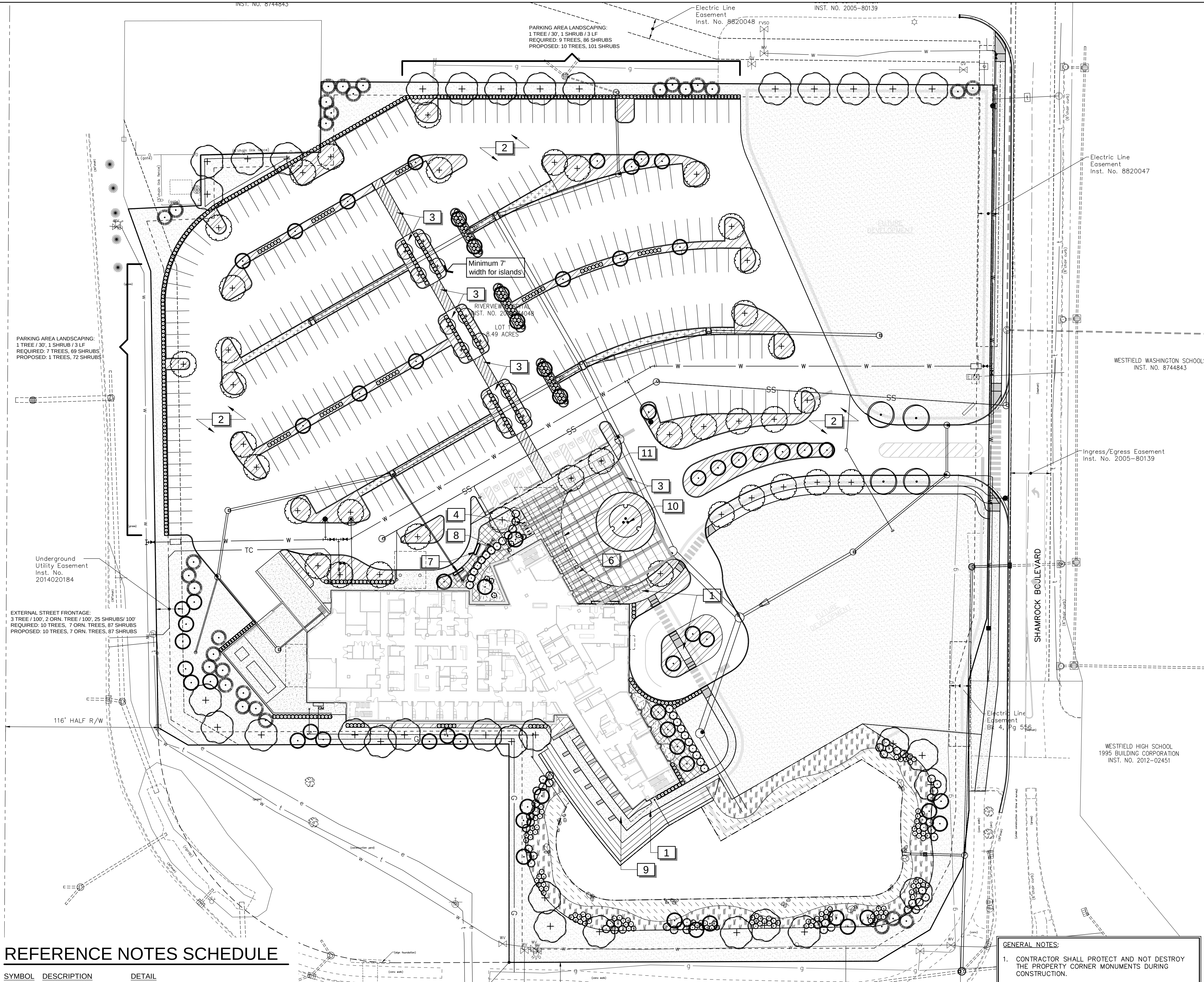
GENERAL NOTES:

- CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
- CONTRACTOR TO VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION. CONTACT ENGINEER IF VARIATION EXISTS.
- SEE SHEET C002 GENERAL NOTES FOR MORE INFORMATION.

CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CALL TOLL FREE
"811" OR 1-800-382-5544
- INDIANA UNDERGROUND -



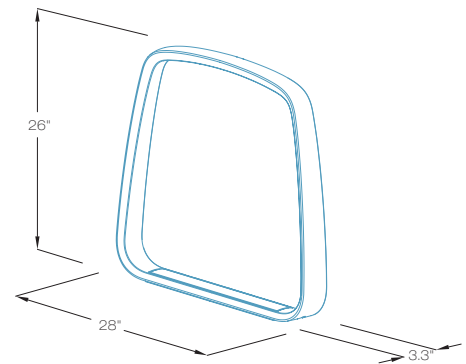
Installation

- Surface mount or embedded to concrete surface.
- Requires only two bolts to mount, with extra surface mount anchor hole provided.
- 4 stainless steel leveling glides within the base are provided for fine adjustment from top side of base.
- Cover plate over bike rack base provides seamless appearance.
- Must be spaced 30" apart and 24" from a wall to meet APBP guidelines.

To Specify

Select Ride bike rack and powdercoat color. Specify surface mount or embedded.

Ride



Ride Dimensions



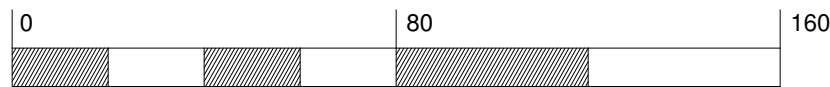
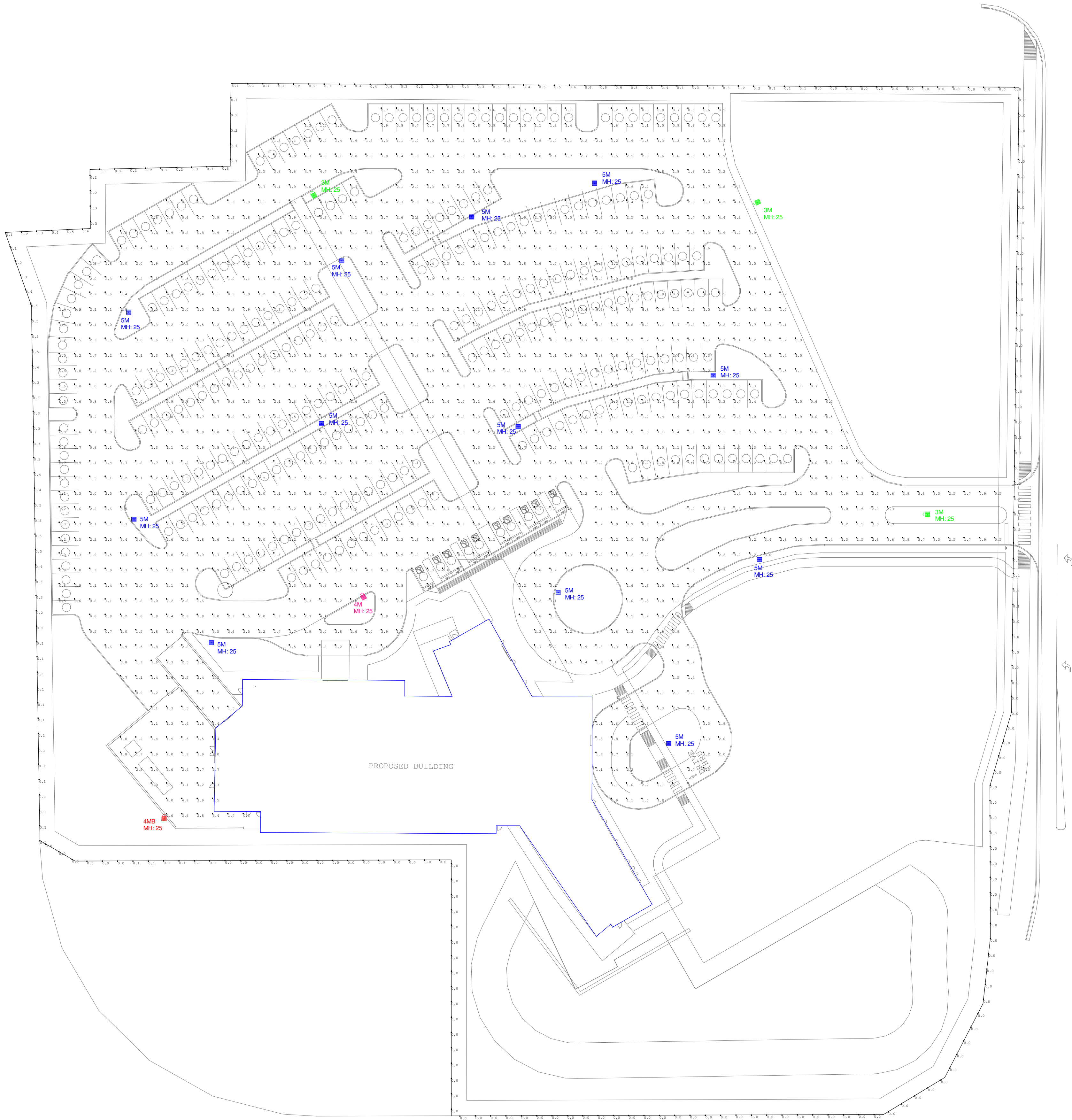
Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Lumens/Lamp	LLF	Total Watts	Description
3M	3	3M	SINGLE	23101	0.960	789	ARE-EDG-3M-R3-16-E-UL-BZ-525
4M	1	4M	SINGLE	24367	0.960	263	ARE-EDG-4M-R3-16-E-UL-BZ-525
4MB	1	4MB	SINGLE	18354	0.960	263	ARE-EDG-4MB-R3-16-E-UL-BZ-525
5M	12	5M	SINGLE	25632	0.960	3156	ARE-EDG-5M-R3-16-E-UL-BZ-525

Footcandles calculated using predicted lumen values after 50K hours of operation					
Label	Avg	Max	Min	Avg/Min	Max/Min
Parking Lot	1.82	5.3	0.5	3.64	10.60
Property Line	0.13	0.7	0.0	N.A.	N.A.

Pole Schedule
(17) PS4S22CTBZ (22" X 4" X .125" STEEL SQUARE POLE)

Additional Equipment Required
(17) PB-1A4 (Tenon)

*** CUSTOMER TO VERIFY ORDERING INFORMATION AND CATALOGUE NUMBER PRIOR TO PLACING ORDER ***



1200 92nd Street - Sturtevant, WI 53177
www.cree.com - (800) 236-6800

Project Name: Riverview Health Parking Lot - Westfield, IN
Date: 3/11/2016
Scale: 1"=40'
Footcandles calculated at grade
Filename: 160113CS1CISR2.AGI
Layout by: Chris Schiltz

Illumination results shown on this lighting design are based on project parameters provided to Cree, Inc. used in conjunction with luminaire test procedures conducted under laboratory conditions. Actual project conditions differing from these design parameters may affect field results. The customer is responsible for verifying dimensional accuracy along with compliance with any applicable electrical, lighting, or energy code.

Cree Edge™ Series

LED Area/Flood Luminaire

Product Description

The Cree Edge™ Series has a slim, low profile design. Its rugged cast aluminum housing minimizes wind load requirements and features an integral, weathertight LED driver compartment and high performance aluminum heat sinks. Various mounting choices: Adjustable Arm, Direct Arm, Direct Arm Long, or Side Arm (details on page 2). Includes a leaf/debris guard.

Applications: Parking lots, walkways, campuses, car dealerships, office complexes, and internal roadways

Performance Summary

Patented NanoOptic® Product Technology

Made in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

CCT: 4000K (+/- 300K), 5700K (+/- 500K) standard

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

*See www.cree.com/lighting/products/warranty for warranty terms

Accessories

Field-Installed	
Bird Spikes XA-BRDSPK	Backlight Control Shields XA-20BLS-4 - Four-pack - Unpainted stainless steel
Hand-Held Remote XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required	

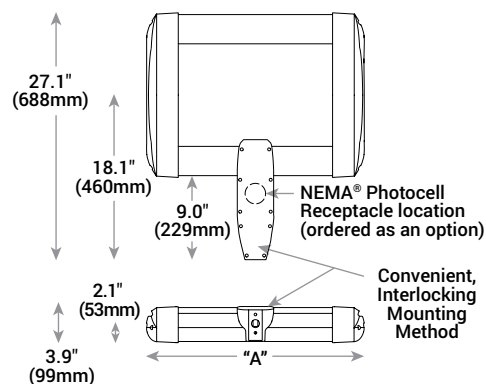
Ordering Information

Example: ARE-EDG-2M-AA-12-E-UL-SV-350

Product	Optic			Mounting*	LED Count (x10)	Series	Voltage	Color Options	Drive Current	Options	
ARE-EDG	2M	3MB	4MP	AA	02	E	UL	BK	350	DIM 0-10V Dimming - Control by others - Refer to Dimming spec sheet for details - Can't exceed specified drive current F Fuse - Refer to ML spec sheet for availability with ML options - Available with UL voltage only - When code dictates fusing, use time delay fuse HL Hi/Low (Dual Circuit Input) - Refer to HL spec sheet for details - Sensor not included ML Multi-Level - Refer to ML spec sheet for details - Intended for downlight applications at 0° tilt P Photocell - Refer to ML spec sheet for availability with ML options - Available with UL voltage only	PML Programmable Multi-Level, 20-40' Mounting Height - Refer to PML spec sheet for details - Intended for downlight applications at 0° tilt PML2 Programmable Multi-Level, 10-30' Mounting Height - Refer to PML spec sheet for details - Intended for downlight applications at 0° tilt R NEMA® Photocell Receptacle - Intended for downlight applications with maximum 45° tilt - Photocell by others - Refer to ML spec sheet for availability with ML options 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire
	Type II Medium	Type III Medium w/BLS	Type IV Medium w/Partial BLS	Adjustable Arm	04		Universal 120-277V	Black	525		
	2MB	3MP	BLS	DA	06		UH	BZ	525mA		
	Type II Medium w/BLS	Type III Medium w/Partial BLS	Type V Medium	DL	08		Universal 347-480V	Bronze	700		
	2MP	5M	5M	Direct Long Arm	10			SV	700mA		
	Type II Medium w/Partial BLS	Type IV Medium w/BLS	Type V Short	SA	12			Silver	- Available with 20-60 LEDs		
	3M	4MB		Side Arm	14			WH			
	Type III Medium	Type IV Medium w/BLS		- Available with 20-60 LEDs	16			White			
FLD-EDG	25	70	N6								
	25' Flood	70' Flood	NEMA® 6								
	40	SN									
	40' Flood	Sign									

* Reference EPA and pole configuration suitability data beginning on page 19
NOTE: Price adder may apply depending on configuration

DA Mount



LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	21 lbs. (10kg)
04	12.1" (306mm)	24 lbs. (11kg)
06	14.1" (357mm)	27 lbs. (12kg)
08	16.1" (408mm)	28 lbs. (13kg)
10	18.1" (459mm)	32 lbs. (15kg)
12	20.1" (510mm)	34 lbs. (15kg)
14	22.1" (560mm)	37 lbs. (17kg)
16	24.1" (611mm)	41 lbs. (19kg)

AA/DL/SA Mount - see page 22 for weight & dimensions



US: www.cree.com/lighting

T (800) 236-6800 F (262) 504-5415

Rev. Date: V3 10/15/2015

Canada: www.cree.com/canada



T (800) 473-1234 F (800) 890-7507

Product Specifications

CONSTRUCTION & MATERIALS

- Slim, low profile, minimizing wind load requirements
- Luminaire sides are rugged die cast aluminum with integral, weathertight LED driver compartment and high performance heat sinks
- DA and DL mount utilizes convenient interlocking mounting method. Mounting is rugged die cast aluminum, mounts to 3-6" (76-152mm) square or round pole and secures to pole with 5/16-18 UNC bolts spaced on 2" (51mm) centers
- AA and SA mounts are rugged die cast aluminum and mount to 2" (51mm) IP, 2.375" (60mm) O.D. tenons
- Includes leaf/debris guard
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver, and white are available
- **Weight:** See Dimensions and Weight Charts on pages 1 and 22

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- DA and DL mounts designed with integral weathertight electrical box with terminal strips (12Ga-20Ga) for easy power hookup
- Integral 10kV surge suppression protection standard
- To address inrush current, slow blow fuse or type C/D breaker should be used
- **Maximum 10V Source Current:** 20 LED (350mA): 10mA; 20 LED (525 & 700mA) and 40-80 LED: 0.15mA; 100-160 LED: 0.30mA

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Enclosure rated IP66 per IEC 60529 when ordered without P or R options
- Consult factory for CE Certified products
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards when ordered with AA, DA and DL mounts
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15 standards for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- DLC qualified. Exceptions apply when ordered with full backlight control or 3MP optic with 20 LEDs. Please refer to www.designlights.org/QPL for most current information
- Meets Buy American requirements within ARRA

Electrical Data*							
LED Count (x10)	System Watts 120-480V	Total Current					
		120V	208V	240V	277V	347V	480V
350mA							
02	25	0.21	0.13	0.11	0.10	0.08	0.07
04	46	0.36	0.23	0.21	0.20	0.15	0.12
06	66	0.52	0.31	0.28	0.26	0.20	0.15
08	90	0.75	0.44	0.38	0.34	0.26	0.20
10	110	0.92	0.53	0.47	0.41	0.32	0.24
12	130	1.10	0.63	0.55	0.48	0.38	0.28
14	158	1.32	0.77	0.68	0.62	0.47	0.35
16	179	1.49	0.87	0.77	0.68	0.53	0.39
525mA							
02	37	0.30	0.19	0.17	0.16	0.12	0.10
04	70	0.58	0.34	0.31	0.28	0.21	0.16
06	101	0.84	0.49	0.43	0.38	0.30	0.22
08	133	1.13	0.66	0.58	0.51	0.39	0.28
10	171	1.43	0.83	0.74	0.66	0.50	0.38
12	202	1.69	0.98	0.86	0.77	0.59	0.44
14	232	1.94	1.12	0.98	0.87	0.68	0.50
16	263	2.21	1.27	1.11	0.97	0.77	0.56
700mA							
02	50	0.41	0.25	0.22	0.20	0.15	0.12
04	93	0.78	0.46	0.40	0.36	0.27	0.20
06	134	1.14	0.65	0.57	0.50	0.39	0.29

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-480V +/- 10%

Recommended Cree Edge™ Series Lumen Maintenance Factors (LMF) ¹					
Ambient	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ LMF
5°C (41°F)	1.04	0.99	0.97	0.95	0.93
10°C (50°F)	1.03	0.98	0.96	0.94	0.92
15°C (59°F)	1.02	0.97	0.95	0.93	0.91
20°C (68°F)	1.01	0.96	0.94	0.92	0.90
25°C (77°F)	1.00	0.95	0.93	0.91	0.89

¹ Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip)

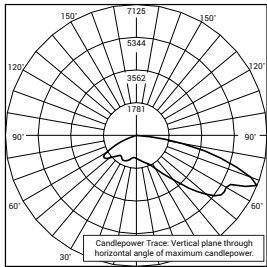
³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip)



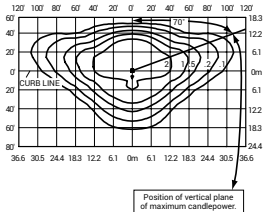
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: www.cree.com/Lighting/Tools-and-Support/Exterior-IES-Configuration-Tool

2M



CSA Test Report #: 6371
ARE-EDG-2M-**-06-E-UL-700-40K
Initial Delivered Lumens: 10,985



ARE-EDG-2M-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 17,710
Initial FC at grade

Type II Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,138	B1 U0 G1	2,220	B1 U0 G1
04	4,276	B1 U0 G1	4,440	B1 U0 G1
06	6,340	B2 U0 G1	6,584	B2 U0 G2
08	8,454	B2 U0 G2	8,779	B2 U0 G2
10	10,542	B2 U0 G2	10,947	B2 U0 G2
12	12,650	B2 U0 G2	13,137	B3 U0 G3
14	14,665	B3 U0 G3	15,229	B3 U0 G3
16	16,760	B3 U0 G3	17,405	B3 U0 G3
525mA				
02	2,993	B1 U0 G1	3,108	B1 U0 G1
04	5,986	B2 U0 G1	6,216	B2 U0 G1
06	8,876	B2 U0 G2	9,218	B2 U0 G2
08	11,835	B2 U0 G2	12,290	B2 U0 G2
10	14,759	B3 U0 G3	15,326	B3 U0 G3
12	17,710	B3 U0 G3	18,391	B3 U0 G3
14	20,531	B3 U0 G3	21,321	B3 U0 G3
16	23,464	B3 U0 G3	24,367	B3 U0 G3
700mA				
02	3,656	B1 U0 G1	3,796	B1 U0 G1
04	7,311	B2 U0 G2	7,593	B2 U0 G2
06	10,842	B2 U0 G2	11,259	B2 U0 G2

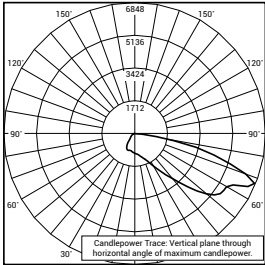
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf.
Valid with no tilt



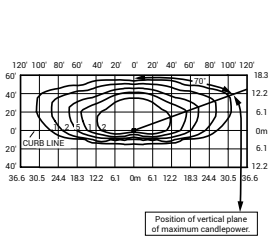
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: www.cree.com/Lighting/Tools-and-Support/Exterior-IES-Configuration-Tool

2MB



CSA Test Report #: 6447
ARE-EDG-2MB-**-06-E-UL-700-40K
Initial Delivered Lumens: 7,953



ARE-EDG-2MB-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 13,340
Initial FC at grade

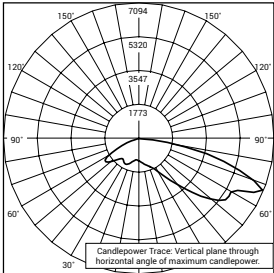
Type II Medium Distribution w/BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,610	B0 U0 G1	1,672	B0 U0 G1
04	3,221	B0 U0 G1	3,345	B0 U0 G1
06	4,776	B1 U0 G1	4,959	B1 U0 G1
08	6,368	B1 U0 G1	6,613	B1 U0 G2
10	7,941	B1 U0 G2	8,246	B1 U0 G2
12	9,529	B1 U0 G2	9,895	B1 U0 G2
14	11,046	B1 U0 G2	11,471	B1 U0 G2
16	12,624	B1 U0 G2	13,110	B1 U0 G2
525mA				
02	2,254	B0 U0 G1	2,341	B0 U0 G1
04	4,509	B1 U0 G1	4,682	B1 U0 G1
06	6,686	B1 U0 G2	6,943	B1 U0 G2
08	8,915	B1 U0 G2	9,258	B1 U0 G2
10	11,117	B1 U0 G2	11,544	B1 U0 G2
12	13,340	B1 U0 G2	13,853	B1 U0 G2
14	15,465	B2 U0 G2	16,060	B2 U0 G3
16	17,674	B2 U0 G3	18,354	B2 U0 G3
700mA				
02	2,754	B0 U0 G1	2,860	B0 U0 G1
04	5,507	B1 U0 G1	5,719	B1 U0 G1
06	8,167	B1 U0 G2	8,481	B1 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt

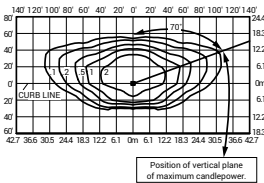
Photometry

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2MP



CSA Test Report #: 6361
ARE-EDG-2MP-**-06-E-UL-700-40K
Initial Delivered Lumens: 9,912



ARE-EDG-2MP-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 15,640
Initial FC at grade

Type II Medium Distribution w/Partial BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,888	B1 U0 G1	1,961	B1 U0 G1
04	3,776	B1 U0 G1	3,921	B1 U0 G1
06	5,599	B1 U0 G1	5,815	B1 U0 G1
08	7,466	B2 U0 G2	7,753	B2 U0 G2
10	9,310	B2 U0 G2	9,668	B2 U0 G2
12	11,172	B2 U0 G2	11,601	B2 U0 G2
14	12,951	B2 U0 G2	13,449	B2 U0 G2
16	14,801	B2 U0 G2	15,370	B2 U0 G3
525mA				
02	2,643	B1 U0 G1	2,745	B1 U0 G1
04	5,286	B1 U0 G1	5,490	B1 U0 G1
06	7,839	B2 U0 G2	8,140	B2 U0 G2
08	10,452	B2 U0 G2	10,854	B2 U0 G2
10	13,034	B2 U0 G2	13,535	B2 U0 G2
12	15,640	B2 U0 G3	16,242	B3 U0 G3
14	18,131	B3 U0 G3	18,829	B3 U0 G3
16	20,722	B3 U0 G3	21,519	B3 U0 G3
700mA				
02	3,228	B1 U0 G1	3,353	B1 U0 G1
04	6,457	B2 U0 G1	6,705	B2 U0 G1
06	9,575	B2 U0 G2	9,943	B2 U0 G2

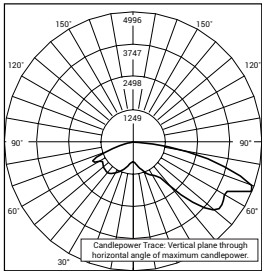
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf.
Valid with no tilt



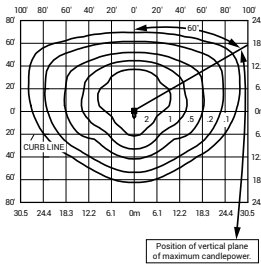
Photometry

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3M



CSA Test Report #: 6401
ARE-EDG-3M-**-06-E-UL-700-40K
Initial Delivered Lumens: 10,657



ARE-EDG-3M-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 16,790
Initial FC at grade

Type III Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,027	B1 U0 G1	2,105	B1 U0 G1
04	4,054	B1 U0 G1	4,209	B1 U0 G1
06	6,011	B2 U0 G2	6,242	B2 U0 G2
08	8,015	B2 U0 G2	8,323	B2 U0 G2
10	9,994	B3 U0 G3	10,379	B3 U0 G3
12	11,993	B3 U0 G3	12,454	B3 U0 G3
14	13,903	B3 U0 G3	14,438	B3 U0 G3
16	15,889	B3 U0 G3	16,501	B3 U0 G3
525mA				
02	2,837	B1 U0 G1	2,947	B1 U0 G1
04	5,675	B2 U0 G2	5,893	B2 U0 G2
06	8,415	B2 U0 G2	8,739	B2 U0 G2
08	11,220	B3 U0 G3	11,652	B3 U0 G3
10	13,992	B3 U0 G3	14,530	B3 U0 G3
12	16,790	B3 U0 G3	17,436	B3 U0 G3
14	19,465	B3 U0 G3	20,213	B3 U0 G3
16	22,245	B3 U0 G3	23,101	B3 U0 G3
700mA				
02	3,466	B1 U0 G1	3,599	B1 U0 G1
04	6,932	B2 U0 G2	7,198	B2 U0 G2
06	10,279	B3 U0 G3	10,674	B3 U0 G3

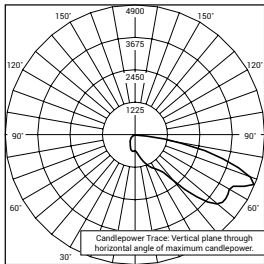
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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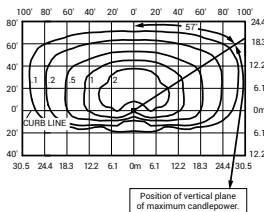
Photometry

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3MB



CSA Test Report #: 6448
ARE-EDG-3MB-**-06-E-UL-700
Initial Delivered Lumens: 7,740



ARE-EDG-3MB-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 12,420
Initial FC at grade

Type III Medium Distribution w/BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,499	B1 U0 G1	1,557	B1 U0 G1
04	2,999	B1 U0 G1	3,114	B1 U0 G1
06	4,446	B1 U0 G1	4,617	B1 U0 G1
08	5,929	B1 U0 G2	6,157	B1 U0 G2
10	7,393	B1 U0 G2	7,677	B1 U0 G2
12	8,872	B1 U0 G2	9,213	B1 U0 G2
14	10,285	B1 U0 G2	10,680	B1 U0 G2
16	11,754	B1 U0 G3	12,206	B1 U0 G3
525mA				
02	2,099	B1 U0 G1	2,180	B1 U0 G1
04	4,198	B1 U0 G1	4,359	B1 U0 G1
06	6,225	B1 U0 G2	6,464	B1 U0 G2
08	8,300	B1 U0 G2	8,619	B1 U0 G2
10	10,350	B1 U0 G2	10,748	B1 U0 G2
12	12,420	B1 U0 G3	12,898	B1 U0 G3
14	14,398	B1 U0 G3	14,952	B2 U0 G3
16	16,455	B2 U0 G3	17,088	B2 U0 G3
700mA				
02	2,564	B1 U0 G1	2,662	B1 U0 G1
04	5,127	B1 U0 G2	5,325	B1 U0 G2
06	7,603	B1 U0 G2	7,896	B1 U0 G2

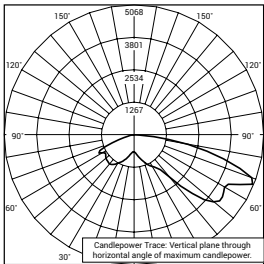
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Valid with no tilt



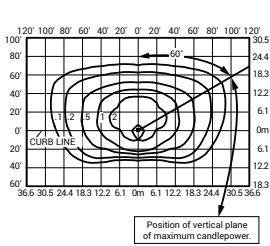
Photometry

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3MP



CSA Test Report #: 6385
ARE-EDG-3MP-**-06-E-UL-700-40K
Initial Delivered Lumens: 9,619



ARE-EDG-3MP-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 14,720
Initial FC at grade

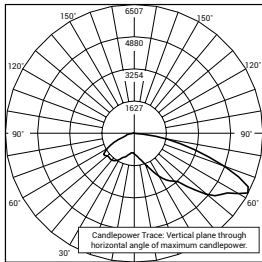
Type III Medium Distribution w/Partial BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,777	B1 U0 G1	1,845	B1 U0 G1
04	3,554	B1 U0 G1	3,690	B1 U0 G1
06	5,270	B1 U0 G2	5,473	B1 U0 G2
08	7,026	B2 U0 G2	7,297	B2 U0 G2
10	8,762	B2 U0 G2	9,099	B2 U0 G2
12	10,514	B2 U0 G3	10,919	B2 U0 G3
14	12,189	B2 U0 G3	12,658	B2 U0 G3
16	13,930	B3 U0 G3	14,466	B3 U0 G3
525mA				
02	2,488	B1 U0 G1	2,583	B1 U0 G1
04	4,975	B1 U0 G2	5,167	B1 U0 G2
06	7,378	B2 U0 G2	7,662	B2 U0 G2
08	9,837	B2 U0 G2	10,215	B2 U0 G2
10	12,267	B2 U0 G3	12,739	B2 U0 G3
12	14,720	B3 U0 G3	15,286	B3 U0 G3
14	17,065	B3 U0 G3	17,721	B3 U0 G3
16	19,503	B3 U0 G3	20,253	B3 U0 G3
700mA				
02	3,039	B1 U0 G1	3,155	B1 U0 G1
04	6,077	B1 U0 G2	6,311	B1 U0 G2
06	9,011	B2 U0 G2	9,358	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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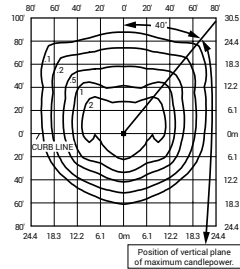
Photometry

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4M



CSA Test Report #: 6438
ARE-EDG-4M-**-06-E-UL-700-40K
Initial Delivered Lumens: 11,367



ARE-EDG-4M-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 17,710
Initial FC at grade

Type IV Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,138	B1 U0 G1	2,220	B1 U0 G1
04	4,276	B1 U0 G1	4,440	B1 U0 G1
06	6,340	B2 U0 G2	6,584	B2 U0 G2
08	8,454	B2 U0 G2	8,779	B2 U0 G2
10	10,542	B2 U0 G2	10,947	B2 U0 G2
12	12,650	B3 U0 G3	13,137	B3 U0 G3
14	14,665	B3 U0 G3	15,229	B3 U0 G3
16	16,760	B3 U0 G3	17,405	B3 U0 G3
525mA				
02	2,993	B1 U0 G1	3,108	B1 U0 G1
04	5,986	B2 U0 G1	6,216	B2 U0 G2
06	8,876	B2 U0 G2	9,218	B2 U0 G2
08	11,835	B2 U0 G2	12,290	B3 U0 G3
10	14,759	B3 U0 G3	15,326	B3 U0 G3
12	17,710	B3 U0 G3	18,391	B3 U0 G3
14	20,531	B3 U0 G3	21,321	B3 U0 G3
16	23,464	B3 U0 G3	24,367	B4 U0 G3
700mA				
02	3,656	B1 U0 G1	3,796	B1 U0 G1
04	7,311	B2 U0 G2	7,593	B2 U0 G2
06	10,842	B2 U0 G2	11,259	B2 U0 G2

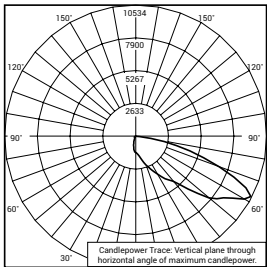
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Valid with no tilt



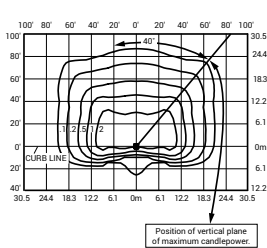
Photometry

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4MB



CSA Test Report #: 6449
ARE-EDG-4MB-**-12-E-UL-525-40K
Initial Delivered Lumens: 13,155



ARE-EDG-4MB-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 13,340
Initial FC at grade

Type IV Medium Distribution w/BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,610	B0 U0 G1	1,672	B0 U0 G1
04	3,221	B1 U0 G1	3,345	B1 U0 G1
06	4,776	B1 U0 G1	4,959	B1 U0 G1
08	6,368	B1 U0 G2	6,613	B1 U0 G2
10	7,941	B1 U0 G2	8,246	B1 U0 G2
12	9,529	B1 U0 G2	9,895	B1 U0 G2
14	11,046	B1 U0 G2	11,471	B1 U0 G2
16	12,624	B1 U0 G2	13,110	B1 U0 G2
525mA				
02	2,254	B0 U0 G1	2,341	B0 U0 G1
04	4,509	B1 U0 G1	4,682	B1 U0 G1
06	6,686	B1 U0 G2	6,943	B1 U0 G2
08	8,915	B1 U0 G2	9,258	B1 U0 G2
10	11,117	B1 U0 G2	11,544	B1 U0 G2
12	13,340	B1 U0 G2	13,853	B2 U0 G2
14	15,465	B2 U0 G2	16,060	B2 U0 G3
16	17,674	B2 U0 G3	18,354	B2 U0 G3
700mA				
02	2,754	B0 U0 G1	2,860	B0 U0 G1
04	5,507	B1 U0 G1	5,719	B1 U0 G2
06	8,167	B1 U0 G2	8,481	B1 U0 G2

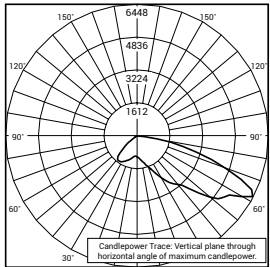
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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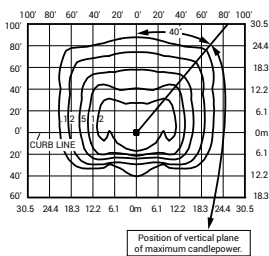
Photometry

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4MP



CSA Test Report #: 6417
ARE-EDG-4MP-**-06-E-UL-700-40K
Initial Delivered Lumens: 9,989



ARE-EDG-4MP-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 15,640
Initial FC at grade

Type IV Medium Distribution w/Partial BLS				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	1,888	B1 U0 G1	1,961	B1 U0 G1
04	3,776	B1 U0 G1	3,921	B1 U0 G1
06	5,599	B1 U0 G1	5,815	B1 U0 G1
08	7,466	B2 U0 G2	7,753	B2 U0 G2
10	9,310	B2 U0 G2	9,668	B2 U0 G2
12	11,172	B2 U0 G2	11,601	B2 U0 G2
14	12,951	B2 U0 G2	13,449	B2 U0 G2
16	14,801	B3 U0 G2	15,370	B3 U0 G2
525mA				
02	2,643	B1 U0 G1	2,745	B1 U0 G1
04	5,286	B1 U0 G1	5,490	B1 U0 G1
06	7,839	B2 U0 G2	8,140	B2 U0 G2
08	10,452	B2 U0 G2	10,854	B2 U0 G2
10	13,034	B2 U0 G2	13,535	B2 U0 G2
12	15,640	B3 U0 G2	16,242	B3 U0 G2
14	18,131	B3 U0 G2	18,829	B3 U0 G3
16	20,722	B3 U0 G3	21,519	B3 U0 G3
700mA				
02	3,228	B1 U0 G1	3,353	B1 U0 G1
04	6,457	B2 U0 G1	6,705	B2 U0 G1
06	9,575	B2 U0 G2	9,943	B2 U0 G2

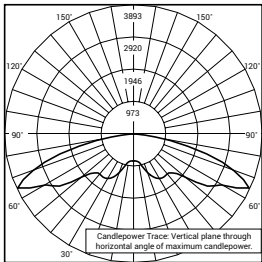
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Valid with no tilt



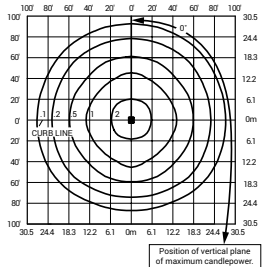
Photometry

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5M



CSA Test Report #: 6416
ARE-EDG-5M-**-06-E-UL-700-40K
Initial Delivered Lumens: 12,022



ARE-EDG-5M-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 18,630
Initial FC at grade

Type V Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,249	B2 U0 G1	2,335	B2 U0 G1
04	4,498	B3 U0 G1	4,671	B3 U0 G1
06	6,670	B3 U0 G2	6,926	B3 U0 G2
08	8,893	B3 U0 G2	9,235	B3 U0 G2
10	11,089	B4 U0 G2	11,516	B4 U0 G2
12	13,307	B4 U0 G3	13,819	B4 U0 G3
14	15,427	B4 U0 G3	16,020	B4 U0 G3
16	17,631	B4 U0 G3	18,309	B4 U0 G3
525mA				
02	3,148	B2 U0 G1	3,270	B2 U0 G1
04	6,297	B3 U0 G2	6,539	B3 U0 G2
06	9,338	B3 U0 G2	9,697	B3 U0 G2
08	12,450	B4 U0 G3	12,929	B4 U0 G3
10	15,525	B4 U0 G3	16,122	B4 U0 G3
12	18,630	B4 U0 G3	19,347	B4 U0 G3
14	21,598	B5 U0 G3	22,428	B5 U0 G3
16	24,683	B5 U0 G3	25,632	B5 U0 G3
700mA				
02	3,846	B2 U0 G1	3,994	B2 U0 G1
04	7,691	B3 U0 G2	7,987	B3 U0 G2
06	11,405	B4 U0 G2	11,844	B4 U0 G3

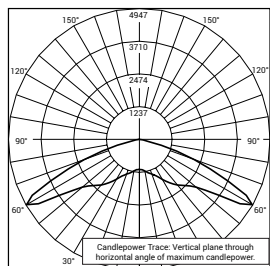
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: www.ies.org/PDF/Erratas/TM-15-11BugRatingsAddendum.pdf. Valid with no tilt



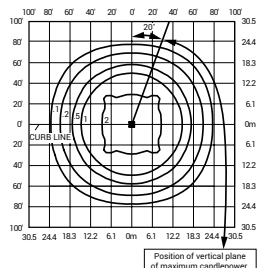
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: www.cree.com/Lighting/Tools-and-Support/Exterior-IES-Configuration-Tool

5S



CSA Test Report #: 6362
ARE-EDG-5S-**-06-E-UL-700-40K
Initial Delivered Lumens: 12,798



ARE-EDG-5S-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 20,700
Initial FC at grade

Type V Short Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
350mA				
02	2,499	B1 U0 G0	2,595	B1 U0 G1
04	4,998	B2 U0 G1	5,190	B2 U0 G1
06	7,411	B3 U0 G1	7,696	B3 U0 G1
08	9,881	B3 U0 G2	10,261	B3 U0 G2
10	12,322	B3 U0 G2	12,796	B3 U0 G2
12	14,786	B4 U0 G2	15,355	B4 U0 G2
14	17,141	B4 U0 G2	17,800	B4 U0 G2
16	19,590	B4 U0 G2	20,343	B4 U0 G2
525mA				
02	3,498	B2 U0 G1	3,633	B2 U0 G1
04	6,997	B3 U0 G1	7,266	B3 U0 G1
06	10,375	B3 U0 G2	10,774	B3 U0 G2
08	13,833	B4 U0 G2	14,365	B4 U0 G2
10	17,250	B4 U0 G2	17,914	B4 U0 G2
12	20,700	B4 U0 G2	21,496	B4 U0 G2
14	23,997	B4 U0 G2	24,920	B4 U0 G2
16	27,426	B5 U0 G3	28,480	B5 U0 G3
700mA				
02	4,273	B2 U0 G1	4,437	B2 U0 G1
04	8,546	B3 U0 G1	8,874	B3 U0 G1
06	12,672	B3 U0 G2	13,160	B3 U0 G2

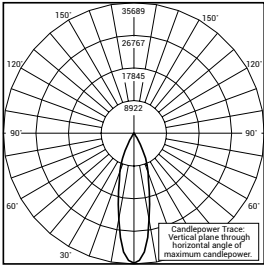
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

Valid with no tilt

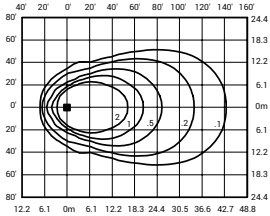
Photometry

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25°



RESTL Test Report #: 2014-0006
FLD-EDG-25-**-06-E-UL-700-40K
Initial Delivered Lumens: 12,924



FLD-EDG-25-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 21,160
Initial FC at grade

25° Flood Distribution		
LED Count (x10)	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*
350mA		
02	2,554	2,653
04	5,109	5,305
06	7,575	7,867
08	10,101	10,489
10	12,595	13,080
12	15,115	15,696
14	17,522	18,196
16	20,025	20,795
525mA		
02	3,576	3,714
04	7,152	7,427
06	10,606	11,013
08	14,141	14,685
10	17,634	18,312
12	21,160	21,974
14	24,531	25,474
16	28,035	29,113
700mA		
02	4,368	4,536
04	8,736	9,072
06	12,954	13,452

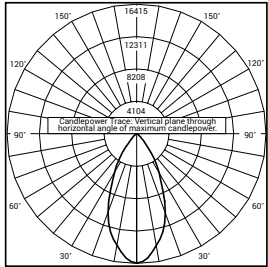
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens



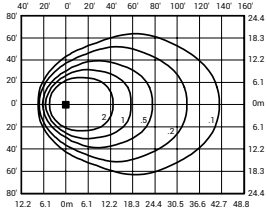
Photometry

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40°



ITL Test Report #: 79679
CAN-EDG-40-**-06-E-UL-700-40K
Initial Delivered Lumens: 12,889



FLD-EDG-40-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 20,700
Initial FC at grade

40° Flood Distribution		
LED Count (x10)	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*
350mA		
02	2,499	2,595
04	4,998	5,190
06	7,411	7,696
08	9,881	10,261
10	12,322	12,796
12	14,786	15,355
14	17,141	17,800
16	19,590	20,343
525mA		
02	3,498	3,633
04	6,997	7,266
06	10,375	10,774
08	13,833	14,365
10	17,250	17,914
12	20,700	21,496
14	23,997	24,920
16	27,426	28,480
700mA		
02	4,273	4,437
04	8,546	8,874
06	12,672	13,160

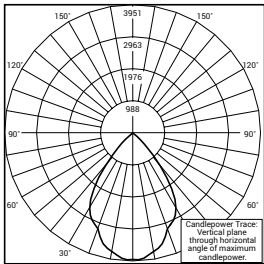
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens



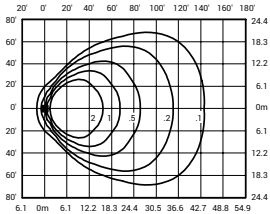
Photometry

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70°



RESTL Test Report #: 2014-0007
FLD-EDG-70-**-04-E-UL-350-40K
Initial Delivered Lumens: 4,734



FLD-EDG-70-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 18,860
Initial FC at grade

70° Flood Distribution		
LED Count (x10)	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*
350mA		
02	2,277	2,364
04	4,553	4,728
06	6,752	7,012
08	9,003	9,349
10	11,226	11,658
12	13,472	13,990
14	15,617	16,218
16	17,848	18,535
525mA		
02	3,187	3,310
04	6,375	6,620
06	9,453	9,816
08	12,604	13,088
10	15,717	16,321
12	18,860	19,586
14	21,864	22,705
16	24,988	25,949
700mA		
02	3,893	4,043
04	7,786	8,086
06	11,546	11,990

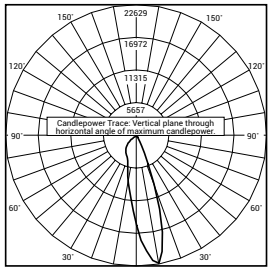
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens



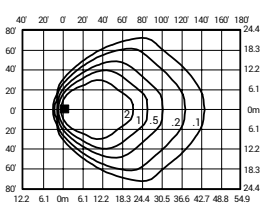
Photometry

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SN



RESTL Test Report #: 2014-0013
FLD-EDG-SN-**-06-E-UL-700-40K
Initial Delivered Lumens: 11,885



FLD-EDG-SN-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 19,090
Initial FC at grade

SN Flood Distribution		
LED Count (x10)	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*
350mA		
02	2,304	2,393
04	4,609	4,786
06	6,834	7,097
08	9,112	9,463
10	11,363	11,800
12	13,636	14,160
14	15,808	16,416
16	18,066	18,761
525mA		
02	3,226	3,350
04	6,452	6,701
06	9,568	9,936
08	12,757	13,248
10	15,909	16,520
12	19,090	19,825
14	22,131	22,982
16	25,293	26,265
700mA		
02	3,941	4,092
04	7,881	8,184
06	11,687	12,136

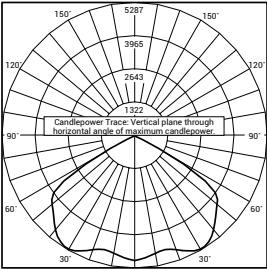
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens



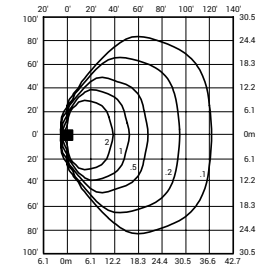
Photometry

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N6



RESTL Test Report #: 2014-0014
FLD-EDG-N6-**-06-E-UL-700-40K
Initial Delivered Lumens: 13,253



FLD-EDG-N6-**-12-E-UL-525-40K
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 21,160
Initial FC at grade

NEMA® 6 Flood Distribution		
LED Count (x10)	4000K	5700K
	Initial Delivered Lumens*	Initial Delivered Lumens*
350mA		
02	2,554	2,653
04	5,109	5,305
06	7,575	7,867
08	10,101	10,489
10	12,595	13,080
12	15,115	15,696
14	17,522	18,196
16	20,025	20,795
525mA		
02	3,576	3,714
04	7,152	7,427
06	10,606	11,013
08	14,141	14,685
10	17,634	18,312
12	21,160	21,974
14	24,531	25,474
16	28,035	29,113
700mA		
02	4,368	4,536
04	8,736	9,072
06	12,954	13,452

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens



Luminaire EPA

Fixed Arm Mount – ARE-EDG-DA						
LED Count (x10)	Single	2 @ 90°	2 @ 180°	3 @ 90°	3 @ 120°	4 @ 90°
						
02	0.60	0.87	1.20	1.47	1.47	1.75
04	0.60	0.87	1.20	1.47	1.47	1.75
06	0.60	0.92	1.20	1.51	1.51	1.83
08	0.60	0.96 N/A with 3" poles	1.20	1.55 N/A with 3" poles	1.55	1.91 N/A with 3" poles
10	0.60	1.00 N/A with 3" poles	1.20	1.60 N/A with 3" poles	1.60	2.00 N/A with 3" poles
12	0.60	1.04 N/A with 3" poles	1.20	1.64 N/A with 3" poles	1.64	2.08 N/A with 3" poles
14	0.60	1.08 N/A with 3" or 4" poles	1.20	1.68 N/A with 3" or 4" poles	1.68	2.16 N/A with 3" or 4" poles
16	0.60	1.12 N/A with 3" or 4" poles	1.20	1.72 N/A with 3" or 4" poles	1.72	2.24 N/A with 3" or 4" poles
Fixed Arm Mount – ARE-EDG-DL						
02	0.75	1.02	1.50	1.77	1.77	1.91
04	0.75	1.02	1.50	1.77	1.77	1.91
06	0.75	1.07	1.50	1.82	1.82	1.98
08	0.75	1.11	1.50	1.86	1.86	2.04
10	0.75	1.15	1.50	1.90	1.90	2.10
12	0.75	1.19	1.50	1.94	1.94	2.16
14	0.75	1.23	1.50	1.98	1.98	2.22
16	0.75	1.27	1.50	2.02	2.02	2.28

Adjustable Arm Mount – ARE-EDG-AA/FLD-EDG-AA/SA									
LED Count (x10)	Single	2 @ 90°	2 @ 180°	In-Line 2 @ 180°	3 @ 90°	3 @ 120°	In-Line 3 @ 180°	4 @ 90°	In-Line 4 @ 180°
Tenon Configuration If used with Cree tenons, please add tenon EPA with Luminaire EPA									
									
	Vertical: PB-1A*; PT-1; PW-1A3** Horizontal: By others	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(90); PT-2(90)	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(180); PT-2(180)	Vertical: PB-2A*; PB-2R2.375	Vertical: PB-3A*; PB-3R2.375 Horizontal: PD-3A4(90); PT-3(90)	Vertical: PB-3A*; PB-3R2.375 Horizontal: PT-3(120)	Vertical: PB-3A*; PB-3R2.375	Vertical: PB-4A*(90); PB-4R2.375 Horizontal: PD-4A4(90) PT-4(90)	Vertical: PB-4A*(180); PB-4R2.375
0° Tilt									
02	0.66	0.98	1.32	1.32	1.77	1.64	1.98	1.91	2.64
04	0.66	0.98	1.32	1.32	1.64	1.64	1.98	1.97	2.64
06	0.66	1.02	1.32	1.32	1.68	1.68	1.98	2.05	2.64
08	0.66	1.07	1.32	1.32	1.80	1.72	1.98	2.29	2.64
10	0.66	1.11	1.32	1.32	1.76	1.76	1.98	2.21	2.64
12	0.66	1.15	1.32	1.32	1.80	1.80	1.98	2.29	2.64
14	0.66	1.19	1.32	1.32	1.84	1.84	1.98	2.38	2.64
16	0.66	1.23	1.32	N/A	1.89	1.89	N/A	2.46	N/A

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation
 ** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

Luminaire EPA

Adjustable Arm Mount – ARE-EDG-AA/FLD-EDG-AA/SA									
LED Count (x10)	Single	2 @ 90°	2 @ 180°	In-Line 2 @ 180°	3 @ 90°	3 @ 120°	In-Line 3 @ 180°	4 @ 90°	In-Line 4 @ 180°
Tenon Configuration If used with Cree tenons, please add tenon EPA with Luminaire EPA									
									
	Vertical: PB-1A*; PT-1; PW-1A3** Horizontal: By others	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(90); PT-2(90)	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(180); PT-2(180)	Vertical: PB-2A*; PB-2R2.375	Vertical: PB-3A*; PB-3R2.375 Horizontal: PD-3A4(90); PT-3(90)	Vertical: PB-3A*; PB-3R2.375 Horizontal: PT-3(120)	Vertical: PB-3A*; PB-3R2.375	Vertical: PB-4A*(90); PB-4R2.375 Horizontal: PD-4A4(90) PT-4(90)	Vertical: PB-4A*(180); PB-4R2.375
30° Tilt									
02	0.71	1.37	1.42	1.42	2.08	2.08	2.13	2.73	2.84
04	0.71	1.37	1.42	1.42	2.08	2.08	2.13	2.73	2.84
06	0.82	1.48	1.64	1.64	2.30	2.30	2.46	2.95	3.28
08	0.93	1.59	1.86	1.86	2.52	2.52	2.79	3.17	3.72
10	1.04	1.70	2.08	2.08	2.74	2.74	3.12	3.40	4.16
12	1.15	1.81	2.30	2.30	2.96	2.96	3.45	3.62	4.60
14	1.26	1.92	2.52	2.52	3.18	3.18	3.78	3.84	5.04
16	1.37	2.03	2.74	N/A	3.40	3.40	N/A	4.06	N/A
45° Tilt									
02	0.89	1.55	1.78	1.78	2.45	2.45	2.67	3.10	3.56
04	0.89	1.55	1.78	1.78	2.45	2.45	2.67	3.10	3.56
06	1.03	1.69	2.06	2.06	2.72	2.72	3.09	3.38	4.12
08	1.17	1.83	2.34	2.34	3.00	3.00	3.51	3.66	4.68
10	1.31	1.97	2.62	2.62	3.28	3.28	3.93	3.94	5.24
12	1.45	2.11	2.90	2.90	3.56	3.56	4.35	4.21	5.80
14	1.59	2.25	3.18	3.18	3.83	3.83	4.77	4.49	6.36
16	1.73	2.38	3.46	N/A	4.11	4.11	N/A	4.77	N/A
60° Tilt									
02	1.20	1.86	2.40	2.40	3.06	3.06	3.60	3.72	4.80
04	1.20	1.86	2.40	2.40	3.06	3.06	3.60	3.72	4.80
06	1.39	2.05	2.78	2.78	3.44	3.44	4.17	4.10	5.56
08	1.58	2.23	3.16	3.16	3.81	3.81	4.74	4.47	6.32
10	1.77	2.42	3.54	3.54	4.19	4.19	5.31	4.84	7.08
12	1.95	2.61	3.90	3.90	4.56	4.56	5.85	5.22	7.80
14	2.14	2.80	4.28	4.28	4.94	4.94	6.42	5.59	8.56
16	2.33	2.98	4.66	N/A	5.31	5.31	N/A	5.97	N/A

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation

** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")



Luminaire EPA

Adjustable Arm Mount – ARE-EDG-AA/FLD-EDG-AA/SA									
LED Count (x10)	Single	2 @ 90°	2 @ 180°	In-Line 2 @ 180°	3 @ 90°	3 @ 120°	In-Line 3 @ 180°	4 @ 90°	In-Line 4 @ 180°
Tenon Configuration If used with Cree tenons, please add tenon EPA with Luminaire EPA									
	Vertical: PB-1A*; PT-1; PW-1A3** Horizontal: By others	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(90); PT-2(90)	Vertical: PB-2A*; PB-2R2.375; PW-2A3** Horizontal: PD-2A4(180); PT-2(180)	Vertical: PB-2A*; PB-2R2.375	Vertical: PB-3A*; PB-3R2.375 Horizontal: PD-3A4(90); PT-3(90)	Vertical: PB-3A*; PB-3R2.375 Horizontal: PT-3(120)	Vertical: PB-3A*; PB-3R2.375	Vertical: PB-4A*(90); PB-4R2.375 Horizontal: PD-4A4(90) PT-4(90)	Vertical: PB-4A*(180); PB-4R2.375
90° Tilt									
02	1.85	2.51	3.70	3.64	4.36	4.36	5.55	5.02	7.40
04	1.85	2.51	3.70	3.64	4.36	4.36	5.55	5.02	7.40
06	2.14	2.80	4.28	4.22	4.94	4.94	6.42	5.59	8.56
08	2.43	3.09	4.86	4.78	5.51	5.51	7.29	6.17 N/A with horizontal tenon	9.72
10	2.71	3.37	5.42	5.34	6.08	6.08	8.13	6.74 N/A with horizontal tenon	10.84
12	3.00	3.66	6.00	5.90	6.66	6.66	9.00	7.31 N/A with horizontal tenon	12.00
14	3.29	3.95 N/A with PW-2A3**	6.58	6.48	7.23	7.23	9.87	7.89 N/A with horizontal tenon	13.16
16	3.57	4.23 N/A with PW-2A3**	7.14	N/A	7.81	7.81	N/A	8.46 N/A with horizontal tenon	N/A

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation

** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

Tenon EPA

Part Number	EPA
PB-1A*	None
PB-2A*	0.82
PB-3A*	1.52
PB-4A*(180)	2.22
PB-4A*(90)	1.11
PB-2R2.375	0.92
PB-3R2.375	1.62
PB-4R2.375	2.32
PD Series Tenons	0.09
PT Series Tenons	0.10
PW-1A3**	0.47
PW-2A3**	0.94
WM-2	0.08
WM-4	0.25
WM-DM	None

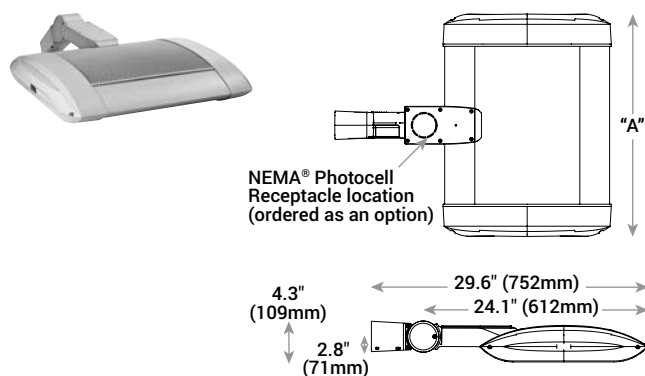
* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation

** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

Tenons and Brackets [†] (must specify color)	
Square Internal Mount Vertical Tenons (Steel) - Mounts to 3-6" (76-152mm) square aluminum or steel poles PB-1A* – Single PB-4A*(90) – 90° Quad PB-2A* – 180° Twin PB-4A*(180) – 180° Quad PB-3A* – 180° Triple	Round External Mount Vertical Tenons (Steel) - Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons PB-2R2.375 – Twin PB-4R2.375 – Quad PB-3R2.375 – Triple
Square Internal Mount Horizontal Tenons (Aluminum) - Mounts to 4" (102mm) square aluminum or steel poles PD-2A4(90) – 90° Twin PD-3A4(90) – 90° Triple PD-2A4(180) – 180° Twin PD-4A4(90) – 90° Quad	Round External Mount Horizontal Tenons (Aluminum) - Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons - Mounts to square pole with PB-1A* tenon PT-1 – Single (Vertical) PT-3(90) – 90° Triple PT-2(90) – 90° Twin PT-4(90) – 90° Quad PT-2(180) – 180° Twin
Wall Mount Brackets - Mounts to wall or roof WM-2 – Horizontal for AA and SA mounts WM-4 – L-Shape for AA and SA mounts WM-DM – Plate for DA and DL mounts	Mid-Pole Bracket - Mounts to square pole PW-1A3** – Single PW-2A3** – Double

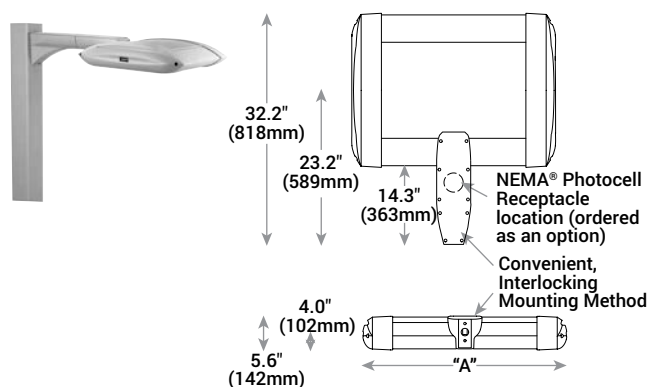
[†] Refer to the [Bracket and Tenons spec sheet](#) for more details

AA Mount



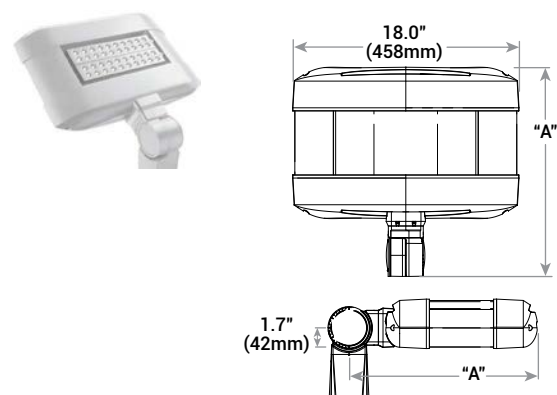
LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	21 lbs. (10kg)
04	12.1" (306mm)	24 lbs. (11kg)
06	14.1" (357mm)	27 lbs. (12kg)
08	16.1" (408mm)	28 lbs. (13kg)
10	18.1" (459mm)	32 lbs. (15kg)
12	20.1" (510mm)	34 lbs. (15kg)
14	22.1" (560mm)	37 lbs. (17kg)
16	24.1" (611mm)	41 lbs. (19kg)

DL Mount



LED Count (x10)	Dim. "A"	Weight
02	12.1" (306mm)	23 lbs. (10kg)
04	12.1" (306mm)	26 lbs. (12kg)
06	14.1" (357mm)	29 lbs. (13kg)
08	16.1" (408mm)	30 lbs. (14kg)
10	18.1" (459mm)	34 lbs. (15kg)
12	20.1" (510mm)	36 lbs. (16kg)
14	22.1" (560mm)	42 lbs. (19kg)
16	24.1" (611mm)	44 lbs. (20kg)

SA Mount



LED Count (x10)	Dim. "A"	Weight
02	16.0" (406mm)	25 lbs. (11kg)
04	18.0" (457mm)	26 lbs. (12kg)
06	20.0" (508mm)	28 lbs. (13kg)

PUD ORDINANCE CHARACTER EXHIBIT



DETAILED DEVELOPMENT PLAN





DETAILED DEVELOPMENT PLAN



PUD ORDINANCE CHARACTER EXHIBIT



DETAILED DEVELOPMENT PLAN





Petition Number: 1603-DDP-07

Subject Site Address: Lot 1, Gateway Northeast Quadrant Subdivision

Petitioner: Riverview Hospital by American Structurepoint, Inc.

Request: Detailed Development Plan review for a 103,000 square foot +/- building on approximately 8.53 acres +/-.

Current Zoning: The Junction Planned Unit Development (PUD) District (Ord. 14-22), as amended (Ord. 15-41)

Current Land Use: Vacant

Approximate Acreage: 8.53 acres+/-

Property History: 1406-PUD-09 PUD District (Ord. 14-22) (07/14/14)
1507-SPP-16 Primary Plat (07/20/15)
1512-SFP-37 Secondary Plat (pending)
1512-PUD-26 PUD District Amendment (Ord. 15-41) (12/14/15)

Exhibits:

1. Staff Report
2. Location Map
3. Site Plan
4. Elevations
5. Landscape Plan
6. Lighting Plan
7. Comparison Exhibit

Staff Reviewer: Jesse M. Pohlman, Senior Planner

PROCEDURAL

Approval of a Detailed Development Plan must be granted if the submitted plans demonstrate compliance with the terms of the underlying zoning district, subdivision control ordinance and/or applicable PUD District Ordinance, any variances associated with the site, and any commitments associated with the site.

PROJECT OVERVIEW

The 8.53-acre+/- site is Lot 1 of the pending Gateway Northeast Quadrant Subdivision, located on the northeast corner of U.S. Highway and State Highway 32 (Main Street) (see **Exhibit 2**). The request is for approval of a Detailed Development Plan (see Site Plan at **Exhibit 3**) for a 103,000 square foot multi-story hospital outpatient care center.

The petition was reviewed by the Technical Advisory Committee at its February 23, 2016, meeting. This petition has been properly noticed for a public hearing at the Plan Commission's March 21, 2016, meeting.

The applicable zoning district is The Junction Planned Unit Development (PUD) District ("Ord. 14-22"), as amended ("Ord. 15-41"), with an underlying zoning district of the GB: General Business (GB) District.

DEVELOPMENT PLAN (Article 10.7(G) of the UDO):

The plans comply except for those items identified as outstanding below:

- 1) Area map insert showing the general location of the site referenced to Streets, section lines and alternative transportation plan system, as well as the Zoning District and use of adjacent property.
- 2) Address and legal description of the property.
- 3) Boundary lines of the property including all dimensions.
- 4) Location, name, centerline and width of all Streets, Private Streets, Alleys, access easements and alternative transportation plan system improvements that are existing or proposed to be located within or adjacent to the property.
- 5) Location, centerline and width (at the Lot Line) measurements of any proposed or existing Driveways within two hundred (200) feet of the property, and any connection to an Alley must be indicated.
- 6) Location and dimensions of primary vehicular ways in and around the proposed development, including depictions of all travel lanes, turning movements, vehicle storage areas and tapers.
- 7) All proposed Street and Driveway improvements, both on and offsite, including measurement of curb radius and/or taper.
- 8) Location and dimensions of existing and proposed sidewalks, pathways, trails or other alternate transportation plan improvements.
- 9) Layout, number, dimension and area (in square feet and acres) of all Lots and Outlots with Building Setback Lines.
- 10) Location and dimensions of all existing structures and paved areas.
- 11) Location and dimensions of all proposed structures and paved areas (indicated by cross-hatching).
- 12) Location of all Floodplain areas within the boundaries of the property.

- 13) Names of legal ditches and streams on or adjacent to the site.
- 14) Location and feasibility statement of all existing and proposed utility facilities and easements, including, but not limited to: sanitary sewer, water, storm water management, electric, gas, telephone and cable.

Comment: Petitioner is coordinating with Public Works Department and utility providers.

- 15) Identify buildings proposed for demolition.
- 16) Areas of the property reserved for Development Amenities, Open Space and other similar uses.

Comment: Please note other comments herein regarding Public Art.

- 17) Use of each Lot and/or building by labeling, including approximate density or size of proposed uses and buildings (e.g., number of parking spaces, Dwelling Units, Gross Floor Area, Living Area).

DEVELOPMENT PLAN REVIEW (Article 10.7(E) of the UDO):

Development Plans shall comply with and be reviewed by the Plan Commission upon finding that the Development Plan is in compliance with the following requirements:

- 18) Compliance with all applicable development and design standards of the Zoning District in which the real estate is located.

Comment: Please see District Standards comments herein.

- 19) Compliance with all applicable provisions of any Overlay District in which the real estate is located.

Comment:

1. Property is located within The Junction Planned Unit Development (PUD) District ("Ord. 14-22"), as amended ("Ord. 15-41"). Please see PUD District Standards comments herein.
 2. US31 Overlay District is not applicable pursuant to Section 5.4 of Ord. 14-22.
 3. Property is located within the Economic Development District (EDD) Overlay pursuant to Article 5.4 of the UDO.
 4. Property is not subject to the State Highway 32 Overlay District pursuant to Article 5.3(C) of the UDO, except for architectural standards of the overlay district made applicable pursuant to Ord. 14-22. Please see architectural comments herein.
- 20) Management of traffic will be in a manner that creates conditions favorable to health, safety, convenience, and the harmonious development of the community such that:

- a) The design and location of proposed street and highway access points shall minimize safety hazards and congestion.
 - b) The capacity of adjacent streets and highways is sufficient to safely and efficiently accept traffic that will be generated by the new development.
 - c) The entrances, streets and internal traffic circulation facilities in the proposed development are compatible with existing and planned streets and adjacent development.
- 21) The applicable utilities have sufficient capacity to provide potable water, sanitary sewer facilities, electricity, telephone, natural gas, and cable service at a satisfactory level of service to meet the needs of the proposed development.

Comment: Petitioner is coordinating with Public Works Department and utility providers.

DISTRICT STANDARDS

The plans comply with Article 4.16 (GB District) and the Junction PUD Ordinance, as amended, unless otherwise noted below.

- 22) Permitted Land Uses (Section 3.3 of Ord. 14-22): Underlying Zoning District
- 23) Minimum Lot Area: No minimum
- 24) Minimum Lot Frontage: 80 feet
- 25) Minimum Building Setback Lines:
- a) Front Yard: No minimum (pursuant to Ord. 14-22)
 - b) Side Yard: No minimum (pursuant to Ord. 14-22)
 - c) Rear Yard: No minimum (pursuant to Ord. 14-22)
- 26) Minimum Lot Width: No minimum
- 27) Maximum Building Height: No maximum (pursuant to Ord. 14-22)
- 28) Minimum Building Height: Five (5) stories for Primary Building (ancillary extensions shall be a minimum two (2) stories (pursuant to Ord. 15-41)
- 29) Minimum Building Size: No minimum

- 30) Concept Plan (Section 4.1 of Ord. 15-41): The Real Estate shall be developed in substantial compliance with Exhibit B (Ord. 15-41) (See Exhibit B: Concept Plan below.)



- 31) Character and Quality (Section 4.2 of Ord. 15-41): Illustrative Character Exhibit is incorporated as a compilation of images designed to capture the intended quality of structures to be constructed on the Real Estate (Exhibit C of Ord. 15-41). (See Exhibit C: Illustrative Character Exhibit partial excerpts below).

East Elevation (Exhibit C of Ord. 15-41)



South Elevation (Exhibit C of Ord. 15-41)



Comment: The incorporation of the Illustrative Character Exhibit is applied as a standard that proposed buildings should be substantially similar in quality and character to the Illustrative Character Exhibit. The SR32 Overlay District Architectural Design Requirements (the “SR32 Overlay Architectural Standards”) also apply, as set forth by the PUD Ordinance and further reviewed herein.

Since review by the Technical Advisory Committee, the Petitioner has submitted revised plans that vary from the Illustrative Character Exhibit (particularly, please note changes to the ancillary extension of the building). A comparison of the Illustrative Character Exhibit and submitted Detailed Development Plan is included at Exhibit 7. As a result, the Department is continuing to coordinate with the Petitioner to ensure compliance.

- 32) Usable Outdoor Public and/or Semi-public Spaces (Section 5.5 of Ord. 14-22): These areas including but not limited to plazas, courtyards, gardens, and public squares, shall be encouraged for all primary structures within the Junction PUD District.

Comment: A garden plaza/space is included along the north foundation of the proposed building (see landscape plan).

- 33) Public Art (Section 5.6 of Ord. 14-22): At least one (1) piece of public art is encouraged within the Junction PUD District. If public art is to be installed, then it shall be visually accessible to the public and visible from either U.S. Highway 31 or State Road 32.

Comment: The subject property includes only a portion of the larger Junction PUD District. No public art is specifically identified within the proposed development plans.

DEVELOPMENT STANDARDS (Chapter 6 of UDO)

The plans comply, as applicable to a Detailed Development Plan, except for those items identified as outstanding below, that need addressed prior to approval:

- 34) Accessory Use and Building Standards (Article 6.1)

- a) Screening of Receptacles and Loading Areas (Article 6.1(H)): Garbage containers, trash receptacles, pallet storage areas, trash compactors, recycling areas, loading areas and other similar facilities shall be completely and permanently screened from view of Rights-of-way and where possible, adjoining properties.

Comment: The site is surrounded on three sides by rights-of-way (US31, SR32, and Shamrock Boulevard). The placement of the loading area and enclosure, enclosure height (13 feet) and materials (stone and steel to match building), loading area angle (facing north/northwest), and proposed landscaping are designed to minimize the view from all rights-of-way and adjacent properties. As a result, the enclosure complies.

- b) Trash Enclosures (Section 4.1(D) of Ord. 14-22) (supersedes Article 6.1(H)(2) of the UDO): Trash containers shall: (i) be screened on all sides with a solid walled or fenced enclosure not less than six (6) feet in height above grade and equipped with wood covered gates; (ii) not be located between the front line of the primary building and the front lot line.

Comment: The “front line of the primary building” (applied as the “Building Façade, Front” pursuant to the UDO) is the building’s Shamrock Boulevard front lot line. As a result, the location of the enclosure complies.

35) Architectural Standards (Article 6.3(F))

Comment: Not applicable and superseded by the terms of the State Highway 32 Overlay District, as made applicable by Ord. 14-22, as otherwise noted herein.

36) Building Standards (Article 6.4)

37) Fence Standards (Article 6.5)

38) Height Standards (Article 6.6)

39) Landscaping Standards (Article 6.8, as modified by Section 4.3 of Ord. 14-22 and Section 3.3 of Ord. 15-41):

- a) General Screening Standards (Article 6.8(H))

Comment: Petitioner has confirmed equipment, aside from that shown in the enclosure area, will be internal to the building with the exception of vent hoods and exhaust.

- b) Detention Area Natural Appearance (Article 6.8(I), as amended by Section 3.3(A) of Ord. 15-41): Not applicable; however, a wall and hardscape areas are planned as illustrated on the Concept Plan and plantings shall be provided around the wet perimeter of ponds where adjacent to lawn areas. Subject to review and approval by the Public Works Department as part of a Detailed Development Plan, side slopes shall not exceed 3:1 above normal pool and may be 2:1 below the safety shelf to provide more depth in the pond.
- c) Minimum Lot Landscaping Requirements (Article 6.8(K))
- d) Foundation Plantings (Article 6.8(L)): Plant materials shall be required approximately every forty (40) feet of Building Facades. Plant materials shall also be required along the Front Building Façade of all Buildings at a minimum ratio of one (1) shrub or ornamental tree per twelve (12) lineal feet. (Planting beds of less than eight (8) feet in width shall be permitted where equivalent planting area is provided around the building perimeter pursuant to Ord. 15-22).
- e) External Street Frontage Landscaping.

Article 6.8.M(3) Easements amended by Ord. 15-22, which states if easements restrict the placement of plantings, then the required number of plantings may be relocated

elsewhere on the Real Estate. If the relocation of plantings results in planting congestion or is otherwise contrary to landscaping best management practices, then the Director or Plan Commission may approve a landscape plan with fewer plantings than otherwise required.

Comment: The external street frontage landscaping adjacent to US31 requires 10 trees; however, this area is encumbered by existing utility easements. Ord. 15-22 permits the deficient plantings to be relocated elsewhere on the real estate. It has been noted these trees have been relocated to the southwest corner of the real estate.

f) Buffer Yard Requirements

Comment: Not applicable.

- g) Interior Parking Area Landscaping: UDO applies with the following modification (pursuant to Ordinance 15-26): A minimum of one (1) interior Parking Area island shall be required per twenty (20) Parking Spaces. The island shall be a minimum of one hundred and twenty (120) square feet in size and shall include a minimum of one (1) tree and four (4) shrubs.
- h) Perimeter Parking Area Landscaping. UDO applies, with the following modification (pursuant to Ordinance 15-26): If Perimeter Parking Area Landscaping is required, then the minimum number of plantings shall be one (1) tree and ten (10) shrubs per sixty (60) linear feet of Parking Area length. Plantings may be clustered in an aesthetically pleasing manner.

Comment: The perimeter parking area adjacent to US31 requires seven (7) trees; however, this area is encumbered by existing utility easements. Ord. 15-22 permits these plantings to be relocated elsewhere on the real estate. It has been noted these trees have been relocated near the main entrance drive and front entrance.

40) Lighting Standards (Article 6.9)

- a) All Light Fixtures shall be Fully Shielded and direct light downward toward the earth's surface. All lighting sources shall be directed away from reflective surfaces to minimize glare upon adjacent Lots and Rights-of-way.
- b) Light pole height shall not exceed twenty-five (25) feet. All Light Fixtures in Parking Areas shall be designed and located to confine emitted light to the Parking Area.
- c) Light meter readings shall not exceed one (1.0) foot candle at all Lot Lines.
- d) All Parking Area lighting shall be reduced (e.g., turned off or dimmed) by a minimum of thirty percent (30%) within thirty (30) minutes of closing of the last business or no later than 11:00 p.m.
- e) Ord. 14-22 requires following additional restrictions:

- (1) Uniformity: All lighting fixtures and poles shall be consistent in style, color, size, height and design and shall be compatible with the architecture of the Real Estate's buildings.
- (2) Decorative Fixtures: Decorative light fixtures shall be provided along the Real Estate's entrance drives, public rights-of-way, building and pedestrian walkways as part of the site's overall architectural design.
- (3) Full Cut-Off Fixtures: With the exception of low intensity architectural lighting and internally illuminated signage, all exterior wall mounted lights and pole-mounted lights shall utilize full cut-off fixtures that direct light downward.

41) Lot Standards (Article 6.10)

42) Outside Storage and Display (Article 6.12)

43) Outdoor Café and Eating Areas (Article 6.13)

44) Parking and Loading Standards (Article 6.14 and Section 3.2 of Ord. 15-41)

Maximum Number of Off-street Parking Spaces (Section 3.2(A) of Ord. 15-41): The maximum number of Parking Spaces for the Real Estate shall not exceed four (4) Parking Spaces per one thousand (1,000) square feet of Net Floor Area for the aggregate of all Buildings on the Real Estate. Shared parking shall be provided for the Real Estate.

45) Setback Standards (Article 6.16)

46) Sign Standards (Article 6.17)

Comment: Any proposed sign(s) will require a sign permit and will be reviewed by the Department for compliance at that time.

47) Vision Clearance Standards (Article 6.19)

48) Yard Standards (Article 6.21)

SR32 OVERLAY DISTRICT ARCHITECTURAL DESIGN REQUIREMENTS (ARTICLE 5.3(K))

Section 5 of Ord. 14-22 provides that the Architectural Design Requirements of the State Highway 32 Overlay District shall apply.

The plans comply with Article 5.3(K) (SR32 Overlay District), except for those items identified as outstanding below:

- 49) General Design Theme Standards: Architectural variation is encouraged. These architectural requirements are intended to provide consistent architectural quality among buildings and other improvements within the corridor. All structures shall be thoughtfully designed in a manner that visually and functionally complements the existing topography.

50) Building Elevations:

- a) All Building Facades shall have a defined base or foundation, a middle or modulated wall, and a top formed by a pitched roof or articulated, three-dimensional cornice as illustrated in FIGURE 5.3(3): BUILDING MODULATION.

Comment: Please see comments herein regarding Illustrative Character Exhibit.

- b) Building Facades, which are ninety (90) feet or greater in length, shall be designed with offsets (projecting or recessed) at intervals of not greater than sixty (60) feet. Buildings less than ten thousand (10,000) square feet in Gross Floor Area shall be designed with offsets at interval of not greater than forty (40) feet. Offsets shall extend the entire vertical plane of the Building Facade and shall be a minimum depth of four (4) feet and a minimum aggregate length of twenty percent (20%) of the horizontal plane of the overall Building Facade. The offset may be met with setbacks of the Building Facade and/or with architectural elements (i.e. arcades, columns, ribs, piers, and pilasters), if such architectural elements meet the minimum offset requirements of this requirement.

Comment: Please see comments herein regarding Illustrative Character Exhibit.

- c) Buildings shall be constructed with the same building material quality and level of architectural detail on all Building Facades (e.g., 360 degree architecture).

51) Openings:

- a) Design elements of the Building Facade shall be organized such that openings (including windows, doors, loading berths, faux windows and architectural or painted elements resembling openings) line up horizontally and vertically with other openings, as illustrated in FIGURE 5.3(5): DESIGN BALANCE.
- b) Openings in a Building Facade shall be arranged in a balanced, relatively uniform fashion (see FIGURE 5.3(6): BALANCE OF OPENINGS). Exceptions may be permitted if openings are organized in an aesthetically pleasing manner and constitute an essential artistic design element appropriate for the building type, scale, orientation, location and site.

52) Gutters and Downspouts shall be visually integrated with the architectural style of the structure. The color of gutters and downspouts shall be selected to complement or to be consistent with the building materials.

53) Roofs:

- a) Flat roofs are permitted if edged by a parapet wall with an articulated, three-dimensional cornice as illustrated in FIGURE 5.3(9): ARTICULATED CORNICE.

Comment: Please see comments herein regarding Illustrative Character Exhibit.

- b) Parapet walls shall be fully integrated into the architectural design of the building to create seamless design transitions between the main building mass and roof-mounted

architectural elements (which may include screening elements for roof-mounted equipment).

- c) Modulation or variation of the roofs and/or roof lines shall be required in order to eliminate the appearance of box-shaped buildings. Buildings shall comply with at least one of the following: (1) A building with a flat roof shall have varying roof height sections, as illustrated in FIGURE 5.3(10): FLAT ROOF VARIATION. A varied roof section shall have a minimum roof height difference of five (5) feet from an adjacent roof section. The maximum horizontal roof line length without variation shall be sixty percent (60%) of the total length of the Building Facade's roof line; or (2) A roof line modulation shall include a vertical change in the visible roof line of at least four (4) feet, with a minimum aggregate modulation length of forty percent (40%) of each Building Facade, as illustrated in FIGURE 5.3(11): FLAT ROOF - ROOF LINE MODULATION. The maximum horizontal roof line length without modulation shall be sixty (60) feet, or forty (40) feet for Buildings with a Gross Floor Area less than ten thousand (10,000) square feet.

Comment: Please see comments herein regarding Illustrative Character Exhibit.

- d) Dormers and cupolas shall be designed with appropriate details, proportion and style consistent with the overall building composition and roofed with symmetrical gable, hip or barrel roofs (see FIGURE 5.3(12): DORMERS AND CUPOLAS).
- e) All visible vents, attic ventilators, turbines, flues and other visible roof penetrations shall be: (a) painted to match the color of the roof or flat black; and (b) oriented to minimize their visibility from adjacent Lots and Streets.

54) Main Entrances:

- a) All buildings shall be designed with a main entrance and at least two (2) window openings associated with the main entrance.
- b) Building entrances shall be clearly defined and articulated by multiple architectural elements such as lintels, pediments, pilasters, columns, awnings, porticos and other design elements appropriate to the architectural style and details of the building as a whole.
- c) The location, orientation, proportion and style of doors shall complement the style of the building.

55) Windows:

- a) All window designs shall be compatible with the style, materials, color, details and proportion of the building. The number of window panes, the number of window openings, window trim and other architectural design elements designed to accent the windows shall be consistent with and complementary to the architectural style of the building (see FIGURE 5.3(14): WINDOW DESIGNS).

- b) Window trim and other architectural design elements designed to accent the windows shall be required for all windows. Acceptable design elements include shutters, keystones, masonry arches, awnings, decorative stone frames, masonry rowlock frames, as illustrated in FIGURE 5.3(15): WINDOW ACCENTS, or other such trim or design elements as approved by the Plan Commission or Director (see FIGURE 5.3(15): WINDOW ACCENTS). Drive-thru windows and lanes shall not be permitted in between the State Highway 32 right-of-way line or the Trail Corridor and the Building Facade nearest to said right-of-way line (e.g., Established Front Yard) or Trail Corridor.

56) Building Materials:

- a) Masonry Materials shall be the preferred and primary exterior building material used on buildings within the corridor. Pursuant to Ord. 14-22, textured or decorative tilt wall construction as a masonry material is permitted for buildings not adjacent to SR 32.
- b) Masonry Materials shall be used to create a wainscot or brick-wrap effect around buildings.
- c) A minimum of sixty percent (60%) of each Building Facade, exclusive of windows (including faux windows and glazing), doors and loading berths, shall be covered with Masonry Materials.
- d) No more than twenty-five percent (25%) of each Building Facade, exclusive of windows (including faux windows and glazing), doors and loading berths, may be covered with metal, Fiber Cement Siding, Polymeric Cladding, E.I.F.S., stucco, or vinyl exterior building materials.
- e) In order to create an aesthetically pleasing appearance and to create an appearance of high-quality, visually interesting architecture, increased and enhanced use of Masonry Material and other architectural ornamentation shall be required around building entrances and on Building Facades visible from State Highway 32.

DESIGN STANDARDS (Chapter 8 of UDO)

The plans comply except for those items identified as outstanding below, that need addressed prior to approval:

57) Easement Standards (Article 8.3)

Comment: Petitioner is coordinating with Public Works Department and utility providers.

58) Pedestrian Network Standards (Article 8.7)

59) Pedestrian and Bicycle Accessibility (Section 4.1(C) of Ord. 14-22)

- a) All walkways internal to the Real Estate that cross vehicular ways (e.g., drive lanes, parking lots) shall be delineated and distinguished from driving surfaces through the use of durable, low maintenance surface materials such as integrated concrete pavers, scored or textured concrete, asphalt, painted asphalt or brick.
- b) Sidewalks, no less than six (6) feet wide, shall be provided along the full length of a building façade featuring a customer entrance, and along any façade abutting a public parking area.
- c) A bicycle parking area that will accommodate a minimum of ten (10) bicycles shall be provided at each primary structure within the Junction PUD District.

60) Street and Right-of-Way Standards (Article 8.9)

61) Surety Standards (Article 8.12)

62) Utility Standards (Article 8.13)

DEPARTMENT COMMENTS

- 1) **Action: Hold a public hearing at the March 21, 2016, Plan Commission meeting.**
- 2) The Petitioner will make any necessary revisions to the plans, as noted in this report as outstanding. The Economic and Community Development Department will confirm compliance prior to this item being placed on the next Plan Commission agenda.
- 3) If any Plan Commission member has questions prior to the public hearing, then please contact Jesse Pohlman at 317.402.4380 or jpohlman@westfield.in.gov.



WESTFIELD-WASHINGTON
ADVISORY PLAN COMMISSION

March 21, 2016
1603-SPP-06 & 1603-ODP-06

Petition Number: 1603-SPP-06 & 1603-ODP-06

Subject Site Address: West of Ditch Road, between 151st and 156th

Petitioner: Estridge Development Management LLC

Request: Petitioner requests an amendment to a previously approved Overall Development Plan and Primary Plat for single-family residential lots on approximately 138.8 acres+/- in the Harmony PUD District

Current Zoning: Harmony PUD District, Underlying Zoning is SF-4

Current Land Use: Agricultural

Approximate Acreage: 138.8 acres+/-

Property History: Harmony PUD Ordinance 12-14
Harmony PUD Text Amendment Ordinance 14-55
Harmony PUD Text Amendment Ordinance 15-18

Exhibits:

1. Staff Report
2. Location Map
3. Overall Development Plan
4. Primary Plat
5. Landscape Plan
6. Harmony PUD Ordinance 12-14
7. Harmony PUD Ordinance 14-55
8. Harmony PUD Ordinance 15-18

Staff Reviewer: Andrew Murray, Senior Planner

PROCEDURAL

Requests for Overall Development Plan Review and Primary Plat review are required to be considered at a public hearing. The public hearing for this petition was held during the March 7, 2016 Advisory Plan Commission (the "APC") meeting. Public notice was given in compliance with all APC Rules of Procedure.

Approval of an Overall Development Plan & Primary Plat must be granted if the submitted plans demonstrate compliance with the terms of the underlying zoning district, subdivision control ordinance and/or applicable PUD District Ordinance, any variances associated with the site and any commitments associated with the site.



PROJECT DESCRIPTION AND HISTORY

The 138 acre+/- site is located at the southwest corner of 156th Street and Ditch Road (the "Subject Property"). The Westfield-Washington Township Advisory Plan Commission (the "APC") approved an Overall Development Plan and Primary Plat (the "Approved Plans") for the Subject Property on January 4, 2016. Following approval of an Overall Development Plan and Primary Plat, property is eligible for Secondary Plat approval. The Petitioner submitted a Secondary Plat for a portion of the Subject Property to the Department for review and approval. In accordance with Article 10.12 of the Westfield-Washington Township Unified Development Ordinance (the "UDO"), the Department shall approve the Secondary Plat if it is substantially consistent with the Approved Plans. After a complete review, it was determined that the proposed Secondary Plat was not substantially consistent with the Approved Plans. The following items were identified during Secondary Plat review as inconsistent with the Approved Plans: lot types, lot configuration and additional easements (private street, access, drainage and utility) (the "Changes"). As a result, the Petitioner has requested to amend the Approved Plans to accommodate the Changes, which requires a public hearing and APC approval.

WESTFIELD-WASHINGTON TOWNSHIP UNIFIED DEVELOPMENT ORDINANCE

The following chapter, articles and standards of the UDO, as amended, apply and comply with the plans unless identified as outstanding below:

Zoning Districts (Chapter 4)

1. SF-4: Single Family High Density District (Article 4.7)

Overlay Districts (Chapter 5)

2. Floodplain Overlay District (Article 5.5)
3. Planned Unit Development District (Article 5.6)
4. Wellhead Protection District (Article 5.7)

Development Standards (Chapter 6)

5. Landscaping Standards
6. Lighting Standards (Article 6.9)
7. Lot Standards (Article 6.10)
8. Setback Standards (Article 6.16)
9. Sign Standards (Article 6.17)
10. Vision Clearance Standards (Article 6.19)



Subdivision Regulations (Chapter 7)

11. Principles and Standards of Design (Article 7.3)

Design Standards (Chapter 8)

- 12. Block Standards (Article 8.1)
- 13. Easement Standards (Article 8.3)
- 14. Monument and Marker Standards (Article 8.5)
- 15. Open Space and Amenity Standards (Article 8.6)
- 16. Pedestrian Network Standards (Article 8.7)
- 17. Storm Water Standards (Article 8.8)
- 18. Street and Right-of-Way Standards (Article 8.9)
- 19. Street Light Standards (Article 8.10)
- 20. Street Sign Standards (Article 8.11)
- 21. Surety Standards (Article 8.12)
- 22. Utility Standards (Article 8.13)

Processes and Permits (Chapter 10)

- 23. Development Plan Review (Article 10.7)
- 24. Primary Plat Review (Article 10.12, I)

HARMONY PUD DISTRICT (Ordinance 12-14)(Amendments: Ordinance 14-55, Ordinance 15-18)

The following standards of the Harmony PUD District, as amended, apply and comply with the plans unless identified as outstanding below:

Section 1.3. Open/Green Space. (As amended via Ordinance 14-55) A minimum of 63 acres of Open/Green Space shall be provided throughout the Real Estate. Development amenities as required in Section 2.4, N and Section 3.3, B and Active Recreation facilities shall be included as Open/Green Space for the purposes of calculating the quantity of Open/Green Space provided. Any Open/Green Space, Green Belt Space, or Green Space Area requirement in the Zoning Ordinance or in the Harmony PUD Ordinance shall apply toward the Open/Green Space requirement.

Section 1.4. The Real Estate shall develop in a manner substantially similar to the layout shown in Exhibit C-1 - Illustrated Site Development Plan.

Section 1.5. The Real Estate is expected, but is not bound, to develop in the order of the sections identified in Exhibit D - Construction Phasing Plan.

Section 3.1. Building Height. All residential dwellings are permitted to be a maximum of thirty (30) feet in height.



Section 3.2. Permitted Uses. All uses permitted in the SF-4 District in the Zoning Ordinance.

Section 3.3. Development Requirements.

A. Lots and buildings within the Single Family Residential District shall comply with the following development standards based upon lot classification:

Mew Lots

- 25. Minimum Lot Width at Building Line – 42’
- 26. Minimum Lot Area – 3,780 SF
- 27. Minimum Lot Frontage on a Public Way – 0’
- 28. Minimum House Size (total square footage) – 1,400 SF
- 29. Minimum Ground Level Area (1-story) – 1,000 SF
- 30. Minimum Ground Level Area (2-story) – 750 SF
- 31. Minimum Front Yard Setback – 10’
- 32. Minimum Side Yard Setback – 5’
- 33. Minimum Rear Yard Setback – 20’

42’ Alley-Load Lots

- 34. Minimum Lot Width at Building Line – 42’
- 35. Minimum Lot Area – 3,780 SF (reduced to 3,654 SF due to ROW increase)
- 36. Minimum Lot Frontage on a Public Way – 30’
- 37. Minimum House Size (total square footage) – 1,400 SF
- 38. Minimum Ground Level Area (1-story) – 1,000 SF
- 39. Minimum Ground Level Area (2-story) – 750 SF
- 40. Minimum Front Yard Setback – 10’ (reduced to 7’ due to ROW increase)
- 41. Minimum Side Yard Setback – 5’
- 42. Minimum Rear Yard Setback – 20’

50’ Alley-Load Lot

- 43. Minimum Lot Width at Building Line – 50’
- 44. Minimum Lot Area – 5,500 SF (reduced to 5,350 SF due to ROW increase)
- 45. Minimum Lot Frontage on a Public Way – 40’
- 46. Minimum House Size (total square footage) – 1,700 SF
- 47. Minimum Ground Level Area (1-story) – 1,000 SF
- 48. Minimum Ground Level Area (2-story) – 750 SF
- 49. Minimum Front Yard Setback (reduced to 7’ due to ROW increase)– 10’
- 50. Minimum Side Yard Setback – 5’
- 51. Minimum Rear Yard Setback – 20’



60' Front-Load Lots

- 52. Minimum Lot Width at Building Line – 60'
- 53. Minimum Lot Area – 7,200 SF (reduced to 7,020 SF due to ROW increase)
- 54. Minimum Lot Frontage on a Public Way – 40'
- 55. Minimum House Size (total square footage) – 2,000 SF
- 56. Minimum Ground Level Area (1-story) – 1,200 SF
- 57. Minimum Ground Level Area (2-story) – 800 SF
- 58. Minimum Front Yard Setback – 20' (reduced to 17' due to ROW increase)
- 59. Minimum Side Yard Setback – 5'
- 60. Minimum Rear Yard Setback – 20'

70' Front-Load Lots

- 61. Minimum Lot Width at Building Line
- 62. Minimum Lot Area – 8,400 SF (reduced to 8,190 SF due to ROW increase)
- 63. Minimum Lot Frontage on a Public Way – 40'
- 64. Minimum House Size (total square footage) – 2,200 SF
- 65. Minimum Ground Level Area (1-story) – 1,200 SF
- 66. Minimum Ground Level Area (2-story) – 800 SF
- 67. Minimum Front Yard Setback – 20' (Reduced to 17' due to ROW increase)
- 68. Minimum Side Yard Setback – 5'
- 69. Minimum Rear Yard Setback – 20'

Additional Restrictions:

- 70. No more than 225 lots shall be less than five thousand five hundred (5,500) square feet in lot area.
- 71. No more than 405 lots shall be less than seven thousand two hundred (7,200) square feet in lot area.
- 72. The front yard setback for the Mew Lots shall be measured from the narrowest property line adjacent to a Mew.

STAFF COMMENT: The Petitioner wishes to immediately subdivide the portion of the Subject Property that includes Lots 228-335). Further subdivision of the Subject Property where Blocks are identified will require the review of a Secondary Plat. As part of the review, compliance will be confirmed with this standard.

Development Amenities.

- 73. A recreation area shall be located immediately north of 151st Street west of Ditch Road and shall comply with the 50' alley-loaded lot standards noted above; except, that the community building



shall be a minimum of 1,000 s.f. The community building shall meet or exceed the architectural standards in Section 3.4. The recreation area shall contain a swimming pool with a minimum surface area of 3,000 square feet, a baby pool with a minimum surface area of 100 square feet, and a playground area.

74. Within the Open/Green Space located along the pipeline easements (see Exhibit C-1) the following amenities shall be provided:
1. An eight (8) foot wide asphalt trail the entire length of the Open/Green Space,
 2. A dog park with fenced enclosures and a shade pavilion,
 3. A playground, and
 4. A multi-purpose field with moveable soccer goals.

STAFF COMMENT: The plans comply. The Overall Development Plan and Primary Plat identify common area within and along the pipeline to install these improvements. Per Article 8.6(F) of the UDO, open space and development amenity improvements shall require Detailed Development Plan approval, which shall be reviewed and approved by the Department as part of an Improvement Location Permit or Certificate of Compliance.

Section 4.3. Bicycle Parking Facilities.

Section 5.2. Buffer Yard Requirements.

75. Buffer yards shall not be required internal to the Real Estate.
76. Buffer yards shall not be required where the front of lots or dwellings face 146th Street, 151st Street, 156th Street or Ditch Road, except as required by Section 5.3.
77. Where the rear yards of lots abut Ditch Road, a minimum 20 foot wide landscape buffer containing a minimum of one (1) evergreen tree, one (1) shade tree, one (1) ornamental tree, and five (5) evergreen shrubs per 30 linear feet of frontage shall be installed. For the area between 151st Street and the pipeline easements, the minimum width of the landscape easement shall vary from 20 feet to 40 feet as shown on Exhibit C-1.
78. A minimum 40 foot wide landscape buffer shall be provided in the areas abutting the existing large lot residential parcels on the south side of 156th Street as shown on Figure #2.
-

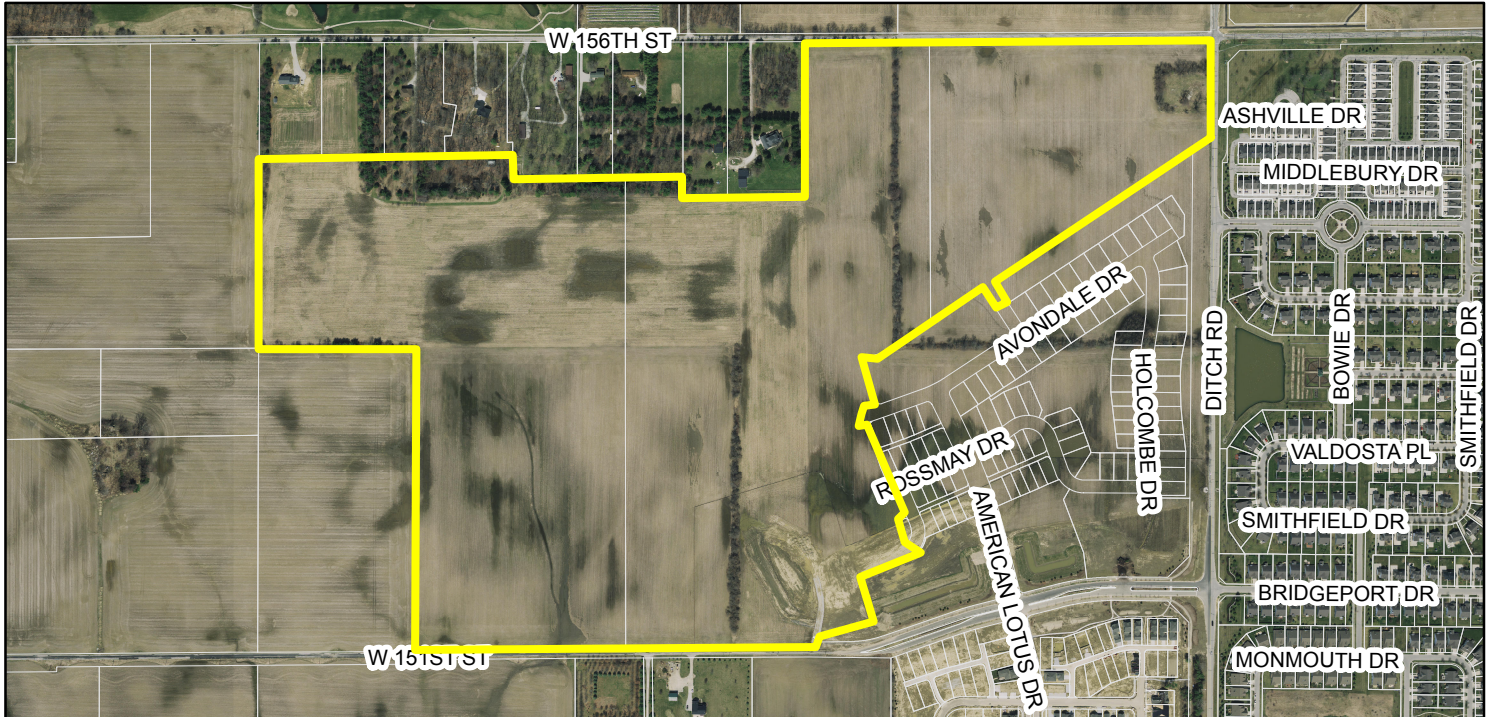


STAFF COMMENTS

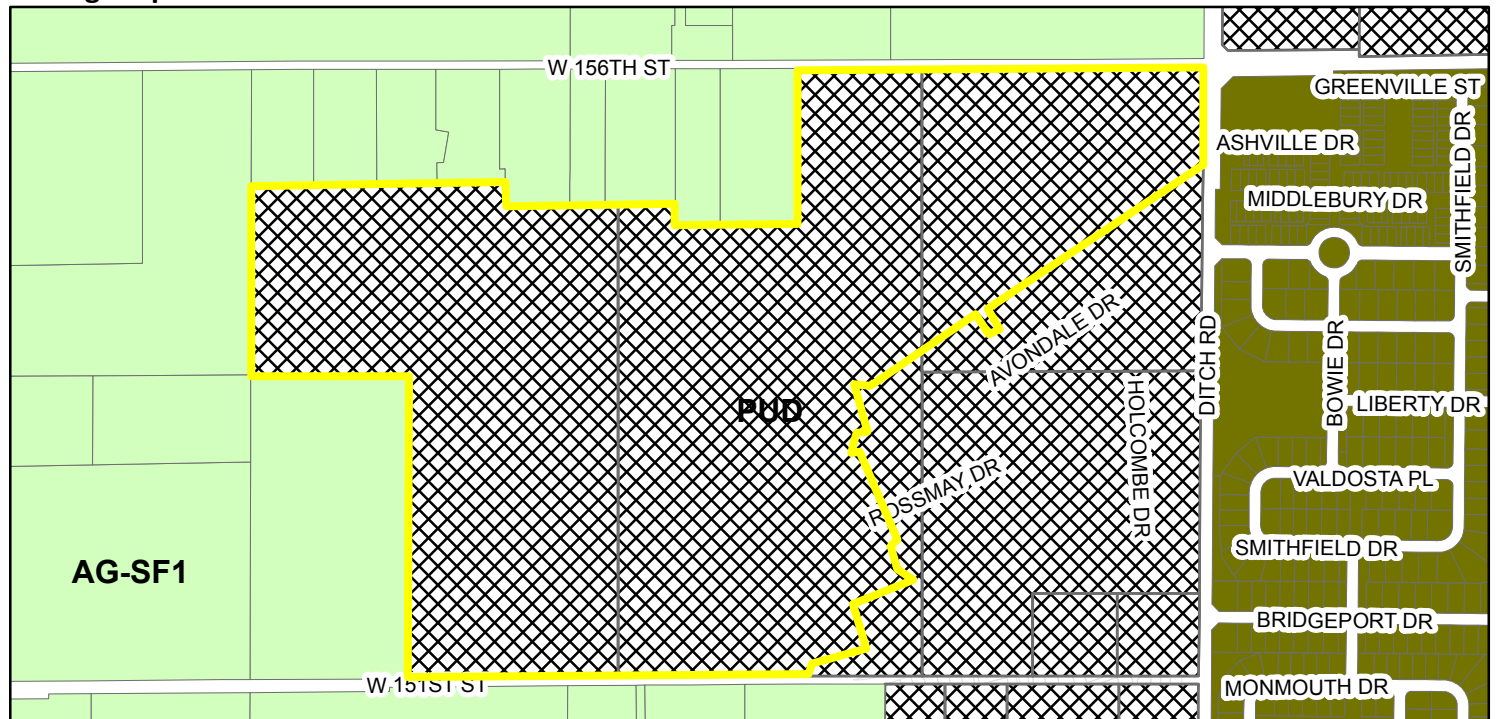
1. The plans are compliant.
2. **Action:** The Department recommends approving the petition with the following condition:
 - All necessary approvals be obtained from the Westfield Public Works Department, Hamilton County Surveyor's Office and Citizens Westfield prior to the issuance of an improvement location permit.
3. If any Plan Commission members have questions prior to the meeting, then please contact Andrew Murray at 317-379-9080 or amurray@westfield.in.gov.

Aerial Location Map

 Subject Parcel



Zoning Map



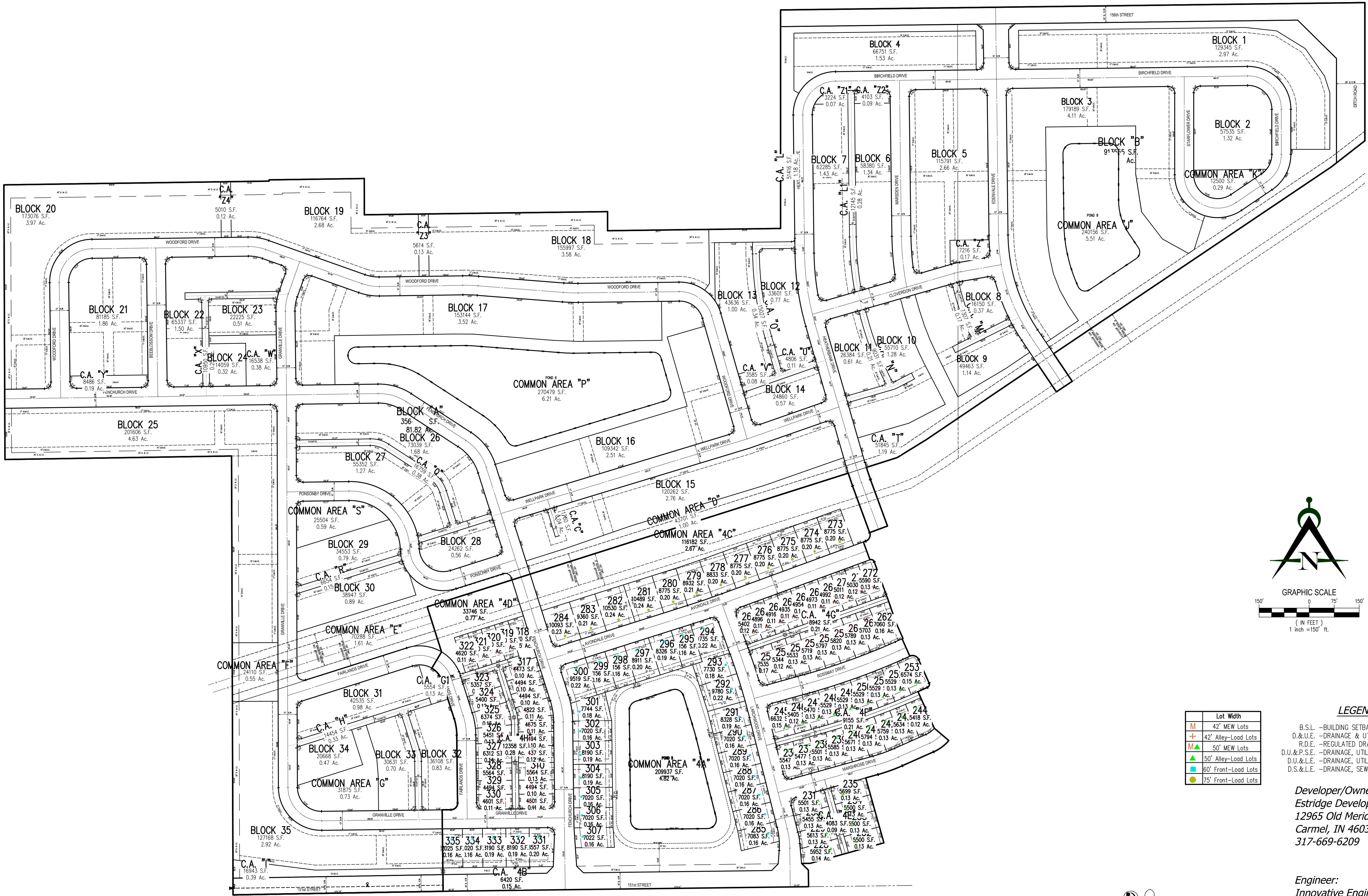
Zoning

- | | |
|---|--|
|  AG-SF1 (Agriculture - Single Family - 1) |  PUD (Planned Unit Development) |
|  SF-3 Cluster |  Parcel |

HARMONY SECTION 4 AMENDED PRIMARY PLAT

PART OF SECTION 16, TOWNSHIP 18N, R3E
WASHINGTON TOWNSHIP, HAMILTON COUNTY
WESTFIELD INDIANA

ZONED: PUD - ORDINANCE 12-14



Lot Width	
M	42' MEW Lots
+	42' Alley-Load Lots
M	50' MEW Lots
▲	50' Front-Load Lots
■	60' Front-Load Lots
●	75' Front-Load Lots

LEGEND
B.S.L. - BUILDING SETBACK LINE
D.&U.E. - DRAINAGE & UTILITY EASEMENT
R.D.E. - REGULATED DRAINAGE EASEMENT
D.U.&P.S.E. - DRAINAGE, UTILITY & PRIVATE STREET EASEMENT
D.U.&L.E. - DRAINAGE, UTILITY & LANDSCAPE EASEMENT
D.S.&L.E. - DRAINAGE, SEWER & LANDSCAPE EASEMENT

Developer/Owner:
Estridge Development Management, LLC
12965 Old Meridian Street
Carmel, IN 46032
317-669-6209

Engineer:
Innovative Engineering & Consulting, Inc.
3961 Perry Boulevard
Whitestown, IN 46075
317-769-2916



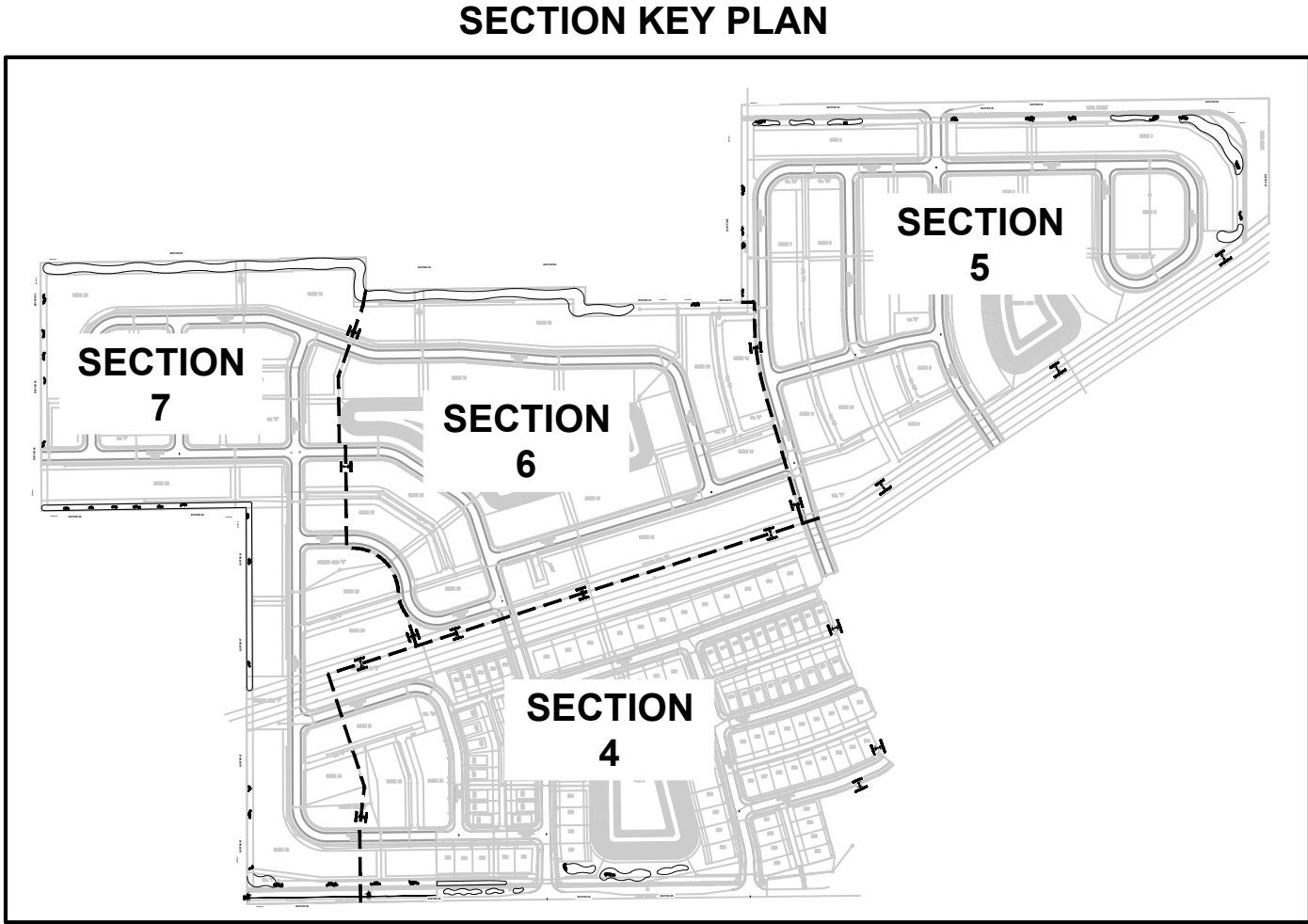
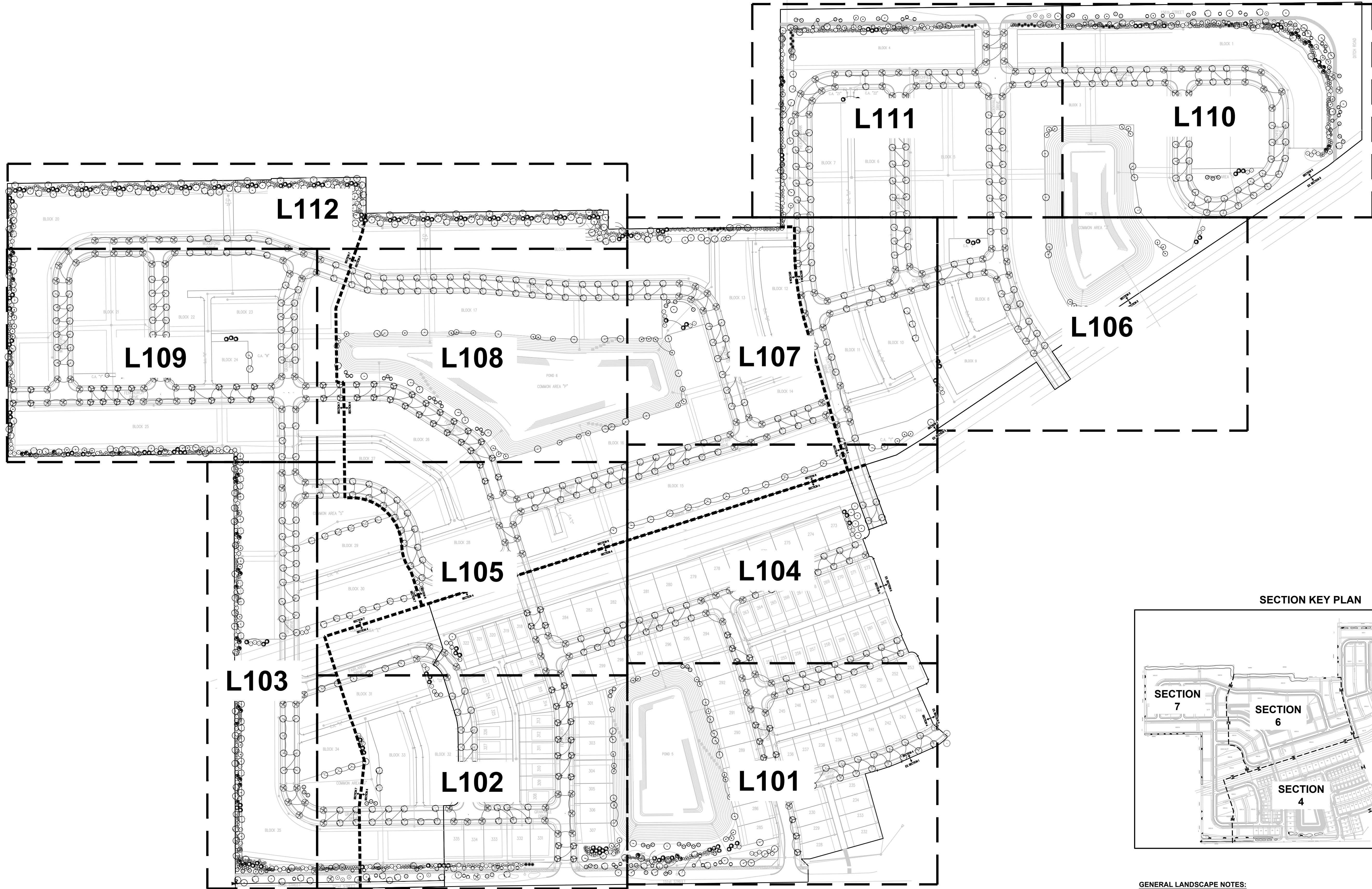
REVISIONS:

Estridge
Estridge Development Management, LLC
12965 Old Meridian Street
Carmel, IN 46032
317-669-6209

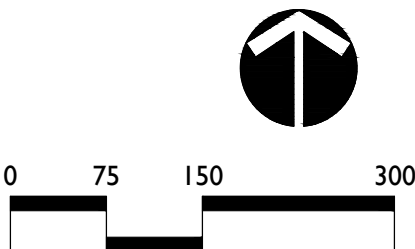
Harmony Section 4
Amended Primary Plat
Westfield, Indiana
Overall Primary Plat

**PRELIMINARY
PENDING
AGENCY
APPROVAL**

DATE: 02/12/16
DRAWN BY: kwk
ISSUED: CHECKED BY:
JOB NUMBER: 15115
SHEET # P101



- GENERAL LANDSCAPE NOTES:**
- ALL DISTURBED AREAS SHALL BE SEEDED.
 - LOCATIONS OF ALL TREES AND SHRUBS SHALL BE STAKED AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLANTING.
 - IF DISCREPANCIES ARE FOUND BETWEEN PLANS AND ACTUAL FIELD CONDITIONS, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY FOR DECISION PRIOR TO COMMENCEMENT OF ANY WORK.
 - REFER TO SHEET L113 FOR PLANT SCHEDULES AND SHEET L114 FOR PLANTING DETAILS.
 - REFER TO SEPARATE SPECIFICATIONS FOR LANDSCAPE SPECIFICATIONS.

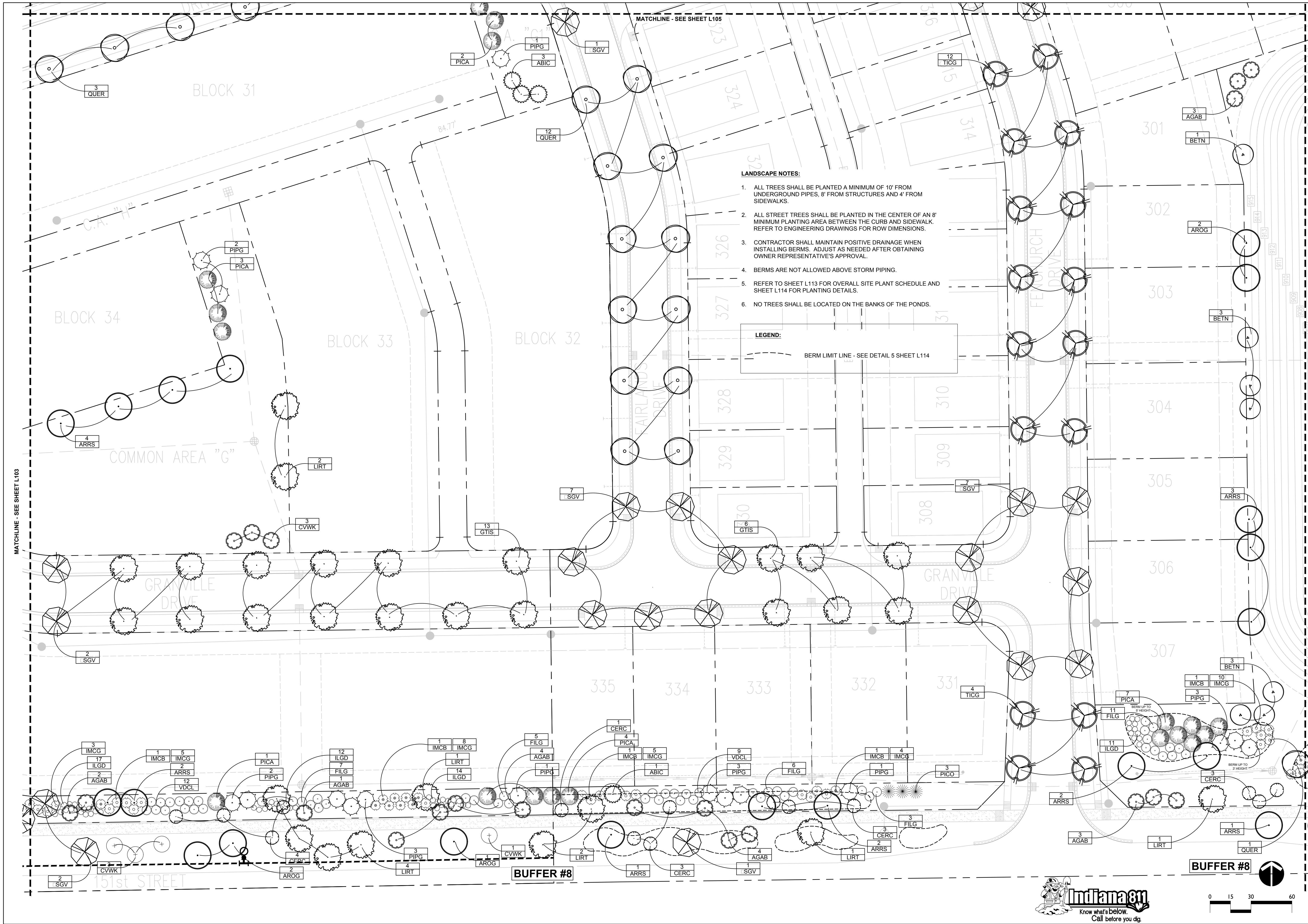


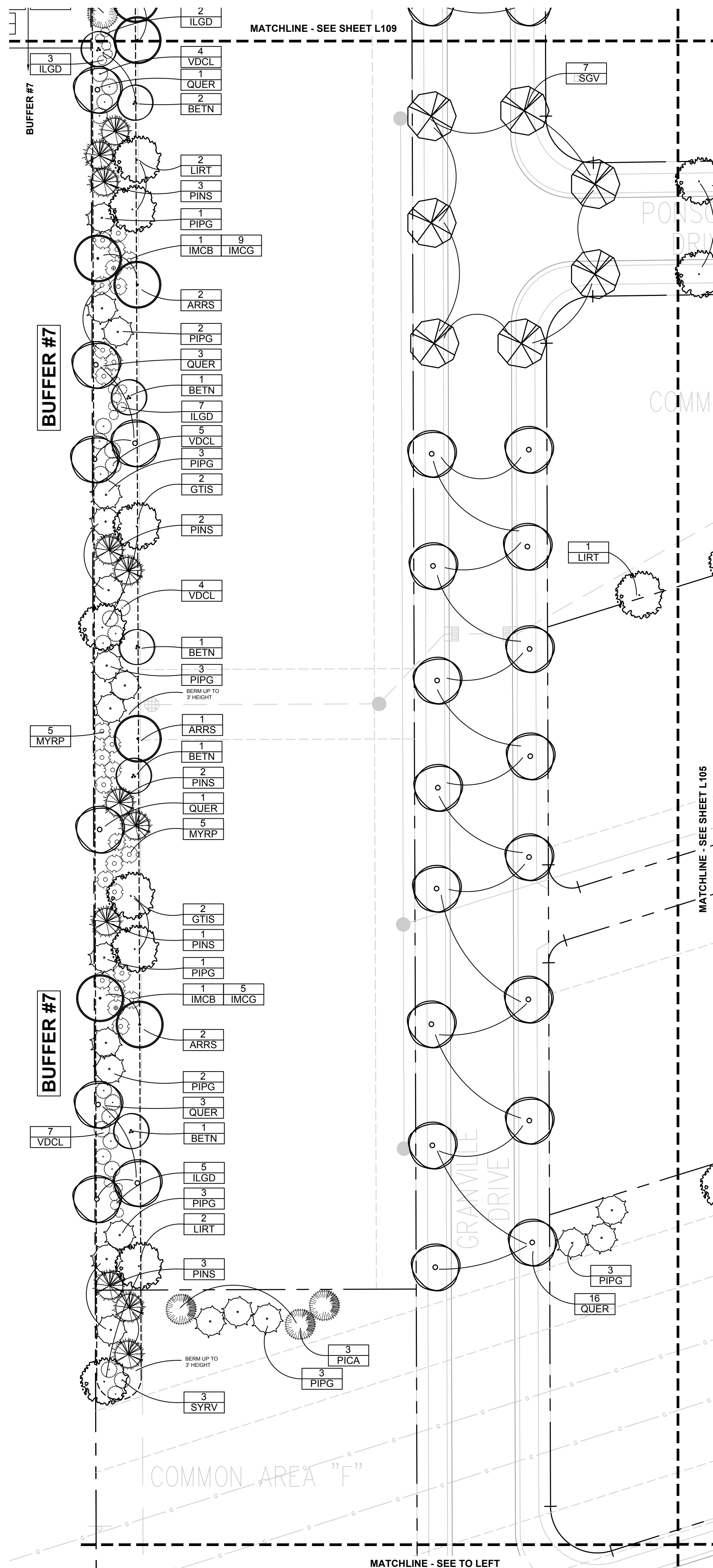
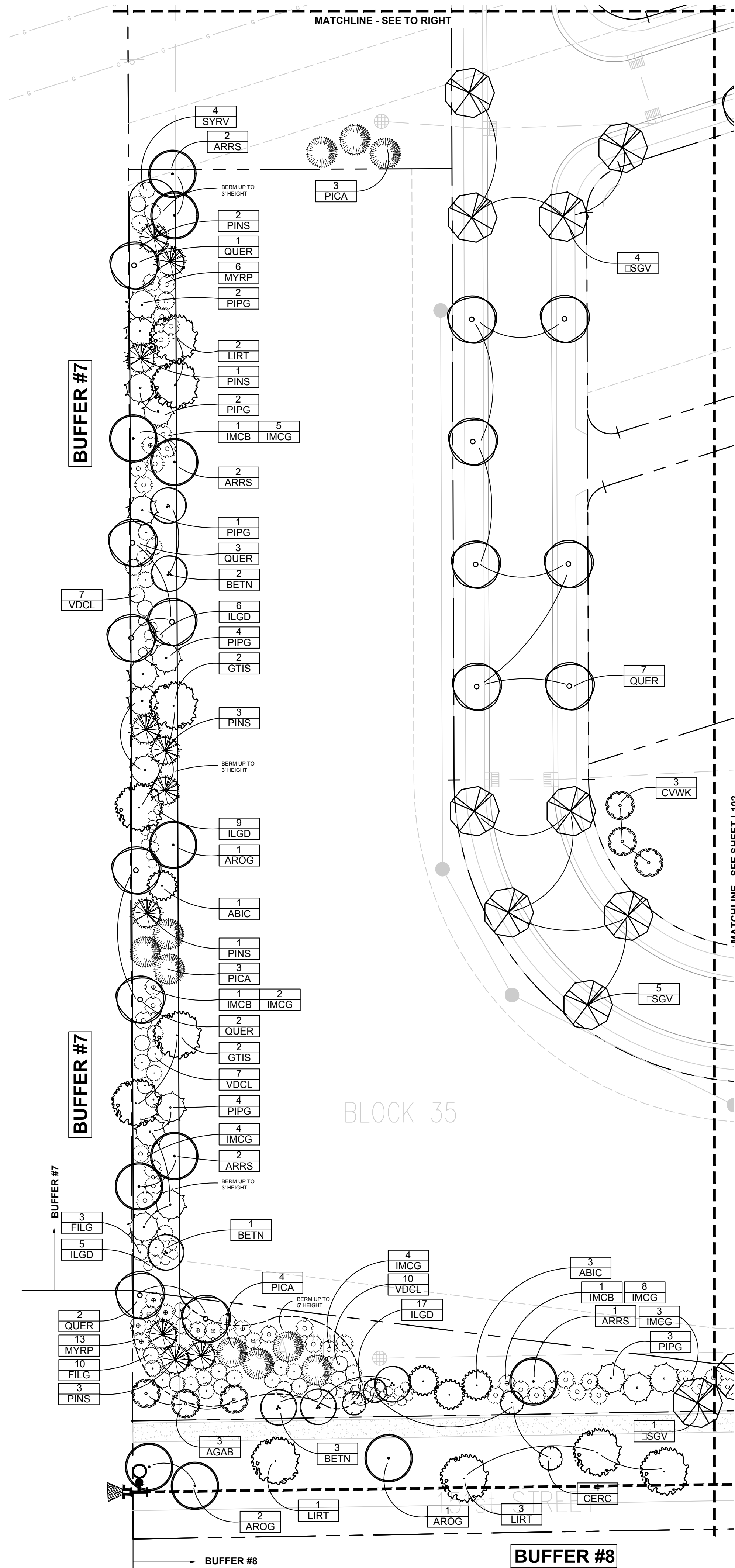


5085 East State Road 32 | Lebanon, Indiana | 46052
317.910.8164 | fischerdesign@us.net | www.fischerdesignllc.com

HARMONY SECTIONS 4, 5, 6 & 7
WESTFIELD, INDIANA
ESTRIDGE HOMES

REVISIONS:
DRAWING FILES:
DATE:
FEBRUARY 25, 2016
PROJECT NUMBER:
DRAWN BY:
RAF
CHECKED BY:
RAF
SHEET TITLE:
LANDSCAPE PLAN
KEY SHEET
SHEET #:
L100

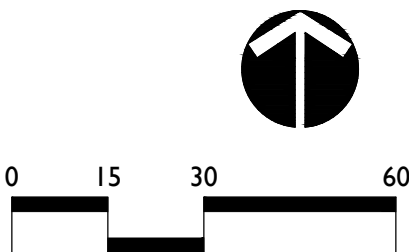


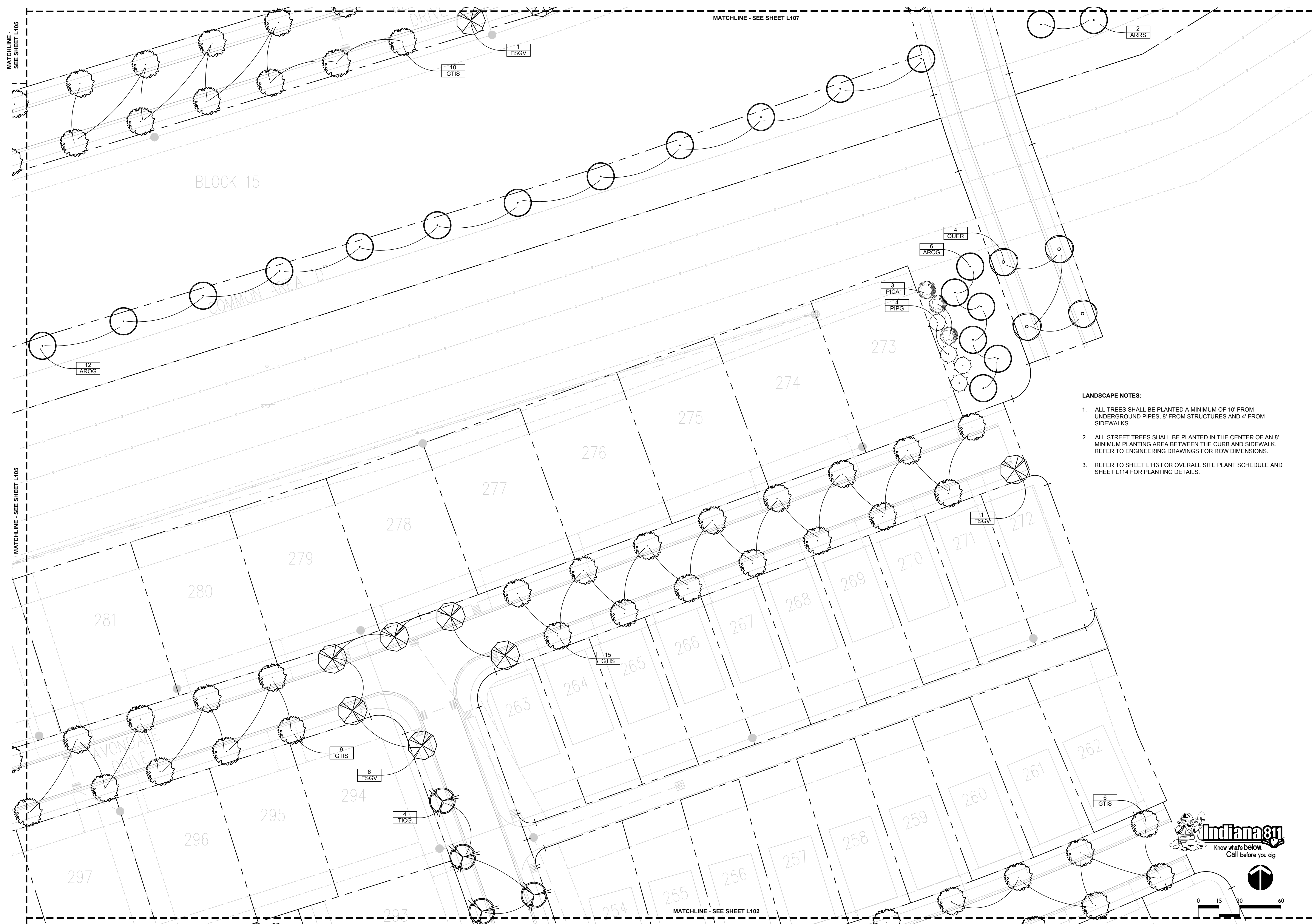


- LANDSCAPE NOTES:**
1. ALL TREES SHALL BE PLANTED A MINIMUM OF 10' FROM UNDERGROUND PIPES, 8' FROM STRUCTURES AND 4' FROM SIDEWALKS.
 2. ALL STREET TREES SHALL BE PLANTED IN THE CENTER OF AN 8' MINIMUM PLANTING AREA BETWEEN THE CURB AND SIDEWALK. REFER TO ENGINEERING DRAWINGS FOR ROW DIMENSIONS.
 3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE WHEN INSTALLING BERMS. ADJUST AS NEEDED AFTER OBTAINING OWNER REPRESENTATIVE'S APPROVAL.
 4. BERMS ARE NOT ALLOWED ABOVE STORM PIPING.
 5. REFER TO SHEET L113 FOR OVERALL SITE PLANT SCHEDULE AND SHEET L114 FOR PLANTING DETAILS.
 6. NO TREES SHALL BE LOCATED ON THE BANKS OF THE PONDS.

LEGEND:

--- BERM LIMIT LINE - SEE DETAIL 5 SHEET L114





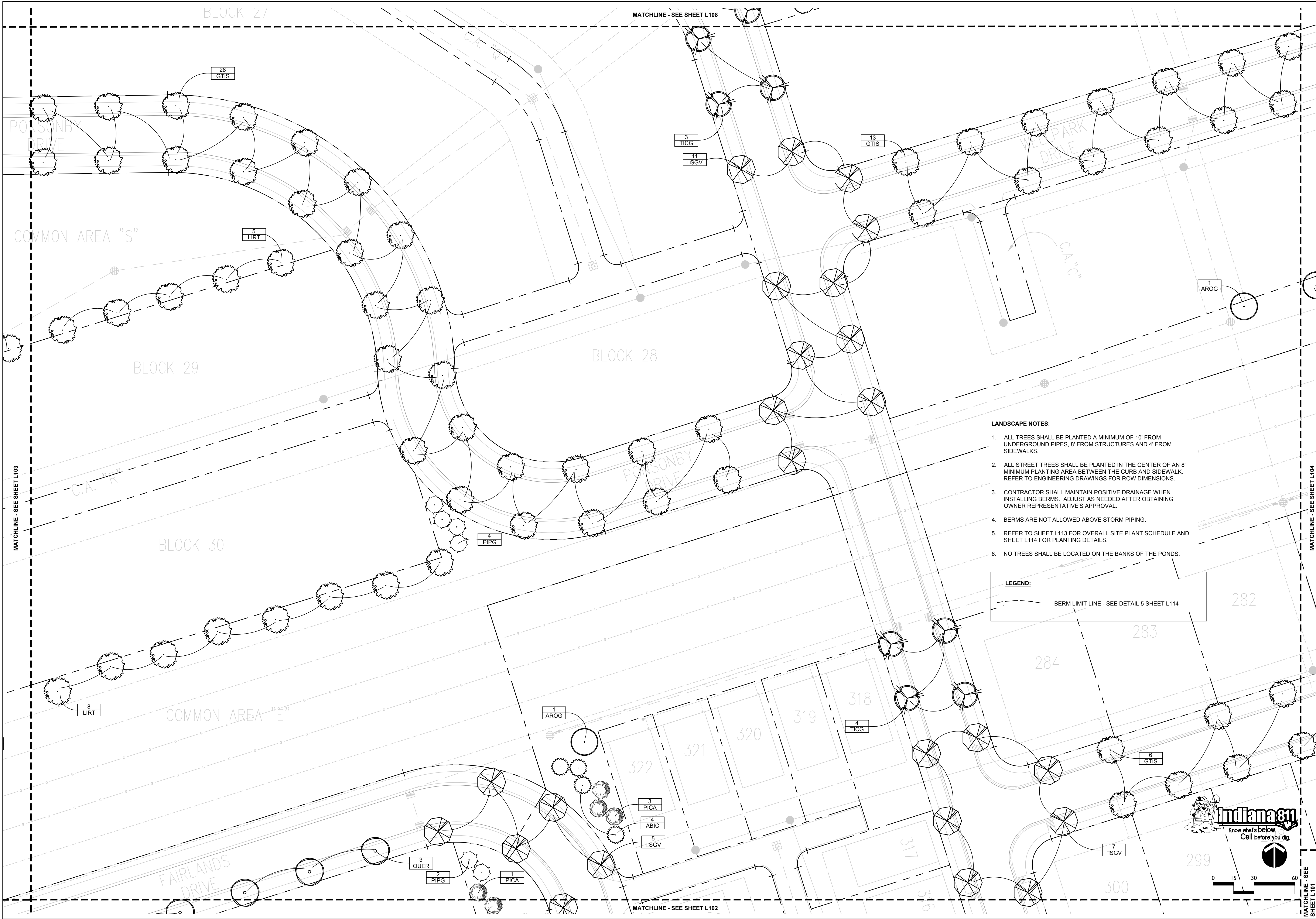
MATCHLINE - SEE SHEET L102

LANDSCAPE NOTES:

1. ALL TREES SHALL BE PLANTED A MINIMUM OF 10' FROM UNDERGROUND PIPES, 8' FROM STRUCTURES AND 4' FROM SIDEWALKS.
2. ALL STREET TREES SHALL BE PLANTED IN THE CENTER OF AN 8' MINIMUM PLANTING AREA BETWEEN THE CURB AND SIDEWALK. REFER TO ENGINEERING DRAWINGS FOR ROW DIMENSIONS.
3. REFER TO SHEET L113 FOR OVERALL SITE PLANT SCHEDULE AND SHEET L114 FOR PLANTING DETAILS.



0 15 30 60



- LANDSCAPE NOTES:**
1. ALL TREES SHALL BE PLANTED A MINIMUM OF 10' FROM UNDERGROUND PIPES, 8' FROM STRUCTURES AND 4' FROM SIDEWALKS.
 2. ALL STREET TREES SHALL BE PLANTED IN THE CENTER OF AN 8' MINIMUM PLANTING AREA BETWEEN THE CURB AND SIDEWALK. REFER TO ENGINEERING DRAWINGS FOR ROW DIMENSIONS.
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 6. NO TREES SHALL BE LOCATED ON THE BANKS OF THE PONDS.

LEGEND:

--- BERM LIMIT LINE - SEE DETAIL 5 SHEET L114

Indiana 811
Know what's below.
Call before you dig.

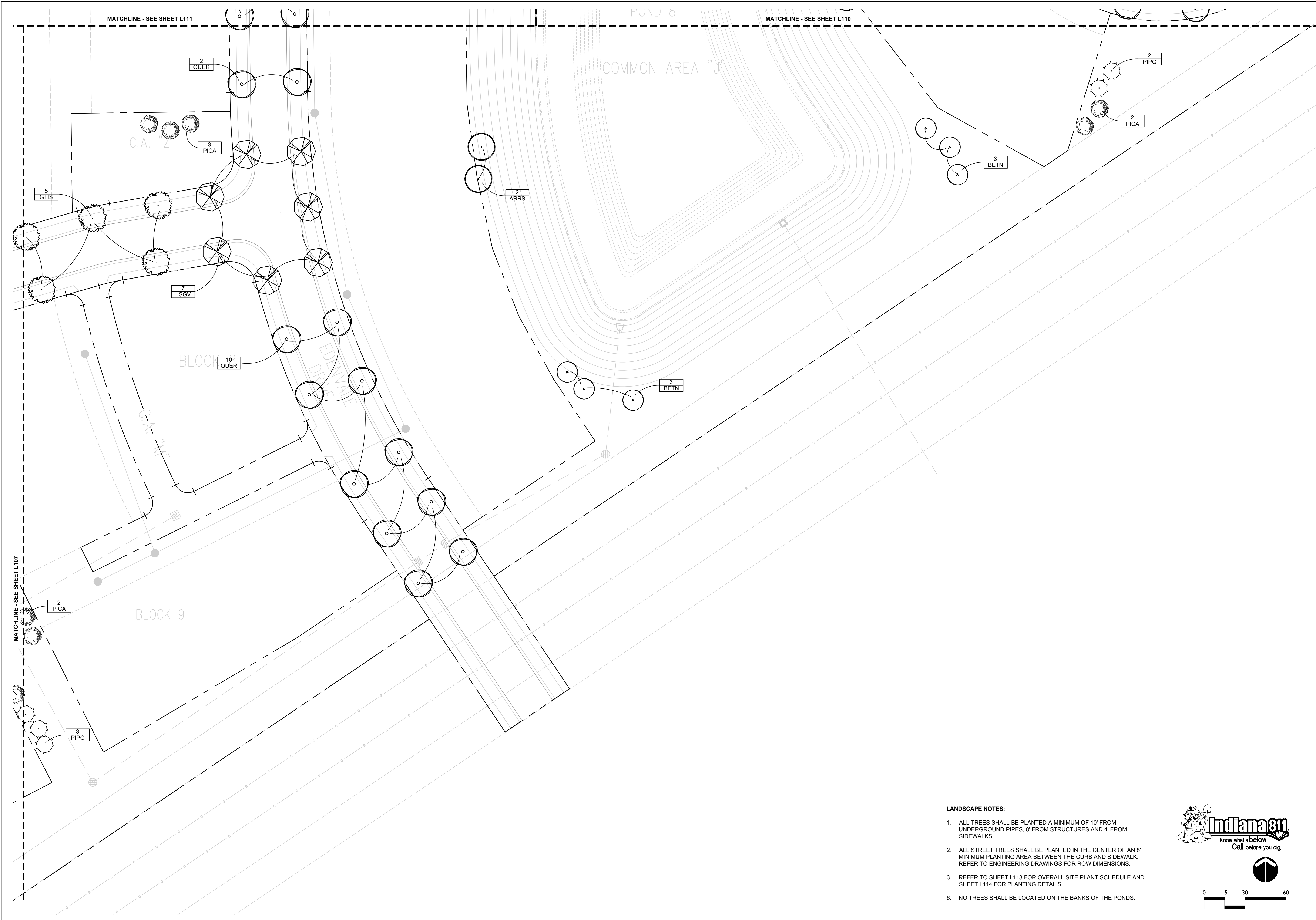
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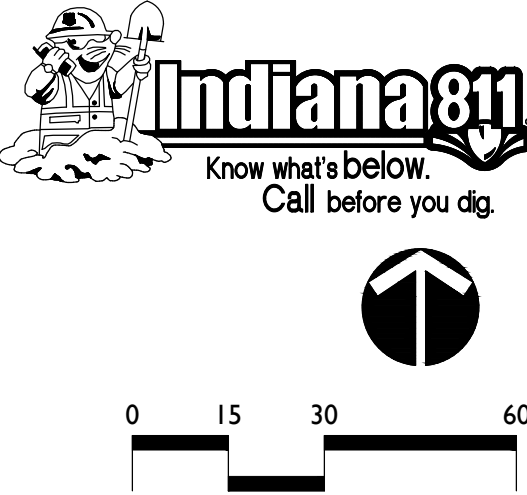
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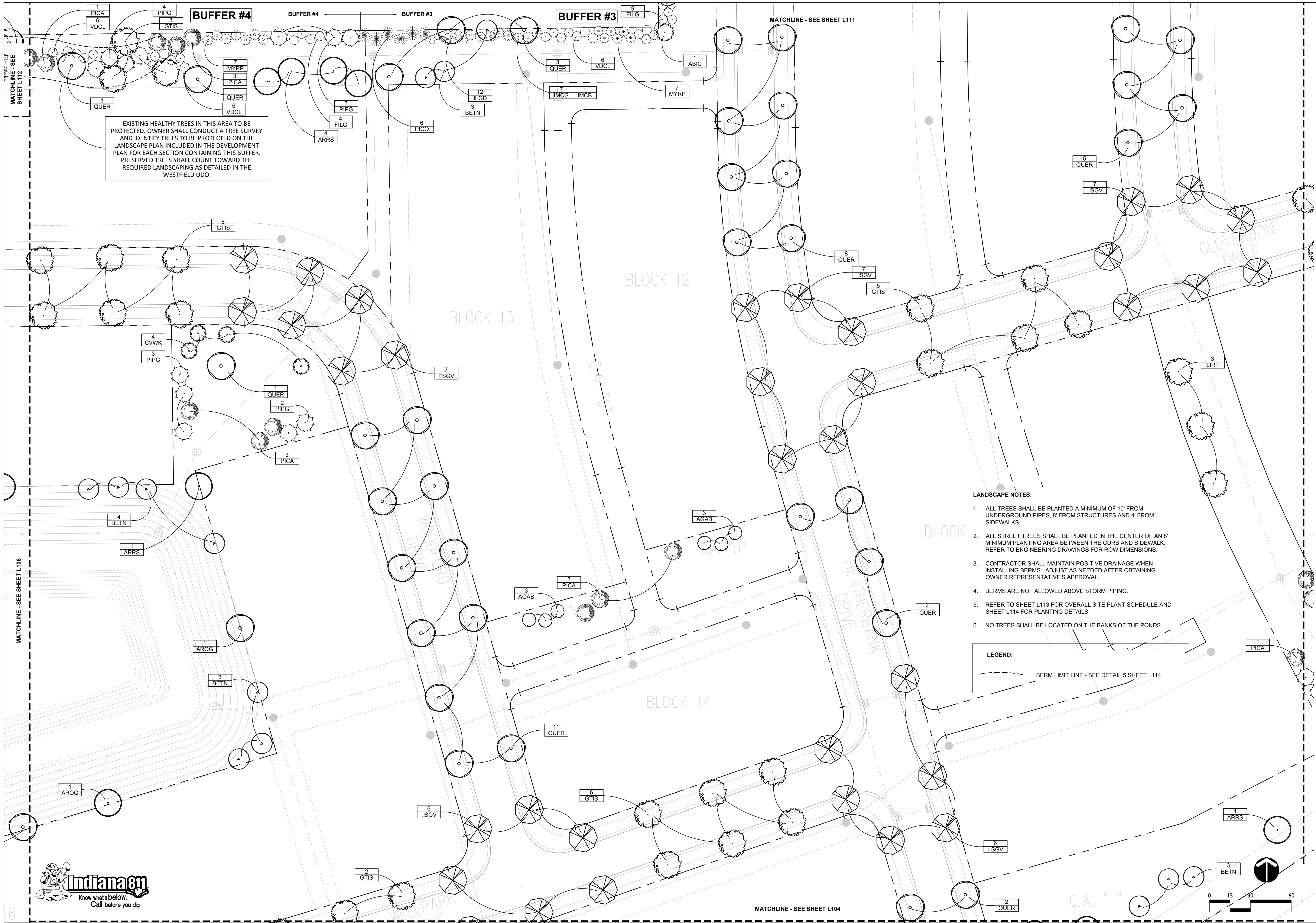
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PROJECT NUMBER:
DRAWN BY: RAF
CHECKED BY: RAF
SHEET TITLE: LANDSCAPE PLAN
SHEET #:

HARMONY SECTIONS 4, 5, 6 & 7
WESTFIELD, INDIANA
ESTRIDGE HOMES



- LANDSCAPE NOTES:**
1. ALL TREES SHALL BE PLANTED A MINIMUM OF 10' FROM UNDERGROUND PIPES, 8' FROM STRUCTURES AND 4' FROM SIDEWALKS.
 2. ALL STREET TREES SHALL BE PLANTED IN THE CENTER OF AN 8' MINIMUM PLANTING AREA BETWEEN THE CURB AND SIDEWALK. REFER TO ENGINEERING DRAWINGS FOR ROW DIMENSIONS.
 3. REFER TO SHEET L113 FOR OVERALL SITE PLANT SCHEDULE AND SHEET L114 FOR PLANTING DETAILS.
 6. NO TREES SHALL BE LOCATED ON THE BANKS OF THE PONDS.





EXISTING HEALTHY TREES IN THIS AREA TO BE PROTECTED. OWNER SHALL CONDUCT A TREE SURVEY AND IDENTIFY TREES TO BE PROTECTED ON THE LANDSCAPE PLAN INCLUDED IN THE DEVELOPMENT PLAN FOR EACH SECTION CONTAINING THIS BUFFER. PRESERVED TREES SHALL COUNT TOWARD THE REQUIRED LANDSCAPING AS DETAILED IN THE WESTFIELD UDO.

- LANDSCAPE NOTES:**
1. ALL TREES SHALL BE PLANTED A MINIMUM OF 10' FROM UNDERGROUND PIPES, 8' FROM STRUCTURES AND 4' FROM SIDEWALKS.
 2. ALL STREET TREES SHALL BE PLANTED IN THE CENTER OF AN 8' MINIMUM PLANTING AREA BETWEEN THE CURB AND SIDEWALK. REFER TO ENGINEERING DRAWINGS FOR ROW DIMENSIONS.
 3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE WHEN INSTALLING BERMS. ADJUST AS NEEDED AFTER OBTAINING OWNER REPRESENTATIVE'S APPROVAL.
 4. BERMS ARE NOT ALLOWED ABOVE STORM PIPING.
 5. REFER TO SHEET L113 FOR OVERALL SITE PLANT SCHEDULE AND SHEET L114 FOR PLANTING DETAILS.
 6. NO TREES SHALL BE LOCATED ON THE BANKS OF THE PONDS.

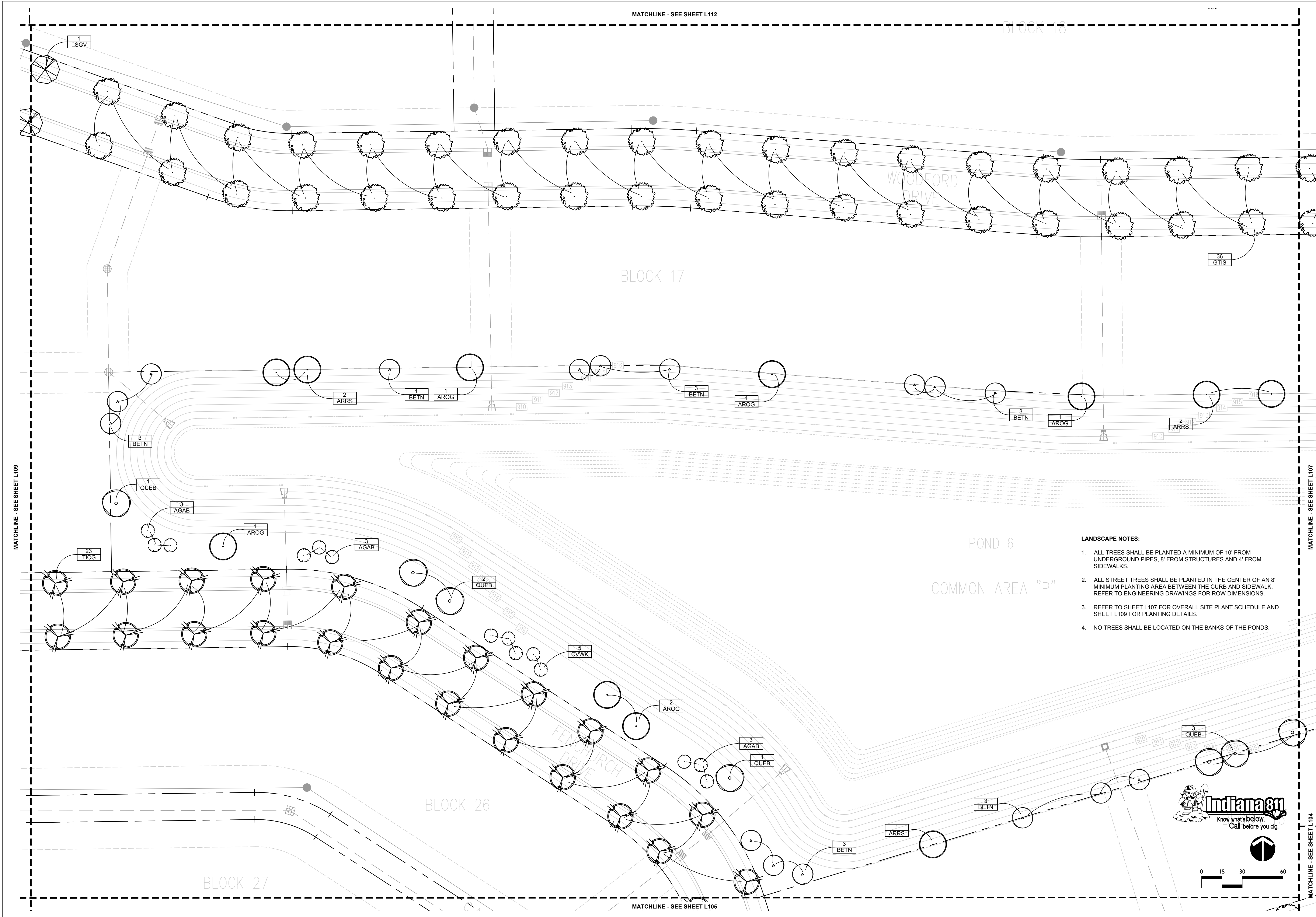
LEGEND:

--- BERM LIMIT LINE - SEE DETAIL 5 SHEET L114

HARMONY SECTIONS 4, 5, 6 & 7
WESTFIELD, INDIANA
ESTRIDGE HOMES

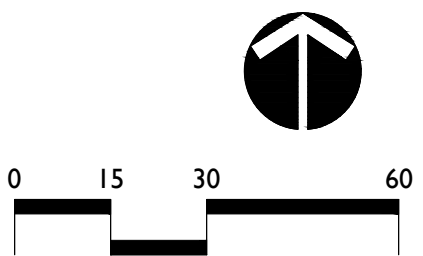
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DATE:	FEBRUARY 25, 2016
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SHEET #:	L107



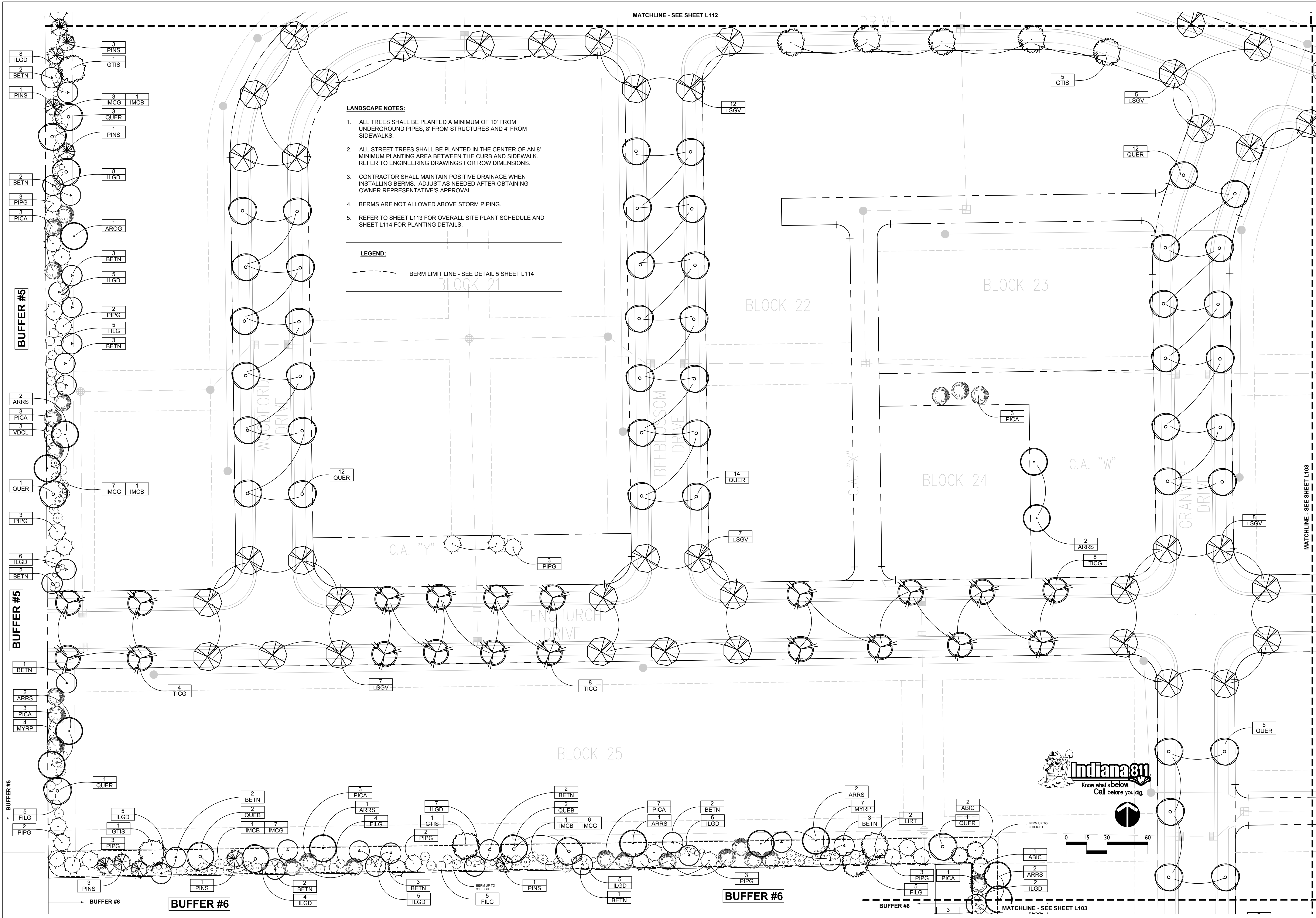


HARMONY SECTIONS 4, 5, 6 & 7
WESTFIELD, INDIANA
ESTRIDGE HOMES

- LANDSCAPE NOTES:**
1. ALL TREES SHALL BE PLANTED A MINIMUM OF 10' FROM UNDERGROUND PIPES, 8' FROM STRUCTURES AND 4' FROM SIDEWALKS.
 2. ALL STREET TREES SHALL BE PLANTED IN THE CENTER OF AN 8' MINIMUM PLANTING AREA BETWEEN THE CURB AND SIDEWALK. REFER TO ENGINEERING DRAWINGS FOR ROW DIMENSIONS.
 3. REFER TO SHEET L107 FOR OVERALL SITE PLANT SCHEDULE AND SHEET L109 FOR PLANTING DETAILS.
 4. NO TREES SHALL BE LOCATED ON THE BANKS OF THE PONDS.



REVISIONS:	
DRAWING FILES:	
DATE: FEBRUARY 25, 2016	
PROJECT NUMBER:	
DRAWN BY: RAF	CHECKED BY: RAF
SHEET TITLE: LANDSCAPE PLAN	
SHEET #:	





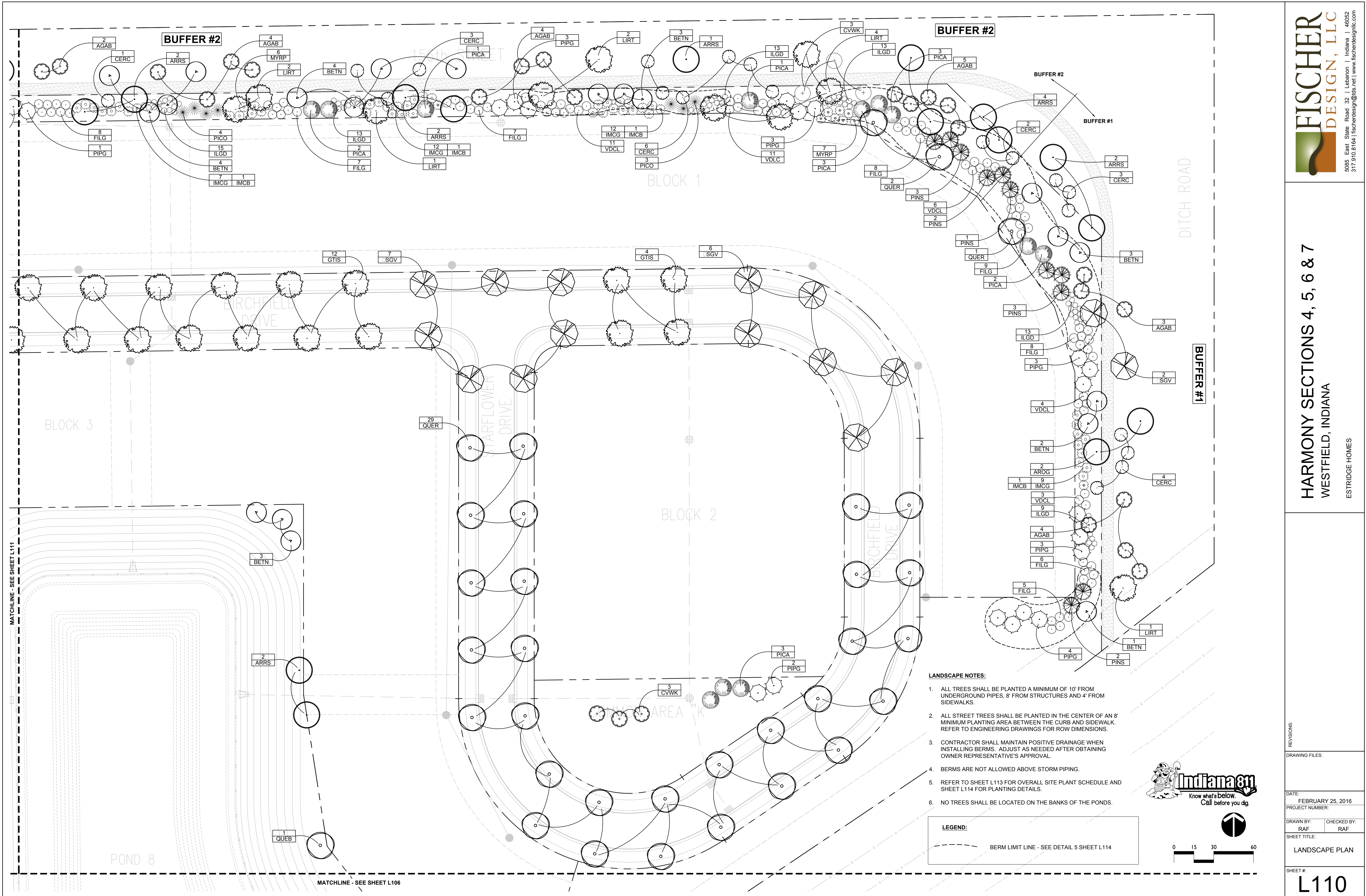
FISCHER
DESIGN, LLC

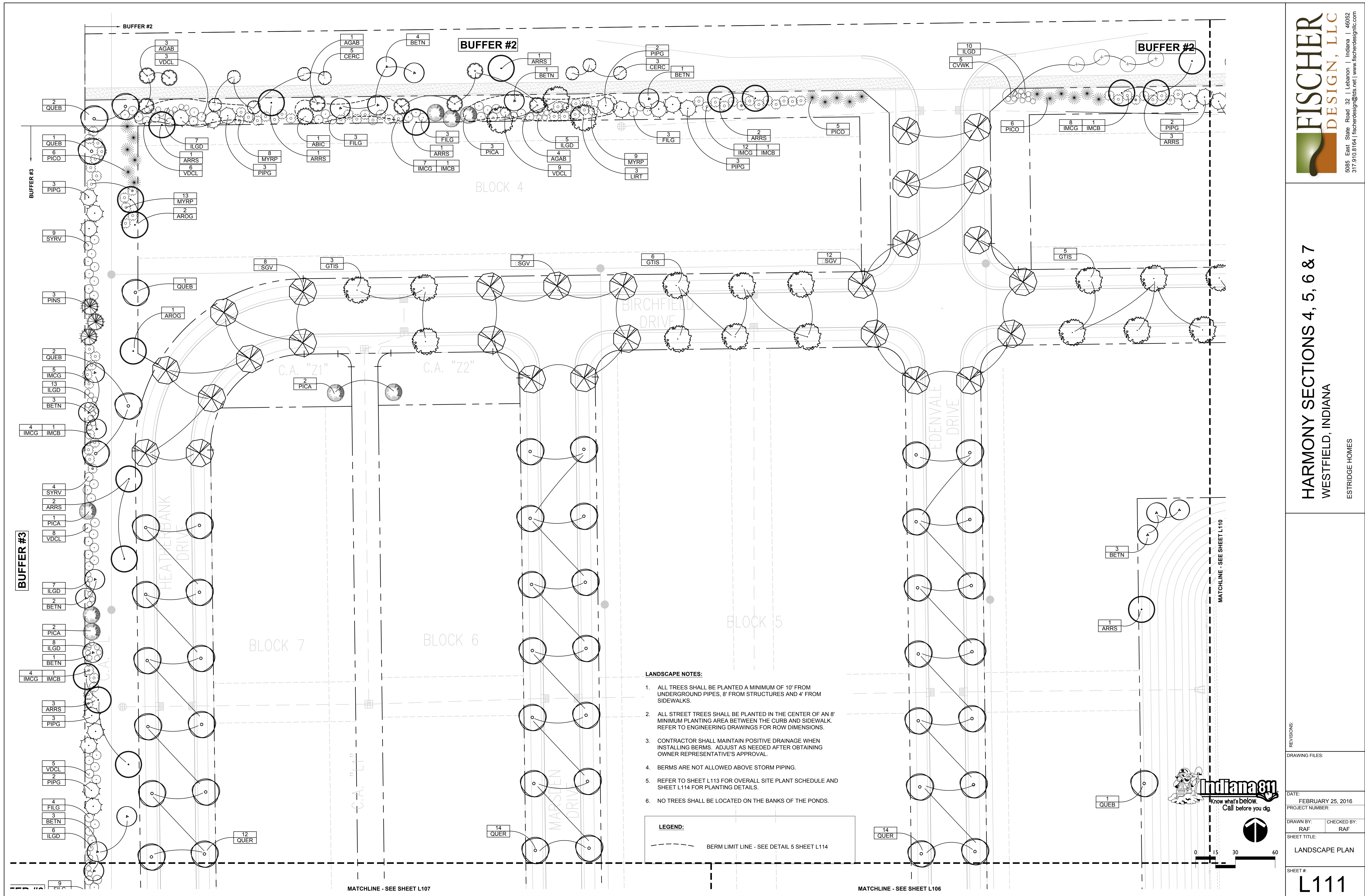
5085 East State Road 32 | Lebanon | Indiana | 46052
317.910.6164 | fischerdesign@dis.net | www.fischerdesignllc.com

HARMONY SECTIONS 4, 5, 6 & 7
WESTFIELD, INDIANA
ESTRIDGE HOMES

REVISIONS:

DATE:	FEBRUARY 25, 2016
PROJECT NUMBER:	
DRAWN BY:	RAF
CHECKED BY:	RAF
SHEET TITLE:	LANDSCAPE PLAN
SHEET #:	L109





CALCULATIONS:

BUFFER CALCULATIONS:

BUFFER #1 DITCH ROAD = 400 lf
(313.06'+86.94' CURVE)

	SHADE TREES	EVERGREEN TREES	ORNAMENTAL TREES	SHRUBS
	1/30 LF	1/30 LF	1/30 LF	5/30 LF
REQUIRED	14	14	14	67
PROVIDED	14	14	14	67

BUFFER #2 156th STREET = 1,529 lf
(587.09'+846.78'+95.15' CURVE)

	SHADE TREES	EVERGREEN TREES	ORNAMENTAL TREES	SHRUBS
	1/30 LF	1/30 LF	1/30 LF	5/30 LF
REQUIRED	51	51	51	255
PROVIDED	51	51	51	255

BUFFER #3 AROUND MCCARTHY PROPERTY = 804' lf TYPE B BUFFER
(585.5'+218.47')

	SHADE TREES	EVERGREEN TREES	SHRUBS
	4/100 LF	4/100 LF	10/100 LF
REQUIRED	27	27	134
PROVIDED	27	27	134

BUFFER #4 NORTH BEHIND LOTS = 2486 lf TYPE B BUFFER
(518.47'+450'+279.15'+285.30'+794.85'+140.7' JOG MINUS 40'+17.15' JOG MINUS 40')

	SHADE TREES	EVERGREEN TREES	SHRUBS
	4/100 LF	4/100 LF	10/100 LF
REQUIRED	100	100	249
PROVIDED	100	100	249

BUFFER #5 FAR WEST ALONG BCE PROP. = 764 lf TYPE B BUFFER

	REQUIRED SHADE TREES	REQUIRED EVERGREEN TREES	REQUIRED SHRUBS
	4/100 LF	4/100 LF	10/100 LF
REQUIRED	31	31	77
PROVIDED	31	31	77

BUFFER #6 SOUTH ALONG BCE PROP. = 679 lf TYPE B BUFFER

	SHADE TREES	EVERGREEN TREES	SHRUBS
	4/100 LF	4/100 LF	10/100 LF
REQUIRED	28	28	68
PROVIDED	28	28	68

BUFFER #7 WEST ALONG BCE PROP. = 1,261 lf
(1,315.85'-55.33 BUFFER #8)

	SHADE TREES	EVERGREEN TREES	SHRUBS
	1/30 LF	1/30 LF	5/30 LF
REQUIRED	51	51	126
PROVIDED	51	51	126

BUFFER #8 151st STREET = 1,565 lf
604.41' EAST+960.11 WEST-MEASURED BACK OF EASEMENT

	SHADE TREES	EVERGREEN TREES	ORNAMENTAL TREES	SHRUBS
	1/30 LF	1/30 LF	1/30 LF	5/30 LF
REQUIRED	53	53	53	261
PROVIDED	53	53	54	261

TOTAL REQUIRED	355	355	118	1237
TOTAL PROVIDED	355	355	119	1237

LOT LANDSCAPING REQUIREMENTS

PER LOT REQUIREMENTS:

LOT SIZE	SHADE TREES	ORNAMENTAL OR EVERGREEN TREES	SHRUBS
42' LOTS	2	1	4
50' LOTS	2	1	4
60' LOTS	2	1	4
75' LOTS	4	2	4

OPEN SPACE/COMMON AREA MINIMUM LANDSCAPING REQUIREMENTS:

COMMON AREA	ACREAGE	TREES REQUIRED
A	4.81	49
B	3.57	36
C		Alley
D		Alley
E	2.4	24
F	0.55	6
G	0.73	8
G1	0.54	6
H		Alley
J	5.6	56
K	0.29	3
L	1.19	12
L1		Alley
M		Alley
N		Alley
O		Alley
P	6.22	63
Q		Alley
R		Alley
S	0.59	6
T	1.19	12
U	0.11	2
V	0.08	1
W	0.38	4
X		Alley
Y	0.19	2
Z	0.17	2
Z1	0.07	1
Z2	0.09	1

TOTAL 28.77 294 TREES REQUIRED

STREET TREES PLANT SCHEDULE:

SYMBOL	QUANTITY												BOTANICAL NAME	COMMON NAME	COND.	SIZE
	L101	L102	L103	L104	L105	L106	L107	L108	L109	L110	L111	L112	TOTAL			
GTIS	10	19	0	40	47	5	19	36	5	16	14	5	216	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'	SKYLINE HONEYLOCUST	B&B 2" CAL./8' MIN. HT.
QUER	16	15	23	4	3	12	30	0	43	29	40	0	215	QUERCUS RUBRA	RED OAK	B&B 2" CAL./8' MIN. HT.
TIICG	8	16	0	4	7	0	0	23	20	0	0	0	78	TIILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLE LEAF LINDEN	B&B 2" CAL./8' MIN. HT.
ZSGV	13	17	16	8	23	7	33	1	38	13	27	7	204	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE ZELKOVA	B&B 2" CAL./8' MIN. HT.
713													TOTAL STREET TREES PROVIDED			

COMMON AREA PLANT SCHEDULE:

SYMBOL	QUANTITY													BOTANICAL NAME	COMMON NAME	COND.	SIZE	NOTES
	L101	L102	L103	L104	L105	L106	L107	L108	L109	L110	L111	L112	TOTAL					
TREES																		
ABIC	0	3	0	0	4	0	0	0	0	0	0	0	7	ABIES CONCOLOR	CONCOLOR FIR	B&B	6' HT.	EVERGREEN
AGAB	3	3	0	0	0	0	6	9	0	0	0	0	21	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	B&B	2" CAL.	DECIDUOUS
AROG	6	2	0	18	2	0	2	6	0	0	0	0	36	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY MAPLE	B&B	2' CAL./8' HT.	DECIDUOUS
ARRS	3	7	0	2	0	2	2	5	2	2	1	0	26	ACER RUBRUM 'RED SUNSET'	RED SUNSET MAPLE	B&B	2' CAL./8' HT.	DECIDUOUS
BETN	11	7	0	0	0	6	10	16	0	3	3	0	56	BETULA NIGRA	RIVER BIRCH	B&B	2' CAL./8' HT.	DECIDUOUS
CVWK	8	3	3	0	0	0	4	5	0	3	0	0	26	CRETAEGUS VIRDIS 'WINTER KING'	WINTER KING HAWTHORN	B&B	2" CAL.	DECIDUOUS
LIRT	0	2	1	0	13	0	3	0	0	0	0	0	19	LIRIODENDRON TULIPIFERA	TULIP TREE	B&B	2' CAL./8' HT.	DECIDUOUS
PICA	4	6	6	3	4	7	7	0	3	3	2	0	45	PICEA ABIES	NORWAY SPRUCE	B&B	6' HT.	EVERGREEN
PINS	0	0	0	0	0	0	0	0	0	0	0	0	0	PINUS STROBUS	WHITE PINE	B&B	6' HT.	EVERGREEN
PIPG	4	6	6	4	6	5	5	0	3	6	0	0	45	PICEA PUNGENS GLAUCA	COLORADO BLUE SPRUCE	B&B	6' HT.	EVERGREEN
QUEB	0	0	0	0	0	0	0	7	0	1	1	0	9	QUERCUS BICOLOR	SWAMP WHITE OAK	B&B	2' CAL./8' HT.	DECIDUOUS
QUER	0	0	0	0	0	0	1	0	0	0	0	0	1	QUERCUS RUBRA	RED OAK	B&B	2' CAL./8' HT.	DECIDUOUS
291													TOTAL TREES PROVIDED					

BUFFERS PLANT SCHEDULE:

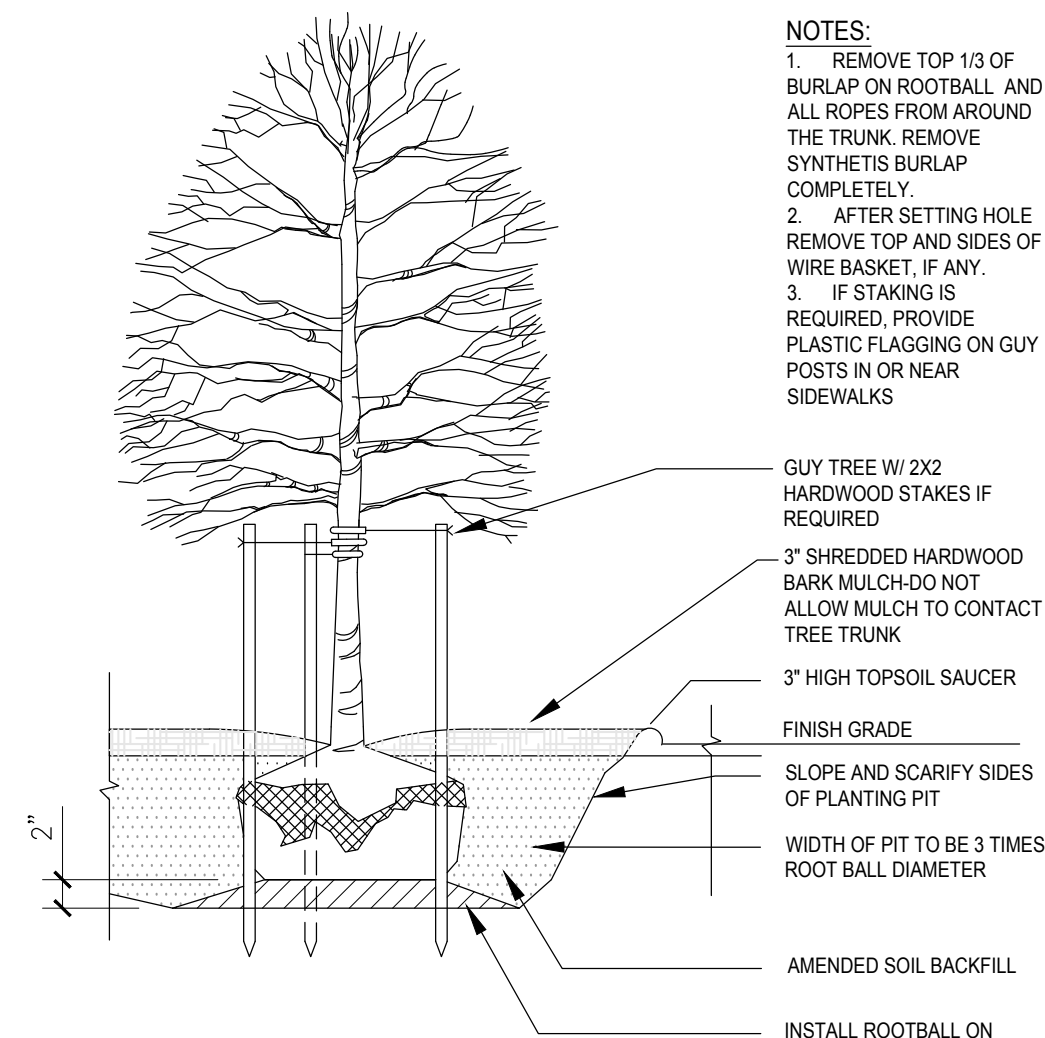
SYMBOL	QUANTITY													BOTANICAL NAME	COMMON NAME	SPACING	COND.	SIZE	NOTES	
	L101	L102	L103	L104	L105	L106	L107	L108	L109	L110	L111	L112	TOTAL							
SHADE TREES																				
AROG	1	3	4						1	2	3	2	16	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY MAPLE		B&B	2" CAL./8' HT.	DECIDUOUS	
ARRS	6	8	12				4		10	11	14	21	86	ACER RUBRUM 'RED SUNSET'	RED SUNSET MAPLE		B&B	2" CAL./8' HT.	DECIDUOUS	
BETN			12				3		28	17	15	3	78	BETULA NIGRA	RIVER BIRCH		B&B	2" CAL./8' HT.	DECIDUOUS	
GTIS			8				3		3				26	40	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'	SKYLINE HONEYLOCUST		B&B	2" CAL./8' HT.	DECIDUOUS
LIRT	6	9	10						2	10	3	2	42	LIRIODENDRON TULIPIFERA	TULIP TREE		B&B	2" CAL./8' HT.	DECIDUOUS	
QUEB									4		6	1	11	QUERCUS BICOLOR	SWAMP WHITE OAK		B&B	2" CAL./8' HT.	DECIDUOUS	
QUER	2	1	16				5		6	3		43	76	QUERCUS RUBRA	RED OAK		B&B	2" CAL./8' HT.	DECIDUOUS	
ZSGV		3	1								2		6	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE ZELKOVA		B&B	2" CAL./8' HT.	DECIDUOUS	
355													TOTAL PROVIDED							
EVERGREEN TREES																				
ABIC		1	4				1		2		1		9	ABIES CONCOLOR	CONCOLOR FIR		B&B	6' HT.	EVERGREEN	
PICA	7	11	7				4		20	9	6	62	126	PICEA ABIES	NORWAY SPRUCE		B&B	6' HT.	EVERGREEN	
PICO		3					6			7	16		32	PICEA OMORICA	SERBIAN SPRUCE	10' O.C.	B&B	6' HT.	EVERGREEN	
PINS	3		21						10	11	3		48	PINUS STROBUS	WHITE PINE		B&B	6' HT.	EVERGREEN	
PIPG	5	10	32				7		21	13	18	34	140	PICEA PUNGENS GLAUCA	COLORADO BLUE SPRUCE		B&B	6' HT.	EVERGREEN	
355													TOTAL PROVIDED							
ORNAMENTAL TREES																				
AGAB	8	14	3							22	8		55	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY		B&B	2" CAL.	DECIDUOUS	
CERC	7	14	4							19	8		52	CERCIS CANADENSIS	EASTERN REDBUD		B&B	2" CAL.	DECIDUOUS	
CVWK		4								3	5		12	CRETAEGUS VIRDIS 'WINTER KING'	WINTER KING HAWTHORN		B&B	2" CAL.	DECIDUOUS	
119													TOTAL PROVIDED							
SHRUBS																				
FILG	10	32	13				13		24	58	13	37	200	FORSYTHIA INTERMEDIA 'LYNWOOD GOLD'	LYNWOOD GOLD FORSYTHIA	5' O.C.	CONT.	18" HT.	DECIDUOUS	
ILGD	13	54	53				12		61	76	56	12	337	ILEX GLABRA 'DENSEA'	DENSEA COMPACT INKBERRY	4' O.C.	CONT.	18" HT.	EVERGREEN	
IMCB	2	5	5				1		4	4	5	6	32	ILEX MESERVEAE 'CHINA BOY'	CHINA BOY BLUE HOLLY	5' O.C.	CONT.	18" HT.	EVERGREEN	
IMCG	13	35	40				7		23	40	40	10	208	ILEX MESERVEAE 'CHINA GIRL'	CHINA GIRL BLUE HOLLY	5' O.C.	CONT.	18" HT.	EVERGREEN	
MYRP	4		29				14		11	13	30	93	194	MYRICA PENSYLVANICA	NORTHERN BAYBERRY	5' O.C.	CONT.	18" HT.	DECIDUOUS	
SYRV			7								13	31	51	SYRINGA VULGARIS	COMMON LILAC	5' O.C.	CONT.	18" HT.	DECISUOUS	
VDCL	6	21	44				18		3	35	31	57	215	VIBURNUM DENTATUM 'CHICAGO LUSTRE'	CHICAGO LUSTRE VIBURNUM	5' O.C.	CONT.	18" HT.	DECIDUOUS	
1237													TOTAL PROVIDED							

REVISIONS:

DRAWING FILES:

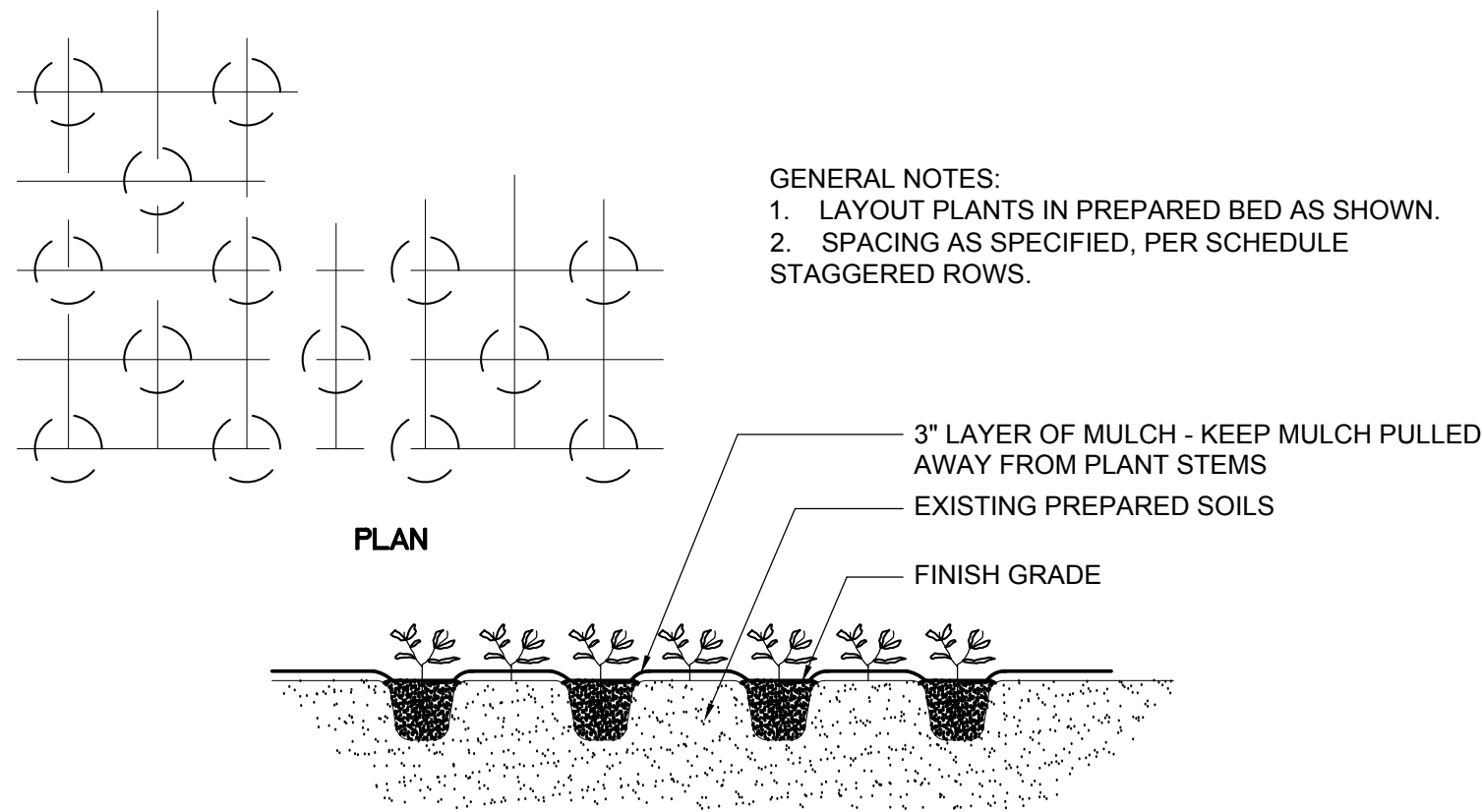
DRAWN BY: RAFCHECKED BY: RAFCALCULATIONS & PLANT SCHEDULES

SHEET #:



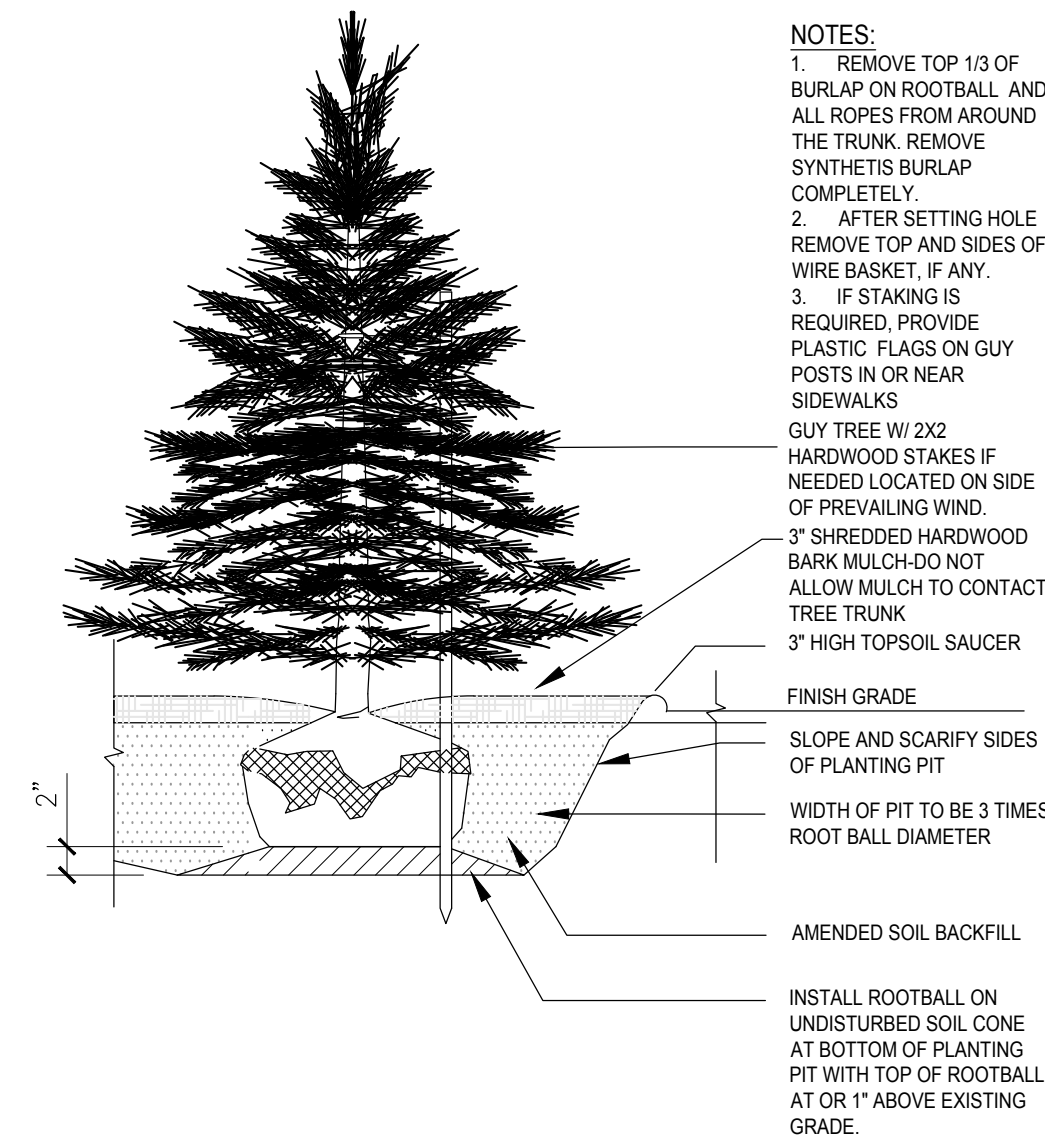
- NOTES:
1. REMOVE TOP 1/3 OF BURLAP ON ROOTBALL AND ALL ROPES FROM AROUND THE TRUNK. REMOVE SYNTHETIC BURLAP COMPLETELY.
 2. AFTER SETTING HOLE REMOVE TOP AND SIDES OF WIRE BASKET, IF ANY.
 3. IF STAKING IS REQUIRED, PROVIDE PLASTIC FLAGGING ON GUY POSTS IN OR NEAR SIDEWALKS
- GUY TREE W/ 2X2 HARDWOOD STAKES IF REQUIRED
- 3\"/>

1 SHADE TREE PLANTING DETAIL
L114 SECTION NTS



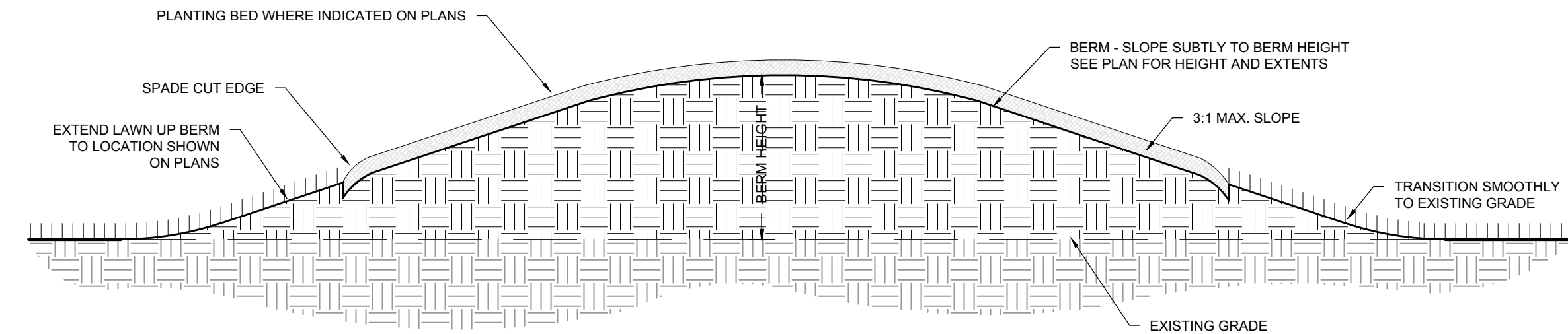
- GENERAL NOTES:
1. LAYOUT PLANTS IN PREPARED BED AS SHOWN.
 2. SPACING AS SPECIFIED, PER SCHEDULE STAGGERED ROWS.

4 PERENNIAL & GROUNDCOVER PLANTING DETAIL
L114 SECTION NTS

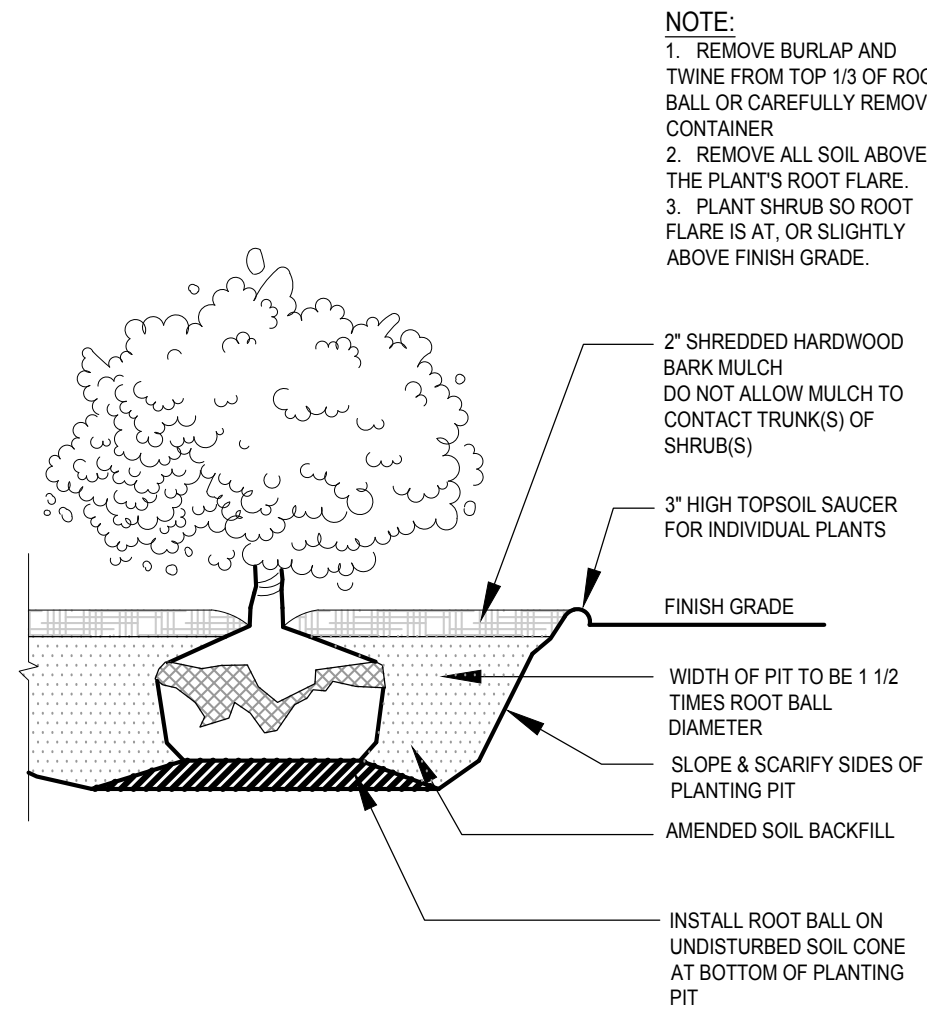


- NOTES:
1. REMOVE TOP 1/3 OF BURLAP ON ROOTBALL AND ALL ROPES FROM AROUND THE TRUNK. REMOVE SYNTHETIC BURLAP COMPLETELY.
 2. AFTER SETTING HOLE REMOVE TOP AND SIDES OF WIRE BASKET, IF ANY.
 3. IF STAKING IS REQUIRED, PROVIDE PLASTIC FLAGGING ON GUY POSTS IN OR NEAR SIDEWALKS
- GUY TREE W/ 2X2 HARDWOOD STAKES IF NEEDED LOCATED ON SIDE OF PREVAILING WIND.
- 3\"/>

2 EVERGREEN TREE PLANTING DETAIL
L114 SECTION NTS



5 LANDSCAPE BERM DETAIL
L114 SECTION 1/2" = 1'-0"



- NOTE:
1. REMOVE BURLAP AND TWINE FROM TOP 1/3 OF ROOT BALL OR CAREFULLY REMOVE CONTAINER.
 2. REMOVE ALL SOIL ABOVE THE PLANT'S ROOT FLARE.
 3. PLANT SHRUB SO ROOT FLARE IS AT, OR SLIGHTLY ABOVE FINISH GRADE.
- 2\"/>

3 SHRUB PLANTING DETAIL
L114 SECTION NTS

REVISIONS:

DRAWING FILES:

DATE: FEBRUARY 25, 2016
PROJECT NUMBER:

DRAWN BY: RAF CHECKED BY: RAF
SHEET TITLE:

PLANTING
DETAILS

SHEET #:
L114



Harmony

PLANNED UNIT DEVELOPMENT

ORIGINAL ORDINANCE

Ordinance No.: 12-14

Adoption Date: January 14, 2013

Instrument No.: 2013004856



ORDINANCE 12-14

**AN ORDINANCE OF THE CITY OF WESTFIELD AND WASHINGTON TOWNSHIP,
HAMILTON COUNTY, INDIANA CONCERNING AMENDMENT TO TITLE 16 –
LAND USE CONTROLS**

This is a planned unit development ordinance (the "Ordinance") to amend the Westfield-Washington Township Zoning Ordinance of the City of Westfield and Washington Township, Hamilton County, Indiana (the "Zoning Ordinance"), enacted by the City of Westfield pursuant to its authority under the laws of the State of Indiana, Ind. Code §36-7-4., as amended.

WHEREAS, the City of Westfield, Indiana ("City") and the Township of Washington, both of Hamilton County, Indiana are subject to the Westfield-Washington Township Zoning Ordinance; and,

WHEREAS, the Westfield-Washington Advisory Plan Commission (the "Commission") considered a petition (Docket 1205-PUD-05), filed with the Commission requesting an amendment to the Zoning Ordinance and to the Zoning Map;

WHEREAS, the Commission forwarded Docket 1205-PUD-05 to the Westfield City Council with a favorable recommendation in accordance with Indiana Code § 36-7-4-608, as required by Indiana Code § 36-7-4-1505; and,

WHEREAS, the Secretary of the Commission certified the action of the Commission to the City Council on December 4, 2012;

WHEREAS, the Westfield City Council is subject to the provisions of the Indiana Code § 36-7-4-1507 and Indiana Code § 36-7-4-1512 concerning any action on this request.

**NOW THEREFORE BE IT ORDAINED BY THE WESTFIELD CITY COUNCIL
THAT THE ZONING ORDINANCE AND ZONING MAP BE AMENDED AS
FOLLOWS:**

Section 1. Development of the Real Estate shall be governed by the provisions of the Zoning Ordinance unless specifically modified by the terms of this Ordinance. All provisions and representations of the Zoning Ordinance that conflict with the provisions of this Ordinance are hereby rescinded as applied to the Real Estate and shall be superseded by the terms of this Ordinance.

Section 2. This Ordinance shall be in full force and effect in accordance with Indiana law, upon the passage of any applicable waiting periods, all as provided by the laws of the State of Indiana. All Zoning Ordinances or parts thereof that are in conflict herewith are hereby inapplicable to the Real Estate. To the extent that this Ordinance conflicts with the terms of any previously adopted Zoning Ordinance, or part thereof, the terms of this Ordinance shall prevail.

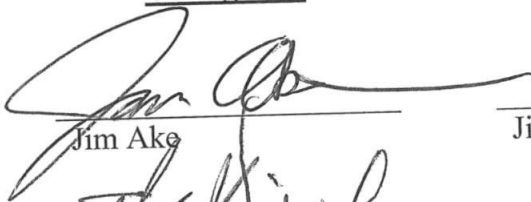
ALL OF WHICH IS HEREBY ADOPTED BY THE CITY COUNCIL OF WESTFIELD,
HAMILTON COUNTY, INDIANA, THIS 14 DAY OF January, 2013.

WESTFIELD CITY COUNCIL
HAMILTON COUNTY, INDIANA

Voting For:

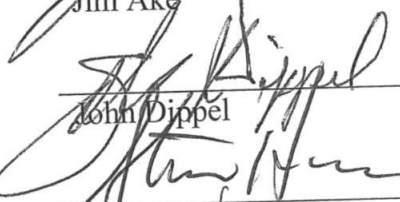
Voting Against:

Abstain


Jim Ake

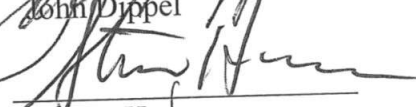
Jim Ake

Jim Ake


John Dippel

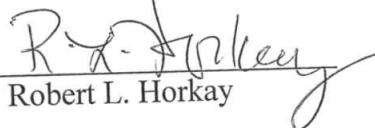
John Dippel

John Dippel


Steven Hoover

Steven Hoover

Steven Hoover


Robert L. Horkay

Robert L. Horkay

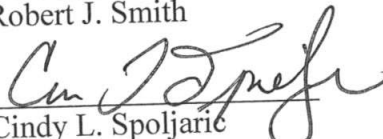
Robert L. Horkay

Robert J. Smith

Robert J. Smith

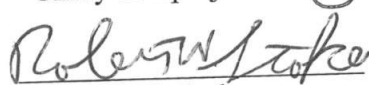
Robert J. Smith

Cindy L. Spoljaric


Cindy L. Spoljaric

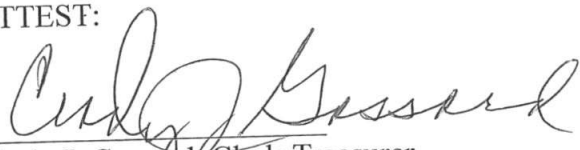
Cindy L. Spoljaric

Robert W. Stokes

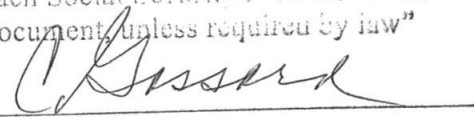

Robert W. Stokes

Robert W. Stokes

ATTEST:

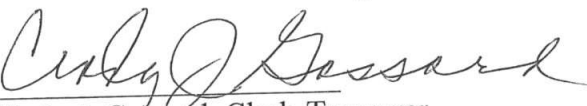

Cindy J. Gossard, Clerk-Treasurer

"I affirm, under the penalties of perjury,
that I have taken reasonable care to redact
each Social Security Number in this
document, unless required by law"


Signed

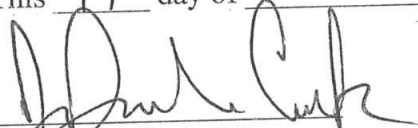
I hereby certify that ORDINANCE 12-14 was delivered to the Mayor of Westfield on the

16th day of January, 2013, at 9:00 a.m.


Cindy J. Gossard, Clerk-Treasurer

I hereby APPROVE ORDINANCE 12-14 I hereby VETO ORDINANCE 12-14

This 17th day of January, 2013.


J. Andrew Cook, Mayor

This _____ day of _____, 2013.

J. Andrew Cook, Mayor

I affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security Number in this document, unless required by law. Bryan D. Stumpf

Prepared by: Bryan D. Stumpf, ASLA, AICP, 11th Street Development
7378 N 550 E, Lebanon, IN 46052 (317) 721-8279

HARMONY PUD TABLE OF CONTENTS

Article 1.	General Provisions	Page 5
Article 2.	Mixed Use District.....	Page 6
Article 3.	Single Family Residential District	Page 12
Article 4.	Off-Street Loading and Parking.....	Page 34
Article 5.	Landscaping Standards	Page 36
Article 6.	Definitions.....	Page 39
Article 7.	City of Westfield's State Highway 32 Overlay Zone Standards	Page 42

HARMONY PUD TABLE OF EXHIBITS

Exhibit A.	Legal Description and Boundary Information	Page 43
Exhibit B.	Zoning District Map.....	Page 47
Exhibit C.	Illustrated Site Development Plans.....	Page 49
Exhibit C-1	Illustrative Site Development Plan	Page 50
Exhibit C-2	Neighborhood Commercial Design Elements	Page 51
Exhibit D.	Construction Phasing Plan	Page 53
Exhibit E.	Architectural Standards for Defined Architectural Designs	Page 55
Exhibit F.	Multifamily Building Examples	Page 127

ARTICLE 1. GENERAL PROVISIONS

Section 1.1. Applicability. This Harmony PUD Ordinance (the "Ordinance") applies to the subject real estate more particularly described in Exhibit A attached hereto (the "Real Estate").

Section 1.2. Districts. There are two districts within the Ordinance as illustrated in Exhibit B attached hereto (the "District Map").

- A. The underlying zoning district for Area A within the Mixed Use District shall be the MF-2 – Multi-Family 2 District (the "MF-2 District"). Except as modified, revised, supplemented or expressly made inapplicable by this Ordinance, the standards of the Zoning Ordinance applicable to the MF-2 District shall apply to Area A within the Mixed Use District of this Ordinance.
- B. The underlying zoning district for Area B and Area C within the Mixed Use District shall be the LB – Local Business District (the "LB District"). Except as modified, revised, supplemented or expressly made inapplicable by this Ordinance, the standards of the Zoning Ordinance applicable to the LB District shall apply to Area B and Area C within the Mixed Use District of this Ordinance.
- C. The underlying zoning district for the Single Family Residential District shall be the SF-4 – Residential District (the "SF-4 District"). Except as modified, revised, supplemented or expressly made inapplicable by this Ordinance, the standards of the Zoning Ordinance applicable to the SF-4 District shall apply to the Single Family Residential District of this Ordinance.

Section 1.3. Open/Green Space. A minimum of 69 acres of Open/Green Space shall be provided throughout the Real Estate. Development amenities as required in Section 2.4, N and Section 3.3, B and Active Recreation facilities shall be included as Open/Green Space for the purposes of calculating the quantity of Open/Green Space provided. Any Open/Green Space, Green Belt Space, or Green Space Area requirement in the Zoning Ordinance or in the Harmony PUD Ordinance shall apply toward the Open/Green Space requirement.

Section 1.4. The Real Estate shall develop in a manner substantially similar to the layout shown in Exhibit C-1 - Illustrated Site Development Plan.

Section 1.5. The Real Estate is expected, but is not bound, to develop in the order of the sections identified in Exhibit D - Construction Phasing Plan.

ARTICLE 2. MIXED USE DISTRICT

The underlying zoning of Area A within the Mixed Use District shall be the MF-2 District in the Zoning Ordinance. The underlying zoning of Area B and Area C within the Mixed Use District shall be the LB District in the Zoning Ordinance. Said underlying zoning classifications, except as modified in this Article, shall govern the use and development of the Mixed Use District. The purpose of this Mixed Use District is to allow multifamily residential uses and commercial development.

Section 2.1. General Requirements. The following general requirements apply to the Mixed Use District.

- A. Parking may be permitted within the area between the right-of-way and building setback line.
- B. A planting buffer shall be provided on any yard that abuts a residential area external to the Real Estate in accordance with the Landscaping Standards of this Ordinance, unless otherwise provided in Article 5.
- C. Pedestrian connections shall be provided between buildings and parking areas via pavement striping and sidewalks.
- D. Sidewalk connections a minimum of five (5) feet in width shall be made between buildings and sidewalks/paths within the rights-of-way closest to the buildings.
- E. Chain link fencing is prohibited.
- F. The Mixed Use District as pictured on Exhibit B (Zoning District Map) contains 40.933 acres comprising 28.396 acres of commercial uses and 12.537 acres of multifamily uses. As more detailed plans are developed in the future, the exact acreage of the commercial area and the multifamily area may increase or decrease, but in no case shall the amount of increase for either use exceed 2.5 acres. The total acreage of the Mixed Use District shall not exceed 40.933 acres.

Section 2.2. Permitted Uses.

- A. In addition to the uses permitted in the LB District in the Zoning Ordinance, the following uses shall be permitted in the Mixed Use District:
 - 1. Health, fitness, and exercise center
 - 2. Multifamily residential

B. In addition to the uses permitted in the LB District in the Zoning Ordinance, in Area C of the Mixed Use District:

1. Restaurants with drive through facilities shall be permitted but limited to Snack Restaurants, Sandwich Restaurants, Pizza/Pasta Restaurants, Mexican Restaurants, Chicken Restaurants, and Asian Restaurants.
1. Burger Restaurants and Seafood Restaurants with drive through facilities shall not be permitted.

Section 2.3. Development Standards for Commercial Uses within the Mixed Use District.

A. Special Requirements.

1. Buildings within Area B and Area C of the Mixed Use District shall comply with *WC § 16.04.065(8), Architectural Design Requirements* of the City of Westfield's State Highway 32 Overlay Zone (the "Overlay Zone").
2. The maximum gross floor area of an individual business shall be 70,000 square feet. No more than one business within the entire development shall have a gross floor area of more than 50,000 square feet.
3. The aggregate maximum gross floor area of all commercial buildings shall be 170,000 square feet. The uses within Areas B and C of the Mixed Use District shall have the following maximum aggregate square footages by use type:
 - a. Grocery – 70,000 s.f.
 - b. Inline retail – 30,000 s.f.
 - c. Office – 40,000 s.f.
 - d. All uses on Outlots – 50,000 s.f.
 - e. Other permitted uses – 30,000 s.f.
4. Proximity Slope – *WC § 16.04.040(B)(11)* and *WC § 16.04.040(B)(13)* shall not apply to the development of the Real Estate.
5. Neighborhood commercial uses in the Mixed Use District shall be designed to encourage the design elements shown in Exhibit C-2.

B. Development Standards.

1. Minimum Lot Area – None.
2. Minimum Lot Frontage on Road – Direct access to a Public Way or indirect access to a Public Way via a Private Street is required.
3. Minimum Setback Lines (applied to perimeter of the Mixed Use District):
 - a. Front Yard – Twenty (20) feet
 - b. Side Yard – Twenty (20) feet
 - c. Rear Yard – Twenty (20) feet
4. Maximum Building Height – Forty-five (45) feet.
5. Loading and Parking - See Article 4 Off-Street Loading and Parking.
6. Landscaping - See Article 5 Landscaping Standards.

Section 2.4. Development Standards for Multifamily Uses within the Mixed Use District.

- A. Minimum Lot Area – None.
- B. Minimum Lot Frontage on Road – Direct access to a Public Way or indirect access to a Public Way via Private Street is required.
- C. Minimum Setback Lines (applied to perimeter of the Mixed Use District and lots abutting Public Ways):
 1. Front Yard – Twenty (20) feet
 2. Side Yard – Twenty (20) feet
 3. Rear Yard – Twenty (20) feet
- D. Minimum Setback from Internal Driveways/Parking Areas – Ten (10) feet.
- E. Maximum Density – Not applicable.
- F. Maximum Number of Attached Dwelling Units Per Structure – Thirty (30) attached dwelling units.

- G. Maximum Number of Attached Dwelling Units – Two hundred seventy (270) attached dwelling units.
- H. Minimum Square Footage Per Attached Dwelling Unit (excluding porches, terraces, carports, and garages):
1. A one bedroom attached dwelling unit shall have a minimum of six hundred fifty (650) square feet.
 2. A two bedroom attached dwelling unit shall have a minimum of eight hundred fifty (850) square feet.
 3. A three bedroom attached dwelling unit shall have a minimum of one thousand (1,000) square feet.
- I. Maximum Building Height – Forty (40) feet.
- J. Development Amenities and Proximity Slope – *WC § 16.04.040(B)(11)* and *WC § 16.04.040(B)(13)* shall not apply to the development of the Real Estate.
- K. Minimum Distance Between Buildings – Twenty (20) feet.
- L. Parking Lot Screening - In addition to the requirements in Article 5, off-street parking lots and spaces within 20 feet of a Public Way or adjacent to single or multifamily development shall be screened by either a three (3) foot high opaque wall or fence or by a solid hedge row. If a hedge row is used, the plants shall be evergreen shrubs and have a minimum mature height of three (3) feet, be spaced a maximum of 48 inches on center, and be a minimum of 18 inches in height at the time of installation.
- M. Development Amenities within Area A of the Mixed Use District – *WC § 16.04.040(B)(13)(b)* and *WC § 16.04.040(B)(13)(c)* shall not apply to the development of the Real Estate. The following amenities shall be distributed throughout Area A of the Mixed Use District:
1. A clubhouse a minimum of 8,000 square feet in size containing an exercise room, gathering room, conference space, reception area, sales offices, kitchen, conference room, maintenance area, and restrooms.
 2. A pool area containing a swimming pool with a minimum surface area of 800 square feet.
 3. An integrated trail and sidewalk system connecting buildings with common areas throughout Area A of the Mixed Use District.

N. Architectural Standards and Building Materials for all Principal Buildings

1. Building massing and quality of design and materials shall meet or exceed the standards reflected in the illustrations found in Exhibit F.
2. Permitted exterior building materials shall include: cultured stone, Masonry, wood, EIFS, stucco, and concrete fiber board. Vinyl or aluminum clad windows with wood (or wood composite material) exterior trim shall be permitted. Vinyl and aluminum siding are prohibited.
3. All buildings shall utilize a minimum of two (2) exterior building materials (excluding window, door, and roofing materials).
4. Masonry or Natural Materials shall be the exterior building material on a minimum of thirty percent (30%) of the elevation of all buildings, excluding openings such as doors and windows, roofs, and the area within any dormer projecting from a roof.
5. All buildings shall utilize a minimum of two (2) Exterior Building Material Designs per elevation. Horizontal concrete fiber board and shake concrete fiber board constitute different exterior building materials for the purpose of this standard.
6. All windows shall have either shutters and/or Enhanced Architectural Window Treatment.
7. The minimum Primary Roof Pitch on the front and sides of all Principal Buildings shall be 6/12, unless a flat roof (for roof examples see *WC § 16.04.065.J*) is being used for the building. Elements such as porches, bays, walkways, etc., may be covered with a lower roof pitch. Lower roof pitches may occur on rear elevations if concealed by side roof elements.
8. Roof vents shall be located to the rear of the dwelling. All vents shall be positioned to be minimally visible from the street and shall be painted to match the roofing material, black, or for those made of metal, left natural or painted to match the roofing material.

O. Development Plans. Multifamily development shall meet the following requirements, in addition to the other requirements set forth in this Ordinance.

1. In the event that more than one building is proposed, they shall be designed to be located so that no more than two (2) buildings are in a straight, unbroken line.
2. Architectural Breaks shall be constructed at intervals of not greater than sixty (60) feet.

P. Off-Street Loading and Parking - See Article 4.

Q. Landscaping - See Article 5.

ARTICLE 3. SINGLE FAMILY RESIDENTIAL DISTRICT

The underlying zoning of the single family uses within the Single Family Residential District shall be the SF-4 Single Family Residential District in the Zoning Ordinance. Said underlying zoning classification, except as modified in this Article, shall govern the use and development of the Single Family Residential District. The purpose of this Single Family Residential District is to allow a variety of detached single family residential living options.

Section 3.1. Building Height. All residential dwellings are permitted to be a maximum of thirty (30) feet in height.

Section 3.2. Permitted Uses. All uses permitted in the SF-4 District in the Zoning Ordinance.

Section 3.3. Development Requirements.

- A. Lots and buildings within the Single Family Residential District shall comply with the following development standards based upon lot classification:

Development Standard	Lot Classification						Add'l Restrictions
	Mew Lots	42' Alley-load lots	50' Alley-load lots	60' front load lots	70' front load lots	80' front load lots	
Minimum Lot Width at Building Line	42'	42'	50'	60'	70'	80'	
Minimum Lot Area	3,780 s.f.	3,780 s.f.	5,500 s.f.	7,200 s.f.	8,400 s.f.	9,600 s.f.	1, 2
Minimum Lot Frontage on a Public Way	0'	30'	40'	40'	40'	40'	
Minimum House Size (total square footage)	1,400 s.f.	1,400 s.f.	1,700 s.f.	2,000 s.f.	2,200 s.f.	2,600 s.f.	
Min. Ground Level Area – 1-story House	1,000 s.f.	1,000 s.f.	1,000 s.f.	1,200 s.f.	1,200 s.f.	1,200 s.f.	
Min. Ground Level Area – 2-story House	750 s.f.	750 s.f.	750 s.f.	800 s.f.	800 s.f.	800 s.f.	
Minimum Front Yard Setback	10'	10'	10'	20'	20'	20'	3
Minimum Side Yard Setback	5'	5'	5'	5'	5'	5'	
Minimum Rear Yard Setback	20'	20'	20'	20'	20'	20'	

Additional Restrictions:

1. No more than 225 lots shall be less than five thousand five hundred (5,500) square feet in lot area.
2. No more than 405 lots shall be less than seven thousand two hundred (7,200) square feet in lot area.
3. The front yard setback for the Mew Lots shall be measured from the narrowest property line adjacent to a Mew.

B. Development Amenities.

1. A recreation area shall be located immediately north of 151st Street west of Ditch Road and shall comply with the 50' alley-loaded lot standards noted above; except, that the community building shall be a minimum of 1,000 s.f. The community building shall meet or exceed the architectural standards in Section 3.4. The recreation area shall contain a swimming pool with a minimum surface area of 3,000 square feet, a baby pool with a minimum surface area of 100 square feet, and a play ground area.
2. Within the Open/Green Space located along the pipeline easements (see Exhibit C-1) the following amenities shall be provided:
 - i. An eight (8) foot wide asphalt trail the entire length of the Open/Green Space,
 - ii. A dog park with fenced enclosures and a shade pavilion,
 - iii. A playground, and
 - iv. A multi-purpose field with moveable soccer goals.

Section 3.4. Architectural Standards.

A. Architectural Design Standards. Each single family detached dwelling unit located on a Mew Lot, 42' Alley-load Lot, or 50' Alley-load Lot shall comply with one of the defined architectural designs detailed in Section 3.4,A,3. Each single family detached dwelling unit located on a 60' Front-load Lot, 70' Front-load Lot, or 80' Front-load Lot shall meet one of the following standards:

1. Comply with one of the defined architectural designs detailed in Section 3.4,A,3, or
2. Comply with the conventional design guidelines identified in Section 3.4,A,4.
3. Defined Architectural Designs. The following architectural designs of homes are permitted to be constructed within Harmony:

Adam (Colonial)
Georgian
Italianate
Shingle
Folk Victorian
Colonial Revival
Tudor
Craftsman

Architectural Detailing on the side and rear elevations of the building shall be consistent with the design of the Front Elevation.

- a. Adam (Colonial) – See Exhibit E, Figures 101, 102, 108, 109, and 110 for examples of qualifying Adam houses.
 - i. Identifying features – A minimum of three (3) items below shall be present on the Front Elevation in order to qualify as an Adam.
 - 1. Semi-circular or elliptical fanlight over front door. See Exhibit E, Figure 103 for examples of Adam Semi-circular or elliptical fanlight over front door. At least one of the types shown in Figure 103 shall be present in order to qualify.
 - 2. Cornice. See Exhibit E, Figure 104 for examples of Adam cornices. At least one of the types shown in Figure 104 shall be present in order to qualify.
 - 3. Windows. See Exhibit E, Figures 105 and 106 for examples of Adam windows. At least one of the types shown in Figures 105 and 106 shall be present in order to qualify.
 - 4. Windows aligned horizontally and vertically in symmetrical rows. See Exhibit E, Figures 101 and 102 for examples of Adam fenestration.
 - ii. Building Massing and Roof Types. One shall be present in order to qualify as an Adam house – See Exhibit E, Figure 107 for examples of Adam building massing and roof types.
 - 1. Side-gabled roof. See Exhibit E, Figure 108 for examples of Adam side-gabled roof houses.
 - 2. Hipped roof, two-story. See Exhibit E, Figure 109 for examples of Adam hipped roof, two-story houses.
 - 3. Centered gable. See Exhibit E, Figure 110 for examples of Adam centered gable houses.

b. Georgian – See Exhibit E, Figures 201, 202, 211, 212, 213, and 214 for examples of qualifying Georgian houses.

i. Identifying features – A minimum of four (4) items below shall be present on the Front Elevation in order to qualify as a Georgian house.

1. Paneled front door. See Exhibit E, Figure 203 for examples of Georgian entryways.
2. A row of small rectangular panes of glass beneath the crown, either within the door or in a transom just above. See Exhibit E, Figure 204 for examples of Georgian use of glass at the front door. At least one of the types shown in Figure 204 shall be present in order to qualify.
3. Cornice. See Exhibit E, Figure 205 for an example of a Georgian cornice. At least one of the types shown in Figure 205 shall be present in order to qualify.
4. Windows having small panes. See Exhibit E, Figure 206 for examples of Georgian windows. At least one of the types shown in Figure 206 shall be present in order to qualify.
5. Windows aligned horizontally and vertically in symmetrical rows. See Exhibit E, Figure 207 for examples of Georgian fenestration. At least one of the types shown in Figure 207 shall be present in order to qualify.
6. A central chimney or paired chimneys. See Exhibit E, Figure 208 for examples of Georgian chimneys. At least one of the types shown in Figure 208 shall be present in order to qualify.
7. Roof with an open side gable, gambrel, pedimented side gable, pent, hipped, or double-hipped configuration. See Exhibit E, Figure 209 for examples of Georgian roofs. At least one of the types shown in Figure 209 shall be present in order to qualify.

ii. Building Massing and Roof Types. One shall be present in order to qualify as a Georgian house – See Exhibit E, Figure 210 for examples of Georgian building massing and roof types.

1. Side-gabled roof. See Exhibit E, Figure 211 for examples of Georgian side-gabled roof houses.
2. Gambrel roof. See Exhibit E, Figure 212 for examples of Georgian gambrel roof houses.

3. Hipped roof. See Exhibit E, Figure 213 for examples of Georgian hipped roof houses.
4. Centered gable. See Exhibit E, Figure 214 for examples of Georgian centered gable houses.

c. Italianate – See Exhibit E, Figures 301, 302, 309, 310, 311, 312, and 313 for examples of qualifying Italianate houses.

i. Identifying features – A minimum of five (5) items below shall be present on the Front Elevation in order to qualify as a Italianate house.

1. Two stories. See Exhibit E, Figure 302 for examples of Italianate building heights.
2. Low-pitched roof with widely overhanging eaves having decorative brackets beneath. See Exhibit E, Figure 301 for an example of Italianate roof detailing.
3. Tall, narrow windows. See Exhibit E, Figure 303 for examples of Italianate windows. At least one of the types shown in Figure 303 shall be present in order to qualify.
4. Window crowns. See Exhibit E, Figure 304 for examples of Italianate window crowns. At least one of the types shown in Figure 304 shall be present in order to qualify.
5. A square cupola or tower. See Exhibit E, Figures 301 and 302 for examples of Italianate cupolas or towers. At least one of the types shown in Figures 301 and 302 shall be present in order to qualify.
6. A cornice line dominated by large eave brackets. See Exhibit E, Figure 305 for examples of Italianate cornices. At least one of the types shown in Figure 305 shall be present in order to qualify.
7. A single-story porch. See Exhibit E, Figure 306 for examples of Italianate porches. At least one of the types shown in Figure 306 shall be present in order to qualify.
8. Doorways in the same shapes as windows (rectangular, arched, segmentally arched) with elaborate enframements above doors that are similar to those over the windows. See Exhibit E, Figure 307 for examples of Italianate doorways. At least one of the types shown in Figure 307 shall be present in order to qualify.

ii. Building Massing and Roof Types. One shall be present in order to qualify as a Italianate house – See Exhibit E, Figure 308 for examples of Italianate building massing and roof types.

1. Simple hipped roof. See Exhibit E, Figure 309 for examples of Italianate simple hipped roof houses.

2. Centered gable. See Exhibit E, Figure 310 for examples of Italianate center gable houses.
3. Asymmetrical. See Exhibit E, Figure 311 for examples of Italianate asymmetrical houses.
4. Towered. See Exhibit E, Figure 312 for examples of Italianate towered houses.
5. Front-gabled roof. See Exhibit E, Figure 313 for examples of Italianate front-gabled roof houses.

- d. Shingle – See Exhibit E, Figures 401, 402, 407, 408, 409, 410, and 411 for examples of qualifying Shingle houses.
- i. Identifying features – A minimum of four (4) items below shall be present on the Front Elevation in order to qualify as a Shingle house.
1. Wall cladding and roofing of continuous wood or composition shingles (shingled wall may occur on second story only). See Exhibit E, Figures 401 and 402 for examples of Shingle wall cladding and roofing.
 2. Shingled walls without interruption at corners (no corner boards). See Exhibit E, Figure 401 for an example of Shingle walls.
 3. Asymmetrical elevation with irregular, steeply pitched roof line. See Exhibit E, Figure 402 for an example of a Shingle asymmetrical elevation.
 4. Roofs having intersecting cross gables and multi-level eaves. See Exhibit E, Figures 401 and 402 for examples of Shingle roofs;
 5. Extension porches. See Exhibit E, Figure 403 for examples of Shingle porches. At least one of the types shown in Figure 403 shall be present in order to qualify.
 6. Window surrounds using bay windows, multiple windows, walls curving into windows, and Palladian windows. See Exhibit E, Figure 404 for an example of a Shingle window. At least one of the types shown in Figure 404 shall be present in order to qualify.
 7. Dormers with geometric, angular, or curved roof. See Exhibit E, Figure 405 for an example of Shingle dormers. At least one of the types shown in Figure 405 shall be present in order to qualify.
- ii. Building Massing and Roof Types. One shall be present in order to qualify as a Shingle house – See Exhibit E, Figure 406 for examples of Shingle building massing and roof types.
1. Hipped roof with cross gables. See Exhibit E, Figure 407 for examples of Shingle hipped roof with cross gables houses.
 2. Side-gabled roof. See Exhibit E, Figure 408 for examples of Shingle side-gabled roof houses.

3. Front-gabled roof. See Exhibit E, Figure 409 for examples of Shingle front-gabled roof houses.
4. Cross-gabled roof. See Exhibit E, Figure 410 for examples of Shingle cross-gabled roof houses.
5. Gambrel roof. See Exhibit E, Figure 411 for examples of Shingle gambrel roof houses.

- e. Folk Victorian – See Exhibit E, Figures 501, 503, 504, 505, 506, and 507 for examples of a qualifying Folk Victorian house.
 - i. Identifying features – A minimum of two (2) items below shall be present on the Front Elevation in order to qualify as a Folk Victorian house.
 - 1. Porches with spindlework detailing or flat, jig-saw cut trim. See Exhibit E, Figure 501 for an example of a Folk Victorian porch.
 - 2. Symmetrical elevation (except gable-front-and-wing subtype).
 - 3. Cornice-line brackets. See Exhibit E, Figure 501 for an example of a Folk Victorian cornice-line bracket.
 - ii. Building Massing and Roof Types. One shall be present in order to qualify as a Folk Victorian house – See Exhibit E, Figure 502 for examples of Folk Victorian building massing and roof types.
 - 1. Front-gabled roof. See Exhibit E, Figure 503 for examples of Folk Victorian front-gabled roof houses.
 - 2. Gable front and wing. See Exhibit E, Figure 504 for examples of Folk Victorian gable front and wing houses.
 - 3. Side-gabled-roof, one-story. See Exhibit E, Figure 505 for examples of Folk Victorian side-gabled-roof, two-story houses.
 - 4. Side-gabled-roof, two-story. See Exhibit E, Figure 506 for examples of Folk Victorian side-gabled-roof, two-story houses.
 - 5. Pyramidal. See Exhibit E, Figure 507 for examples of Folk Victorian pyramidal houses.

- f. Colonial Revival – See Exhibit E, Figures 601, 605, 606, 607, 608, 609, 610, 611, and 612 for examples of a qualifying Colonial Revival house.
- i. Identifying features – A minimum of two (2) items below shall be present on the Front Elevation in order to qualify as a Colonial Revival house.
1. Accentuated front door. See Exhibit E, Figure 602 for examples of Colonial Revival accentuated front doors. At least one of the types shown in Figure 602 shall be present in order to qualify.
 2. Overhead fanlights or sidelights. See Exhibit E, Figure 602 for examples of Colonial Revival overhead fanlights or sidelights. At least one of the types shown in Figure 602 shall be present in order to qualify.
 3. Symmetrically balanced windows and center door. See Exhibit E, Figure 603 for examples of Colonial Revival fenestration. At least one of the types shown in Figure 603 shall be present in order to qualify.
- ii. Building Massing and Roof Types. One shall be present in order to qualify as a Colonial Revival house – See Exhibit E, Figure 604 for examples of Colonial Revival building massing and roof types.
1. Asymmetrical. See Exhibit E, Figure 605 for examples of Colonial Revival asymmetrical houses.
 2. Hipped roof with full-width porch. See Exhibit E, Figure 606 for examples of Colonial Revival hipped roof with full-width porch houses.
 3. Hipped roof without full-width porch. See Exhibit E, Figure 607 for examples of Colonial Revival hipped roof without full-width porch houses.
 4. Side-gabled roof. See Exhibit E, Figure 608 for examples of Colonial Revival side-gabled roof houses.
 5. Centered gable. See Exhibit E, Figure 609 for examples of Colonial Revival centered gable houses.
 6. Gambrel roof. See Exhibit E, Figure 610 for examples of Colonial Revival gambrel roof houses.
 7. Second-story overhang. See Exhibit E, Figure 611 for examples of Colonial Revival second-story overhang houses.

8. One-story. See Exhibit E, Figure 612 for examples of Colonial Revival one-story houses.

- g. Tudor – See Exhibit E, Figures 701, 702, 710, 711, 712, 713, and 714 for examples of qualifying Tudor houses.
- i. Identifying features – A minimum of four (4) items below shall be present on the Front Elevation in order to qualify as a Tudor house.
1. Steeply pitched roof. See Exhibit E, Figures 701 and 702 for examples of Tudor roofs.
 2. Elevation dominated by one or more prominent cross gables. See Exhibit E, Figure 703 for examples of Tudor cross gables. At least one of the types shown in Figure 703 shall be present in order to qualify.
 3. Decorative (i.e., not structural) half-timbering. See Exhibit E, Figure 704 for examples of Tudor decorative half-timbering. At least one of the types shown in Figure 704 shall be present in order to qualify.
 4. Tall, narrow windows. See Exhibit E, Figure 705 for examples of Tudor windows. At least one of the types shown in Figure 705 shall be present in order to qualify.
 5. Massing chimneys. See Exhibit E, Figure 706 for examples of Tudor massing chimneys. At least one of the types shown in the Figure shall be present in order to qualify.
 6. Gables with decorated vergeboards or parapeted gables. See Exhibit E, Figure 707 for examples of Tudor gables. At least one of the types shown in Figure 707 shall be present in order to qualify.
 7. Doorways with cut stone projecting into surrounding brickwork giving a quoin-like effect, simple round-arched doorways with heavy board-and-batten doors, or Tudor (flattened pointed) arches. See Exhibit E, Figure 708 for examples of Tudor doorways. At least one of the types shown in Figure 708 shall be present in order to qualify.
- ii. Building Massing and Roof Types. One shall be present in order to qualify as a Tudor house – See Exhibit E, Figure 709 for examples of Tudor building massing and roof types.
1. Stucco wall cladding. See Exhibit E, Figure 710 for examples of Tudor stucco wall cladding houses.
 2. Brick wall cladding. See Exhibit E, Figure 711 for examples of Tudor brick wall cladding houses.

3. Stone wall cladding. See Exhibit E, Figure 712 for examples of Tudor stone wall cladding houses.
4. Wooden wall cladding. See Exhibit E, Figure 713 for examples of Tudor wooden wall cladding houses.
5. Parapeted gables. See Exhibit E, Figure 714 for examples of Tudor parapeted gables houses.

- h. Craftsman – See Exhibit E, Figures 801, 802, 806, 807, 808, and 809 for examples of qualifying Craftsman houses.
- i. Identifying features – A minimum of three (3) items below shall be present on the Front Elevation in order to qualify as a Craftsman house.
 - 1. Low-pitched, gabled or hipped roof with wide, unenclosed eave overhang. See Exhibit E, Figures 801 and 802 for examples of a Craftsman roof.
 - 2. Exposed roof rafters. See Exhibit E, Figure 803 for examples of Craftsman roof rafters.
 - 3. Decorative (false) beams or braces added under gables; porches, either full- or partial-width, with roof supported by tapered square columns. See Exhibit E, Figure 803 for examples of Craftsman decorative (false) beams or braces.
 - 4. Columns or pedestals extend to ground level. See Exhibit E, Figure 804 for examples of Craftsman columns or pedestals. At least one of the types shown in Figure 804 shall be present in order to qualify.
- ii. Building Massing and Roof Types. One shall be present in order to qualify as a Craftsman house – See Exhibit E, Figure 805 for examples of Craftsman building massing and roof types.
 - 1. Front-gabled roof. See Exhibit E, Figure 806 for examples of Craftsman front-gabled roof houses.
 - 2. Cross-gabled roof. See Exhibit E, Figure 807 for examples of Craftsman cross-gabled roof houses.
 - 3. Side-gabled roof. See Exhibit E, Figure 808 for examples of Craftsman side-gabled roof houses.
 - 4. Hipped roof. See Exhibit E, Figure 809 for examples of Craftsman hipped roof houses.

4. Conventional Design Standards. Each dwelling not following a defined architectural design as established in Section 3.4, A, 3 shall conform with the following design standards. Roof design elements shall contribute to no more than two (2) of the required architectural elements for the same elevation. An architectural element used to meet the standards for one elevation shall not contribute as an element on other elevations.
- a. Front Elevation. Each dwelling shall utilize a minimum of six (6) of the following architectural elements on the Front Elevation:
- i. Side load, rear load, or angled ($>15^\circ$) garage;
 - ii. Covered front porch at least six (6) feet in width and four (4) feet in depth;
 - iii. Roofline direction change or roofline height change greater than sixteen (16) inches on the dwelling and attached garage (dormers and porches shall not qualify to meet this standard);
 - iv. Wood, concrete fiber board, trim at corners, frieze boards, window and door wraps, and as transitional material between two different exterior materials;
 - v. Decorative shutters or other Enhanced Architectural Window Treatment on all windows, where feasible (a minimum of three (3) windows with shutters are required to meet this provision);
 - vi. Architectural Break, including cantilevered offsets, of at least two (2) feet of relief at two (2) or more points along the Front Elevation, excluding relief for doors and windows and garages (homes incorporating two (2) or more Architectural Breaks shall be deemed to have met two (2) of the element requirements);
 - vii. Primary Roof Pitches of 8/12 or greater and Secondary Roof Pitches of 10/12 or greater;
 - viii. Masonry, EIFS, stucco, cultured stone material on a minimum of the first floor or twenty-five percent (25%) of the total elevation, exclusive of windows and doors;
 - ix. Separate overhead garage door for each car space;
 - x. Roof design featuring hip roof, dormers (a minimum of two (2) dormers), a reverse gable, a shed roof accent, or two (2) or more roof planes;

- xi. Architecturally-treated Entranceways (for homes without a front porch) consistent with the architectural design of the home;
- xii. Bay window(s);
- xiii. Transom window(s);
- xiv. Veranda/balcony;
- xv. Architecturally-enhanced Articulated Trim Moldings (e.g. fipons above windows); or
- xvi. Exterior chase Masonry fireplace.

- b. Side Elevation. Each dwelling shall utilize a minimum of three (3) of the following architectural elements on each side elevation. Side elevations that face Public Ways on corner lots, or Open/Green Space on Mew Lots, shall utilize a minimum of five (5) of the following architectural elements on said side elevation:
- i. Side load, rear load, or angled ($>15^{\circ}$) garage;
 - ii. Hip roof;
 - iii. Roofline direction change OR roofline height change greater than sixteen (16) inches OR two or more roof planes;
 - iv. Architectural Break, including cantilevered offsets, of at least two (2) feet of relief at two (2) or more points along the side elevation, excluding relief for doors and windows and garages (homes incorporating two (2) or more Architectural Breaks shall be deemed to have met two (2) of the element requirements);
 - v. Masonry, EIFS, stucco, cultured stone material a minimum of eighteen (18) inches in height the entire length of the elevation or a five (5) foot return on the first floor;
 - vi. Three (3) or more windows on the elevation;
 - vii. Side yard landscaping to include at least one (1) tree a minimum of six (6) feet in height at the time of planting and three (3) shrubs three (3) feet in height at the time of planting;
 - viii. Bay window(s);
 - ix. Transom window(s);
 - x. Veranda/balcony;
 - xi. Architecturally-enhanced Articulated Trim Moldings (e.g. fipons above windows);
 - xii. Exterior chase fireplace;
 - xiii. Architectural Treatment on Gable Ends; or
 - xiv. Sunroom or screened porch.

- c. Rear Elevation. Each dwelling shall utilize a minimum of three (3) of the following architectural elements on the rear elevation. Rear elevations that face exterior Public Ways, and which are located within fifty (50) feet of that Public Way, shall utilize a minimum of five (5) of the following architectural elements on said rear elevation:
- i. Covered open or screened porch (minimum size ten (10) foot by ten (10) foot, includes porches with arbor or similar roof treatments);
 - ii. Shutters on all windows, where they can fit (a minimum of three (3) windows with shutters are required);
 - iii. Architectural Break, including cantilevered offsets, of at least two (2) feet of relief at two (2) or more points along the rear elevation, excluding relief for doors and windows and garages (homes incorporating two (2) or more Architectural Breaks shall be deemed to have met two (2) of the element requirements);
 - iv. Masonry, EIFS, stucco, cultured stone material a minimum of eighteen (18) inches in height the entire length of the elevation or a five (5) foot return on the first floor;
 - v. Hip roof;
 - vi. Elevated deck a minimum of twenty-four (24) inches above finish grade;
 - vii. Roofline direction change OR roofline height change greater than sixteen (16) inches OR two (2) or more roof planes;
 - viii. Bay window(s);
 - ix. Transom window(s);
 - x. Veranda/balcony;
 - xi. Rear yard landscaping to include at least two (2) trees, one of which shall be an evergreen tree (a minimum of six [6] feet in height at the time of planting) and at least one of which shall be a deciduous tree (a minimum of 2" caliper 12 inches above finished grade) and five (5) shrubs (a minimum of three [3] feet in height at the time of planting).
 - xii. Architecturally-enhanced Articulated Trim Moldings (e.g. fipons above windows);
 - xiii. Exterior chase fireplace; or

xiv. Architectural Treatment on Gable Ends.

- d. Garage Doors. A maximum of 120 dwellings that follow the Conventional Design Standards detailed in Section 3.4,A,4 may have garage doors that are not Architectural Garage Doors. All other dwellings that follow the Conventional Design Standards shall have Architectural Garage Doors.

B. The following architectural standards apply to all dwellings within the Single Family Residential District.

1. On homes with front load garages, the garage door shall be recessed behind the primary plane of the Front Elevation of the home a minimum of two (2) feet.
2. Building Materials. Permitted exterior building materials shall include: cultured stone, Masonry, wood, EIFS, stucco, and concrete fiber board. Vinyl or aluminum clad windows with wood (or wood composite material) exterior trim shall be permitted. Vinyl and aluminum siding are prohibited.
3. Windows.
 - a. A dwelling shall have a minimum of three (3) windows on the Front Elevation of the structure.
 - b. A dwelling shall have a minimum of two (2) windows on each side elevation. A door on the side elevation shall meet the requirements of one window.
 - c. A dwelling shall have a minimum of three (3) windows on the rear elevation.
 - d. A double window (a single window unit a minimum of four (4) feet in width with two windows side by side) shall count as two windows.
4. The minimum slope of the Primary Roof Pitch shall be 6/12. Secondary Roof Pitches such as porches, bays, walkways, etc., may be covered with a lower roof pitch.
5. Roof overhangs shall be required and shall be a minimum of 8 inches. Elements such as porches, bays, walkways, etc. may be covered with fewer inches of overhang.
6. Roof vents shall be located to the rear of the dwelling. All vents shall be positioned to be minimally visible from the street and shall be painted to match the roofing material, black, or for those made of metal, left natural or painted to match the roofing material.

Section 3.5. Additional Standards.

- A. The maximum number of single family detached dwellings shall be seven hundred ten (710).
- B. Single family detached dwellings shall comply with the variety requirements illustrated below:

	3		3
	2		2
	1		1
Subject Dwelling			1
	1		1
	2		2
	3		3

Dwelling	May be Same Front Elevation as Subject Dwelling	May be Same Color Package as Subject Dwelling
1	No	No
2	Yes	No
3	Yes	Yes

ARTICLE 4. OFF-STREET LOADING AND PARKING

WC § 16.04.120 of the Zoning Ordinance, entitled "Off-Street Loading and Parking", shall be applicable to the use and development of the Real Estate, subject to the following exceptions:

Section 4.1. Loading Berths. The Other Local Business off-street loading guidelines in *WC § 16.04.120* shall be modified as follows: two (2) loading berths for businesses with 10,001 or more square feet.

Section 4.2. Off-Street Parking.

- A. Collective Provisions for the Mixed Use District. Off-street parking facilities for separate uses may be provided collectively. A reduction down to not less than 80% of the total number of spaces required for all uses is permitted.
- B. Curbs. All parking lots, including access drives and parking spaces, shall require concrete curbing unless the curb conflicts with the provision of Low Impact Development ("LID") design elements, as determined by the Economic and Community Development Director. In LID situations, wheel stops may be used adjacent to parking stalls as determined by the Economic and Community Development Director. This requirement is not applicable to single family detached dwellings.
- C. Required Spaces. Parking spaces accessory to designated uses shall be provided to meet the following minimum requirements:
 - 1. General Offices: One (1) parking space per each two hundred fifty (250) square feet of assignable office area.
 - 2. Retail Uses: One (1) parking space per each three (300) square feet of gross leasable area.
 - 3. Multifamily Residential Uses:
 - a. One (1) parking space per bedroom of each dwelling unit.
 - b. The minimum number of garage parking spaces shall be equal to 60% of the total number of dwelling units within the multifamily area of the Mixed Use District.
 - c. Two (2) parking spaces for every one thousand (1,000) square feet of clubhouse.
- D. Size. A required off-street parking space shall be at least nine (9) feet in width and at least eighteen (18) feet in length, exclusive of drives, aisles, ramps, and columns.
- E. Each required off-street parking space within Area A of the Mixed Use District shall open directly upon an aisle or a driveway of such width and design as to provide safe access to the street. Tandem parking spaces adjacent to individual garages shall meet this requirement provided that both the garage and tandem space are dedicated to the same tenant.

- F. A parking area a minimum depth of 20 feet shall be provided in front of all garage doors within the Single Family Residential District.

Section 4.3. Bicycle Parking Facilities. Bicycle parking facilities shall be required as follows:

- A. A bicycle parking facility, that will accommodate a minimum of ten (10) bicycles, shall be provided at each of the following locations:
 - 1. The clubhouse within Area A of the Mixed Use District,
 - 2. The recreation area within the Single Family Residential District, and
 - 3. Area B within the Mixed Use District.
- B. In addition to the bicycle parking facilities required under Section 4.3, A, 3, bicycle parking facilities that will accommodate a minimum of two (2) bicycles each shall be provided at each building within Area B of the Mixed Use District.

ARTICLE 5. LANDSCAPING STANDARDS

WC § 16.06.010 thru *WC § 16.06.080*, entitled "Landscaping Standards", shall be applicable to the use and development of the Real Estate, subject to the following exceptions:

Section 5.1. Low Impact Development ("LID") Considerations. Perennial ornamental grasses with a mature height of no more than six (6) feet, may be substituted for shrubs where necessary to address LID applications, as determined by the Economic and Community Development Director. Ornamental grasses shall not be used as a substitute for buffer yard plantings. The minimum container size for planting ornamental grasses shall be one gallon.

Section 5.2. Buffer Yard Requirements.

- A. Buffer yards shall not be required internal to the Real Estate.
- B. Buffer yards shall not be required where the front of lots or dwellings face 146th Street, 151st Street, 156th Street or Ditch Road, except as required by Section 5.3.
- C. Where the rear yards of lots abut Ditch Road, a minimum 20 foot wide landscape buffer containing a minimum of one (1) evergreen tree, one (1) shade tree, one (1) ornamental tree, and five (5) evergreen shrubs per 30 linear feet of frontage shall be installed. For the area between 151st Street and the pipeline easements, the minimum width of the landscape easement shall vary from 20 feet to 40 feet as shown on Exhibit C-1.
- D. A minimum 40 foot wide landscape buffer shall be provided in the areas abutting the existing large lot residential parcels on the south side of 156th Street as shown on Figure #2.

Section 5.3. Landscape Buffer in the Mixed Use District.

- A. In the areas noted Landscape Buffer A on the following illustration, Figure #1, a landscape buffer a minimum of 20 feet wide and planted with a minimum of one and one-half (1.5) evergreen trees, and five (5) evergreen shrubs per 30 linear feet of frontage shall be installed.
- B. In the areas noted Landscape Buffer B on the following illustration, Figure #1, a landscape buffer a minimum of 10 feet wide and planted with a minimum of one (1) evergreen tree, and five (5) evergreen shrubs per 30 linear feet of frontage shall be installed.

Section 5.4. Refer to Section 2.4,M for additional parking lot screening requirements for Area A of the Mixed Use District.

Figure #1

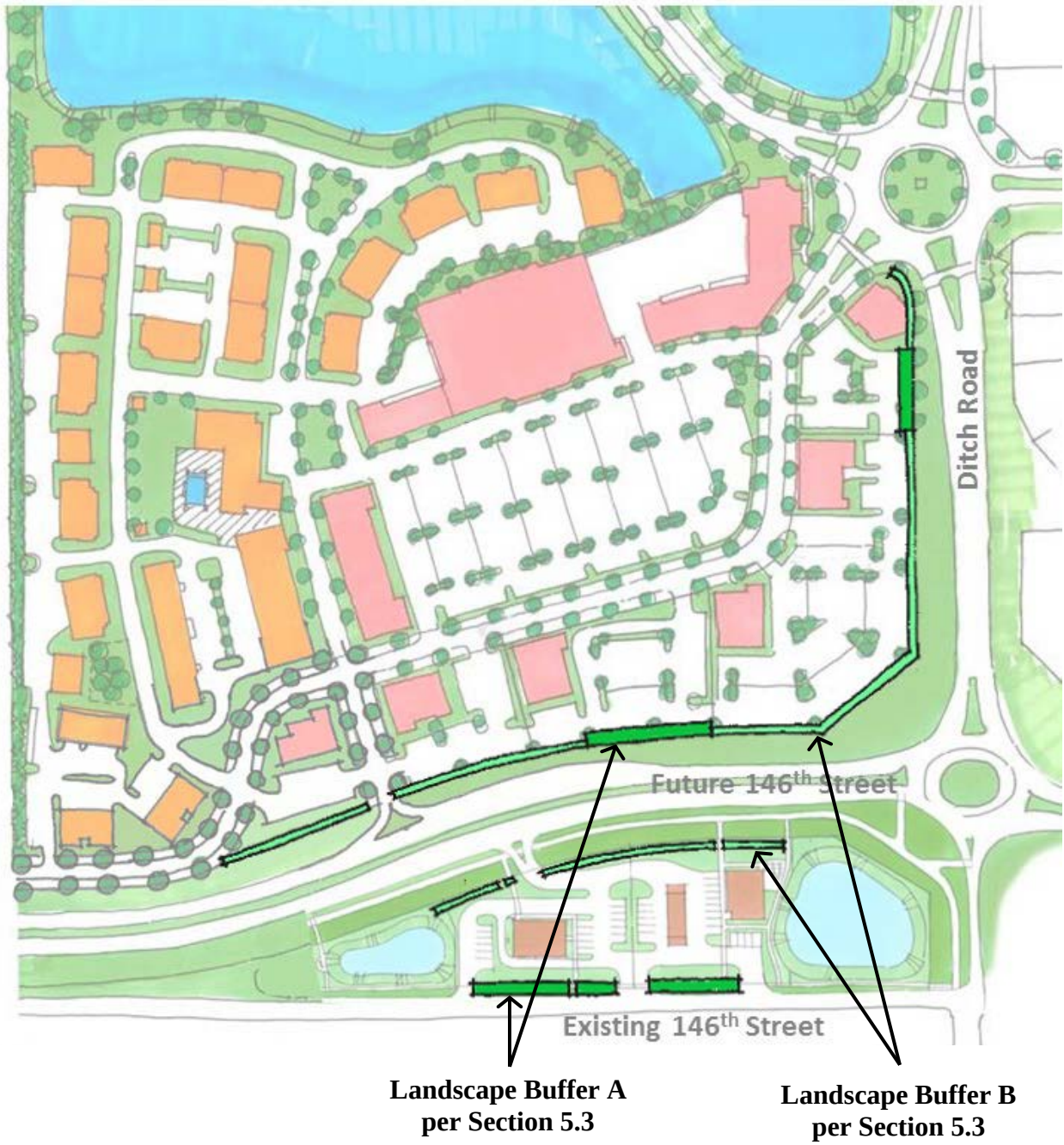


Figure #2



ARTICLE 6. DEFINITIONS

“Alley” shall mean a permanent right-of-way or easement which provides a secondary means of access to abutting lands. In the case of Mew Lots, an Alley will provide the primary means of access to the lot.

“Architectural Break” shall mean and refer to the corner of a projection along an elevation of a building. The exterior corners of a covered porch and a projection with a height of no less than six (6) feet and projection of no less than two (2) feet shall count as an Architectural Break.

“Architectural Detailing” shall mean detailed design, location, composition and correlation of elements that provide ornamentation.

“Architectural Garage Door” shall mean and refer to a garage door with Architectural Detailing reflecting the design of the building. The architectural details may include windows, materials, colors, hardware specifications, etc., consistent with the details of the remainder of the primary building.

“Architecturally-enhanced Articulated Trim Mouldings” shall mean and refer to a decorative strip used for ornamentation or finishing with materials, dimensions, and colors that are consistent with and enhance the architectural design of a building.

“Architecturally-treated Entranceways” shall mean and refer to the use of trim details on the three sides of a door or entrance point into a building to draw attention to the entrance.

“Architectural Treatment on Gable Ends” shall mean and refer to the finishing of the triangular area of the side of a building with a gable roof with architectural details consistent with the design of the home.

“Color Package” shall mean a combination of the color of the following elements: the main body of the house, the trim, and an optional accent color. To be different from another Color Package, a Color Package must include at least two of the three elements being of a different color.

“Construction Phasing Plan” shall mean and refer to the Construction Phasing Plan attached hereto and incorporated herein by reference as Exhibit D.

“Enhanced Architectural Window Treatment” shall mean and refer to Architectural Detailing of elements around window openings. For windows in a Masonry elevation, the treatment shall be of natural or Masonry materials and be applied to the sill and header at a minimum. For windows in a non-Masonry elevation, the treatment shall be of Natural Materials and be applied to the sill, header, and jams. The width of the treatment shall be a minimum of 3½ inch reveal dimension of the base siding material.

“Exterior Building Material Design” shall mean the combination of exterior building materials used on a building.

“Front Elevation” shall mean the exterior side of a dwelling that primarily faces the street. In the case of a Mew Lot, the Front Elevation shall be that exterior side of the dwelling that primarily faces the Mew. In the case of a corner lot, the Front Elevation shall be determined by the builder and shall be clearly identified on the building permit plans.

“Illustrative Site Development Plans” shall mean and refer to the Illustrative Site Development Plans attached hereto and incorporated herein by reference as Exhibit C.

“Lot, Mew” shall mean and refer to a lot fronting upon Open/Green Space and served by an Alley.

“Low Impact Development (LID)” shall mean and refer to an approach to land development that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product.

“Masonry” shall mean and refer to brick, limestone, natural stone, cultured stone, or a combination of the same, bonded together with mortar to form a wall, buttress, or similar mass.

“Mew” shall mean and refer to the Open/Green Space the Front Elevation of a dwelling on a Mew Lot faces.

“Mixed Use District” shall mean and refer to what is identified on the Zoning District Map in Exhibit B as Mixed Use.

“Natural Materials” shall mean and refer to brick, wood, limestone, fiber cement siding, or natural stone.

“Owner” shall mean and refer to any owner of any part of the Real Estate.

“Real Estate” shall mean and refer to the property described in what is attached hereto and incorporated herein by reference as Exhibit A.

“Restaurant, Asian” shall mean a Quick Service Restaurant specializing in cuisine from the Asian region.

“Restaurant, Burger” shall mean a Quick Service Restaurant specializing in hamburgers as the primary menu feature.

“Restaurant, Chicken” shall mean a Quick Service Restaurant specializing in chicken as the primary menu feature.

“Restaurant, Mexican” shall mean a Quick Service Restaurant specializing in Mexican cuisine.

"Restaurant, Pizza/Pasta" shall mean a Quick Service Restaurant specializing in pizza and pasta as the primary menu features.

"Restaurant, Quick Service" shall mean an establishment primarily engaged in providing food services where patrons order or select items and pay before eating. Food and drink may be consumed on premises, taken out, or delivered to the customer's location.

"Restaurant, Sandwich" shall mean a Quick Service Restaurant specializing in sandwiches as the primary menu feature.

"Restaurant, Seafood" shall mean a Quick Service Restaurant specializing in seafood as the primary menu feature.

"Restaurant, Snack" shall mean a Quick Service Restaurant specializing in (1) preparing and/or serving a specialty snack, such as ice cream, frozen yogurt, doughnuts, bagels, cookies, or popcorn or (2) serving nonalcoholic beverages, such as coffee, juices, or sodas for consumption on or near the premises. These establishments may carry and sell a combination of snack, nonalcoholic beverage, and other related products (e.g., coffee beans, mugs, coffee makers) but primarily promote and sell a unique snack or nonalcoholic beverage.

"Roof Pitch, Primary" shall mean and refer to the slope of the Primary Roof of a building. The pitch of a roof is measured in degrees or the vertical rise in inches for every horizontal 12 inch length (called the "run").

"Roof Pitch, Secondary" shall mean and refer to any roof pitch on a building that is not the Primary Roof Pitch.

"Roof, Primary" shall mean and refer to the portion of a building's roof structure that most contributes to the mass of a building due to its predominance in height, width, length, bulk, or volume of area covered.

"Single Family Residential District" shall mean and refer to what is identified on the Zoning District Map in Exhibit B as the Single Family Residential District.

"Zoning District Map" shall mean and refer to the Zoning District Map attached hereto and incorporated herein by reference as Exhibit B.

"Zoning Ordinance" shall mean and refer to the Comprehensive Zoning Ordinance of Westfield-Washington Township, 1977, as amended.

ARTICLE 7. CITY OF WESTFIELD'S STATE HIGHWAY 32 OVERLAY ZONE STANDARDS

Buildings shall comply with *WC § 16.04.065(8)* Architectural Design Requirements of the State Highway 32 Overlay Zone (the "Overlay Zone"). Standards in the Overlay Zone that apply to the State Highway 32 right-of-way line shall be applied to the Ditch Road and 146th Street right-of-way lines adjacent to the Real Estate, unless otherwise stated herein. Standards in the Overlay Zone that refer to the State Highway 32 Overlay Zone shall mean and refer to the Harmony PUD, for the purposes of this Ordinance.

Exhibit A

Legal Descriptions and Boundary Information

Exhibit A – Legal Description of Overall Property

Harmony
Southwest corner of 156th Street & Ditch Road

Part of the Northeast, Southeast and Northwest Quarters of Section 16, Township 18 North, Range 3 East in Hamilton County, Indiana, more particularly described as follows:

BEGINNING at the northeast corner of said Northeast Quarter; thence South 00 degrees 00 minutes 00 seconds East (assumed basis of bearings) along the east line of said Northeast Quarter 2,630.58 feet to the northeast corner of said Southeast Quarter; thence South 00 degrees 12 minutes 08 seconds East along the east line of said Southeast Quarter 2,636.09 feet to the southeast corner thereof; thence South 89 degrees 25 minutes 04 seconds West along the south line of said Southeast Quarter 1,352.44 feet to the southwest corner of the East Half of said Southeast Quarter; thence North 00 degrees 18 minutes 09 seconds West along the west line of said East Half 2,633.15 feet to the southeast corner of the West Half of said Northeast Quarter; thence South 89 degrees 17 minutes 41 seconds West along the south line of said West Half 1,357.06 feet to the southeast corner of said Northwest Quarter; thence South 89 degrees 01 minute 52 seconds West along the south line of said Northwest Quarter 678.57 feet to the southwest corner of the East Half of the Southeast Quarter of said Northwest Quarter; thence North 00 degrees 11 minutes 40 seconds West along the West line of said East Half 1,315.85 feet to the northwest corner thereof; thence South 89 degrees 07 minutes 04 seconds West along the south line of the Northeast Quarter of said Northwest Quarter 679.24 feet to the southwest corner thereof; thence North 00 degrees 13 minutes 26 seconds West along the west line of the Northeast Quarter of said Northwest Quarter 823.64 feet to a point that is 493.24 feet South 00 degrees 13 minutes 26 seconds East from the northwest corner of the Northeast Quarter of said Northwest Quarter; thence North 89 degrees 12 minutes 17 seconds East parallel with the north line of said Northwest Quarter 794.85 feet; thence North 00 degrees 13 minutes 26 seconds West 3.82 feet; thence North 89 degrees 12 minutes 17 seconds East parallel with the north line of said Northwest Quarter 285.30 feet to an east line of the 119.55-acre tract described in Instrument Number 200300107178, on file in the Office of the Recorder of Hamilton County, Indiana, the following six (6) courses are along the east, south and west lines of said 119.55-acre tract; 1)thence South 00 degrees 09 minutes 54 seconds East 108.70 feet; 2)thence North 89 degrees 12 minutes 17 seconds East 279.15 feet to the west line of said Northeast Quarter; 3)thence North 89 degrees 16 minutes 38 seconds East 450.00 feet; 4)thence South 00 degrees 09 minutes 53 seconds East 57.15 feet; 5)thence North 89 degrees 16 minutes 38 seconds East 518.47 feet; 6)thence North 00 degrees 00 minutes 00 seconds East parallel with the east line of said Northeast Quarter 655.30 feet to a point on the north line of said Northeast Quarter that is 1,751.34 feet west of the northeast corner of said Northeast Quarter; thence North 89 degrees 16 minutes 38 seconds East along said north line 1,751.34 feet to the POINT OF BEGINNING. Containing 277.55 acres, more or less.

Exhibit A – Legal Description of Area A in the Mixed Use District

LEGAL DESCRIPTION AREA A

Part of the Southeast Quarter of the Southeast Quarter of Section 16, Township 18 North, Range 3 East, in Hamilton County, Indiana, more particularly described as follows:

COMMENCING at the southeast corner of said Quarter Quarter Section, the following three (3) courses are along the south and west lines thereof; (1) thence South 89 degrees 25 minutes 04 seconds West 1352.44 feet to the southwest corner of said Quarter Quarter Section; (2) thence North 00 degrees 18 minutes 09 seconds West 217.93 feet to the POINT OF BEGINNING; (3) thence North 00 degrees 18 minutes 09 seconds West 1037.19 feet; thence North 88 degree 58 minutes 18 seconds East 313.16 feet; thence South 77 degrees 25 minutes 17 seconds East 228.55 feet; thence North 72 degrees 50 minutes 48 seconds East 156.26 feet; thence South 85 degrees 36 minutes 16 seconds East 72.10 feet; thence South 66 degrees 48 minutes 09 seconds East 84.24 feet; thence South 39 degrees 24 minutes 00 seconds East 133.60 feet; thence South 75 degrees 24 minutes 46 seconds West 278.11 feet; South 47 degrees 10 minutes 32 seconds West 103.05 feet; thence South 20 degrees 33 minutes 07 seconds West 126.00 feet; thence South 87 degrees 08 minutes 18 seconds West 147.66 feet; thence South 08 degrees 21 minutes 04 seconds East 203.08 feet; thence South 15 degrees 39 minutes 18 seconds East 348.42 feet; thence South 70 degrees 26 minutes 11 seconds West 236.73 feet; thence South 83 degrees 05 minutes 16 seconds West 183.83 feet; thence North 86 degrees 20 minutes 47 seconds West 95.84 feet to the POINT OF BEGINNING, containing 12.537 acres more or less.

Exhibit A – Legal Description of Areas B & C in the Mixed Use District

LEGAL DESCRIPTION

AREA B and C

The Southeast Quarter of the Southeast Quarter of Section 16, Township 18 North, Range 3 East, in Hamilton County, Indiana, more particularly described as follows:

BEGINNING at the Southeast Corner of said Quarter Quarter Section, the following four (4) courses are along the south, west, north, and east lines thereof; (1) thence South 89 degrees 25 minutes 04 seconds West 1352.44; (2) thence North 00 degrees 18 minutes 09 seconds West 1316.58 feet; (3) thence North 89 degrees 21 minutes 22 seconds East 1354.75 feet; (4) thence South 00 degree 12 minutes 08 seconds East 1318.05 feet to the POINT OF BEGINNING, containing 40.933 acres more or less.

EXCEPT (AREA A)

Part of the Southeast Quarter of the Southeast Quarter of Section 16, Township 18 North, Range 3 East, in Hamilton County, Indiana, more particularly described as follows:

COMMENCING at the southeast corner of said Quarter Quarter Section, the following three (3) courses are along the south and west lines thereof; (1) thence South 89 degrees 25 minutes 04 seconds West 1352.44 feet to the southwest corner of said Quarter Quarter Section; (2) thence North 00 degrees 18 minutes 09 seconds West 217.93 feet to the POINT OF BEGINNING; (3) thence North 00 degrees 18 minutes 09 seconds West 1037.19 feet; thence North 88 degree 58 minutes 18 seconds East 313.16 feet; thence South 77 degrees 25 minutes 17 seconds East 228.55 feet; thence North 72 degrees 50 minutes 48 seconds East 156.26 feet; thence South 85 degrees 36 minutes 16 seconds East 72.10 feet; thence South 66 degrees 48 minutes 09 seconds East 84.24 feet; thence South 39 degrees 24 minutes 00 seconds East 133.60 feet; thence South 75 degrees 24 minutes 46 seconds West 278.11 feet; South 47 degrees 10 minutes 32 seconds West 103.05 feet; thence South 20 degrees 33 minutes 07 seconds West 126.00 feet; thence South 87 degrees 08 minutes 18 seconds West 147.66 feet; thence South 08 degrees 21 minutes 04 seconds East 203.08 feet; thence South 15 degrees 39 minutes 18 seconds East 348.42 feet; thence South 70 degrees 26 minutes 11 seconds West 236.73 feet; thence South 83 degrees 05 minutes 16 seconds West 183.83 feet; thence North 86 degrees 20 minutes 47 seconds West 95.84 feet to the POINT OF BEGINNING, containing 12.537 acres more or less.

Exhibit B

Zoning District Map

Exhibit B – Zoning District Map

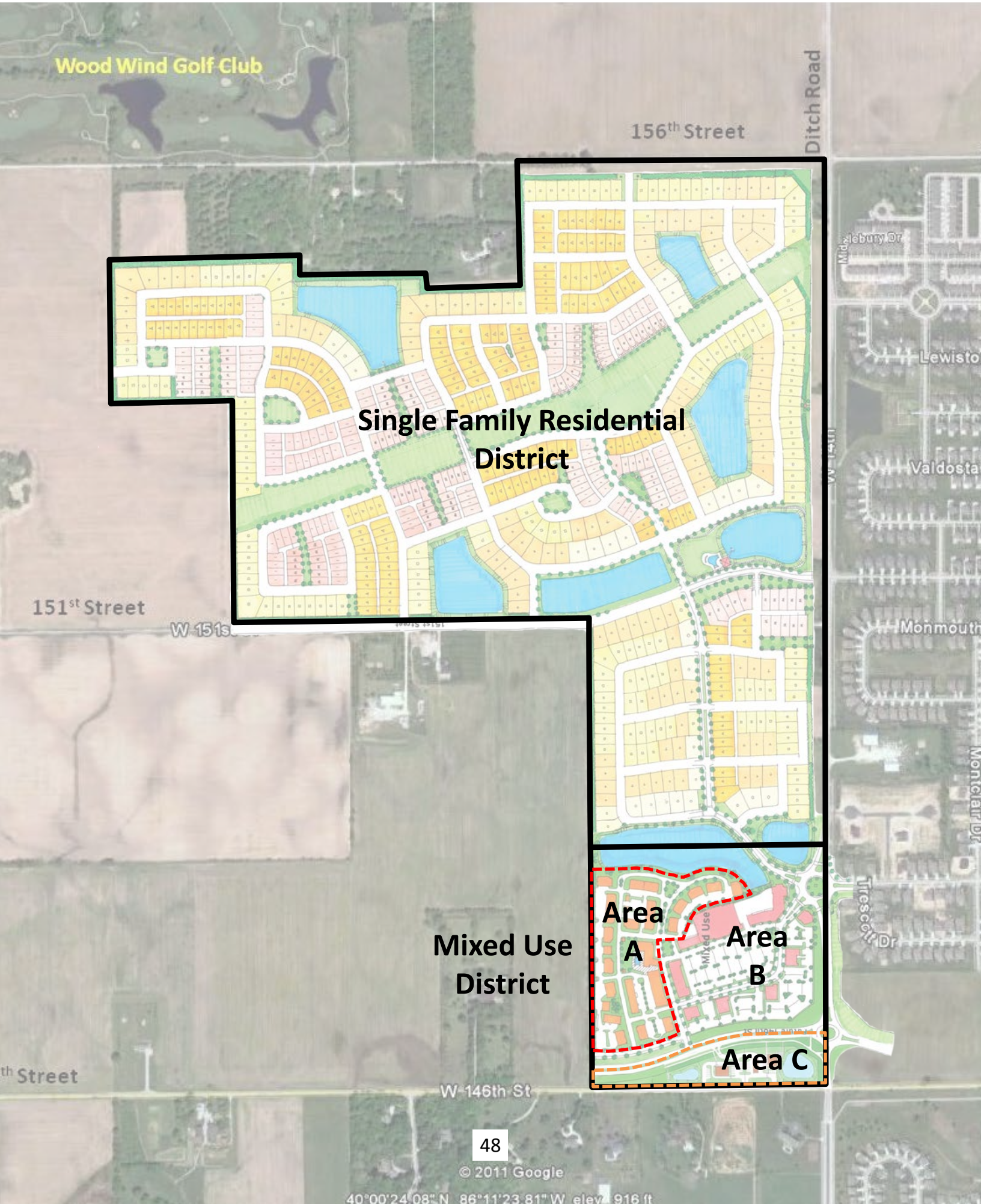


Exhibit C

Illustrated Site Development Plans

Exhibit C-1 – Illustrative Site Development Plan

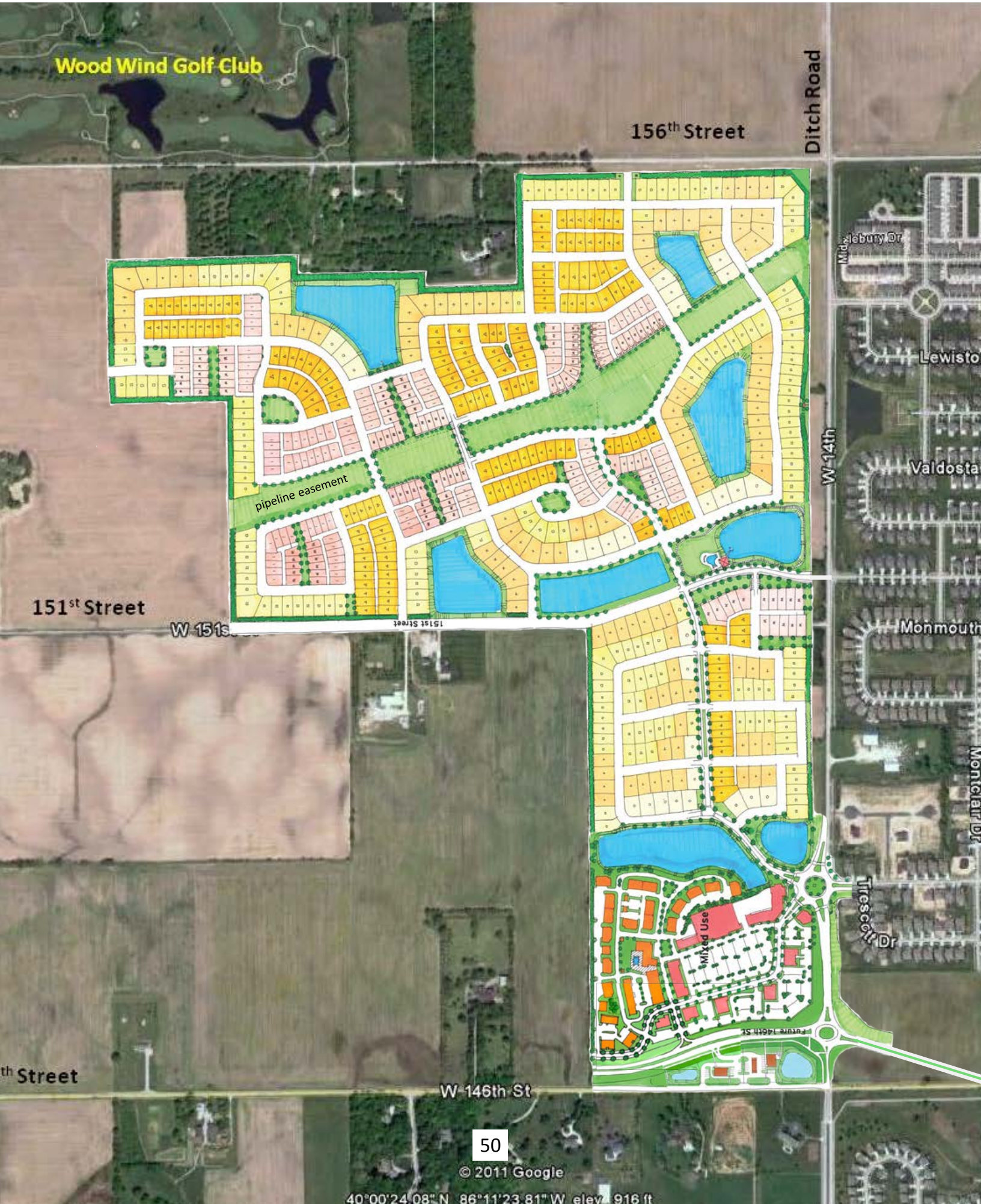


Exhibit C-2 – Neighborhood Commercial Design Elements

The neighborhood commercial uses in the Mixed Use District shall be designed to encourage:



Outdoor dining



Opportunities to gather



Amenities to enhance pedestrian comfort

Exhibit D

Construction Phasing Plan

Exhibit D – Construction Phasing Plan

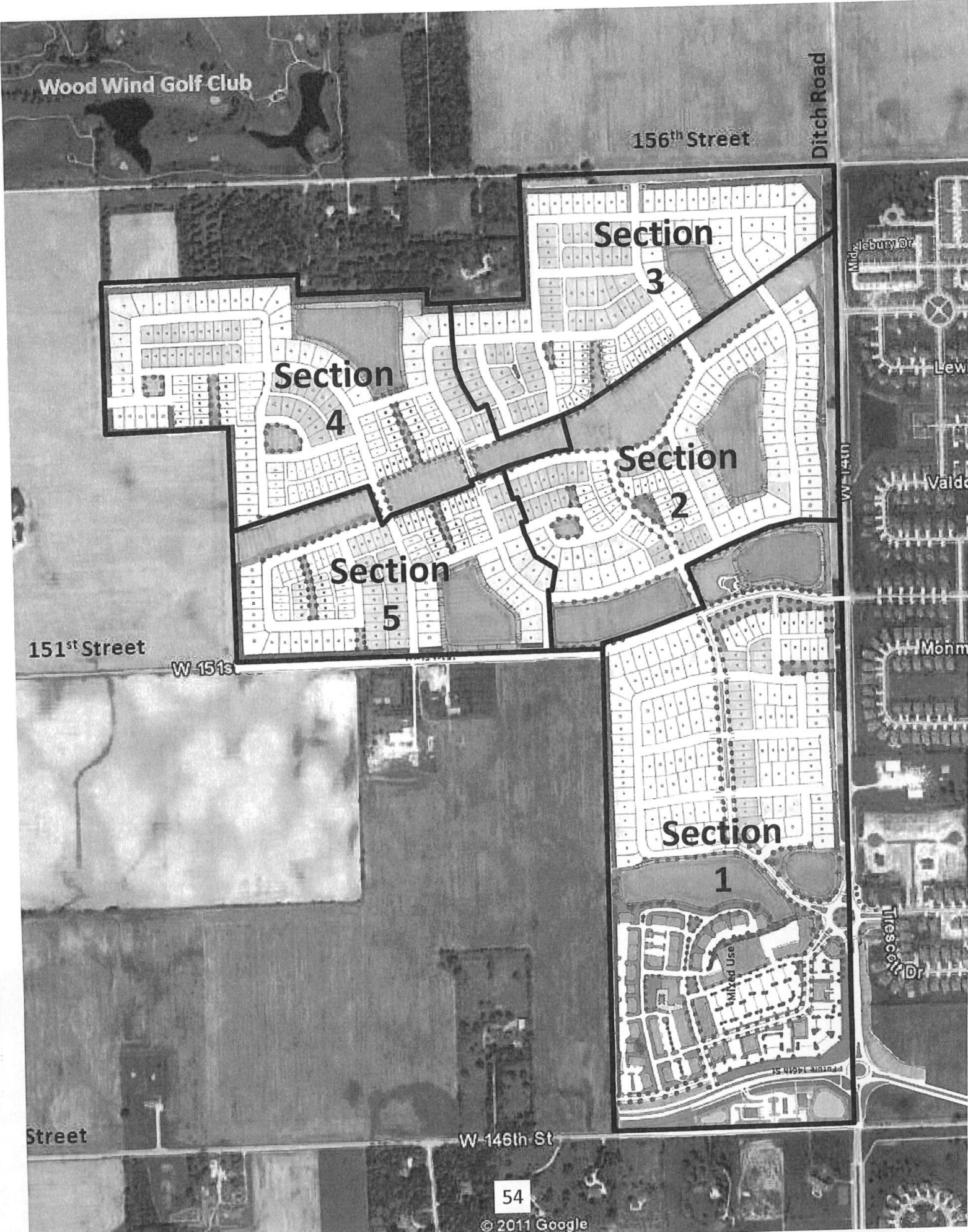


Exhibit E

Architectural Standards for Defined Architectural Designs

Figures :

100 series – Adam (Colonial)

200 series – Georgian

300 series – Italianate

400 series – Shingle

500 series – Folk Victorian

600 series – Colonial Revival

700 series – Tudor

800 series – Craftsman

(Excerpts and graphics from
A Field Guide to American Houses,
Virginia & Lee McAlester; 2003;
Alfred A. Knopf; New York, NY)

100 – Adam (Colonial) Figures

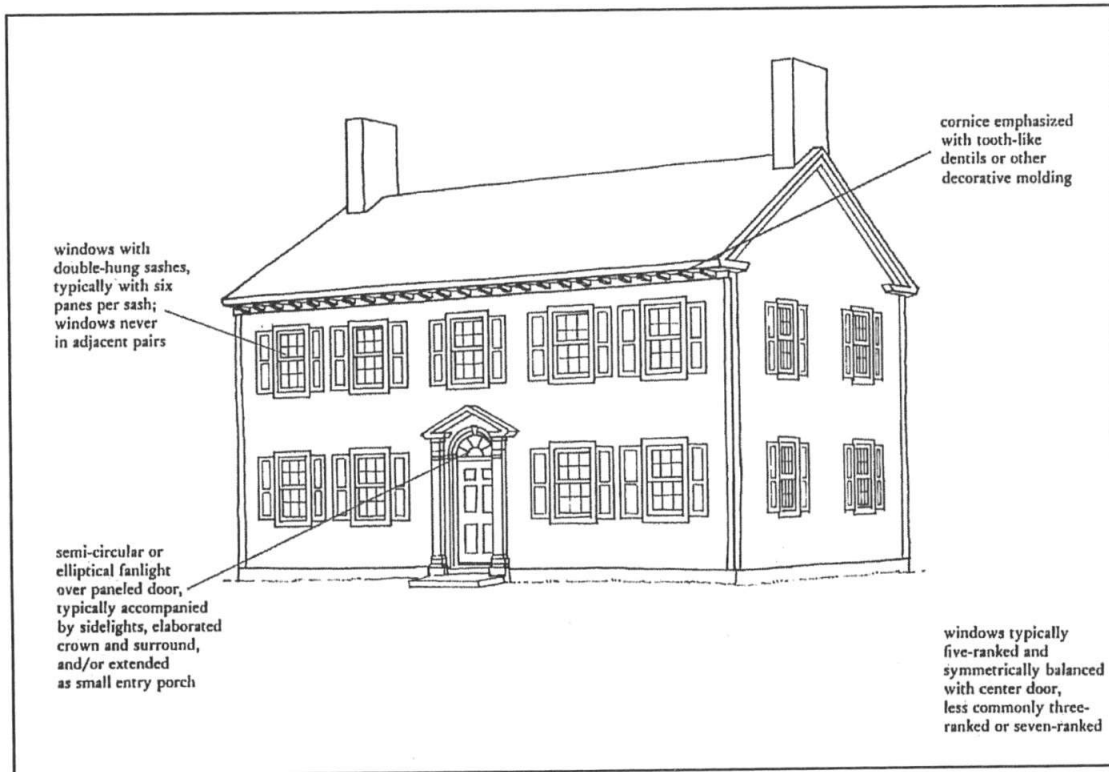


Figure 101

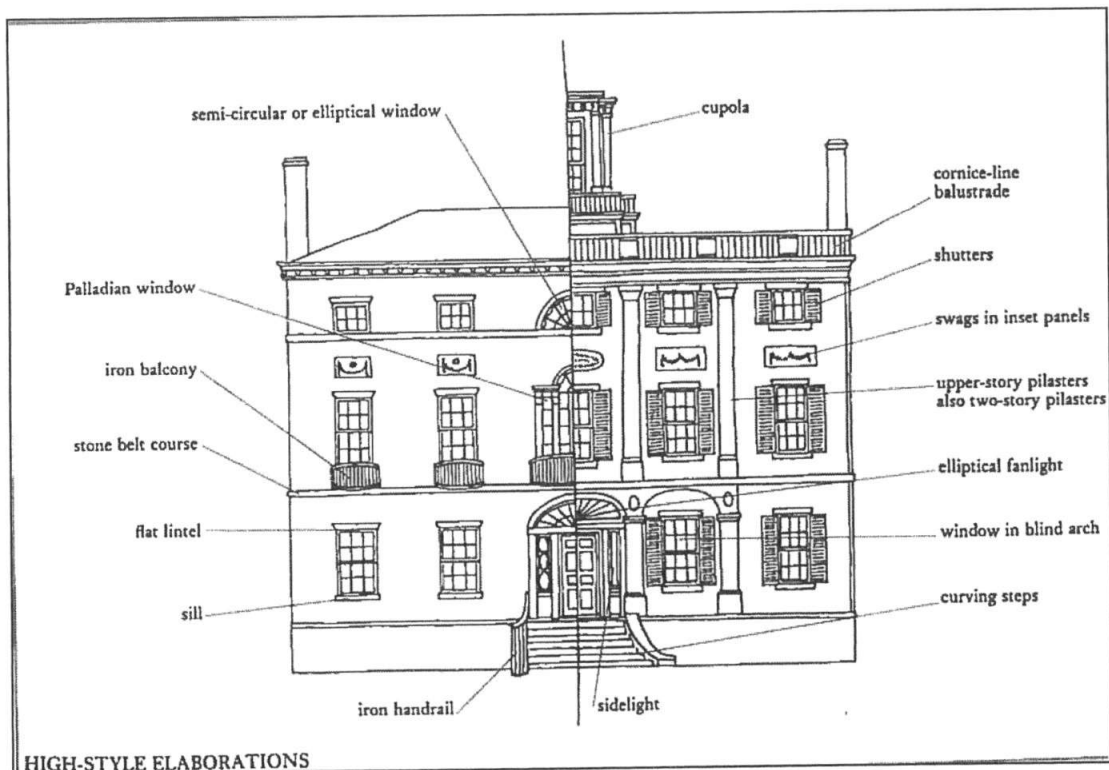
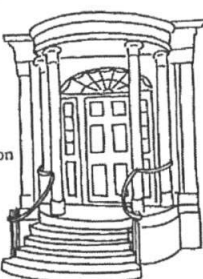


Figure 102

DOOR SURROUNDS			
LIGHTS	rectangular light or light omitted		
	common		
	semi-circular fanlight only	common	very common
	semi-circular fanlight with sidelights		
	elliptical fanlight with sidelights		
	filled in or omitted fanlight		
PORTICOS	occurrence not affected by frame or masonry construction	very common	common
			
			very common
			

DOOR SURROUND & ENTRY PORCH VARIANTS

Figure 103

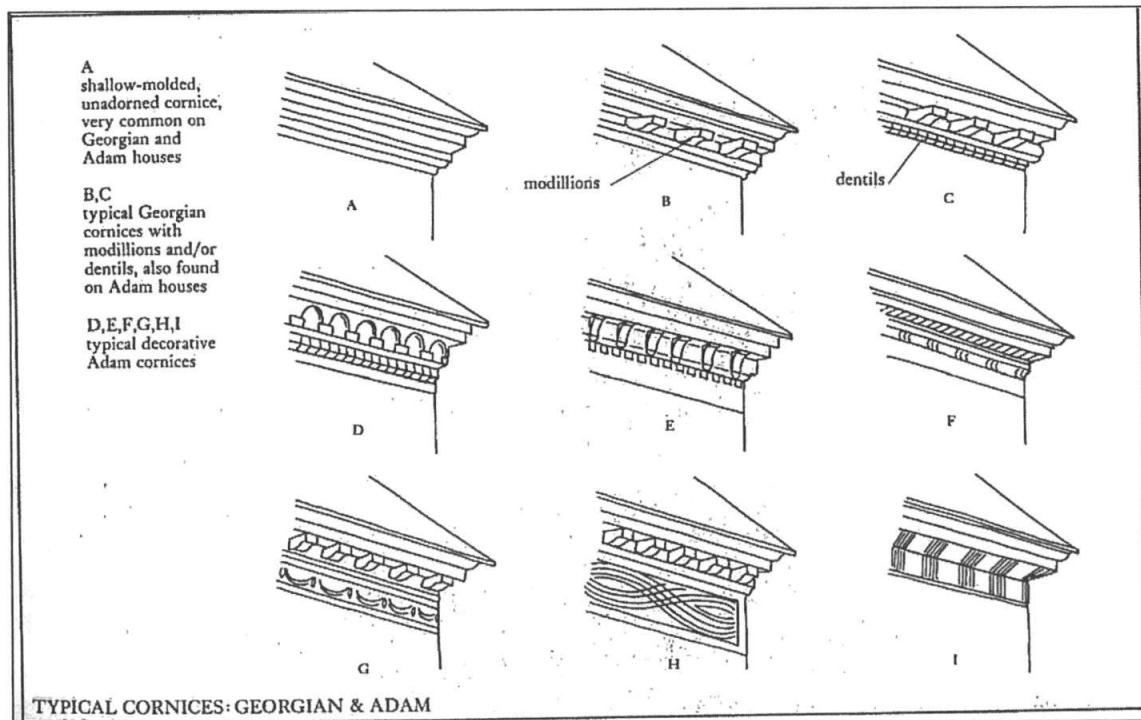


Figure 104

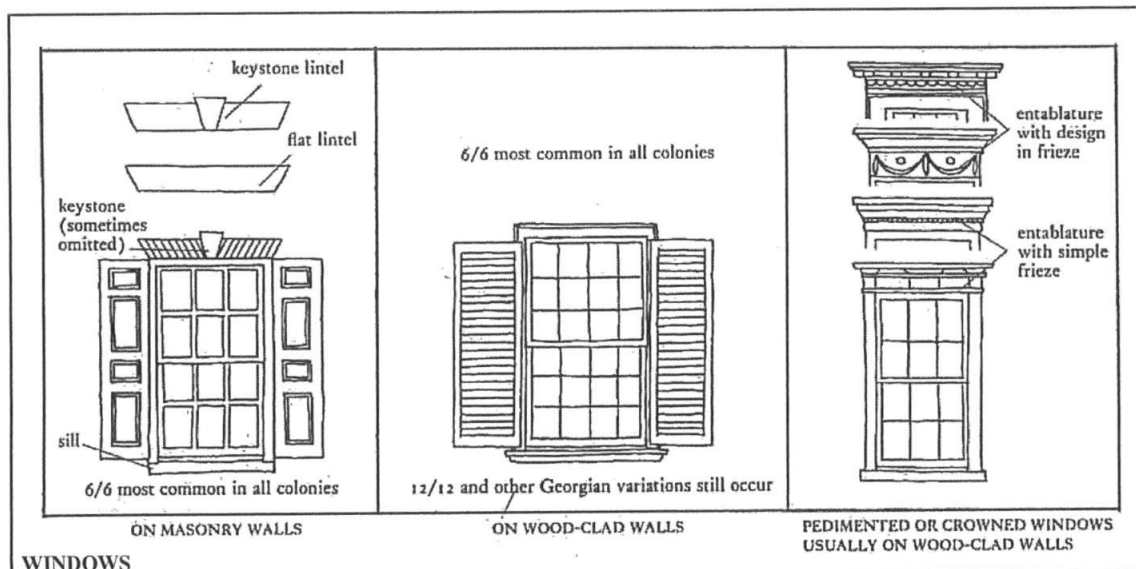


Figure 105

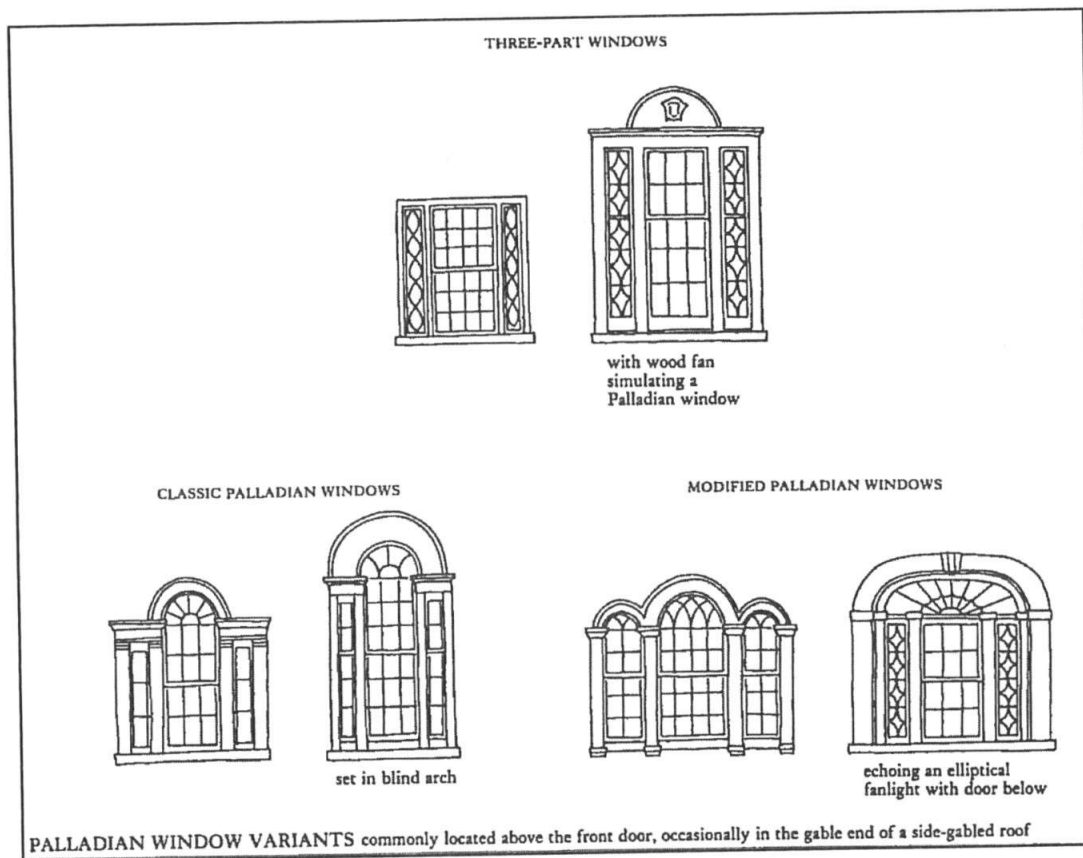


Figure 106

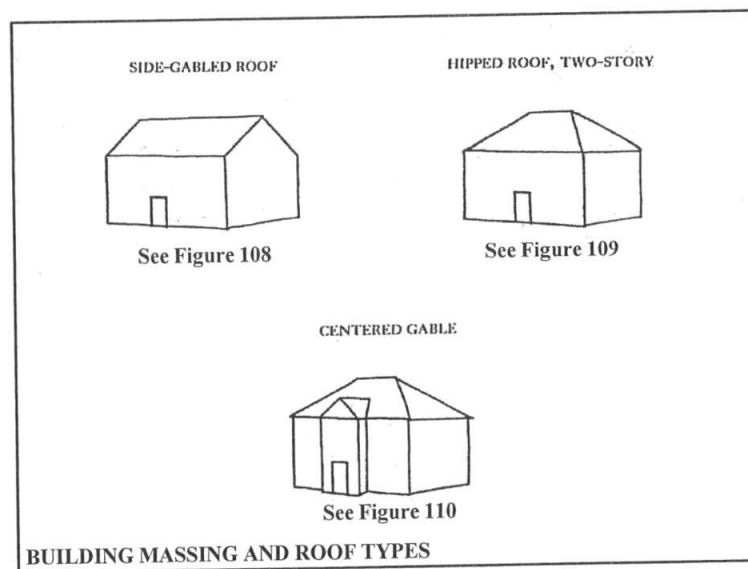


Figure 107

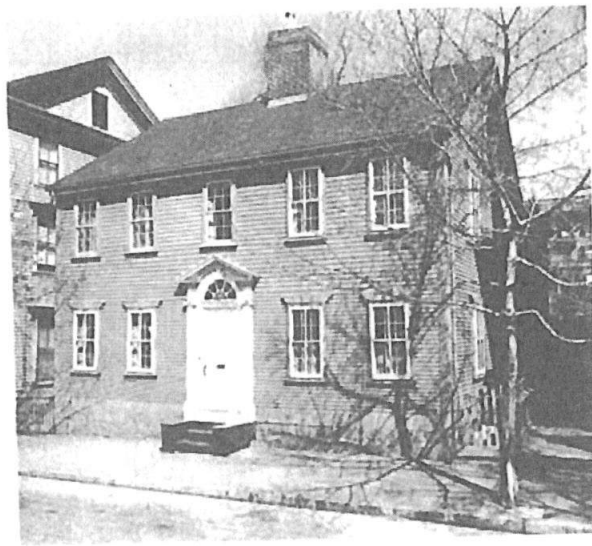


Figure 108 – Side-gabled Roof Adam Examples



Figure 108 – Side-gabled Roof Adam Examples (continued)

100 series – Adam (Colonial) Figures

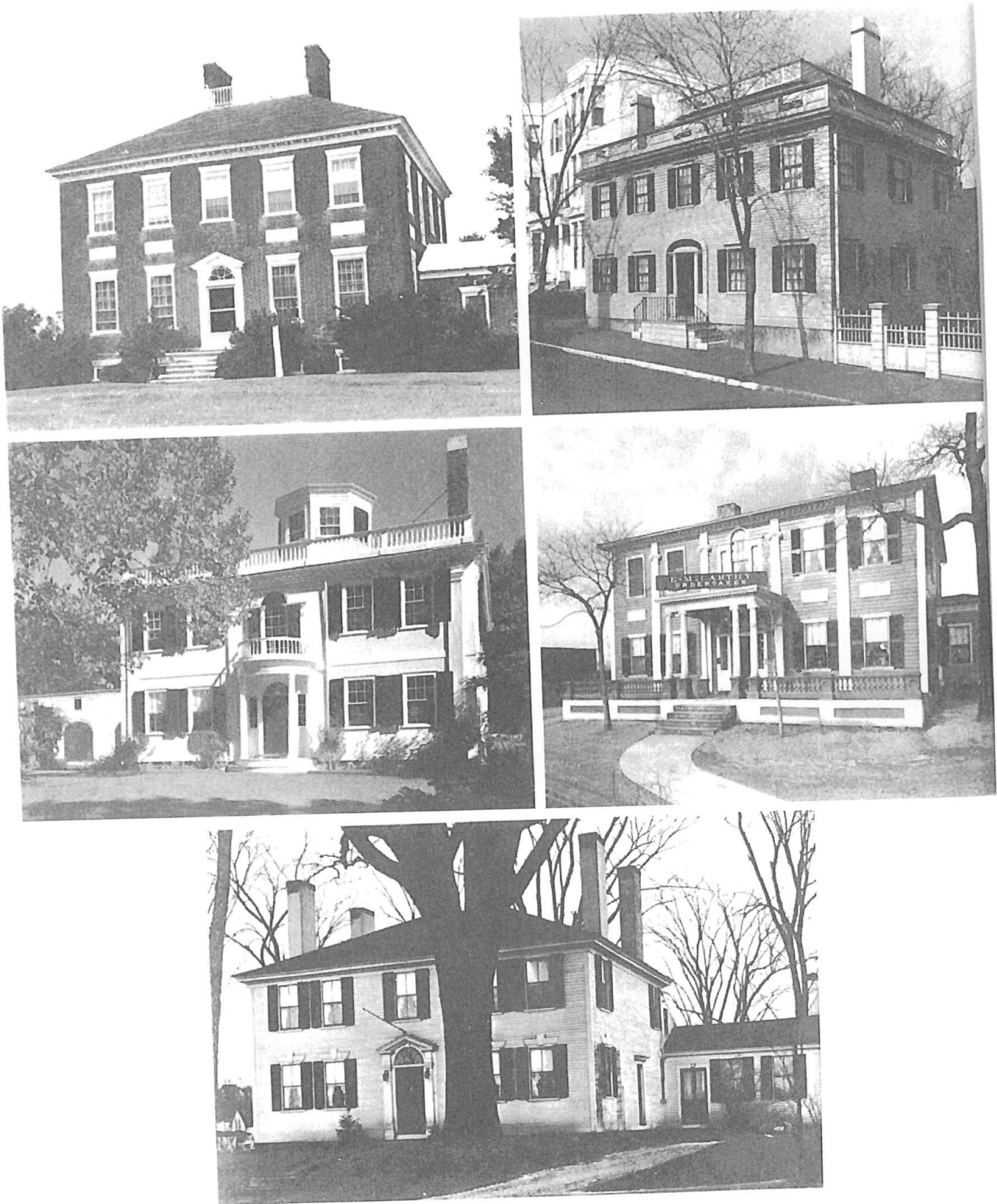


Figure 109 – Hipped Roof, Two-Story Adam Examples



Figure 109 – Hipped Roof, Two-Story Adam Examples (continued)



Figure 110 – Centered Gable Adam Examples

200 – Georgian Figures

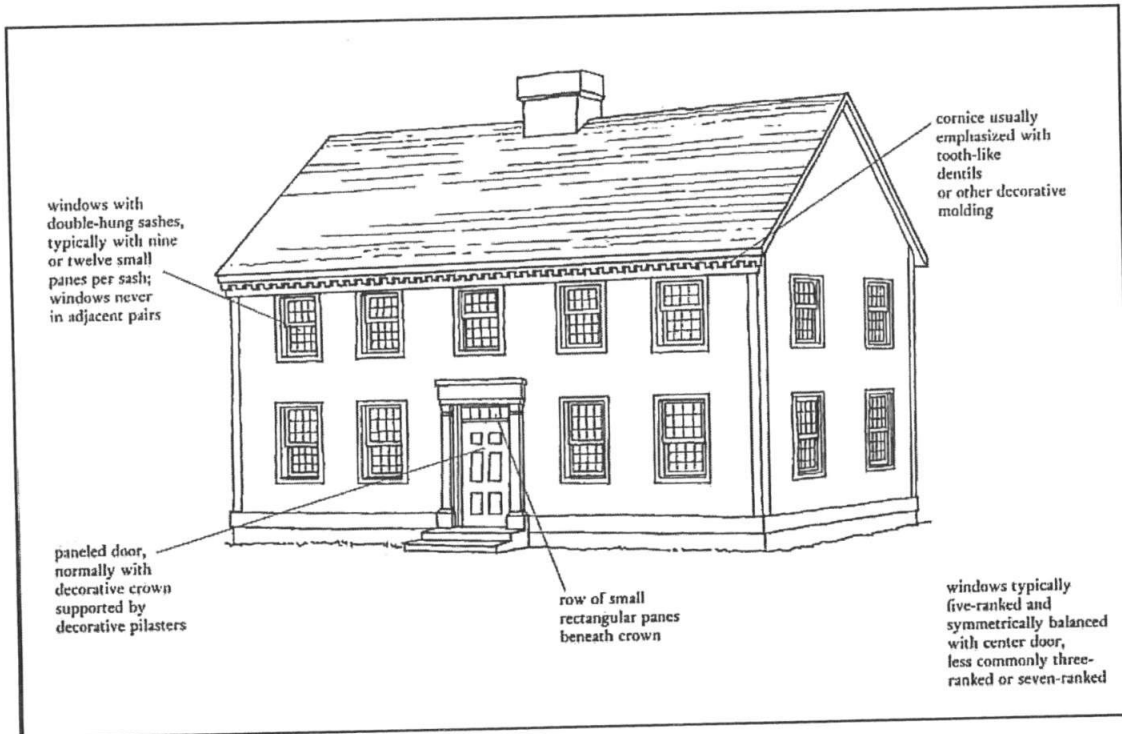


Figure 201

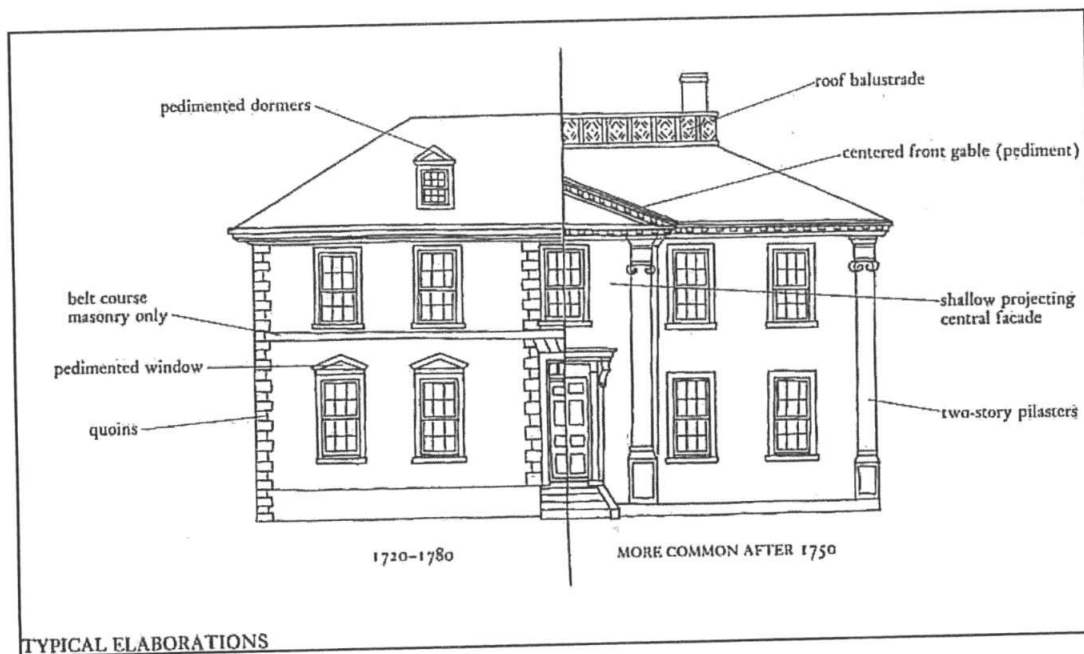


Figure 202

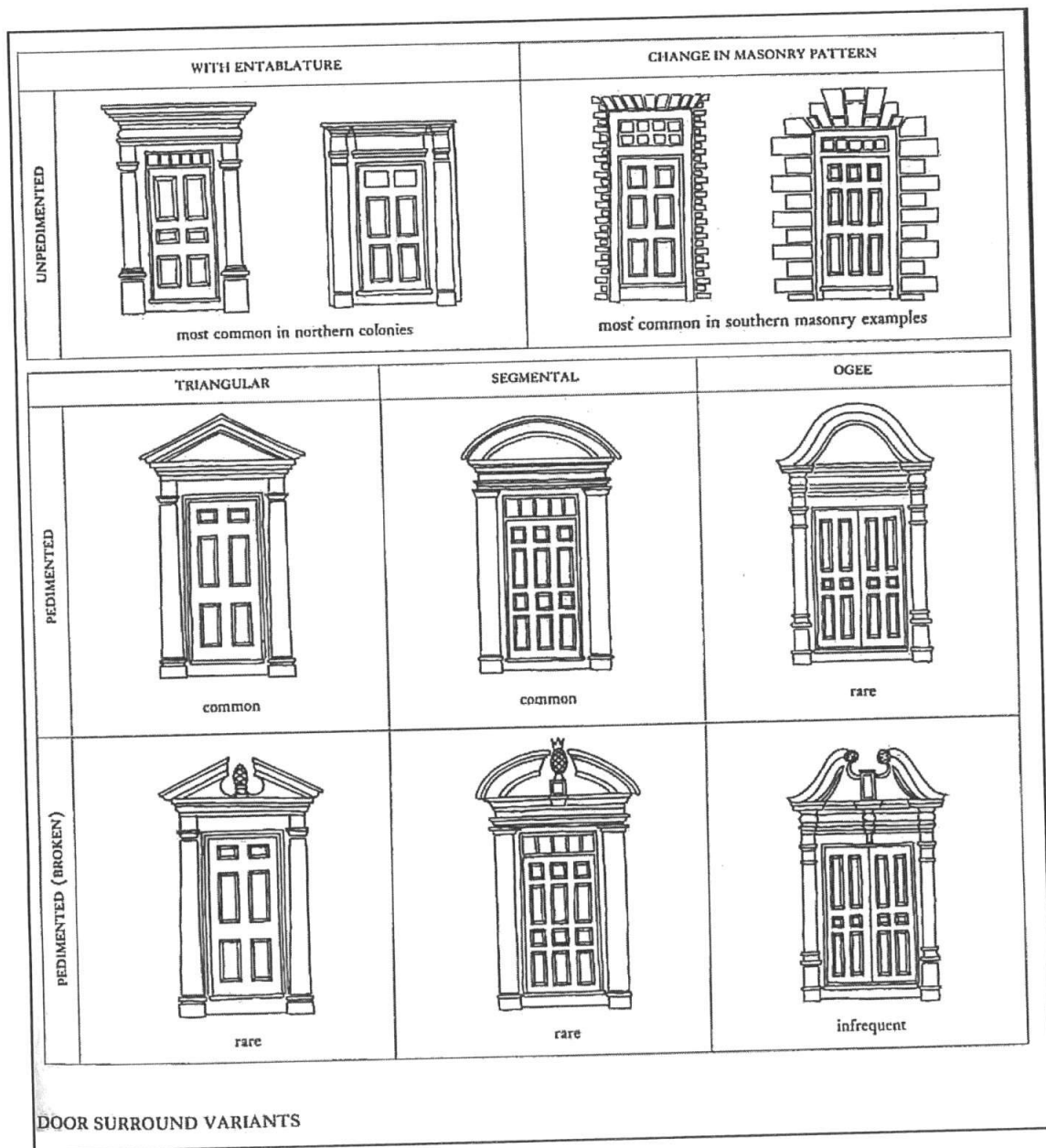


Figure 203

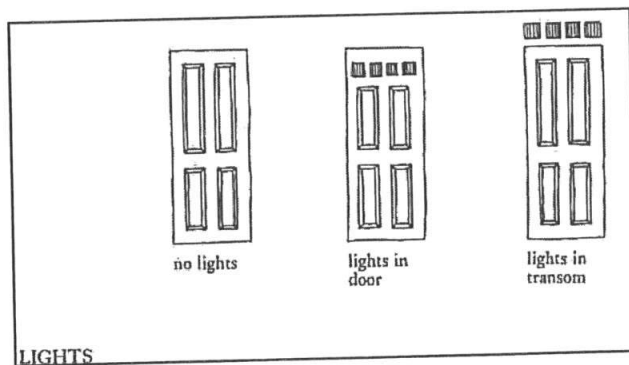


Figure 204

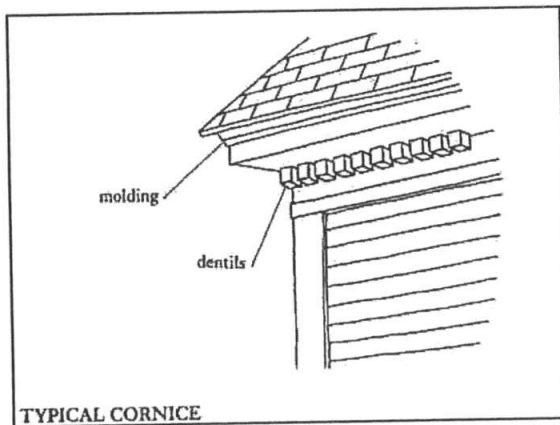


Figure 205

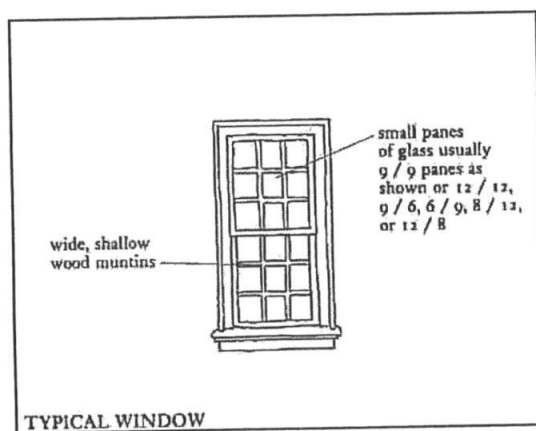


Figure 206

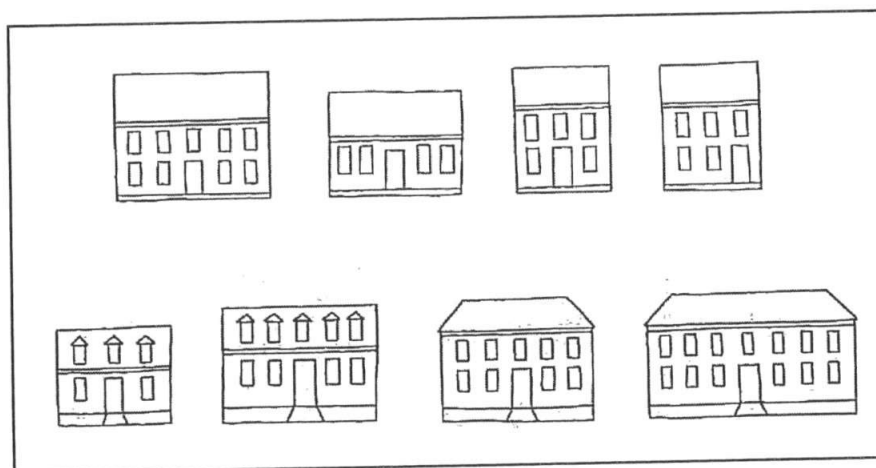


Figure 207

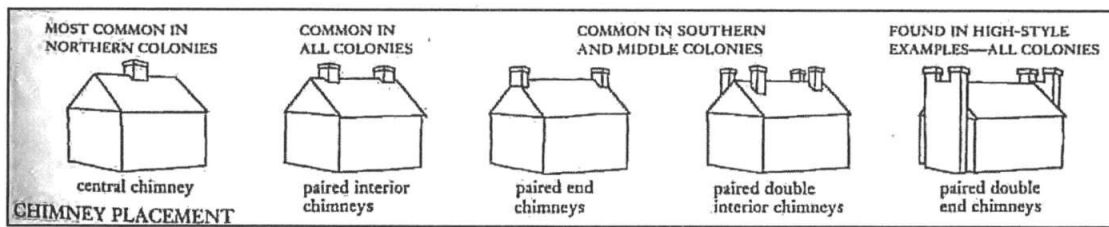


Figure 208

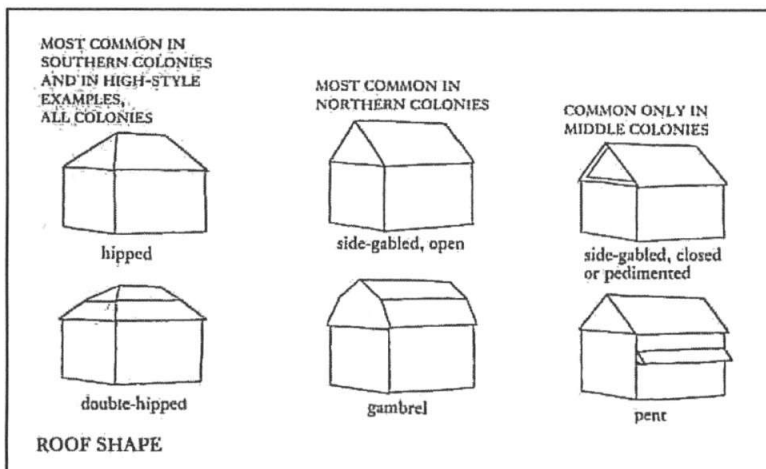


Figure 209

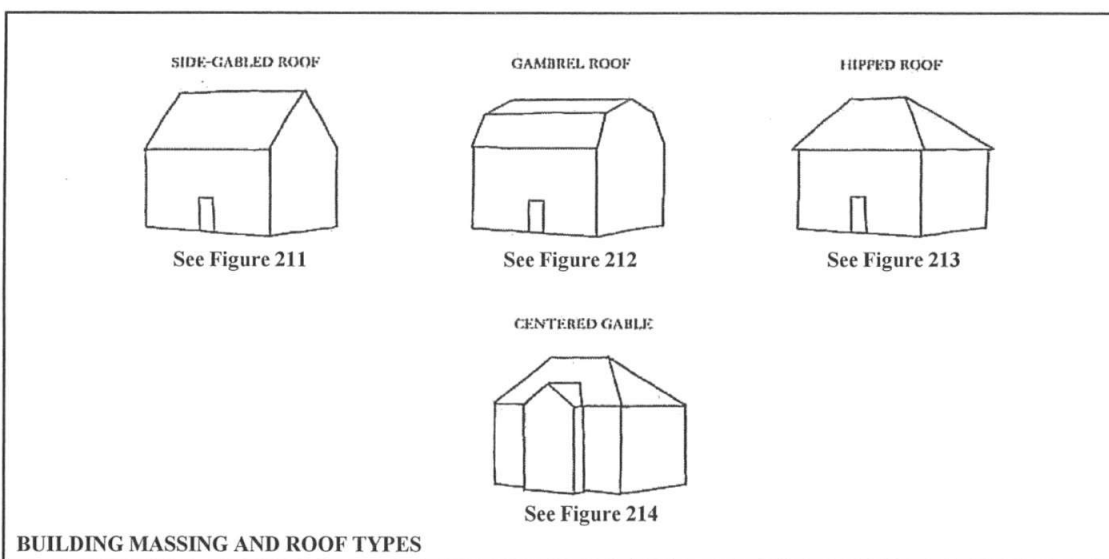


Figure 210



Figure 211 – Side-gabled Georgian Examples



Figure 211 – Side-gabled Georgian Examples (continued)

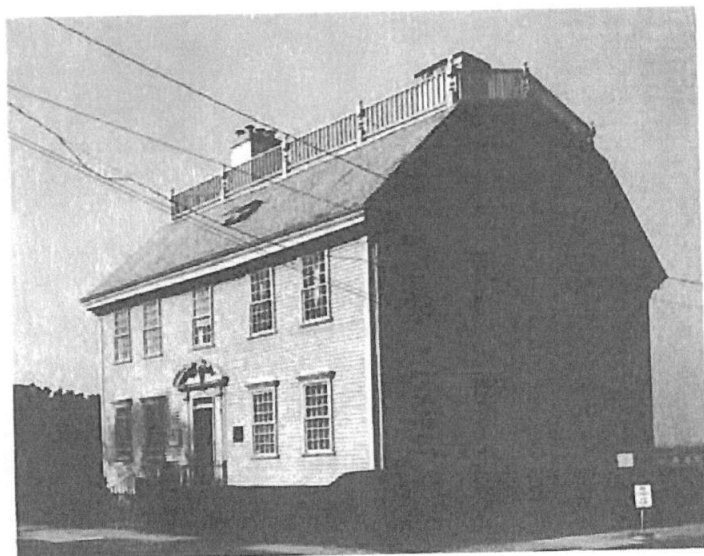


Figure 212 – Gambrel Roof Georgian Examples



Figure 213 – Hipped Roof Georgian Examples



Figure 214 – Centered Gable Georgian Examples

300 – Italianate Figures

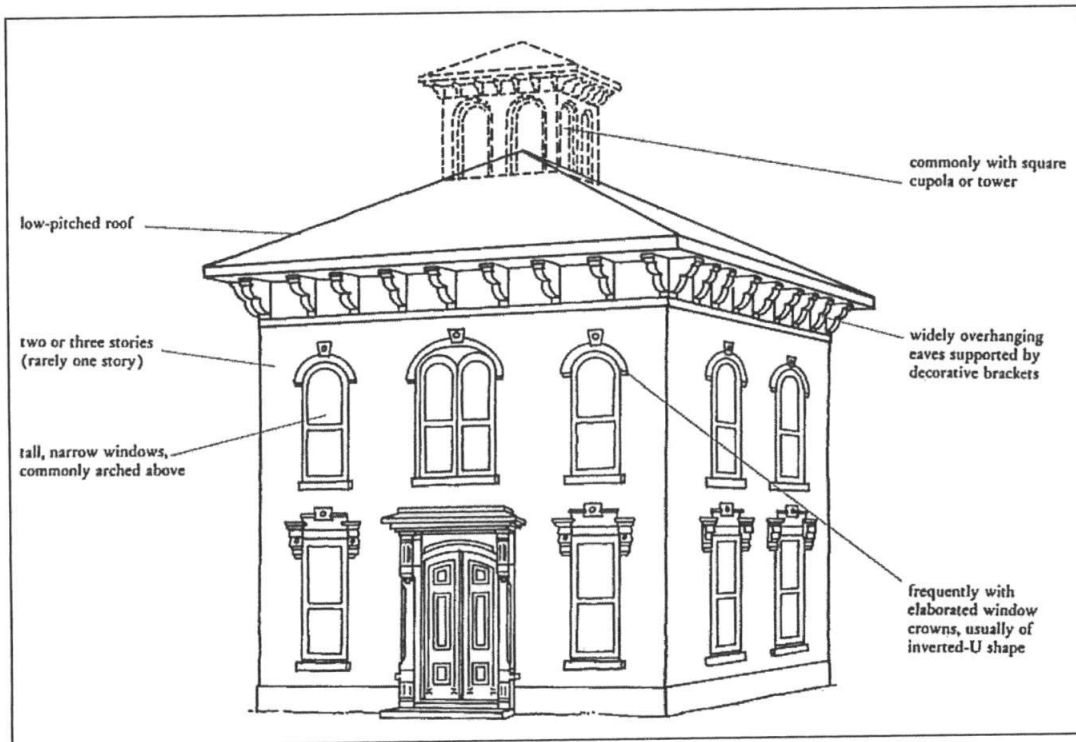


Figure 301

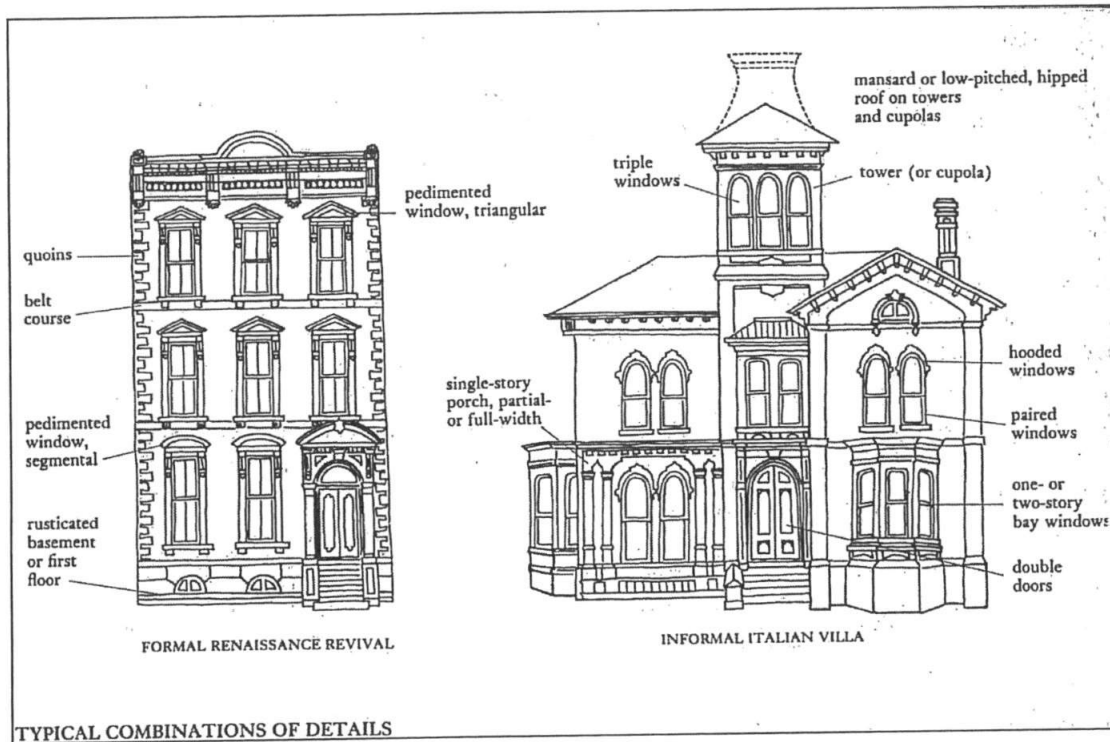


Figure 302

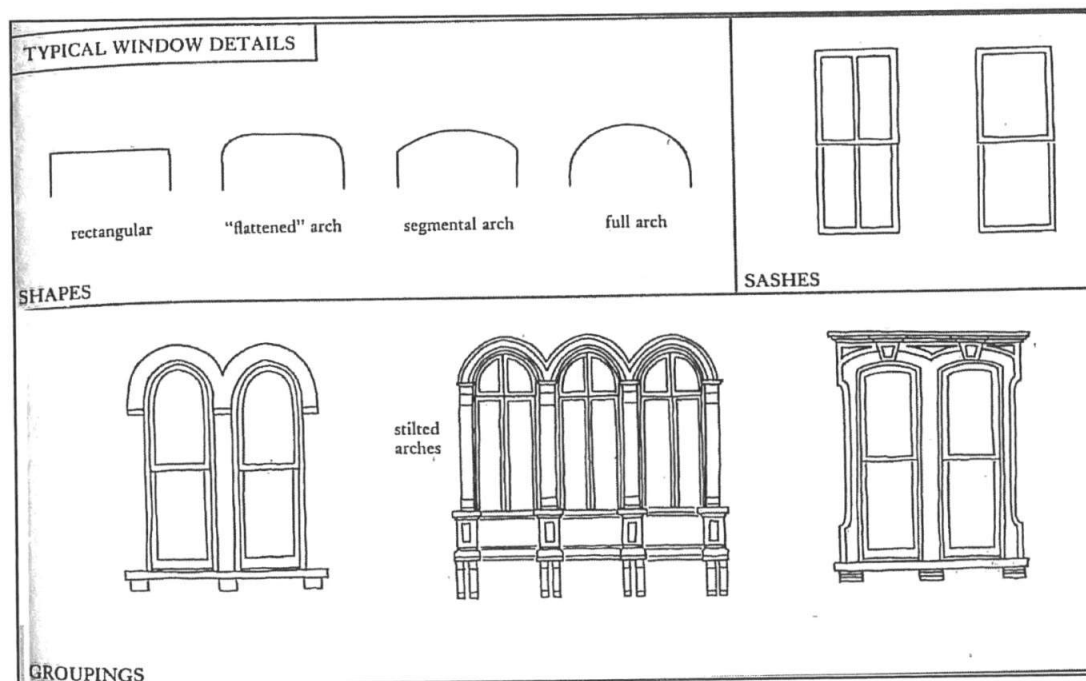


Figure 303

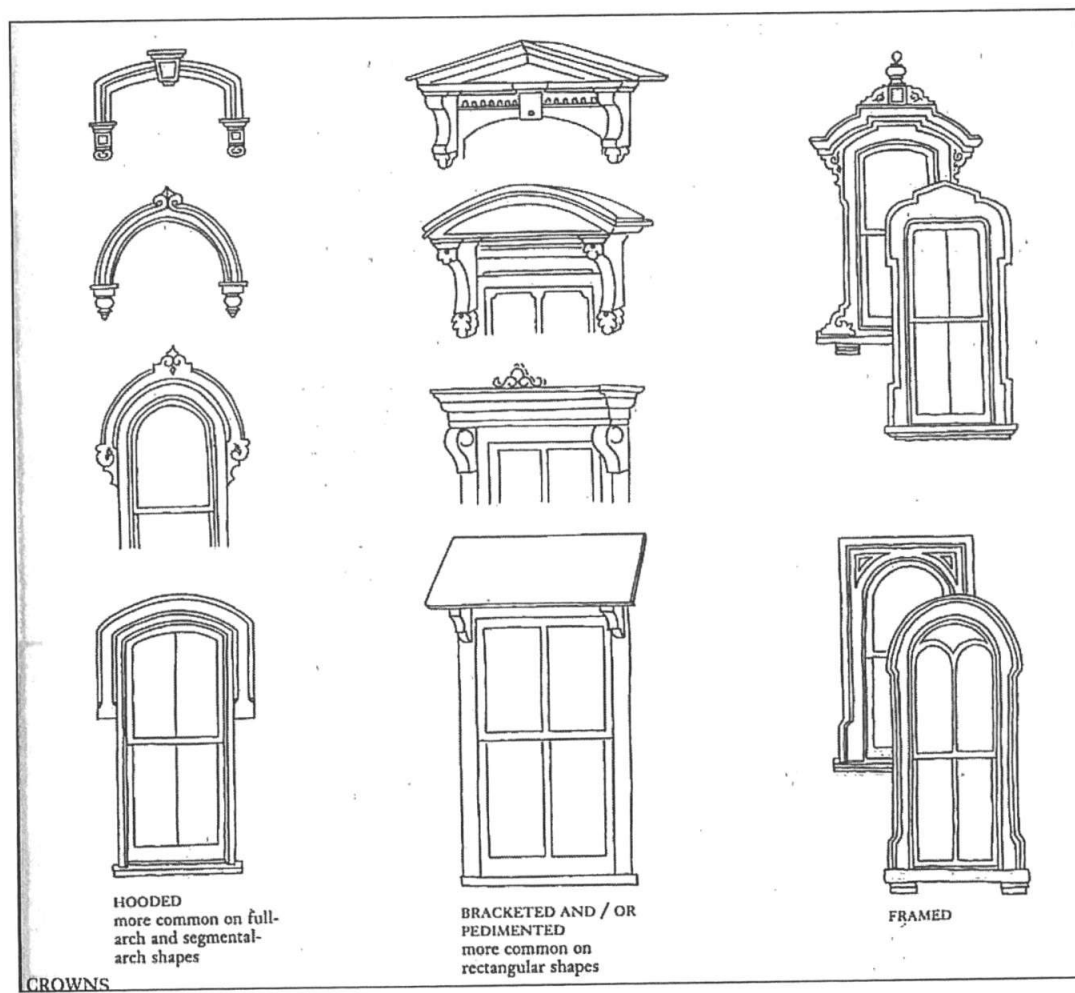


Figure 304

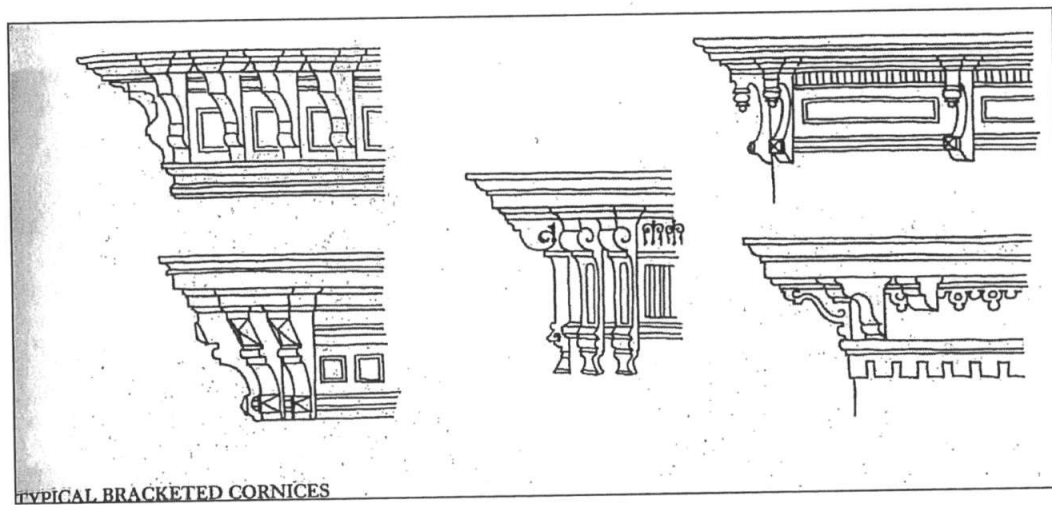


Figure 305

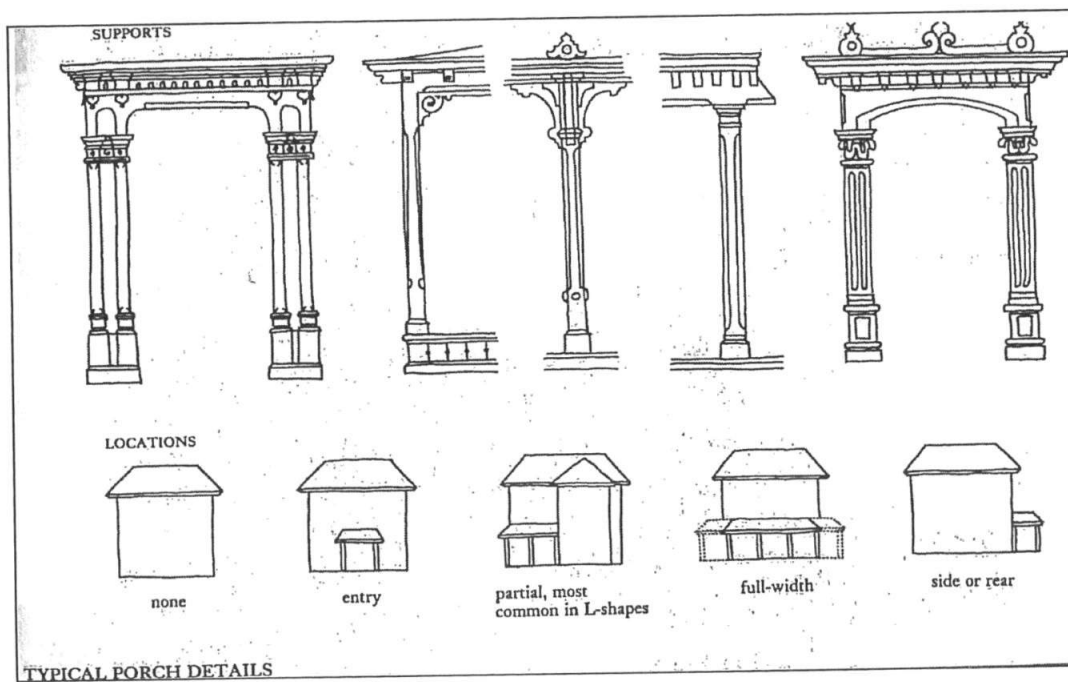


Figure 306

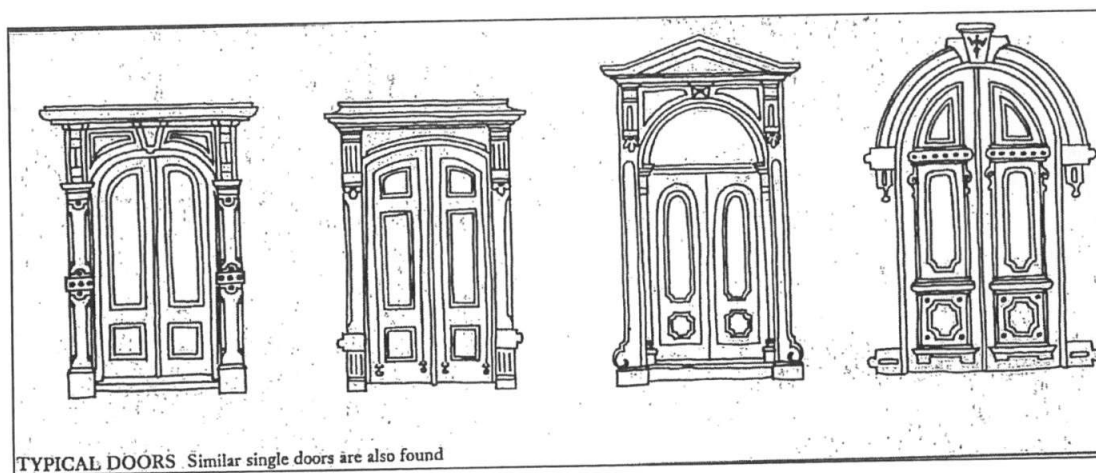


Figure 307

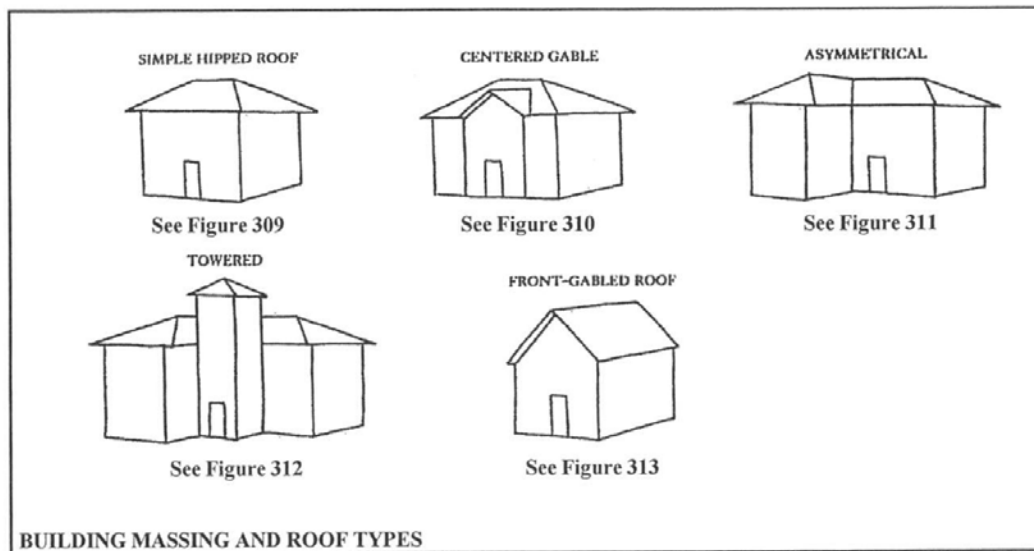


Figure 308

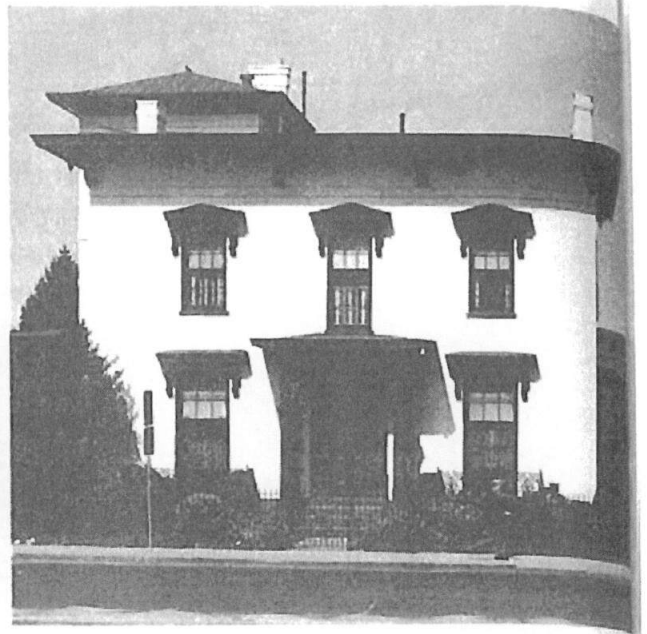


Figure 309 – Simple Hipped Roof Italianate Examples

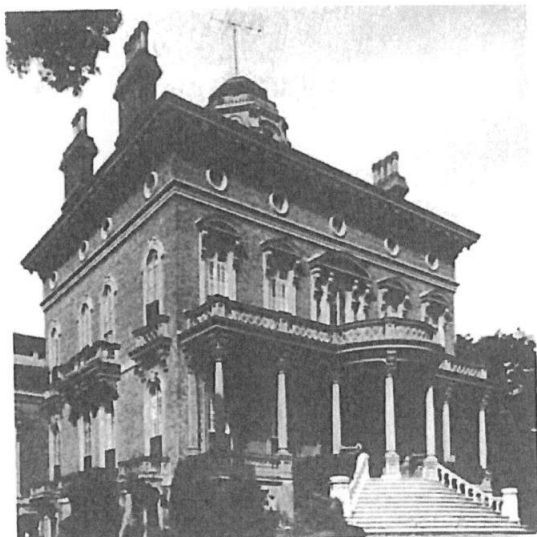


Figure 309 – Simple Hipped Roof Italianate Examples (continued)

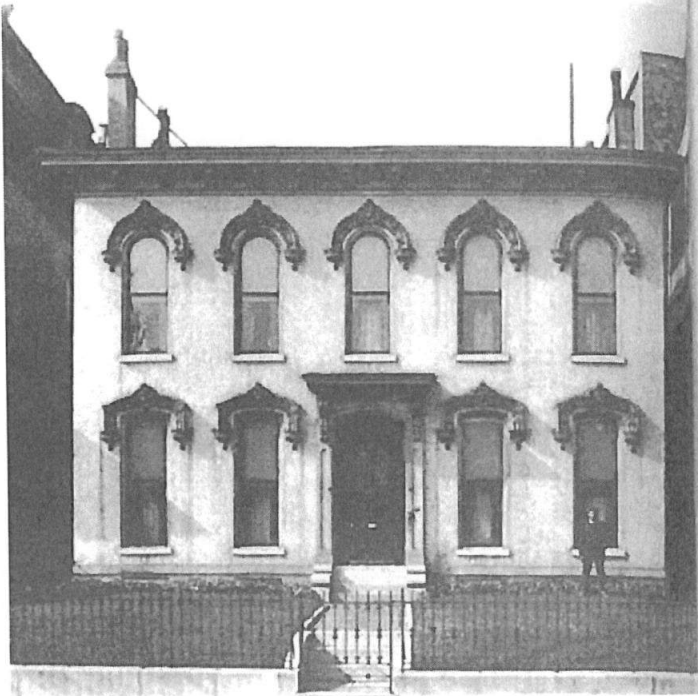


Figure 309 – Simple Hipped Roof Italianate Examples (continued)

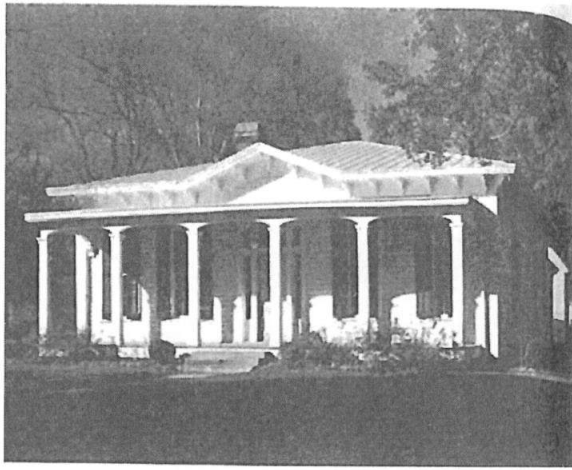


Figure 310 – Centered Gable Italianate Examples



Figure 311 – Asymmetrical Italianate Examples

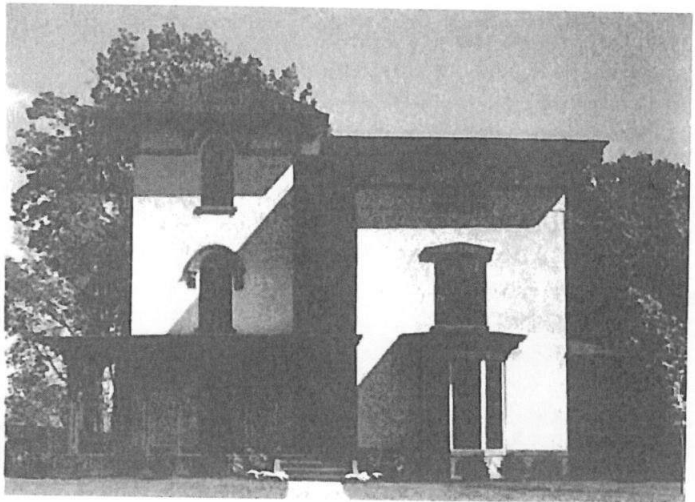
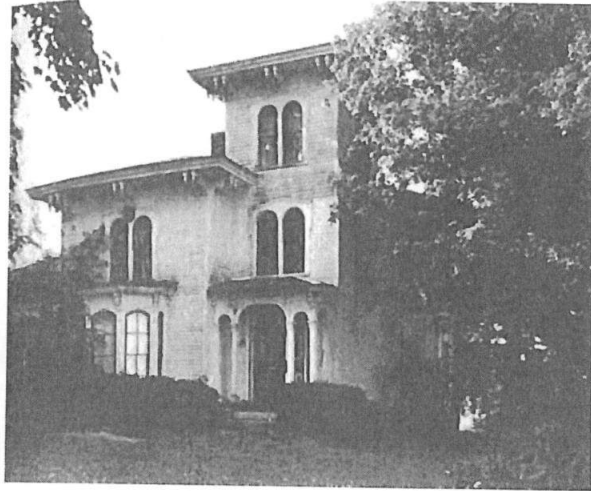


Figure 312 – Towered Italianate Examples



Figure 312 – Towered Italianate Examples (continued)

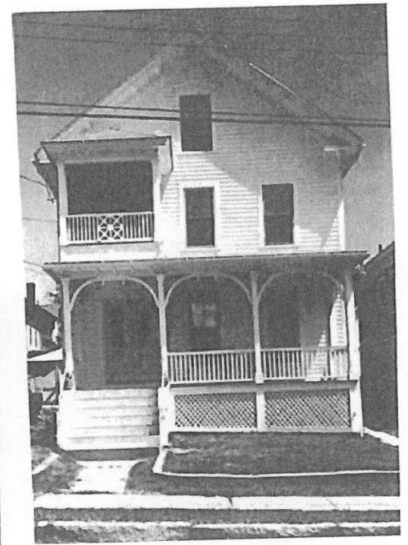
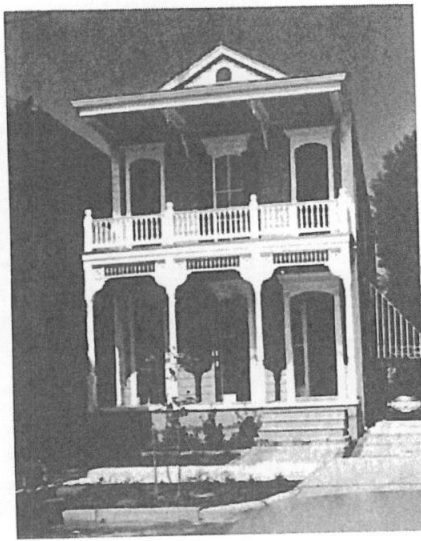


Figure 313 – Front-gabled Roof Italianate Examples

400 – Shingle Figures



Figure 401

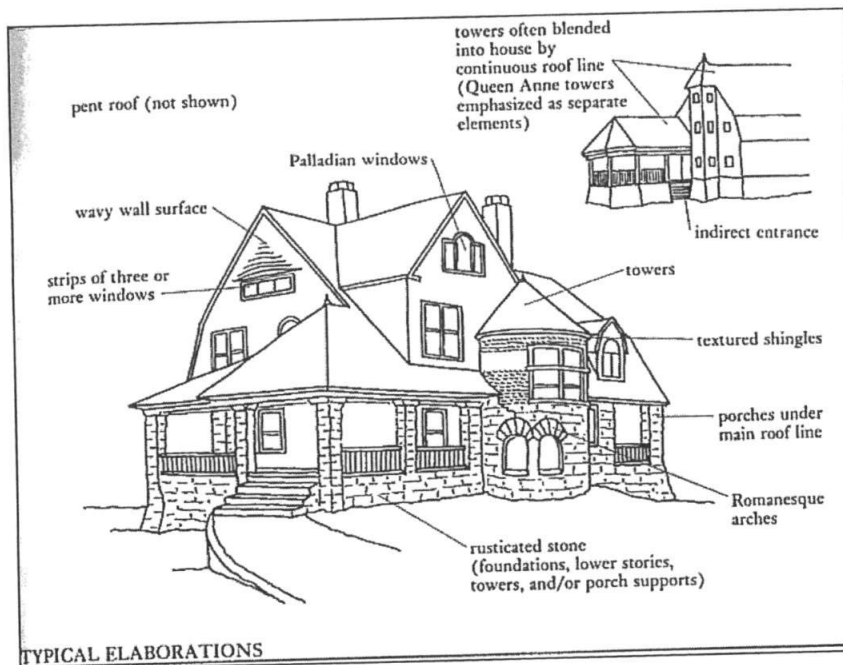


Figure 402

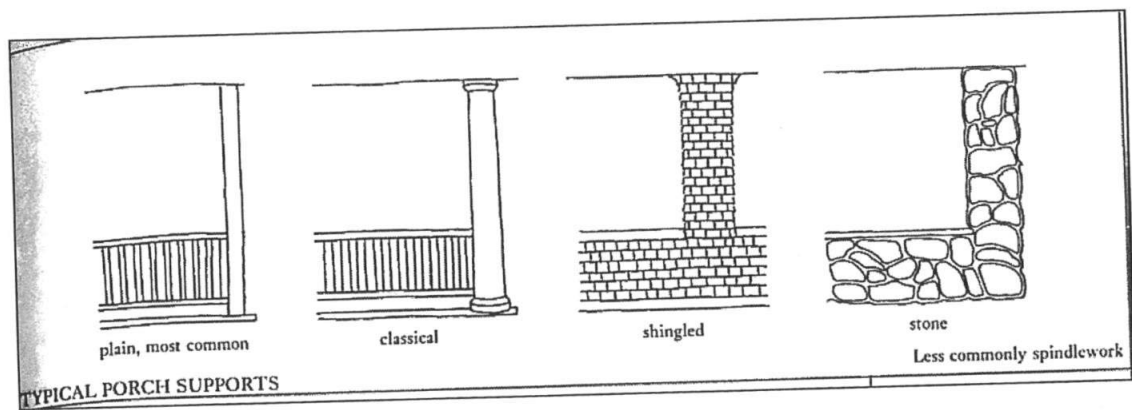


Figure 403

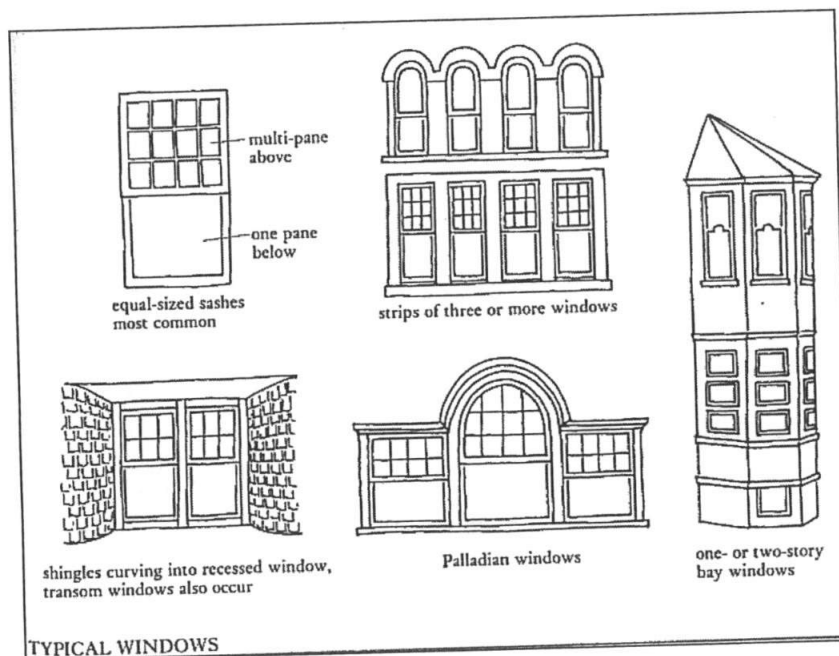


Figure 404

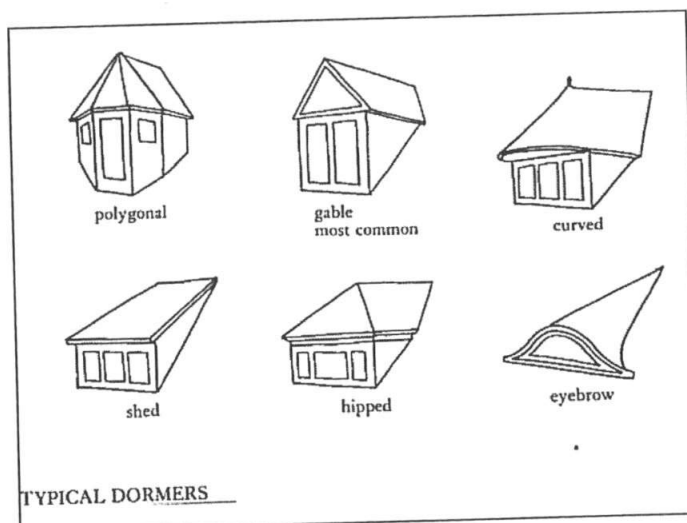


Figure 405

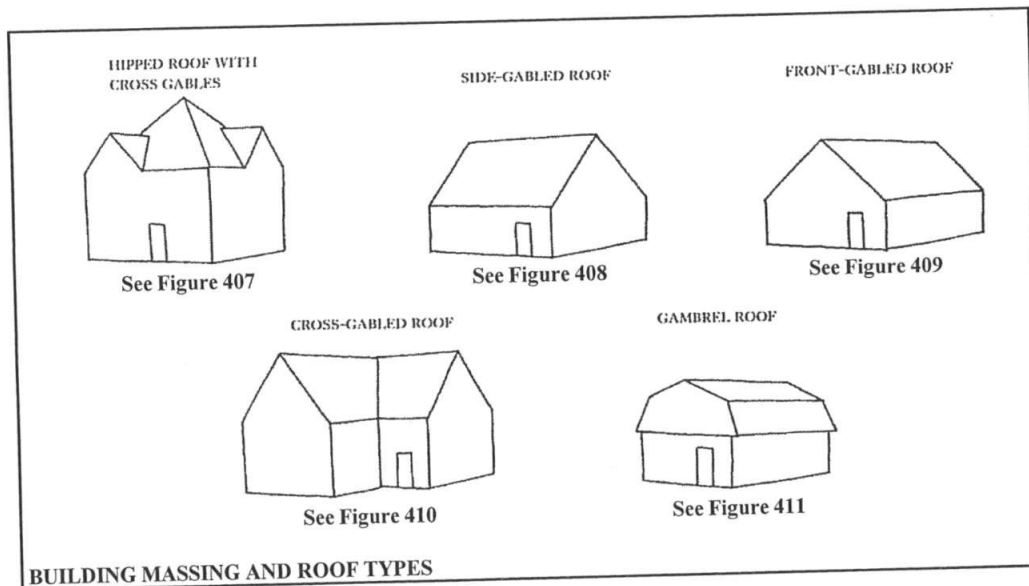


Figure 406



Figure 407 – Hipped Roof with Cross Gables Shingle Examples



Figure 408 – Side-gabled Roof Shingle Examples

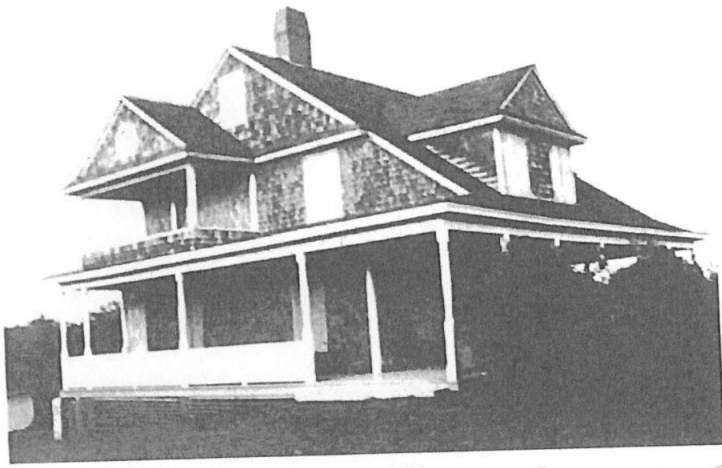


Figure 409 – Front-gabled Roof Shingle Examples

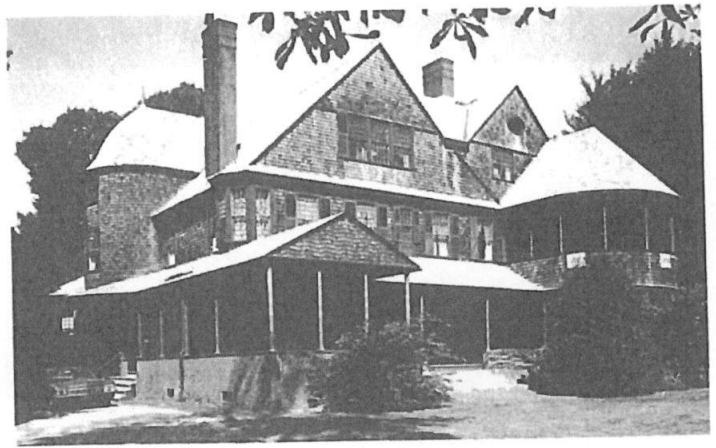


Figure 410 – Cross-gabled Roof Shingle Examples

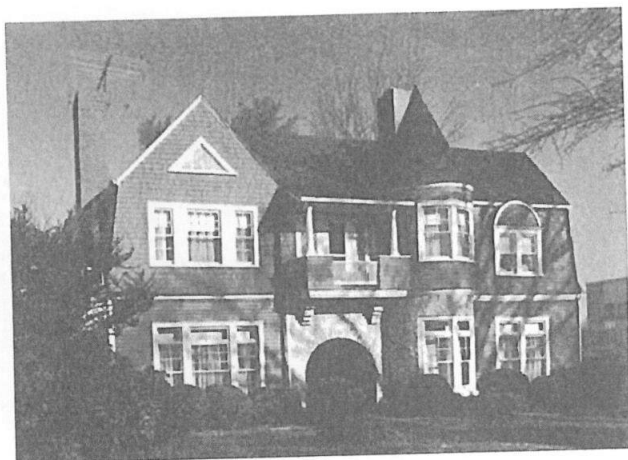


Figure 411 – Gambrel Roof Shingle Examples

500 – Folk Victorian Figures



Figure 501

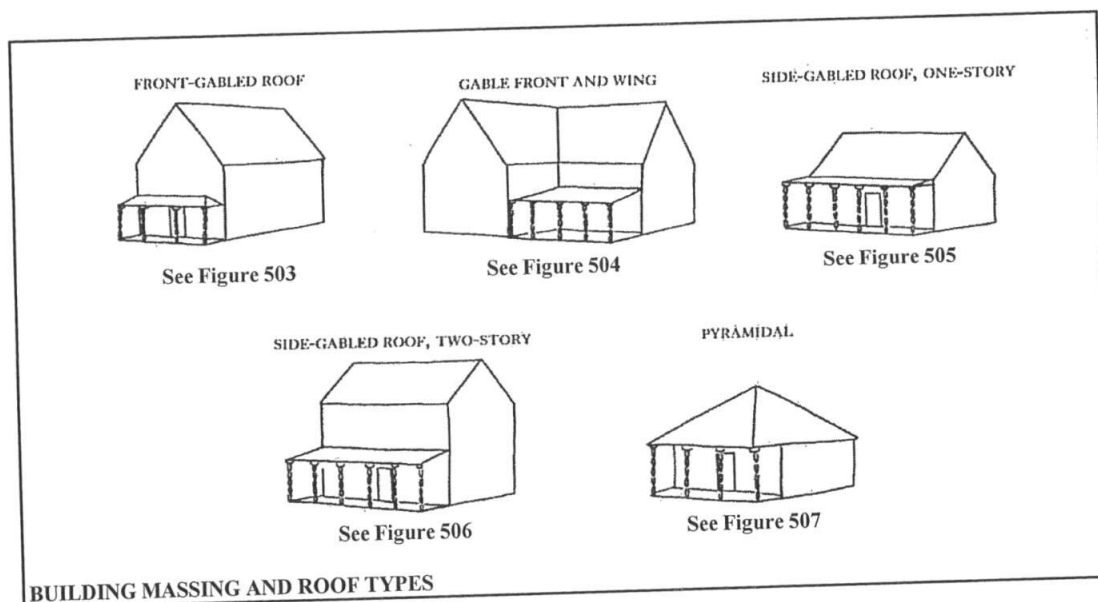


Figure 502

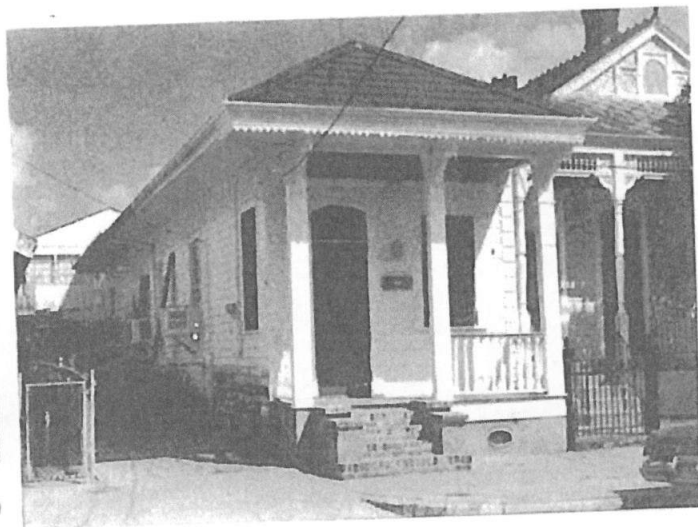


Figure 503 – Front-gabled Roof Folk Victorian Examples

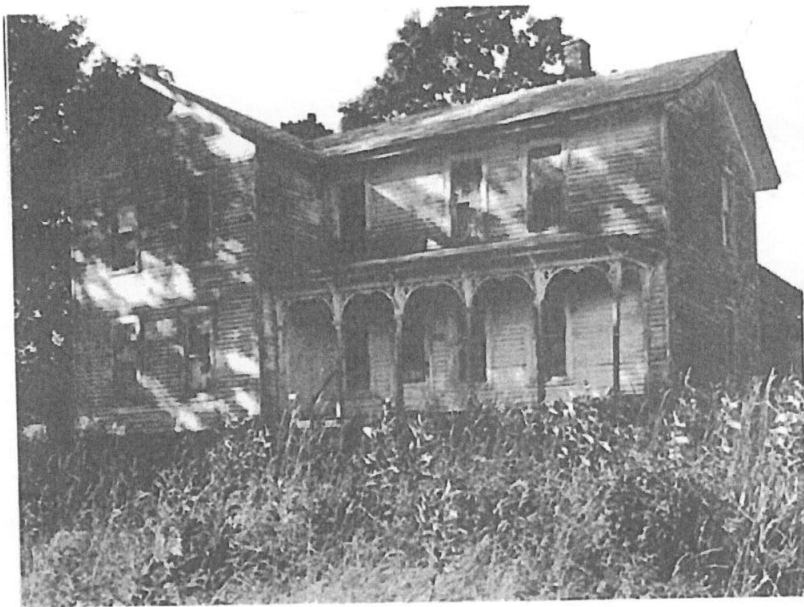


Figure 504 – Gable Front and Wing Folk Victorian Examples

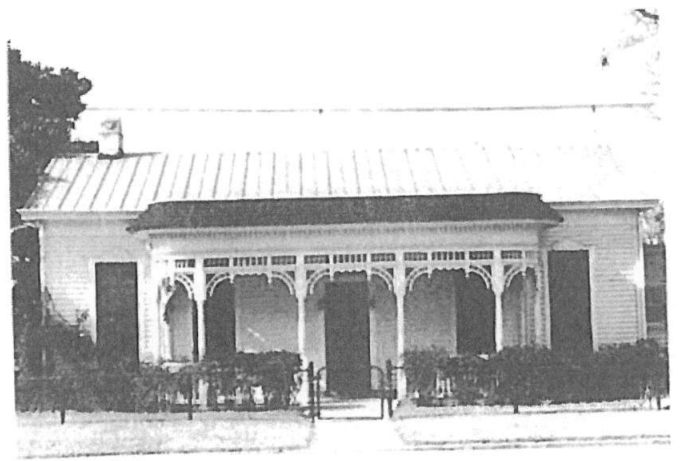


Figure 505 – Side-gabled Roof, One-Story Folk Victorian Examples

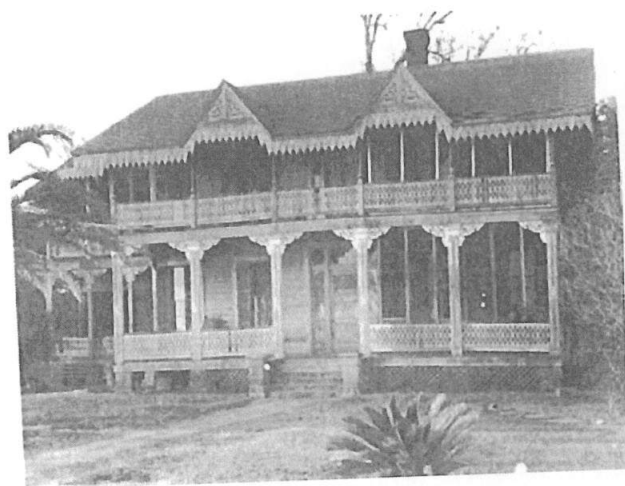
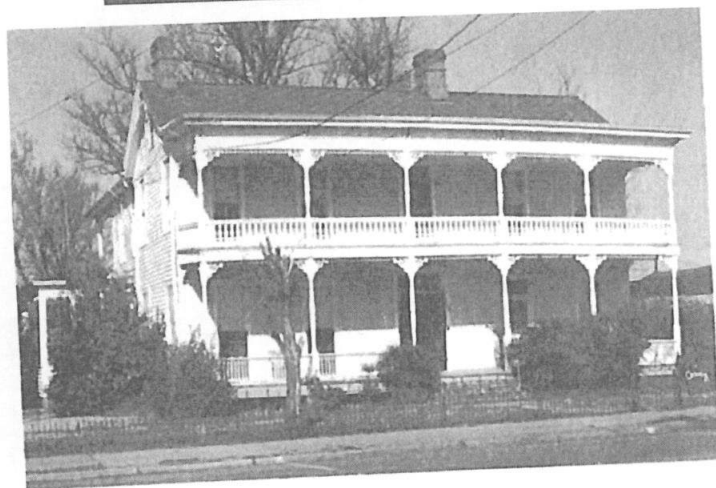
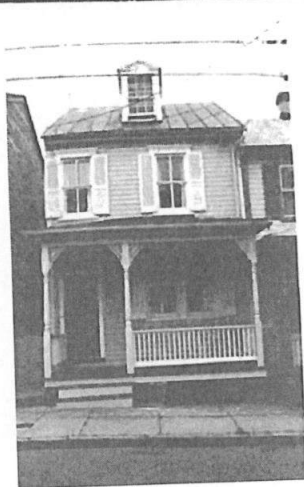


Figure 506 – Side-gabled Roof, Two-Story Folk Victorian Examples

500 series – Folk Victorian Figures



Figure 507 – Pyramidal Folk Victorian Examples

600 – Colonial Revival Figures

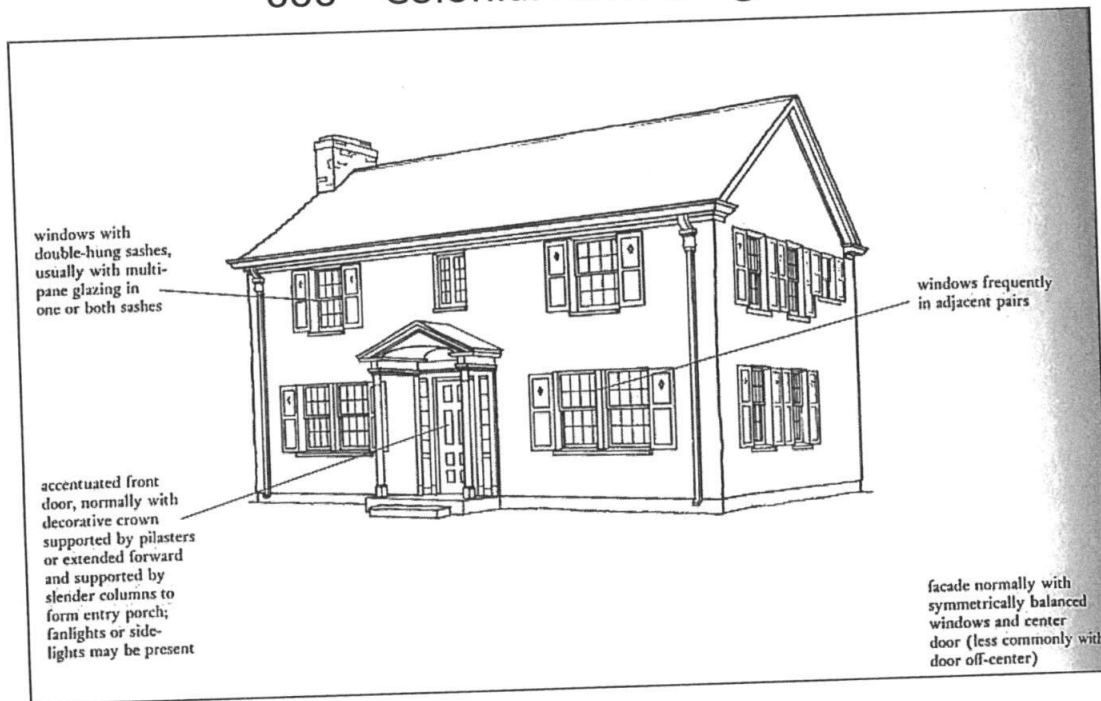


Figure 601

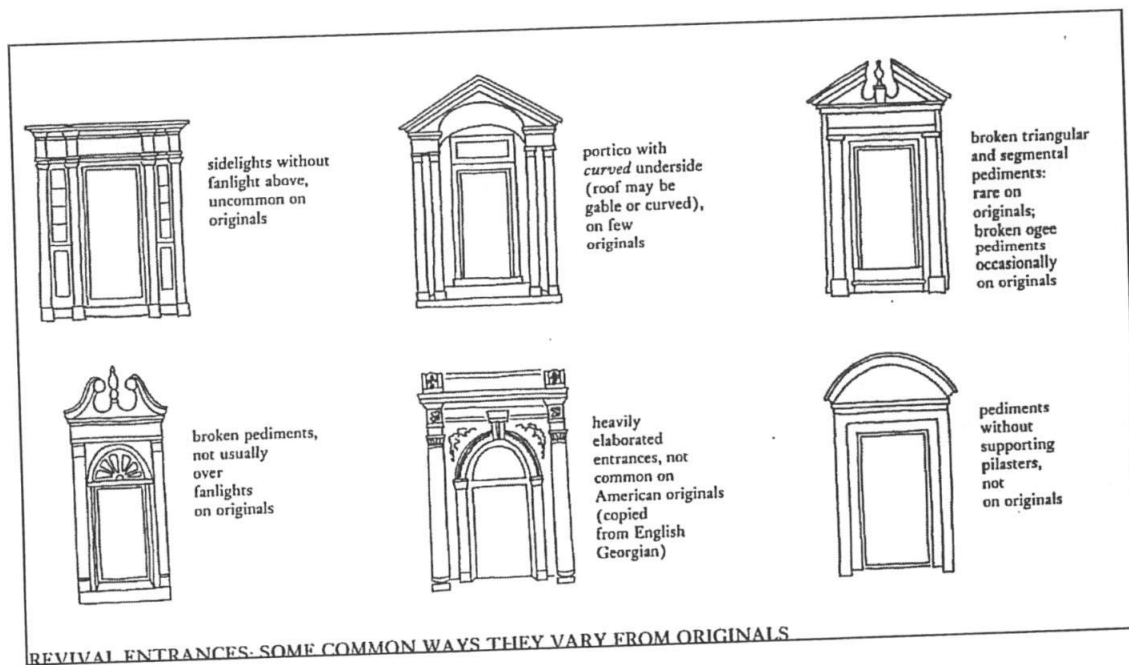


Figure 602

ORIGINAL EXAMPLES



Georgian



Adam



Dutch

REVIVAL EXAMPLES

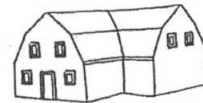
paired, triple,
or bay windows

never found
in originals



front-facing
gambrel roof
with cross gambrel

never found
in originals



one-story side
wings, either
open or
enclosed, usually
with flat roof

if found
on original
probably an
addition



steeply pitched
gambrel containing
a nearly full
second story

originals with
moderate- to
low-pitched roofs



broken
pediments

segmental,
triangular,
or ogee

only ogees
found on
originals and
even these
not common



continuous dormer
across front
and/or Federal
or Georgian entry
detail

dormer never
in originals



brick houses
with Georgian
doorways

originals primarily
in Virginia,
Maryland, or
landmark examples



Be certain to check range map, page 115,
for Dutch Colonial houses. Originals
occur *only* within the range shown on this map.

Figure 603

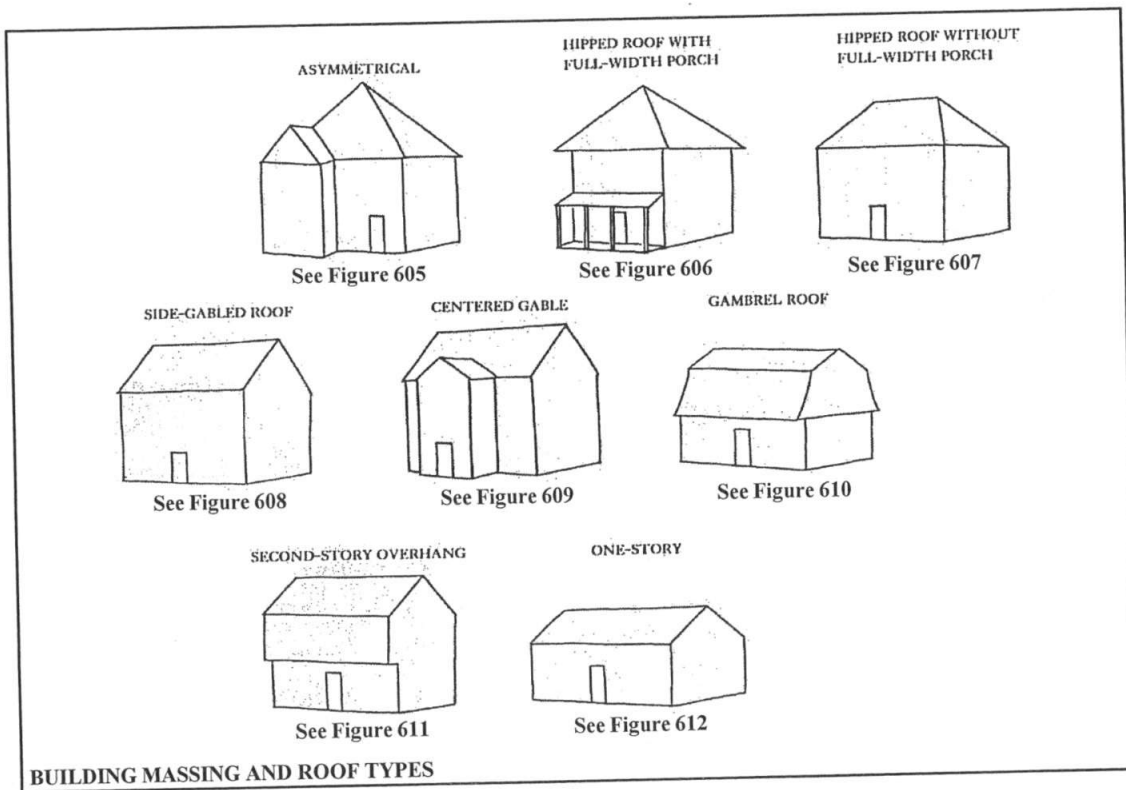


Figure 604



Figure 605 – Colonial Revival Asymmetrical Examples



Figure 606 – Hipped Roof with Full-width Porch Colonial Revival Examples

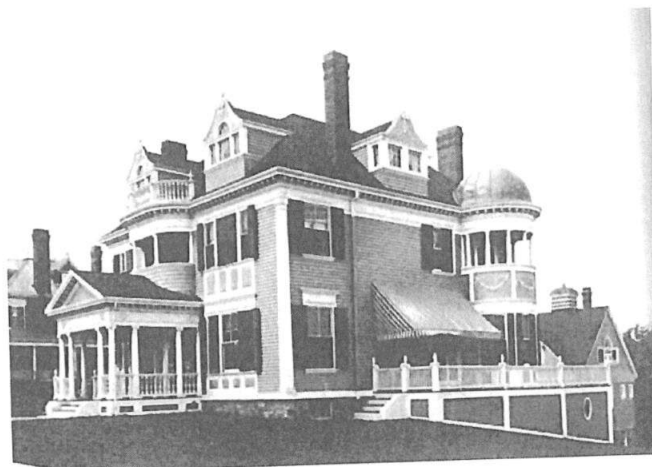
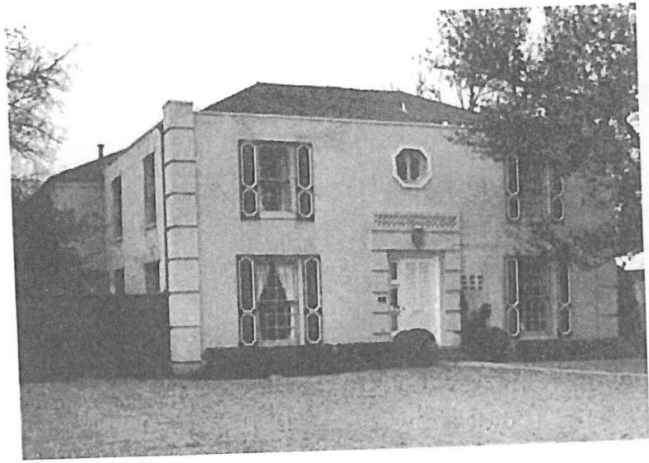


Figure 607 – Hipped Roof without Full-width Porch Colonial Revival Examples



Figure 608 – Side-gabled Roof Colonial Revival Examples



Figure 608 – Side-gabled Roof Colonial Revival Examples (continued)



Figure 609 – Centered Gable Colonial Revival Examples

600 series – Colonial Revival Figures



Figure 610 – Gambrel Roof Colonial Revival Examples

600 series – Colonial Revival Figures

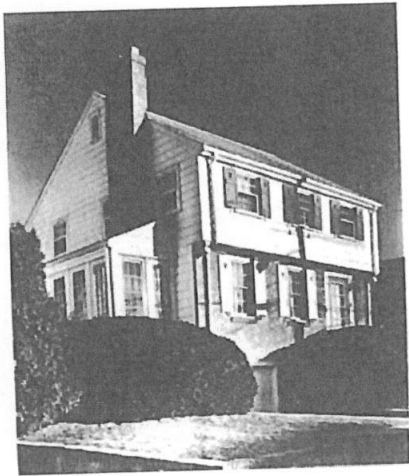


Figure 611 – Second-story Overhang Colonial Revival Examples



Figure 612 – One-story Colonial Revival Examples

700 – Tudor Figures

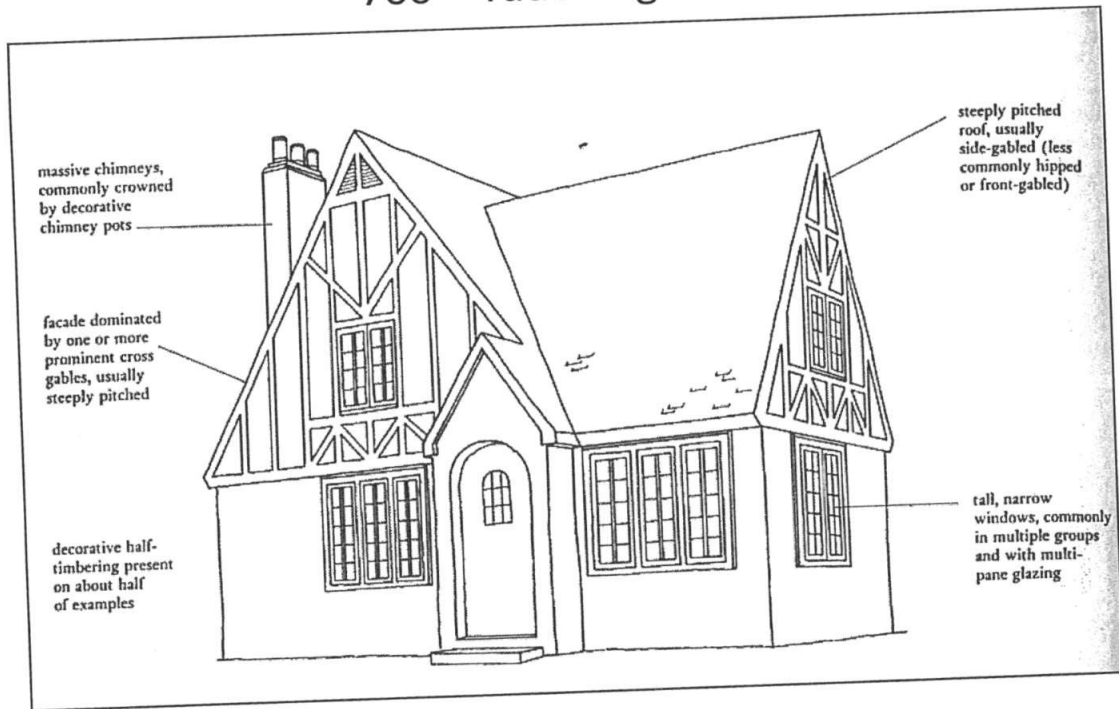


Figure 701

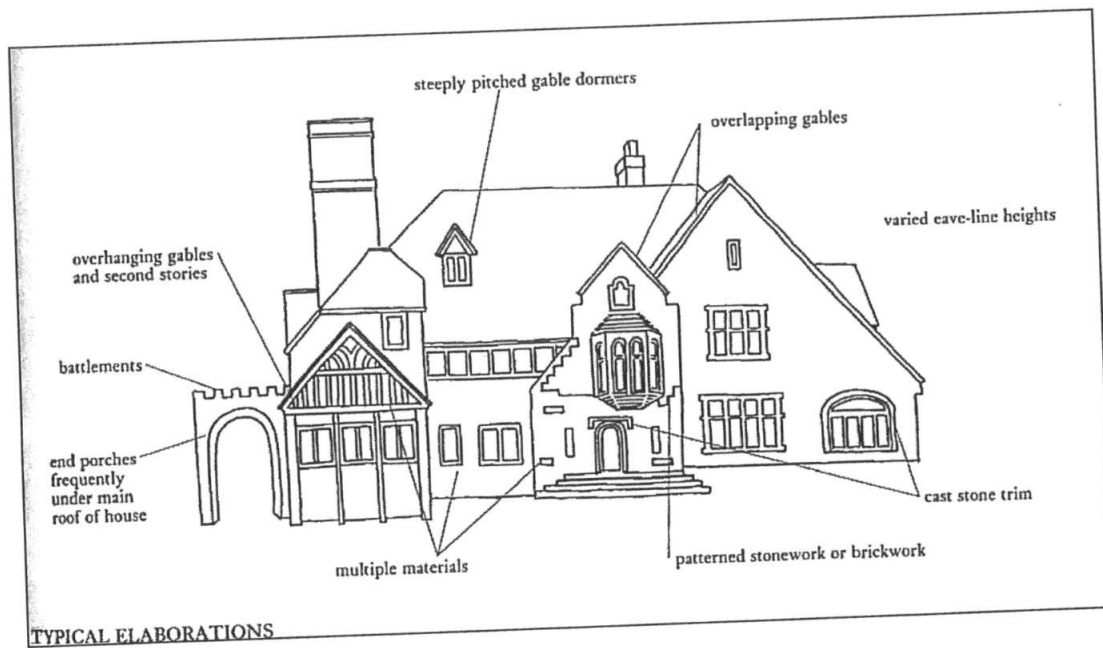


Figure 702

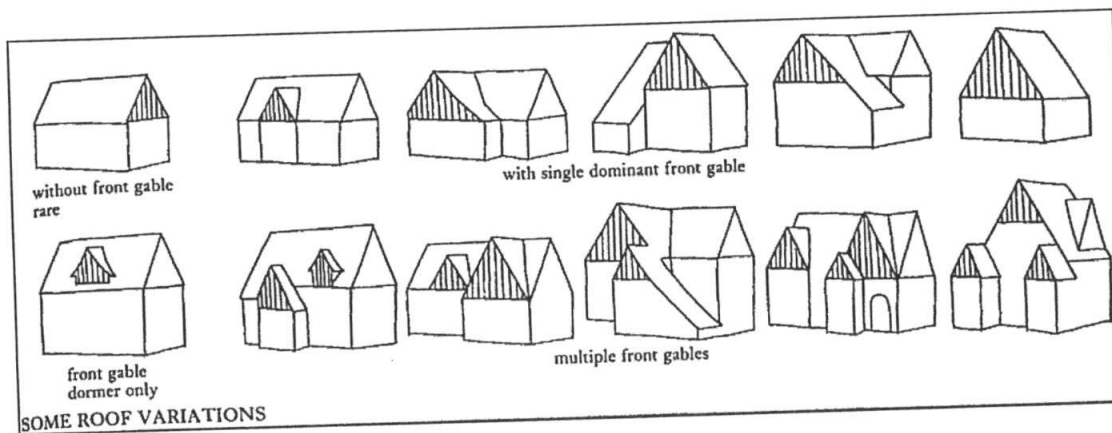


Figure 703

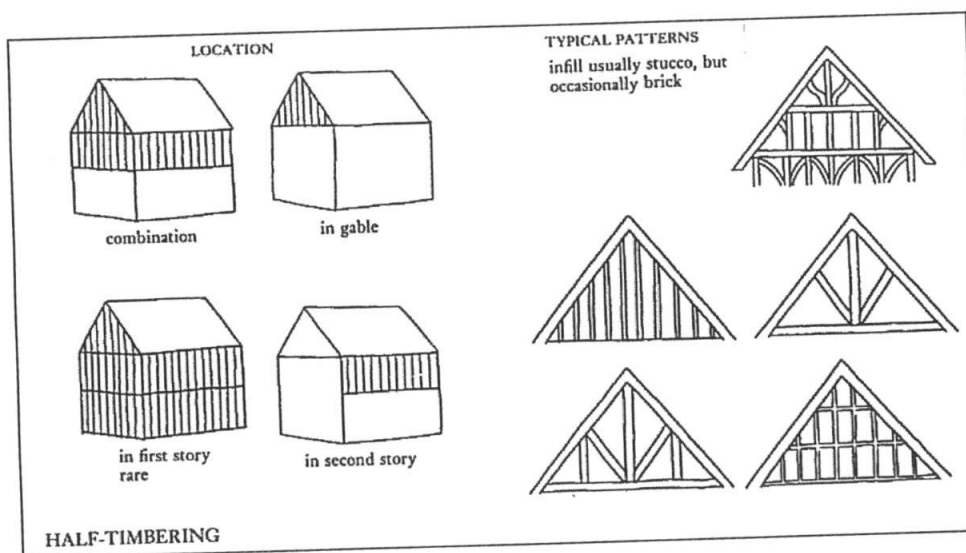


Figure 704

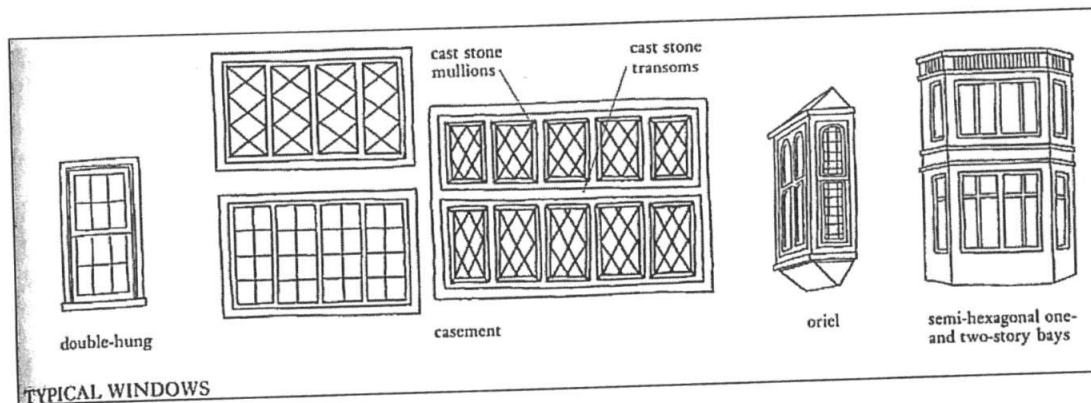


Figure 705

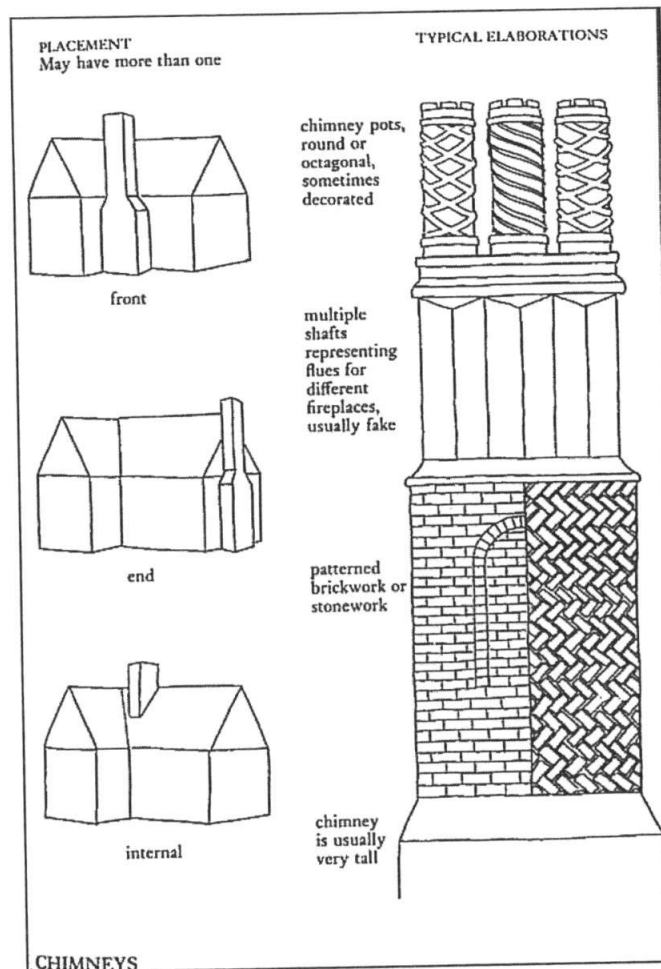


Figure 706

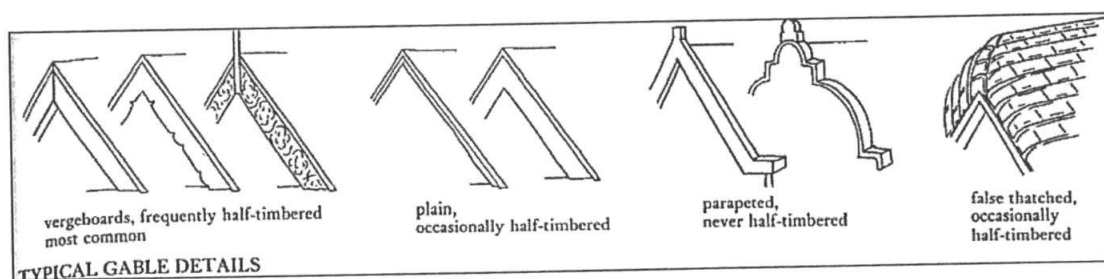


Figure 707

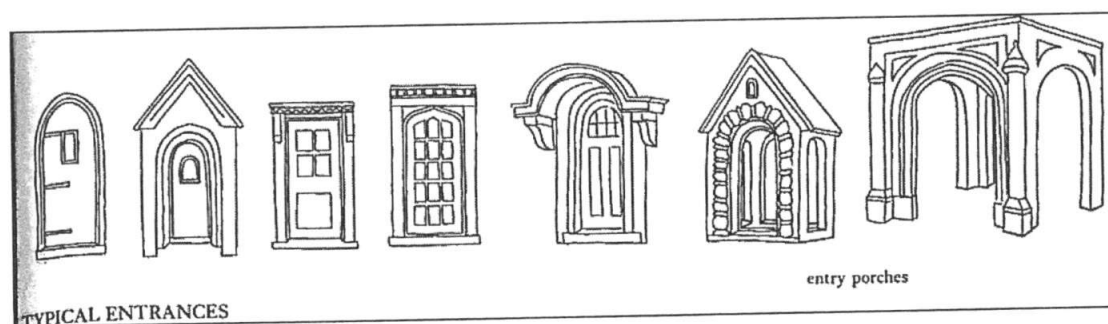


Figure 708

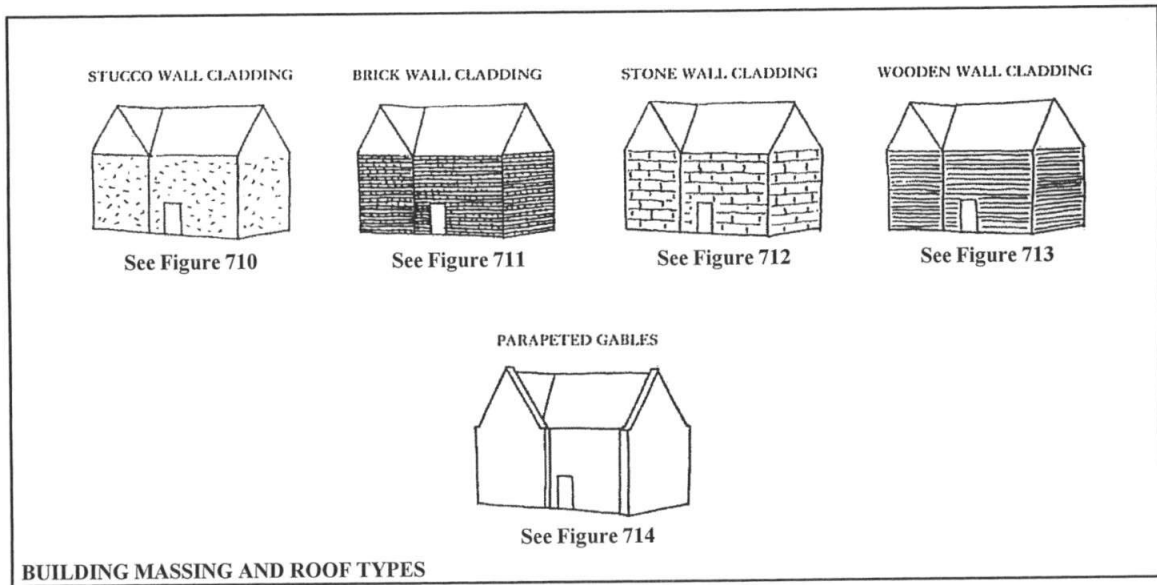


Figure 709

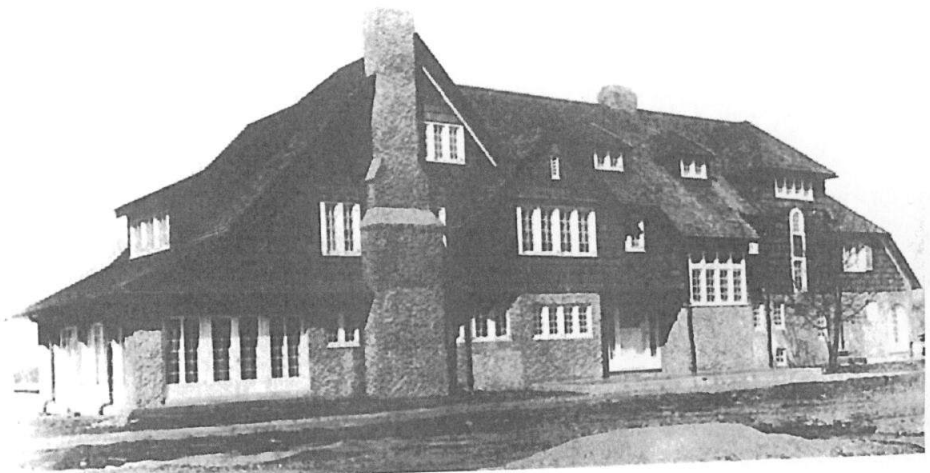
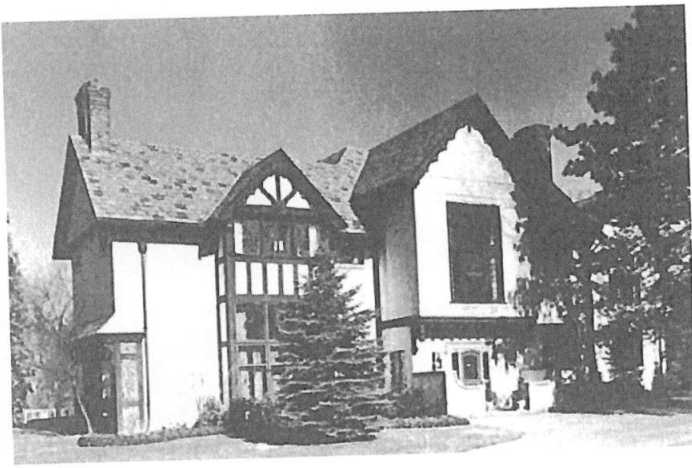


Figure 710 – Stucco Wall Cladding Tudor Examples

700 series – Tudor Figures

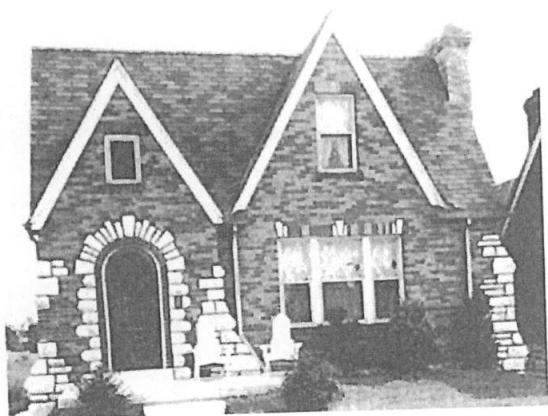


Figure 711 – Brick Wall Cladding Tudor Examples



Figure 711 – Brick Wall Cladding Tudor Examples (continued)

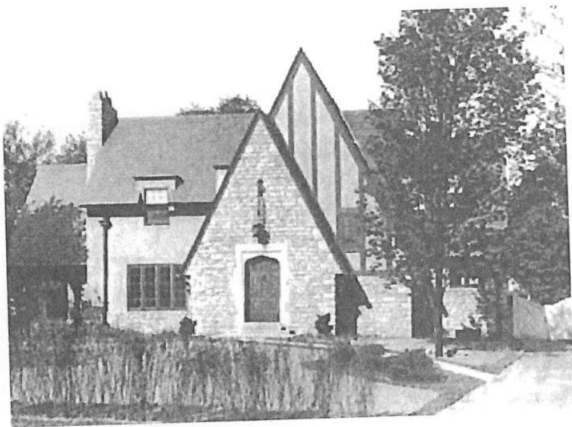


Figure 712 – Stone Wall Cladding Tudor Examples

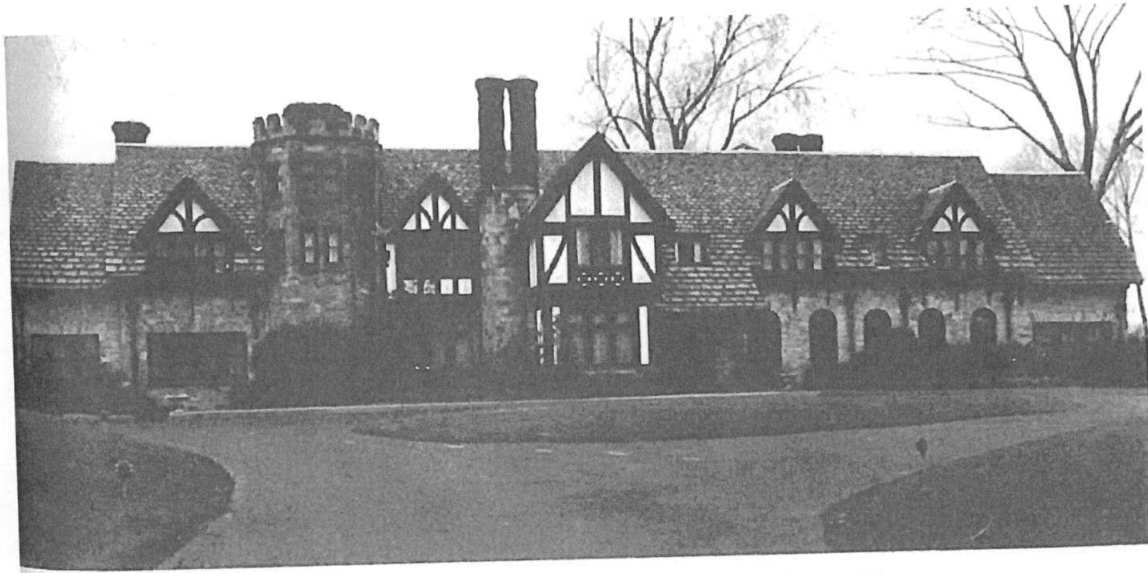


Figure 712 – Stone Wall Cladding Tudor Examples (continued)

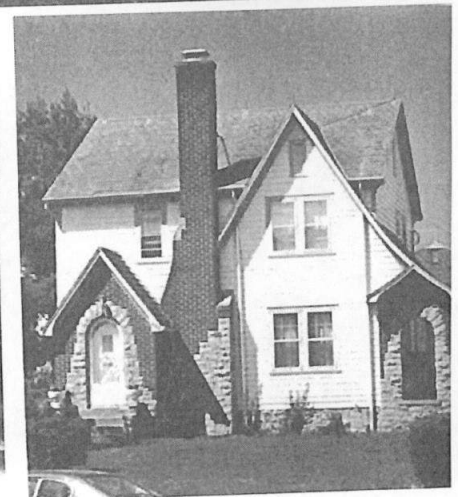


Figure 713 – Wooden Wall Cladding Tudor Examples



Figure 714 – Parapeted Gables Tudor Examples

800 – Craftsman Figures

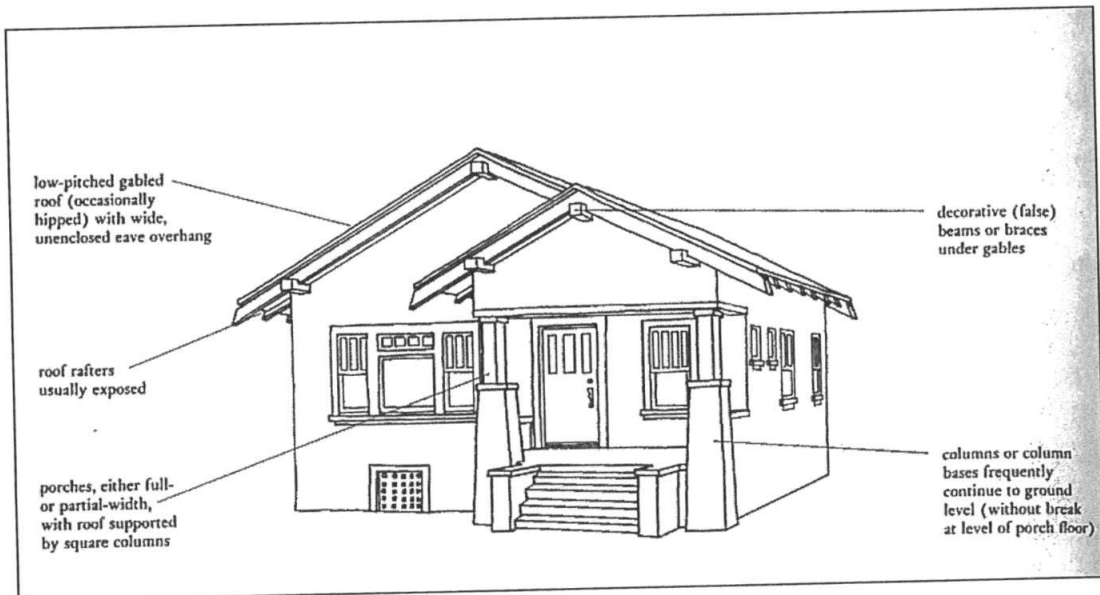


Figure 801

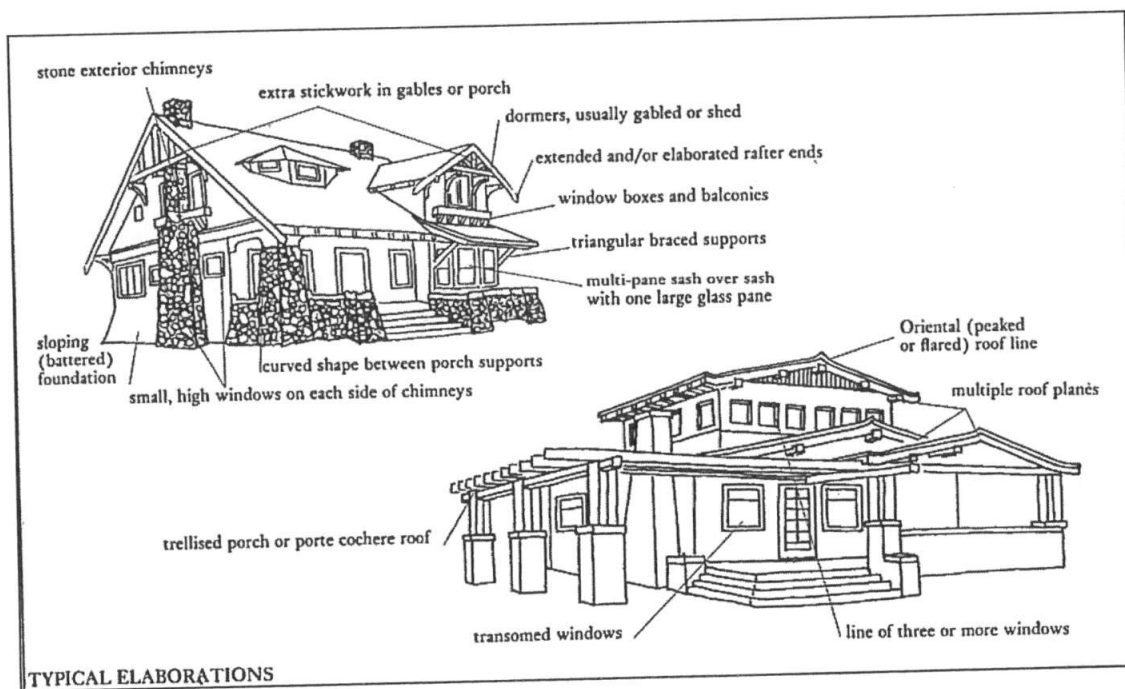


Figure 802

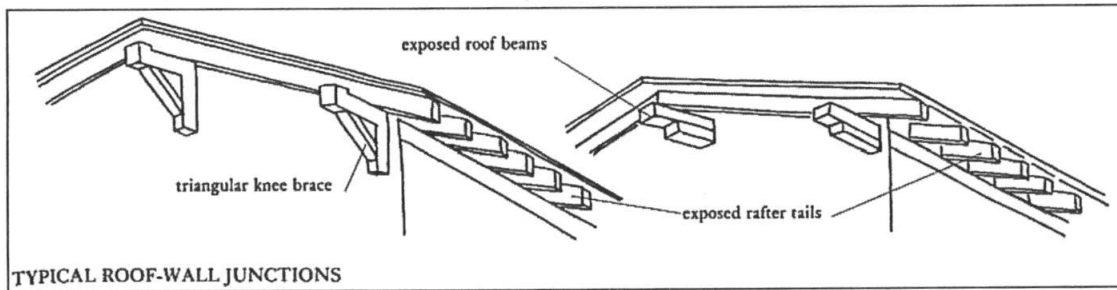


Figure 803

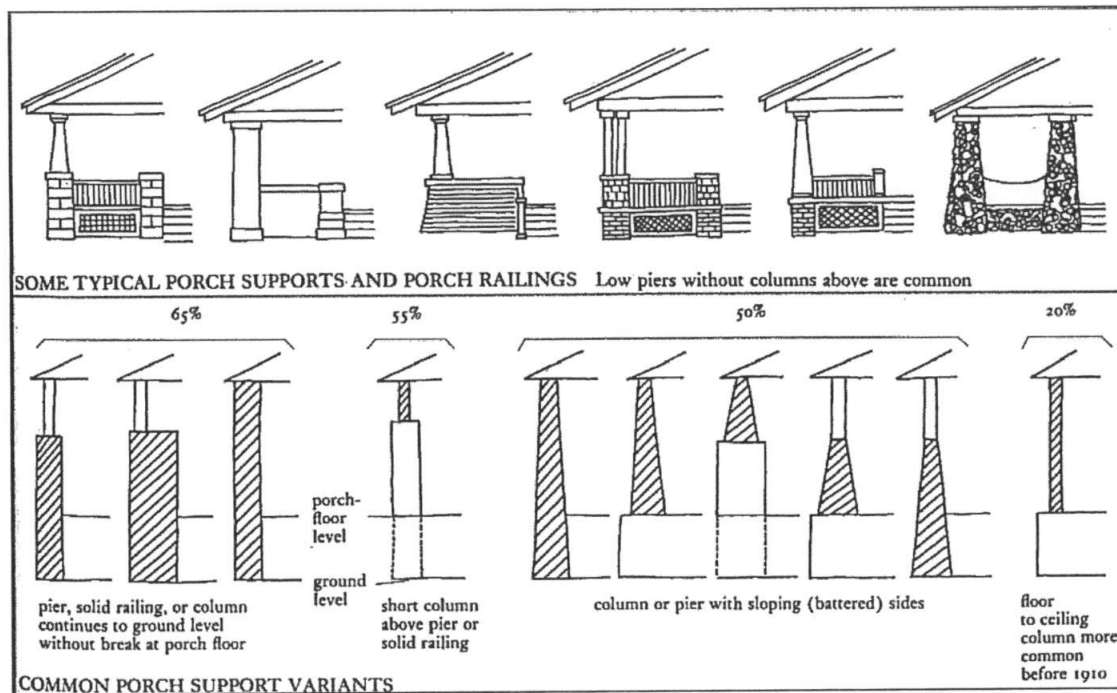


Figure 804

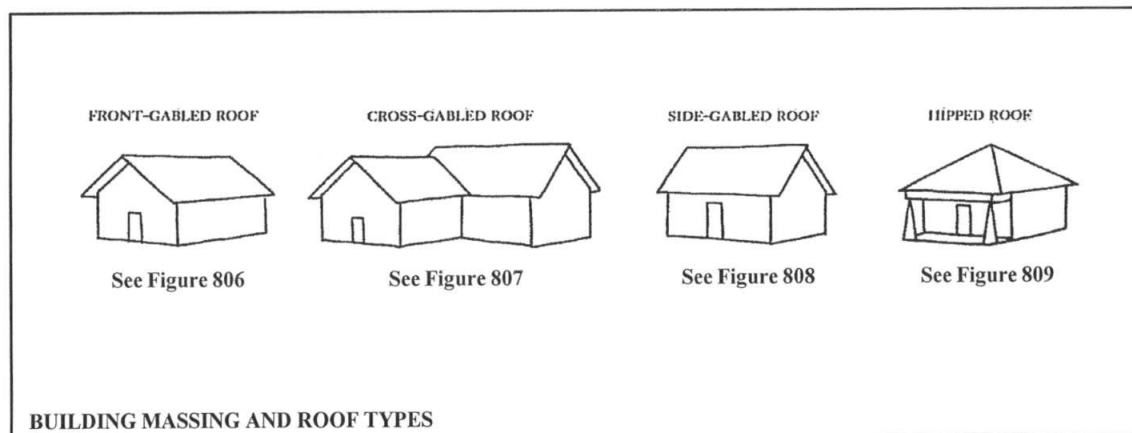


Figure 805

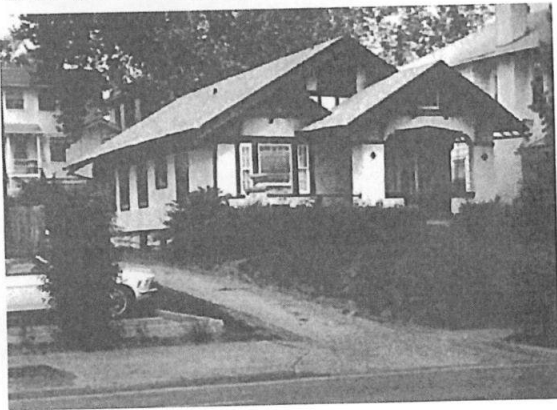


Figure 806 – Front-gabled Roof Craftsman Examples

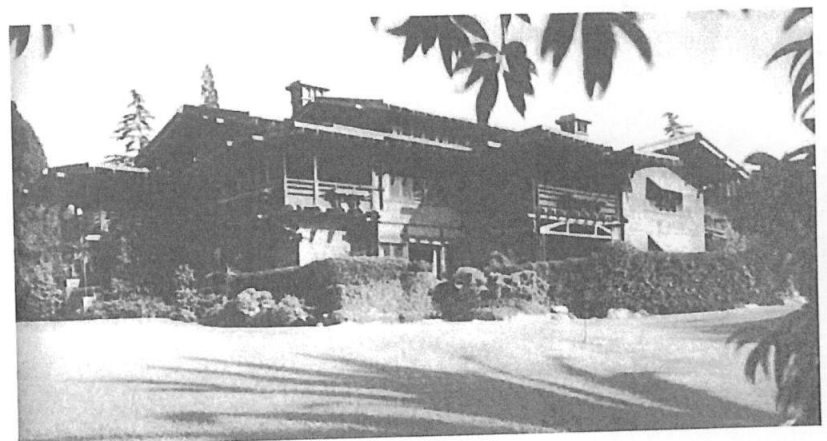


Figure 807 – Cross-gabled Roof Craftsman Examples

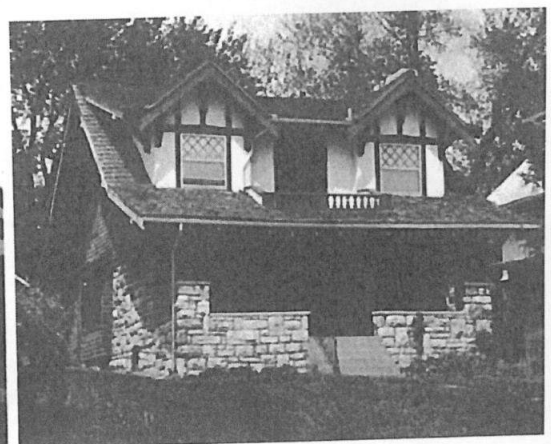
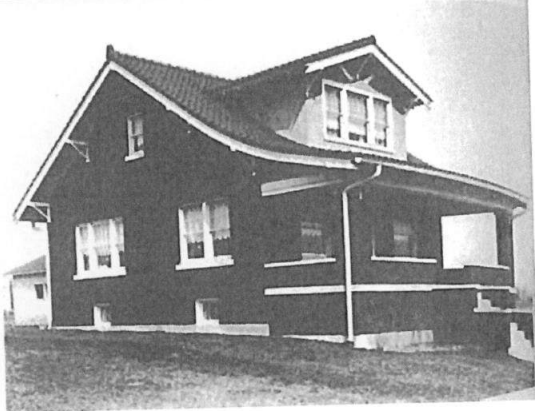
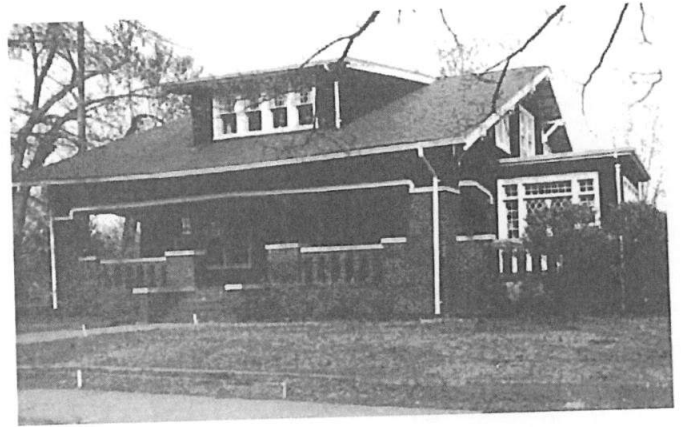


Figure 808 – Side-gabled Roof Craftsman Examples

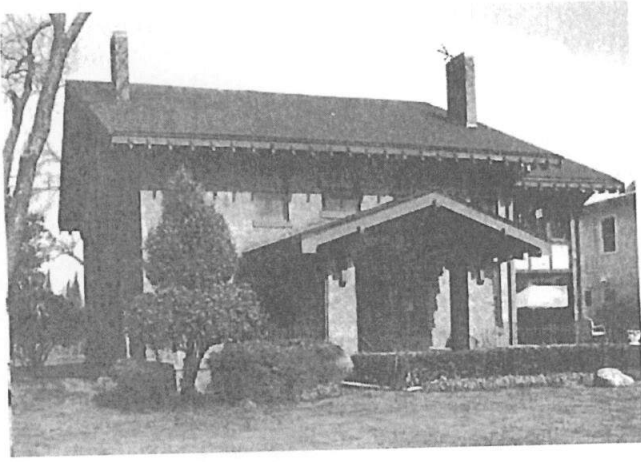


Figure 808 – Side-gabled Roof Craftsman Examples (continued)

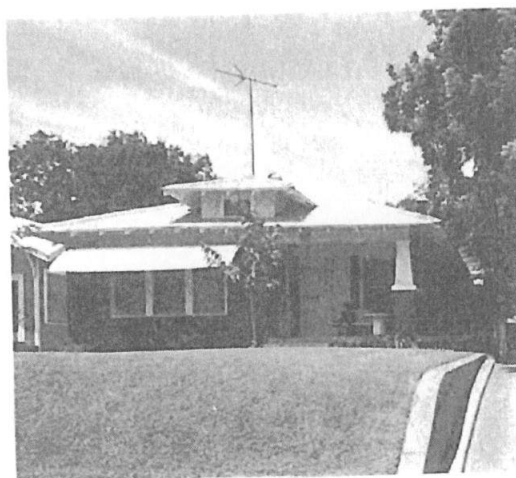


Figure 809 – Hipped Roof Craftsman Examples

Exhibit F

Multifamily Building Examples



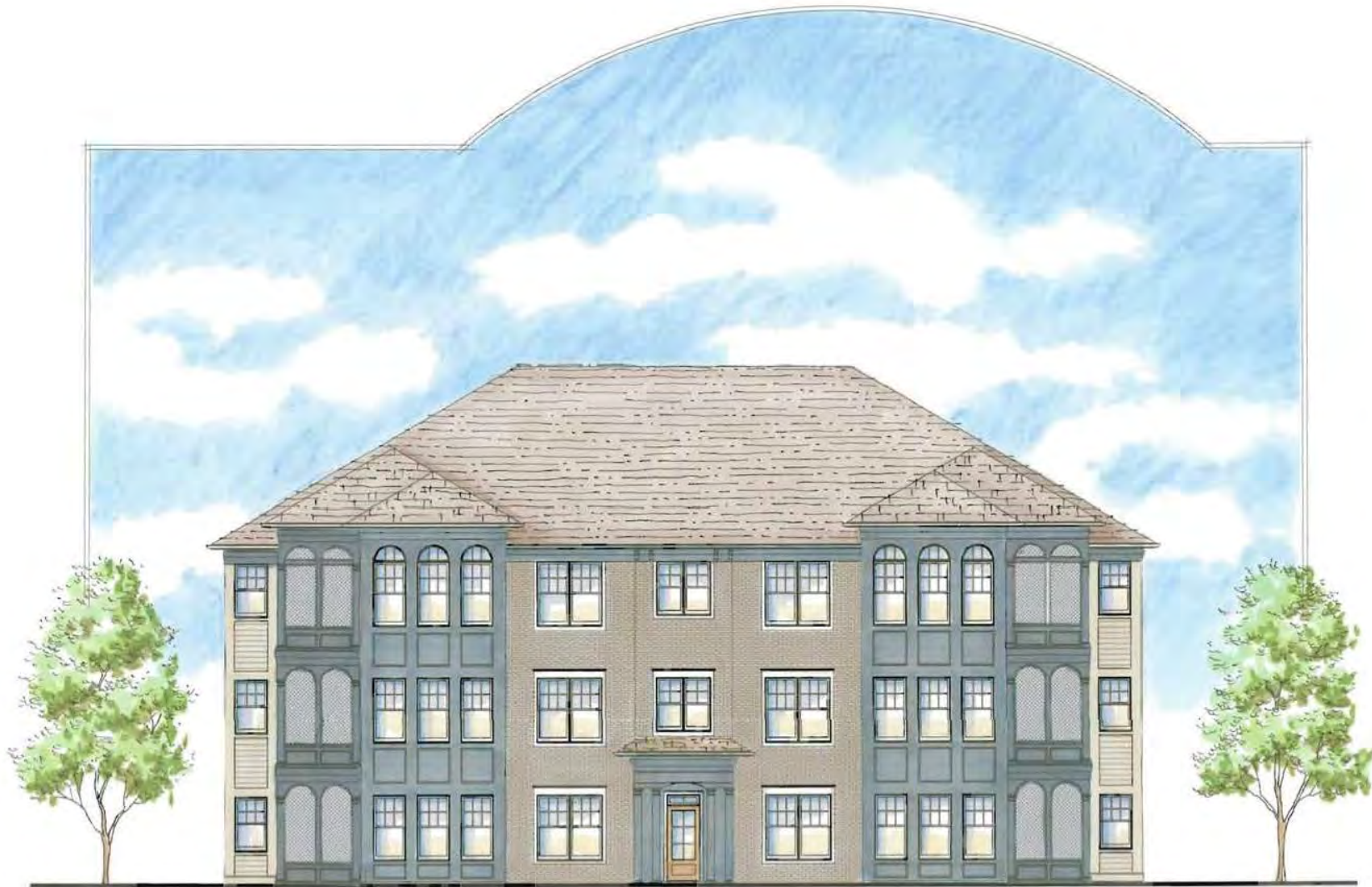
Front Elevation -Building Type 2



Rear Elevation –Building Type 2



Left and Right Side Elevations –Building Type 2



Alternate Front Elevation –Building Type 2



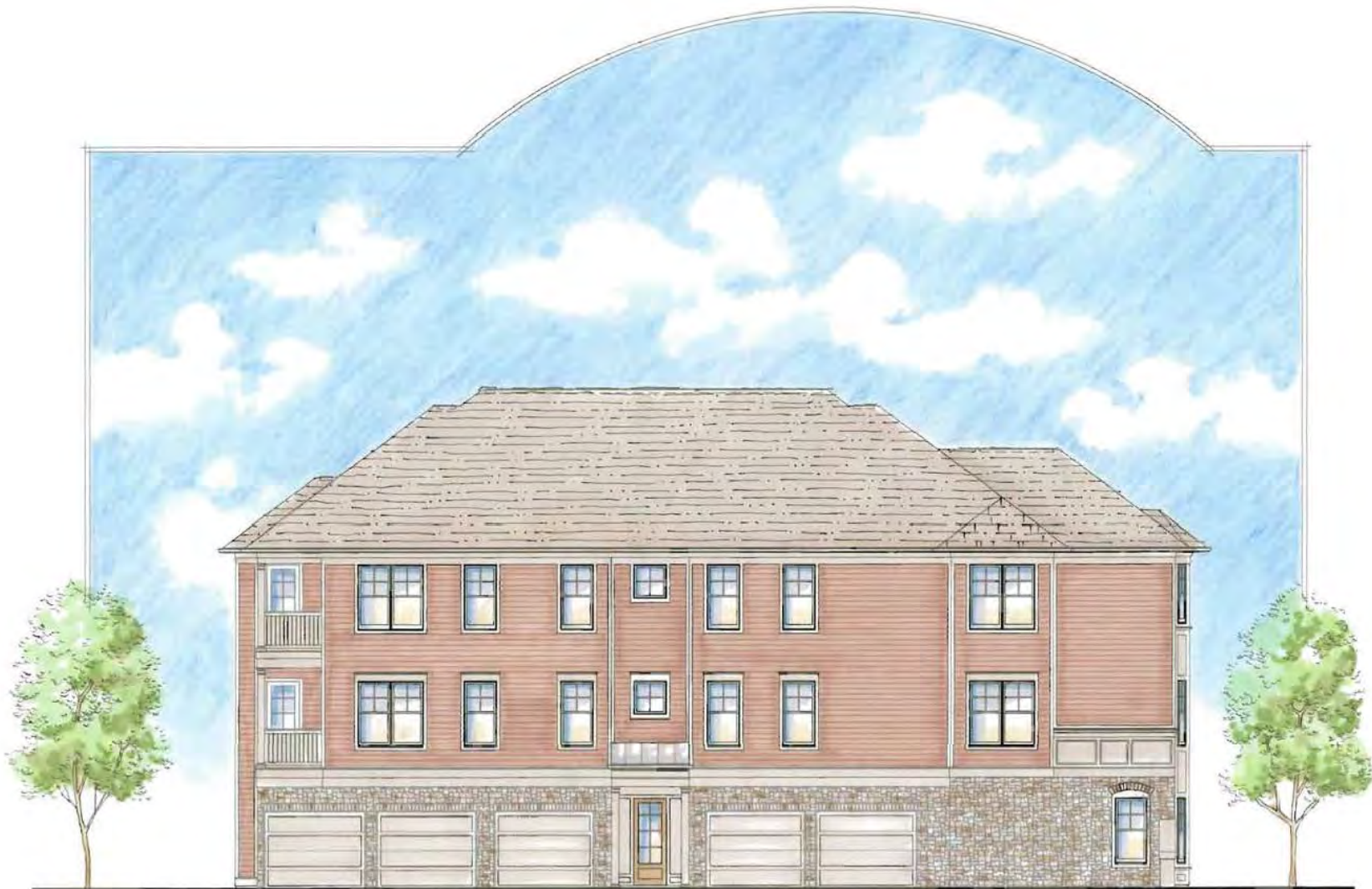
Alternate Rear Elevation - Building Type 2



Alternate Left and Right Side –Building Type 2



Front Elevation -Building Type 3



Rear Elevation -Building Type 3



Left Side Elevation –Building Type 3



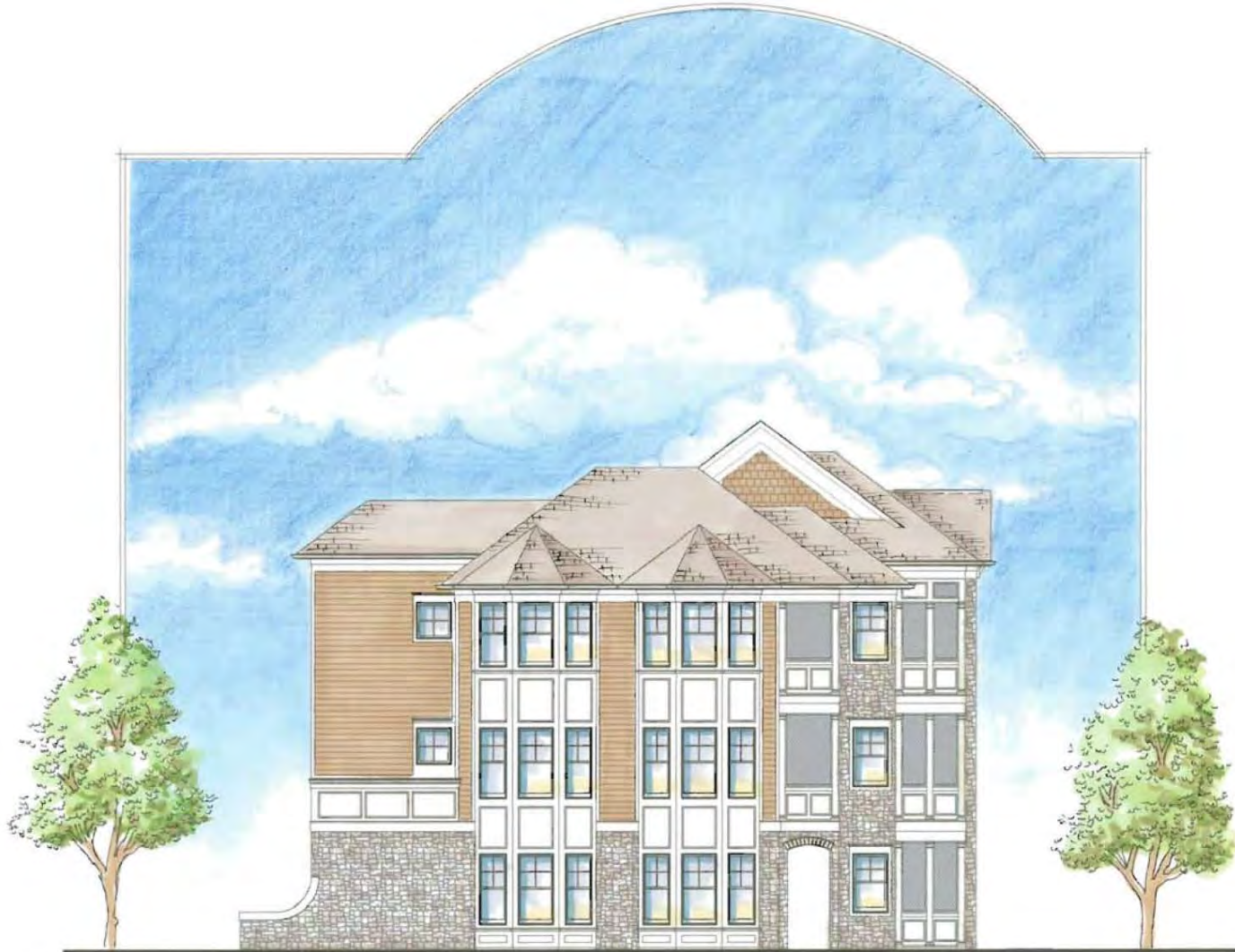
Right Side Elevation –Building Type 3



Alternate Front Elevation –Building Type 3



Alternate Rear Elevation –Building Type 3



Alternate Left Side Elevation –Building Type 3



Alternate Right Side Elevation –Building Type 3



Front Elevation –Building Type 4



Rear Elevation –Building Type 4



Left Side Elevation –Building Type



Right Side Elevation –Building Type 4



Alternate Front Elevation –Building Type 4



Alternate Front Elevation –Building Type 4



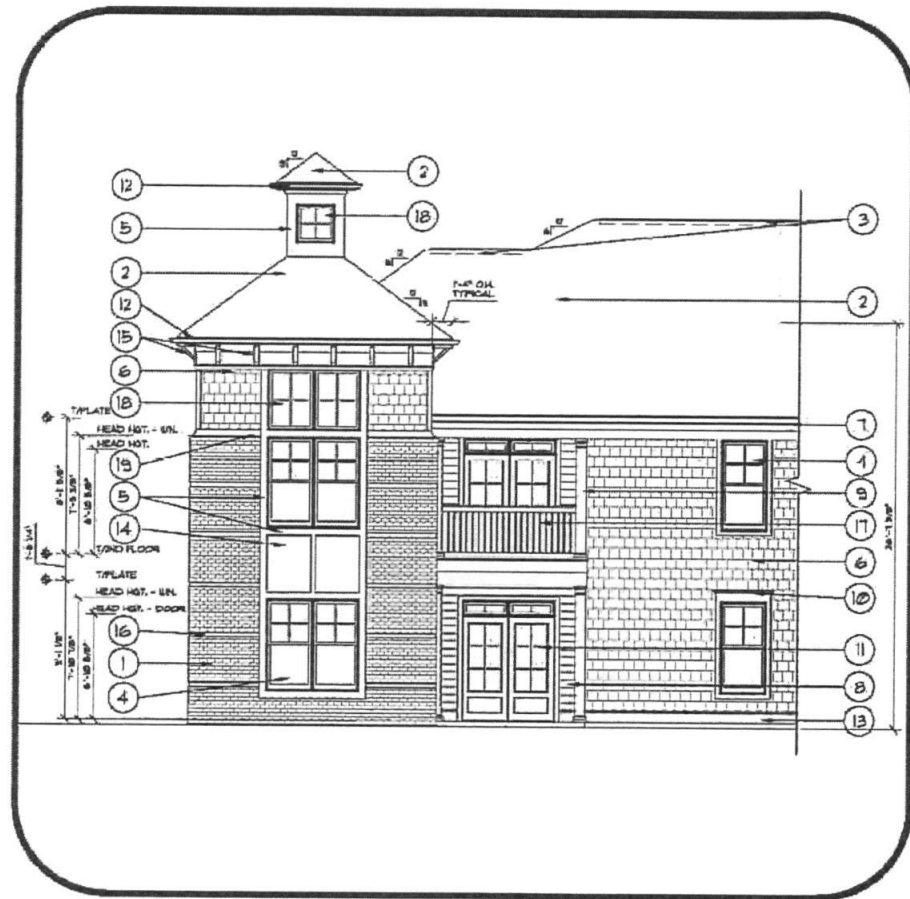
Alternate Left Side Elevation –Building Type 4



Alternate Right Side Elevation -Building Type 4

EXTERIOR MATERIALS KEY

- ① BRICK VENEER
- ② ARCH. TAB DIMENSIONAL SHINGLE
- ③ CONTINUOUS RIDGE VENT
- ④ SINGLE HUNG VINYL WINDOW
- ⑤ 1 X TRIM
- ⑥ FIBER CEMENT SHINGLES
- ⑦ PAINTED 1X FRIEZE TRIM
- ⑧ FIBER CEMENT BOARD SIDING
- ⑨ 1" SQUARE PAINTED COLUMN
- ⑩ AZEK RAM HEAD TRIM OVER 5/4x8 HEAD TRIM WITH 5/4x3 JAMB TRIM WITH 5/4x3 SILL TRIM
- ⑪ PAINTED FIBERGLASS OR STEEL & GLASS DOOR W/ TRANSOM ABOVE
- ⑫ PRE-FINISHED ALUM. GUTTER
- ⑬ WOOD BAND BOARD W/ DRIP EDGE ABOVE
- ⑭ SMOOTH FIBER CEMENT BOARD
- ⑮ 16" ROOF OVERHANG WITH SOFFIT BRACKETS
- ⑯ SINGLE COURSE RUNNING BOND BRICK VENEER - RECESSED
- ⑰ PAINTED METAL RAIL
- ⑱ FIXED VINYL WINDOW
- ⑲ TRIM OVER INVERTED COVE TRIM ON LADDER BRICK TRANSITION DETAIL

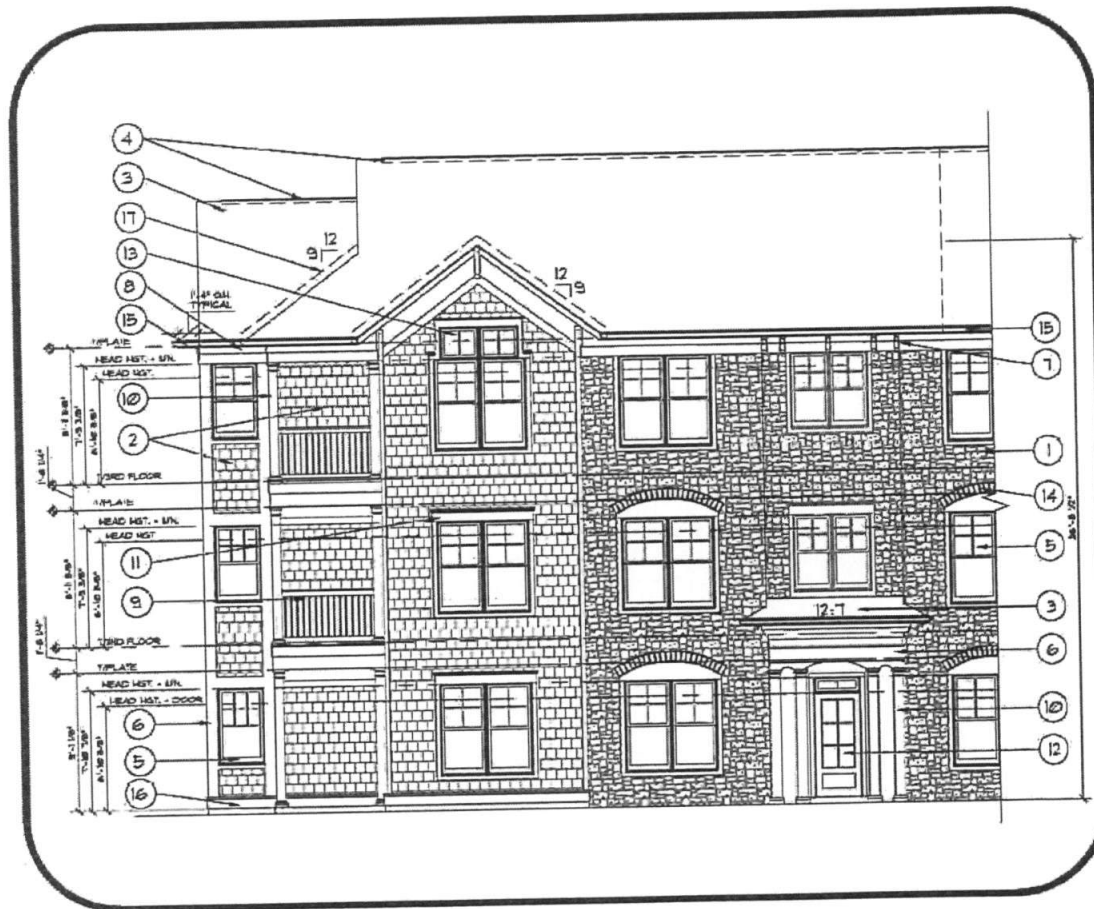


- ① TYPICAL APARTMENT MATERIALS-BLDG TYPE I

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

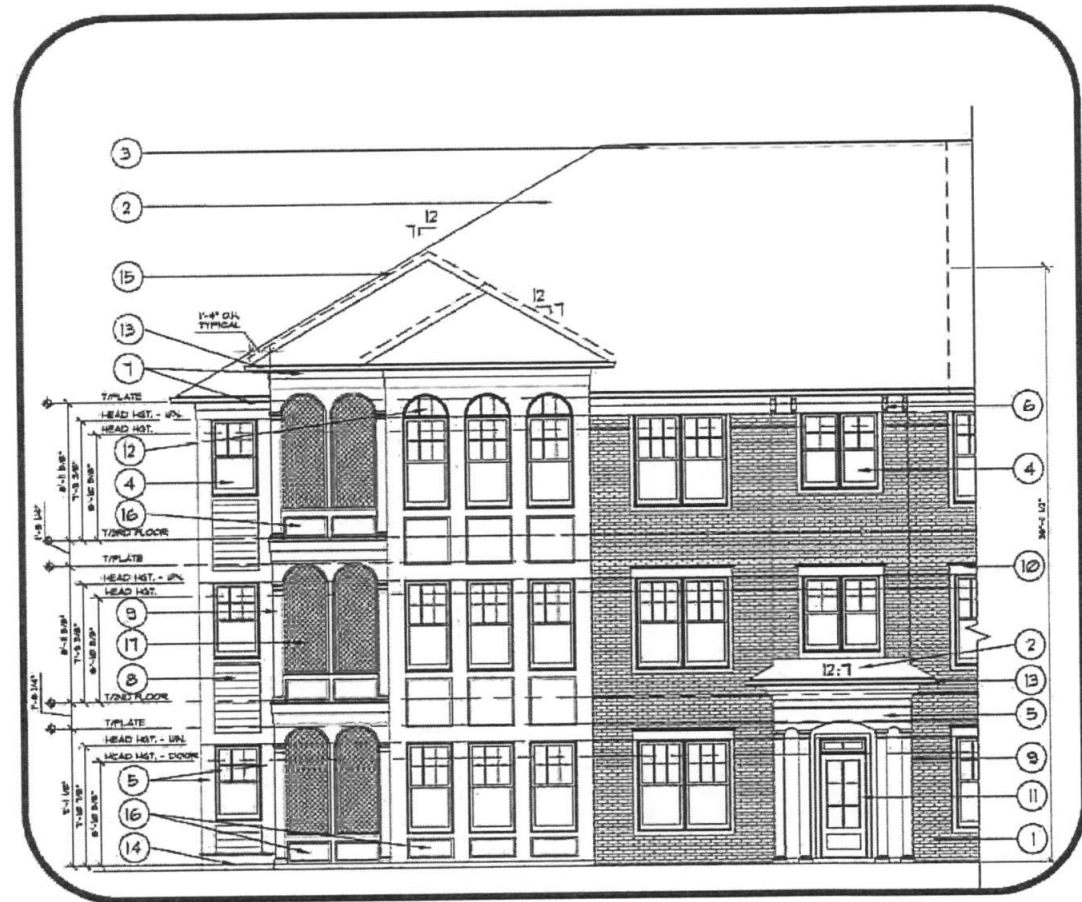
EXTERIOR MATERIALS KEY

- ① DRY STACKED STONE VENEER
- ② FIBER CEMENT SHINGLE
- ③ ARCH. TAB DIMENSIONAL SHINGLE
- ④ CONTINUOUS RIDGE VENT
- ⑤ SINGLE HUNG VINYL WINDOW
- ⑥ 1 X TRIM
- ⑦ 16" ROOF OVERHANG WITH SOFFIT BRACKETS
- ⑧ PAINTED 1X FRIEZE TRIM
- ⑨ PAINTED METAL RAIL
- ⑩ 7" SQUARE PAINTED COLUMN
- ⑪ AZEK RAM HEAD TRIM OVER 5/4x8 HEAD TRIM WITH 5/4x3 JAMB TRIM WITH 5/4x3 SILL TRIM
- ⑫ PAINTED FIBERGLASS OR STEEL & GLASS DOOR W/ TRANSOM ABOVE
- ⑬ TRANSOM WINDOW ABOVE SINGLE HUNG VINYL WINDOW
- ⑭ ARCHED STONE HEAD
- ⑮ PRE-FINISHED ALUM. GUTTER
- ⑯ WOOD BAND BOARD W/ DRIP EDGE ABOVE
- ⑰ PRE-FIN. ALUM. FLASHING @ VERTICAL INTERSECTIONS W/ ROOF LINES. VALLEY FLASH ALL VALLEYS



EXTERIOR MATERIALS KEY

- ① BRICK VENEER
- ② ARCH. TAB DIMENSIONAL SHINGLE
- ③ CONTINUOUS RIDGE VENT
- ④ SINGLE HUNG VINYL WINDOW
- ⑤ 1 X TRIM
- ⑥ 16" ROOF OVERHANG WITH SOFFIT BRACKETS
- ⑦ PAINTED 1X FRIEZE TRIM
- ⑧ FIBER CEMENT BOARD SIDING
- ⑨ 1" SQUARE PAINTED COLUMN
- ⑩ AZEK RAM HEAD TRIM OVER 5/4x8 HEAD TRIM WITH 5/4x3 JAMB TRIM WITH 5/4x3 SILL TRIM
- ⑪ PAINTED FIBERGLASS OR STEEL * GLASS DOOR W/ TRANSOM ABOVE
- ⑫ TRANSOM WINDOW ABOVE SINGLE HUNG VINYL WINDOW
- ⑬ PRE-FINISHED ALUM. GUTTER
- ⑭ WOOD BAND BOARD W/ DRIP EDGE ABOVE
- ⑮ PRE-FIN. ALUM. FLASHING @ VERTICAL INTERSECTIONS W/ ROOF LINES. VALLEY FLASH ALL VALLEYS
- ⑯ SMOOTH FIBER CEMENT BOARD
- ⑰ FIBERGLASS SCREENING PORCH



EXTERIOR MATERIALS KEY

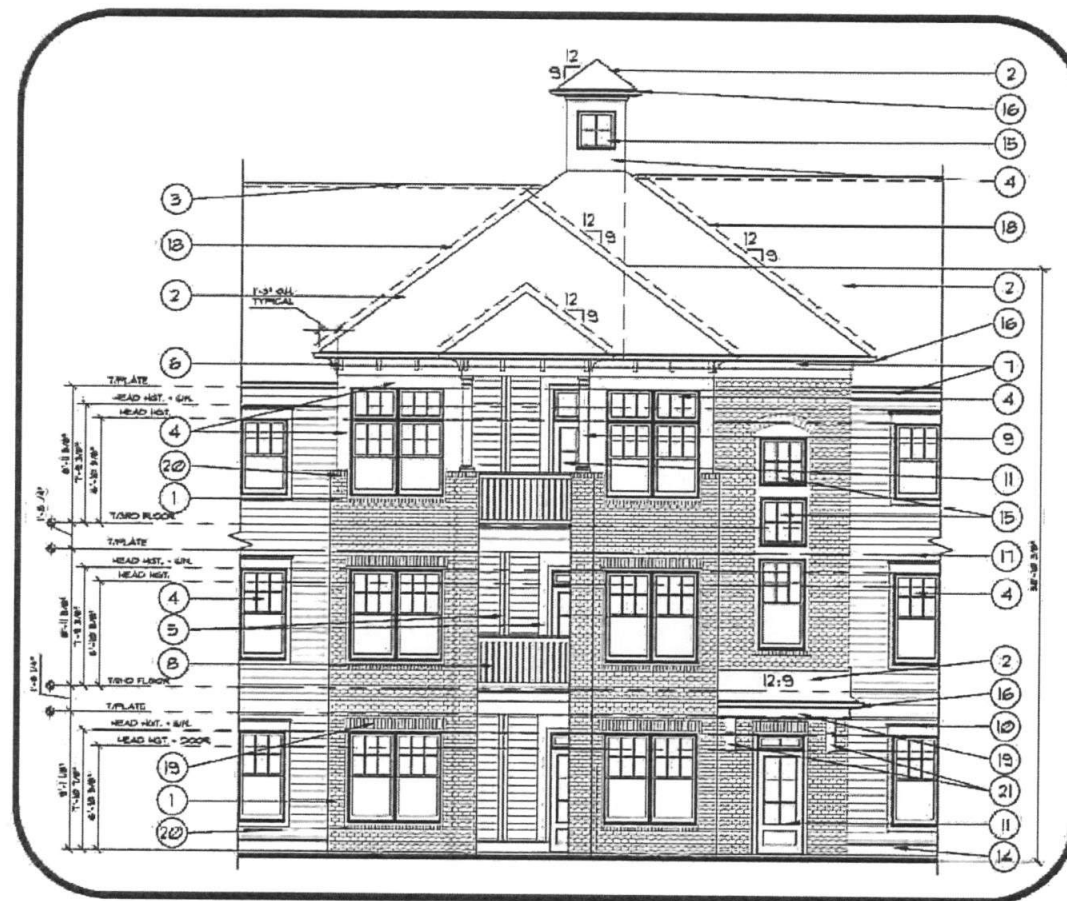
- ① DRY STACKED STONE VENEER
- ② ARCH. TAB DIMENSIONAL SHINGLE
- ③ CONTINUOUS RIDGE VENT
- ④ SINGLE HUNG VINYL WINDOW
- ⑤ 1 X TRIM
- ⑥ ARCHED STONE HEAD
- ⑦ PAINTED 1X FRIEZE TRIM
- ⑧ FIBER CEMENT BOARD SIDING
- ⑨ 1" SQUARE PAINTED COLUMN
- ⑩ AZEK RAM HEAD TRIM OVER 5/4x8 HEAD TRIM WITH 5/4x3 JAMB TRIM WITH 5/4x3 SILL TRIM
- ⑪ PAINTED FIBERGLASS OR STEEL 4 GLASS DOOR W/ TRANSOM ABOVE
- ⑫ TRANSOM WINDOW ABOVE SINGLE HUNG VINYL WINDOW
- ⑬ PRE-FINISHED ALUM. GUTTER
- ⑭ WOOD BAND BOARD W/ DRIP EDGE ABOVE
- ⑮ PRE-FIN. ALUM. FLASHING @ VERTICAL INTERSECTIONS W/ ROOF LINES. VALLEY FLASH ALL VALLEYS
- ⑯ SMOOTH FIBER CEMENT BOARD
- ⑰ FIBERGLASS SCREENING PORCH



- ① TYPICAL APARTMENT MATERIALS-BLDG. TYPE 3
SCALE: 1/8" = 1'-0"

EXTERIOR MATERIALS KEY

- ① BRICK VENEER
- ② ARCH. TAB DIMENSIONAL SHINGLE
- ③ CONTINUOUS RIDGE VENT
- ④ SINGLE HUNG VINYL WINDOW
- ⑤ 1 X TRIM
- ⑥ 16" ROOF OVERHANG WITH SOFFIT BRACKETS
- ⑦ PAINTED 1X FRIEZE TRIM
- ⑧ PAINTED METAL RAIL-ASSEMBLY TOP RAIL +42" AFF.
- ⑨ 7" SQUARE PAINTED COLUMN
- ⑩ AZEK RAM HEAD TRIM OVER 5/4x8 HEAD TRIM WITH 5/4x3 JAMB TRIM WITH 5/4x3 SILL TRIM
- ⑪ PAINTED FIBERGLASS OR STEEL 4 GLASS DOOR W/ TRANSOM ABOVE
- ⑫ TRANSOM WINDOW ABOVE SINGLE HUNG VINYL WINDOW
- ⑬ ARCHED STONE HEAD
- ⑭ WOOD BAND BOARD W/ DRIP EDGE ABOVE
- ⑮ FIXED VINYL WINDOW
- ⑯ PRE-FINISHED ALUM. GUTTER
- ⑰ FIBER CEMENT BOARD SIDING
- ⑱ PRE-FIN. ALUM. FLASHING @ VERTICAL INTERSECTIONS W/ ROOF LINES. VALLEY FLASH ALL VALLEYS
- ⑲ SOLDIER COURSE - BRICK VENEER
- ⑳ ROWLOCK COURSE - BRICK VENEER
- ㉑ SOLID WOOD BRACKETS



① TYPICAL APARTMENT MATERIALS-BLDG TYPE 4
SCALE: 1/8" = 1'-0"

EXTERIOR MATERIALS KEY

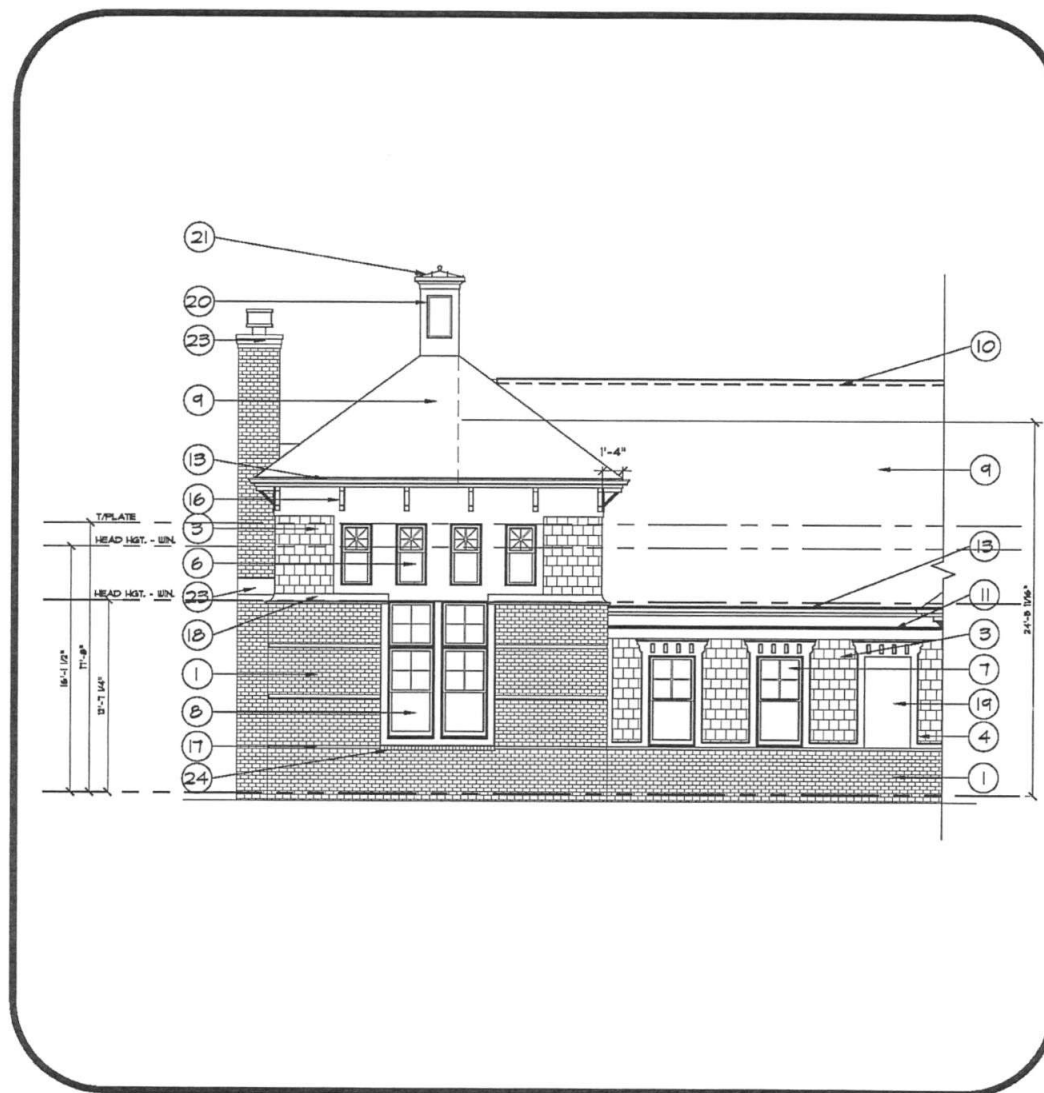
- 1 STONE VENEER
- 2 ARCH. TAB DIMENSIONAL SHINGLE
- 3 CONTINUOUS RIDGE VENT
- 4 SINGLE HUNG VINYL WINDOW
- 5 1" X TRIM
- 6 FIBER CEMENT SHINGLES
- 7 PAINTED 1X FRIEZE TRIM
- 8 PAINTED METAL RAIL-ASSEMBLY TOP RAIL #42" AFF.
- 9 1" SQUARE PAINTED COLUMN
- 10 AZEK RAM HEAD TRIM OVER 5/4x8 HEAD TRIM WITH 5/4x3 JAMB TRIM WITH 5/4x3 SILL TRIM
- 11 PAINTED FIBERGLASS OR STEEL 4 GLASS DOOR W/ TRANSOM ABOVE
- 12 TRANSOM WINDOW ABOVE SINGLE HUNG VINYL WINDOW
- 13 ARCHED STONE HEAD
- 14 WOOD BAND BOARD W/ DRIP EDGE ABOVE
- 15 FIXED VINYL WINDOW
- 16 PRE-FINISHED ALUM. GUTTER
- 17 FIBER CEMENT BOARD SIDING
- 18 PRE-FIN. ALUM. FLASHING @ VERTICAL INTERSECTIONS W/ ROOF LINES. VALLEY FLASH ALL VALLEYS
- 19 ARCHED STONE HEAD
- 20 3 1/2" WIDE PAINTED WOOD BRACKETS
- 21 SMOOTH FIBER CEMENT BOARD
- 22 METAL ROOF



1 TYPICAL APARTMENT MATERIALS-BLDG TYPE 4-ALT. ELEVATION
SCALE: 1/8" = 1'-0"

EXTERIOR MATERIALS KEY

- ① BRICK VENEER
- ② FIBER CEMENT BOARD SIDING
- ③ FIBER CEMENT BOARD SHINGLES
- ④ 1x TRIM
- ⑤ PAINTED FIBERGLASS OR STEEL DOOR (GLASS LITES WHERE INDICATED)
- ⑥ FIXED VINYL WINDOW
- ⑦ SINGLE HUNG VINYL WINDOW
- ⑧ SINGLE HUNG VINYL WINDOW w/ TRANSOM UNIT
- ⑨ ARCH. TAB DIMENSIONAL SHINGLES
- ⑩ CONTINUOUS RIDGE VENT
- ⑪ PAINTED 1x FRIEZE TRIM
- ⑫ 10" DIA. PAINTED WOOD COLUMN
- ⑬ PRE-FINISHED ALUMINUM GUTTER
- ⑭ WOOD BAND BOARD w/ DRIP EDGE ABOVE
- ⑮ SMOOTH FIBER CEMENT BOARD
- ⑯ 16" ROOF OVERHANG w/ PAINTED SOFFIT BRACKETS
- ⑰ SINGLE COURSE BRICK VENEER - RECESSED
- ⑱ TRIM OVER INVERTED COVE MOLDING ON LADDER - BRICK TRANSITION DETAIL
- ⑲ SIGNAGE/MESSAGE BOARD
- ⑳ 1 1/2" PANEL MOLDING
- ㉑ PRE-FINISHED ALUMINUM STANDING SEAM ROOFING w/ BALL FINIAL
- ㉒ 9'x7' FLUSH-PANEL SECTIONAL OVERHEAD DOOR
- ㉓ LIMESTONE TRIM
- ㉔ BRICK ROWLOCK COURSE



① TYPICAL CLUBHOUSE MATERIALS

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



Harmony

PLANNED UNIT DEVELOPMENT

AMENDMENT ORDINANCE

Ordinance No.: 14-55

Adoption Date: January 26, 2015

Instrument No.: 2015004569

AMENDMENT APPLIES TO: The Single-Family District in the Harmony PUD Ordinance.

DESCRIPTION OF AMENDMENT: This amendment modified the architectural and open space standards applicable to the Single-Family District of the Harmony PUD.

RELATED ORDINANCES¹: [12-14](#)

¹ Includes only adopted ordinances prior to the above mentioned ordinance. Please confirm with the Economic and Community Development Department for any succeeding ordinances.

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(13)
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02/03/2015 10:28:55A 63 PGS
Jennifer Hayden
HAMILTON County Recorder IN
Recorded as Presented


ORDINANCE NUMBER 14-55

**AN ORDINANCE OF THE CITY OF WESTFIELD AND WASHINGTON
TOWNSHIP, HAMILTON COUNTY, INDIANA CONCERNING AN AMENDMENT
TO THE UNIFIED DEVELOPMENT ORDINANCE AND THE
HARMONY PLANNED UNIT DEVELOPMENT DISTRICT ORDINANCE**

This is an Ordinance (this "Ordinance") to amend the Unified Development Ordinance of the City of Westfield and Washington Township, Hamilton County, Indiana (the "Unified Development Ordinance"), enacted by the City of Westfield pursuant to its authority under the laws of the State of Indiana, Ind. Code § 36-7-4 et seq., as amended;

WHEREAS, the City of Westfield, Indiana (the "City") and the Township of Washington, both of Hamilton County, Indiana are subject to the Unified Development Ordinance;

WHEREAS, the Council enacted Ordinance No. 12-14, the Harmony Planned Unit Development District (the "Harmony PUD Ordinance"), on January 14, 2014;

WHEREAS, the Westfield-Washington Advisory Plan Commission (the "Commission") considered a petition (**Petition No. 1501-PUD-01**), requesting an amendment to the Harmony PUD Ordinance with regard to the subject real estate more particularly described in **Exhibit A** attached hereto (the "Real Estate");

WHEREAS, the Commission forwarded **Petition No. 1501-PUD-01** to the Common Council of the City of Westfield, Hamilton County, Indiana (the "Common Council") with a favorable recommendation (8-0) in accordance with Indiana Code § 36-7-4-608, as required by Indiana Code § 36-7-4-1505;

WHEREAS, the Secretary of the Commission certified the action of the Commission to the Common Council on January 21, 2015;

WHEREAS, the Common Council is subject to the provisions of the Indiana Code § 36-7-4-1507 and Indiana Code § 36-7-4-1512 concerning any action on this request; and

NOW, THEREFORE, BE IT ORDAINED by the Common Council of the City of Westfield, Hamilton County, Indiana, meeting in regular session, that the Harmony PUD Ordinance and the Unified Development Ordinance and are hereby amended as follows:

Section 1. Applicability of Ordinance.

- 1.1 This Ordinance shall amend the Harmony PUD Ordinance, as applicable to the Real Estate. Development of the Real Estate shall be governed by (i) the Harmony PUD Ordinance, as amended by this Ordinance and its exhibits, and (ii) the provisions of the Unified Development Ordinance, as amended and applicable to the Underlying Zoning District or a Planned Unit Development District, except as modified, revised, supplemented or expressly made inapplicable by the Harmony PUD Ordinance, as amended.
- 1.2 Chapter (“*Chapter*”) and Article (“*Article*”) cross-references of this Ordinance shall hereafter refer to the section as specified and referenced in the Unified Development Ordinance.
- 1.3 All other provisions of the Harmony PUD Ordinance shall remain in effect with the adoption of this Ordinance.
- 1.4 All provisions and representations of the Unified Development Ordinance that conflict with the provisions of this Ordinance are hereby made inapplicable to the Real Estate and shall be superseded by the terms of the Harmony PUD Ordinance, as amended.

Section 2. Architectural Standards. The standards of *Section 3.4: Architectural Standards* of the Harmony PUD Ordinance shall apply to the development of the District, except as otherwise modified by the Harmony PUD Ordinance and below.

- 2.1 Architectural Design Standards: *Section 3.4(A) Architectural Design Standards* shall be amended to provide that single-family detached dwelling units on a Mew Lot or 42’ Alley-load Lot shall either: (i) comply with one of the defined architectural designs detailed in *Section 3.4(A)(3) Defined Architectural Designs*; or (ii) shall be substantially similar to the homes depicted in **Exhibit C** attached hereto (the “Cottage Collection Homes”).
 - A. Enhanced End Lots: Enhanced End Lots are identified in **Exhibit B**. In order to enhance the architectural interest of the streetscape, a Cottage Collection Home on an Enhanced End Lot shall be subject to the following:
 - 1) Orientation: The outdoor living area on the side Building Façade (the courtyard area between the main living area and the garage, as depicted in **Exhibit C**) (the “Outdoor Living Area”) shall be oriented towards the Street.
 - 2) Specific Plan Enhancements: The following plans (as included in the **Exhibit C**) shall incorporate the following additional architectural enhancements on the Side Building Façade with the Outdoor Living Area, when oriented towards the Street:
 - i. Plan EH-1030: Incorporate a minimum of one (1) additional

- window in the garage façade and two (2) additional windows in the dwelling façade, with at least one (1) of the windows located on the second floor level of the dwelling.
- ii. Plan EH-1045: Incorporate a minimum of one (1) additional window in the garage façade and two (2) additional windows on the first floor level of the dwelling.
- iii. Plan EH-1060: Incorporate a minimum of one (1) additional window in the garage façade and two (2) additional windows in the dwelling façade. At least one (1) of the windows shall be located on each the first and second floor level of the dwelling.
- iv. Plan EH-1075: Incorporate a minimum of one (1) additional window on the first floor level of the dwelling façade and add a trim band located between the first and second floor levels.
- v. Plan EH-1090: Incorporate a minimum of one (1) window in the garage façade.
- vi. Minimum Window Size: The additional windows required by this subsection (the "Additional Windows") shall each be a minimum size of ten (10) square feet. However, smaller-sized windows may be incorporated to satisfy the Additional Window requirement if the collective size of the smaller windows meets or exceeds the collective total square footage of the Additional Window(s) otherwise required.

2.2 Conventional Design Standards; Rear Elevation: *Section 3.4(A)(4)(c)*
Conventional Design Standards; Rear Elevation shall be amended to include the following additional architectural elements:

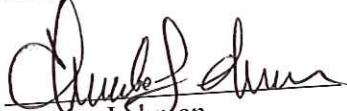
- A. Single story dwelling.
- B. The Dwelling is buffered from the External Street with enhanced landscaping that includes a Common Area or landscaping area along the entire rear or side Lot Line which is a minimum of fifty (50) feet in depth and includes a solid planting screen consisting of a minimum of eight (8) evergreen trees, three (3) shade trees, three (3) ornamental trees and twenty-five (25) shrubs per one hundred (100) lineal feet. In addition, a minimum five-foot (5') tall mound shall be required. (2 points)
- C. Main Roof Design (a maximum of two (2) points from this subsection may qualify):
 - (1) Two (2) or more dormers.
 - (2) Twelve (12) inch overhangs around the entire Dwelling, as measured prior to the installation of Masonry Materials.
 - (3) A minimum roof pitch of 8:12 around the entire Dwelling.
 - (4) Two (2) or more gables.
- D. A minimum of seventy-five (75) square feet of windows.

Section 3.

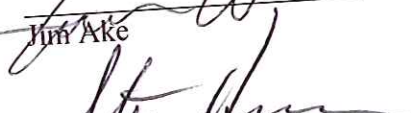
Open/Green Space. The standards of *Section 1.3: Open/Green Space* of the Harmony PUD Ordinance shall apply; however, shall be modified to require a minimum sixty-three (63) acres of Open/Green Space.

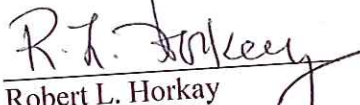
ALL OF WHICH IS HEREBY ADOPTED BY THE CITY COUNCIL OF WESTFIELD,
HAMILTON COUNTY, INDIANA THIS 26th DAY OF JANUARY, 2015.

Voting For


Charles Lehman


Jim Ake


Steven Hoover


Robert L. Horkay

Robert J. Smith


Cindy L. Spoljaric

Robert W. Stokes

Voting Against

Charles Lehman

Jim Ake

Steven Hoover

Robert L. Horkay

Robert J. Smith

Cindy L. Spoljaric

Robert W. Stokes

Abstain

Charles Lehman

Jim Ake

Steven Hoover

Robert L. Horkay

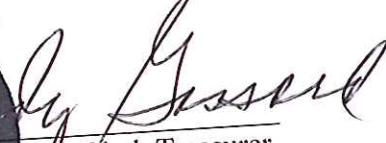
Robert J. Smith

Cindy L. Spoljaric

Robert W. Stokes



TEST:


Cindy Gossard, Clerk Treasurer

I hereby certify that **ORDINANCE 14-55** was delivered to the Mayor of Westfield

on the 27 day of Jan, 2015, at 10:00A.m.

Cindy Gossard
Cindy Gossard, Clerk-Treasurer

I hereby **APPROVE ORDINANCE 14-55**

this 27 day of Jan, 2015.

J. Andrew Cook
J. Andrew Cook, Mayor

I hereby **VETO ORDINANCE 14-55**

this _____ day of _____, 2015.

J. Andrew Cook, Mayor

This document prepared by:
Bryan D. Stumpf, PLA, AICP
12965 Old Meridian Street
Carmel, IN 46032

I affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security Number in this document, unless required by law. Bryan D. Stumpf

SCHEDULE OF EXHIBITS

Exhibit A Real Estate (Legal Description)

Exhibit B Enhanced End Lot Map

Exhibit C Cottage Collection Homes

EXHIBIT A

REAL ESTATE

LEGAL DESCRIPTION FOR THE RESIDENTIAL DISTRICT

Part of the Northeast, Southeast and Northwest Quarters of Section 16, Township 18 North, Range 3 East in Hamilton County, Indiana, more particularly described as follows:

BEGINNING at the northeast corner of said Northeast Quarter; thence South 00 degrees 00 minutes 00 seconds East (assumed basis of bearings) along the east line of said Northeast Quarter 2,630.58 feet to the northeast corner of said Southeast Quarter; thence South 00 degrees 12 minutes 08 seconds East along the east line of said Southeast Quarter 2,636.09 feet to the southeast corner thereof; thence South 89 degrees 25 minutes 04 seconds West along the south line of said Southeast Quarter 1,352.43 feet to the southwest corner of the East Half of said Southeast Quarter; thence North 00 degrees 18 minutes 09 seconds West along the west line of said East Half 2,633.15 feet to the southeast corner of the West Half of said Northeast Quarter; thence South 89 degrees 17 minutes 41 seconds West along the south line of said West Half 1,357.06 feet to the southeast corner of said Northwest Quarter; thence South 89 degrees 01 minute 52 seconds West along the south line of said Northwest Quarter 678.57 feet to the southwest corner of the East Half of the Southeast Quarter of said Northwest Quarter; thence North 00 degrees 11 minutes 39 seconds West along the West line of said East Half 1,315.85 feet to the northwest corner thereof; thence South 89 degrees 07 minutes 05 seconds West along the south line of the Northeast Quarter of said Northwest Quarter 679.24 feet to the southwest corner thereof; thence North 00 degrees 13 minutes 25 seconds West along the west line of the Northeast Quarter of said Northwest Quarter 823.62 feet to a point that is 493.24 feet South 00 degrees 13 minutes 26 seconds East from the northwest corner of the Northeast Quarter of said Northwest Quarter; thence North 89 degrees 12 minutes 17 seconds East parallel with the north line of said Northwest Quarter 794.85 feet; thence North 00 degrees 13 minutes 25 seconds West 3.82 feet; thence North 89 degrees 12 minutes 17 seconds East parallel with the north line of said Northwest Quarter 285.30 feet to an east line of the 119.55-acre tract described in Instrument Number 200300107178, on file in the Office of the Recorder of Hamilton County, Indiana, the following six (6) courses are along the east, south and west lines of said 119.55-acre tract; 1) thence South 00 degrees 09 minutes 53 seconds East 108.70 feet; 2) thence North 89 degrees 12 minutes 17 seconds East 279.15 feet to the west line of said Northeast Quarter; 3) thence North 89 degrees 16 minutes 38 seconds East 450.00 feet; 4) thence South 00 degrees 09 minutes 53 seconds East 57.15 feet; 5) thence North 89 degrees 16 minutes 38 seconds East 518.47 feet; 6) thence North 00 degrees 00 minutes 00 seconds West parallel with the east line of said Northeast Quarter 655.30 feet to a point in the north line of said Northeast Quarter that is 1,751.34 feet west of the northeast corner of said Northeast Quarter; thence North 89 degrees 16 minutes 38 seconds East along said north line 1,751.34 feet to the POINT OF BEGINNING. Containing 277.55 acres, more or less.

EXCEPT THEREFROM the following described real estate:

The Southeast Quarter of the Southeast Quarter of Section 16, Township 18 North, Range 3 East, in Hamilton County, Indiana, more particularly described as follows:

BEGINNING at the Southeast Corner of said Quarter Quarter Section, the following four (4) courses are along the south, west, north, and east lines thereof; (1) thence South 89 degrees 25 minutes 04 seconds West 1352.43 feet; (2) thence North 00 degrees 18 minutes 09 seconds West 1316.57 feet; (3) thence North 89 degrees 21 minutes 22 seconds East 1354.74 feet; (4) thence South 00 degree 12 minutes 08 seconds East 1318.04 feet to the POINT OF BEGINNING; containing 40.933, acres more or less.

EXHIBIT B

ENHANCED END LOT MAP

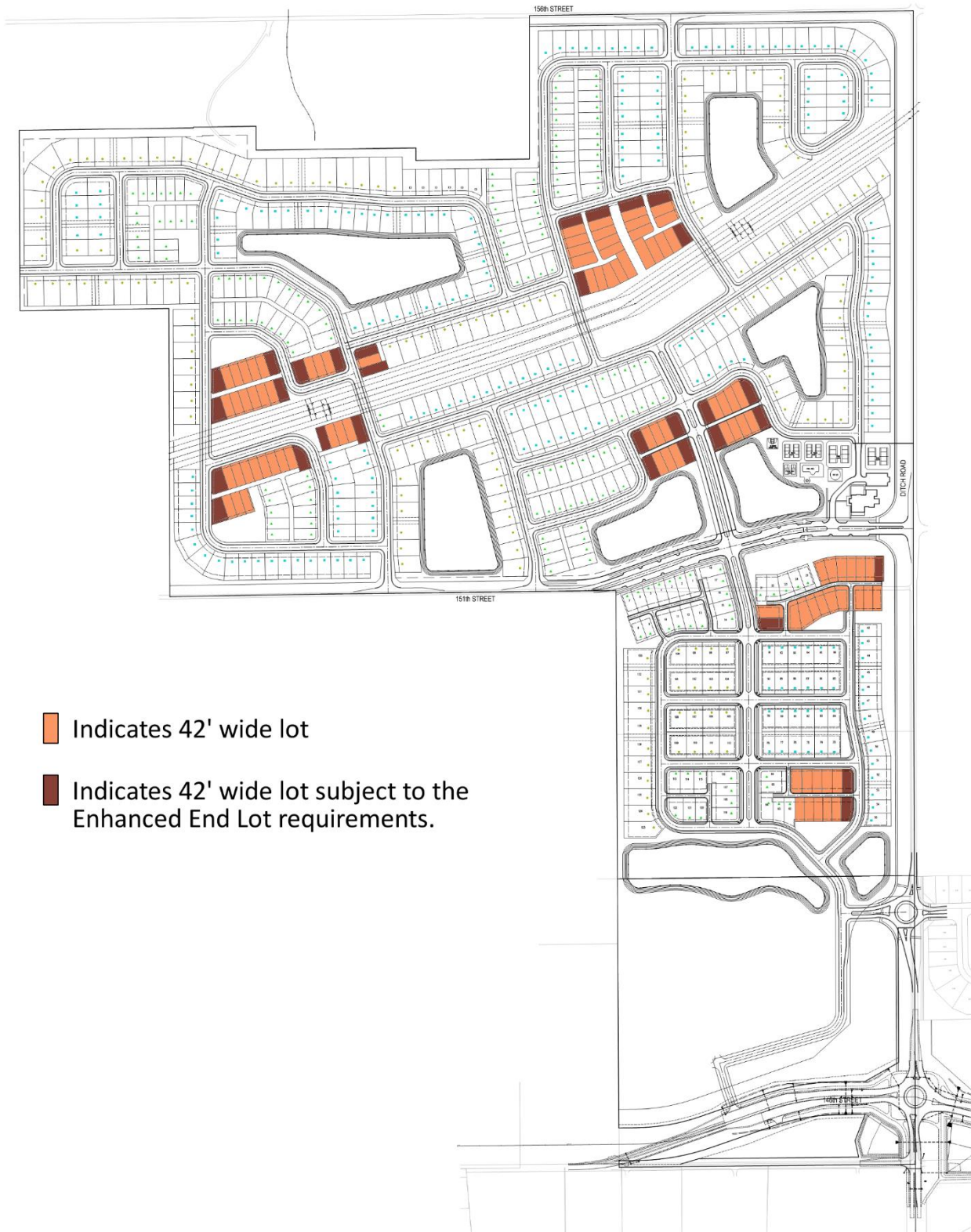


EXHIBIT C

COTTAGE COLLECTION HOMES

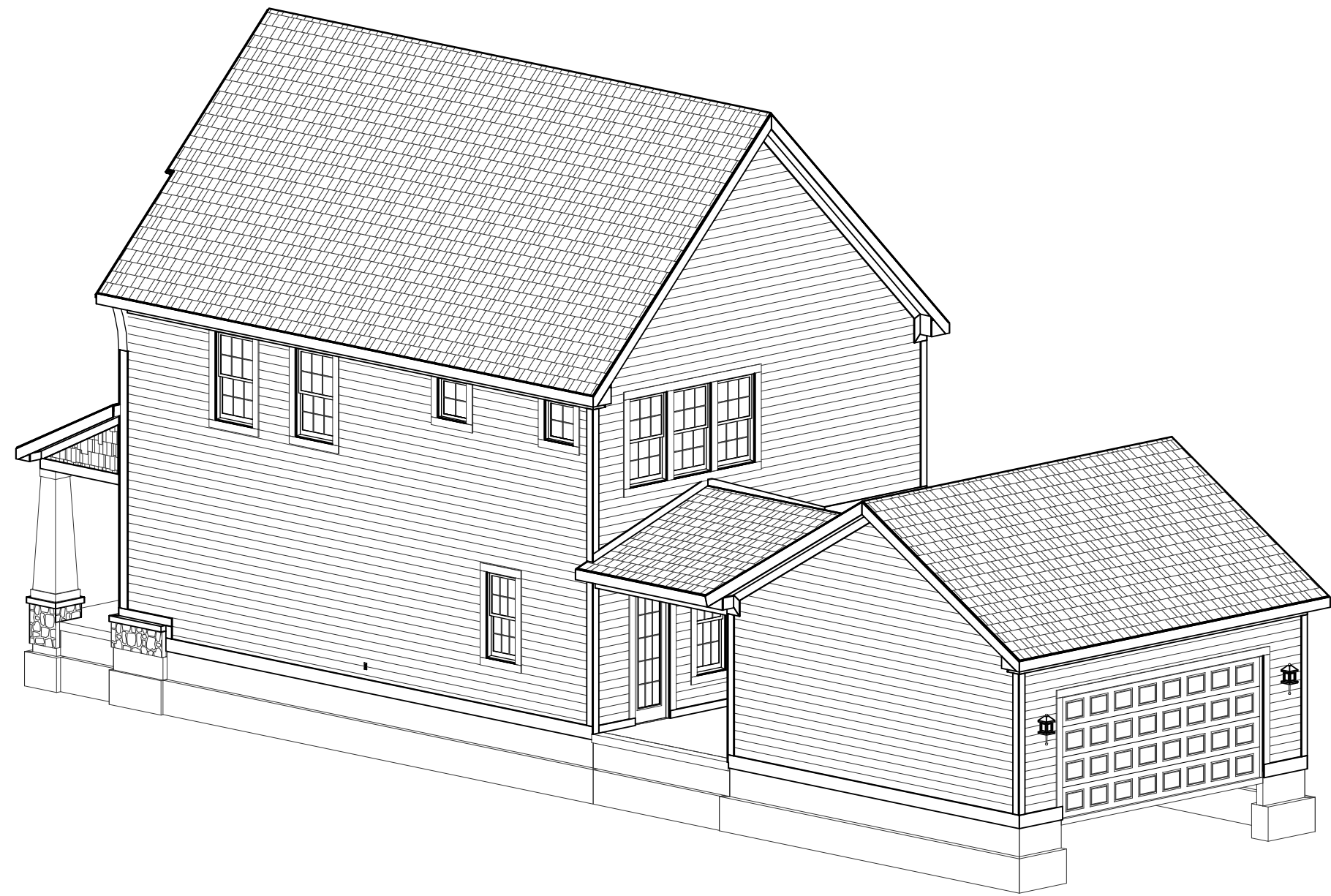
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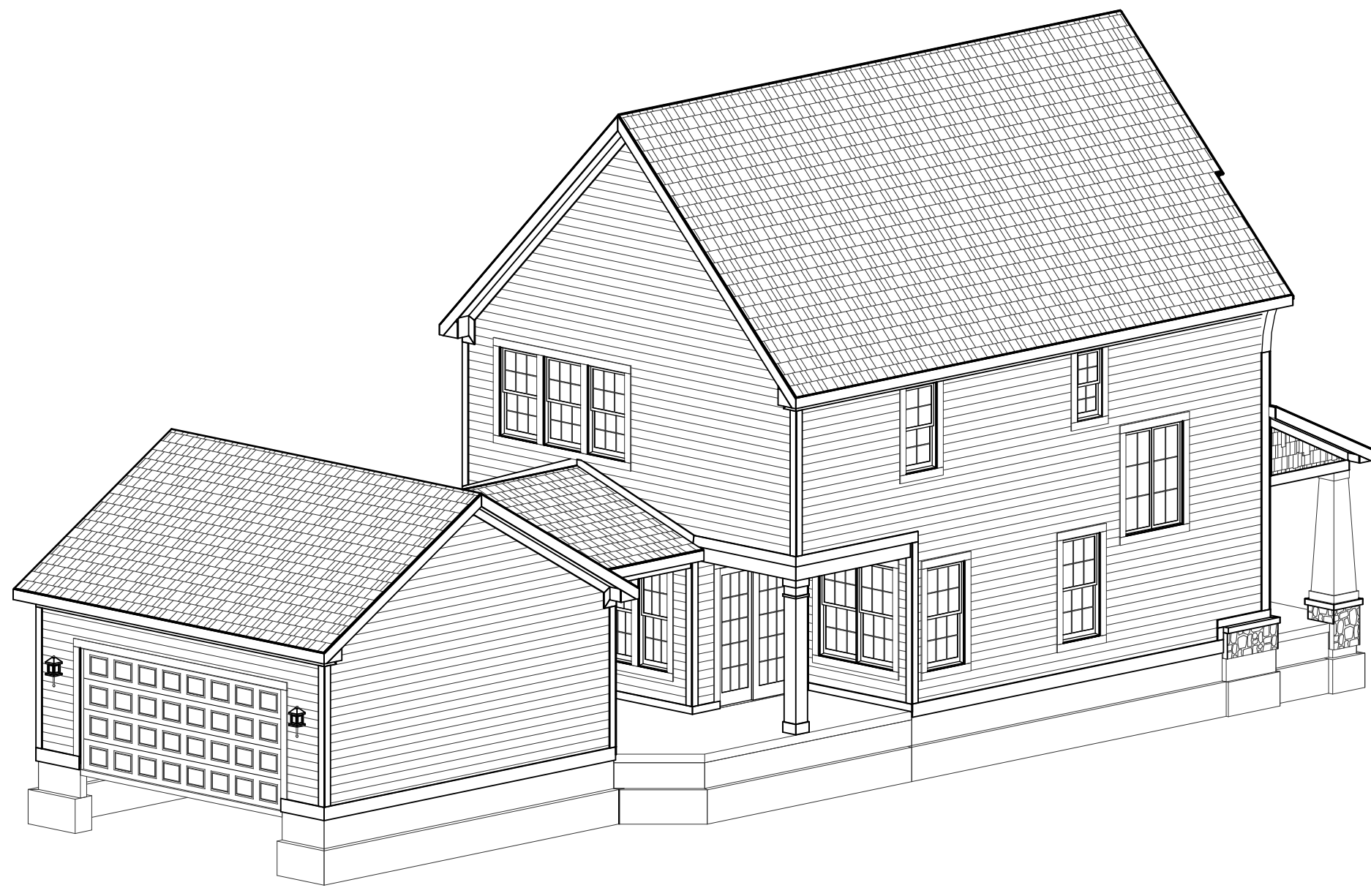
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SHEET NUMBER A-01			

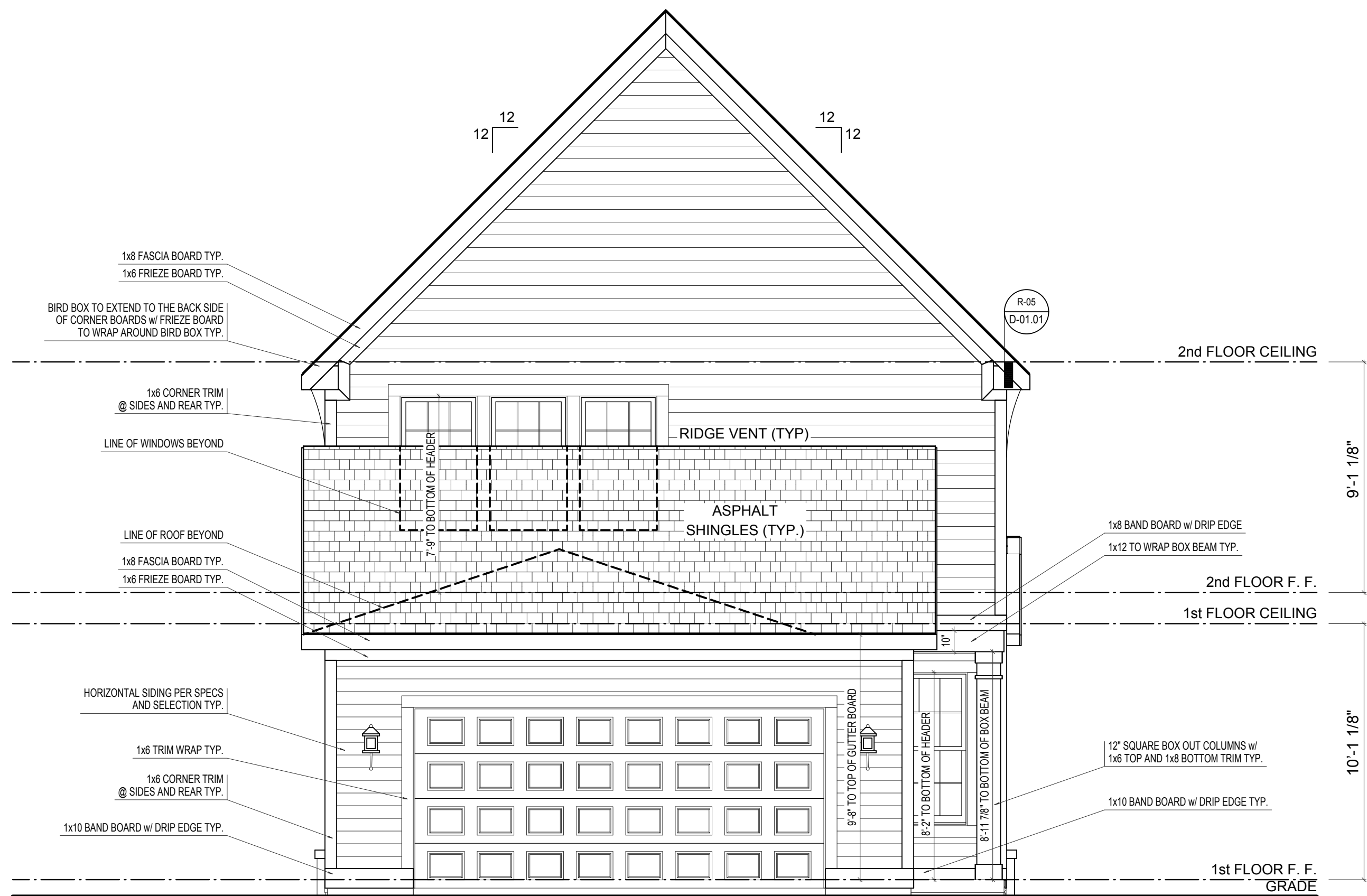
© CGVisions 2004 PLAN CREATION DATE 04/25/2014



REAR-RIGHT



REAR-LEFT



REAR ELEVATION

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

ELEVATION 'A' BASE FINAL

ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			



PRINT DATE: 10/08/2014		
EH_1000	FOR:	Estridge Homes
	LOCATION:	
SHEET NUMBER		
A-02		

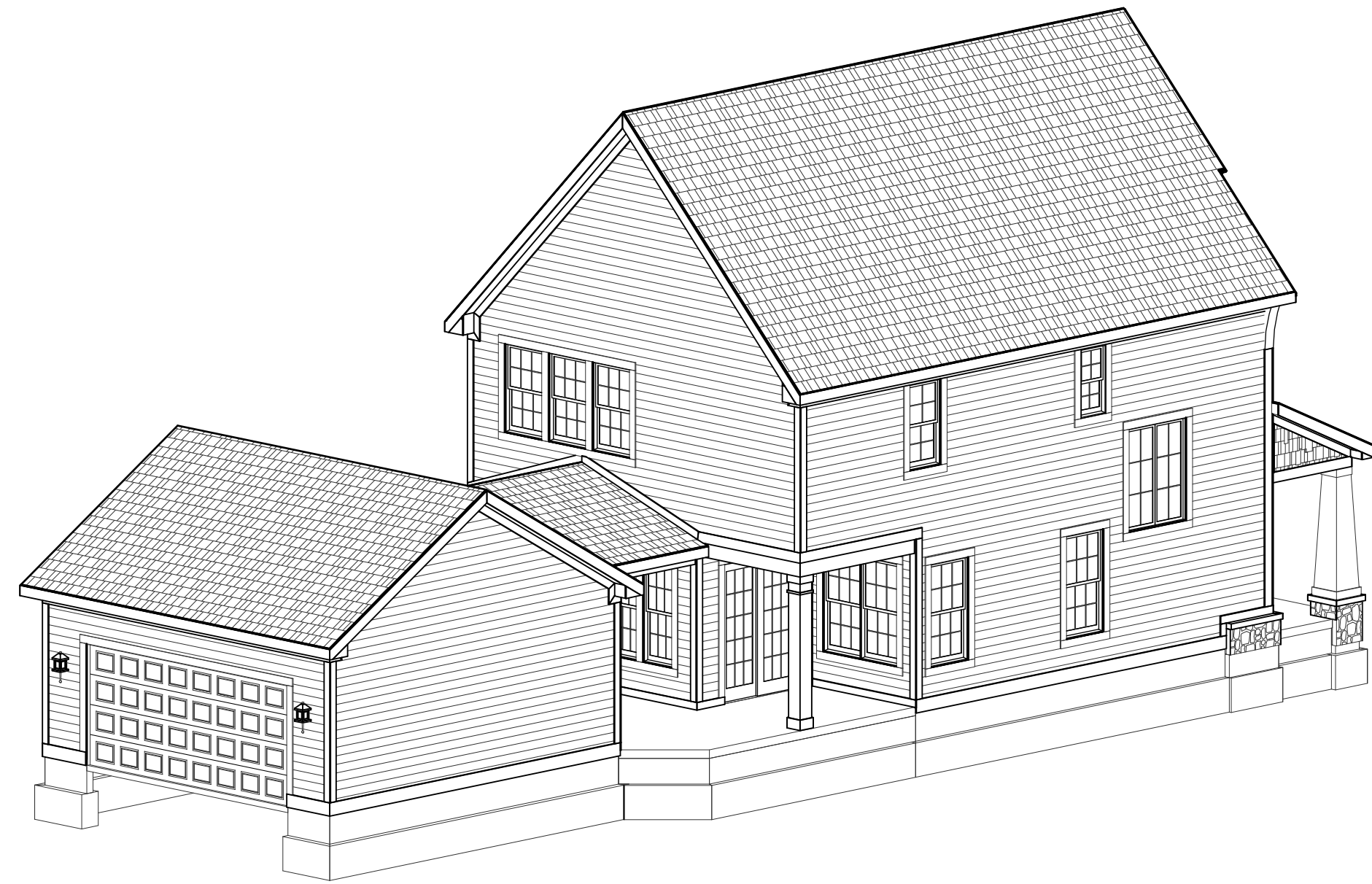


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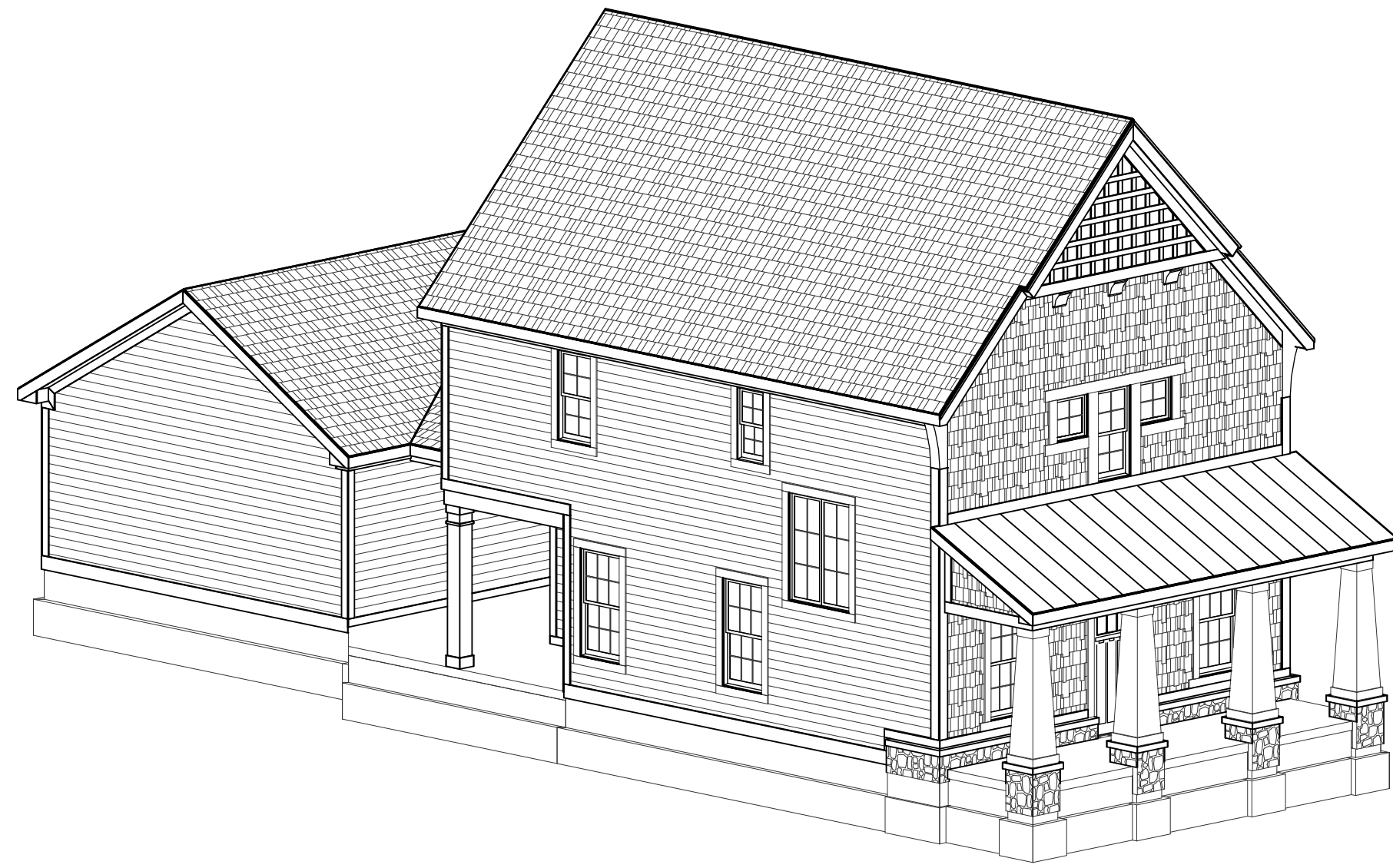


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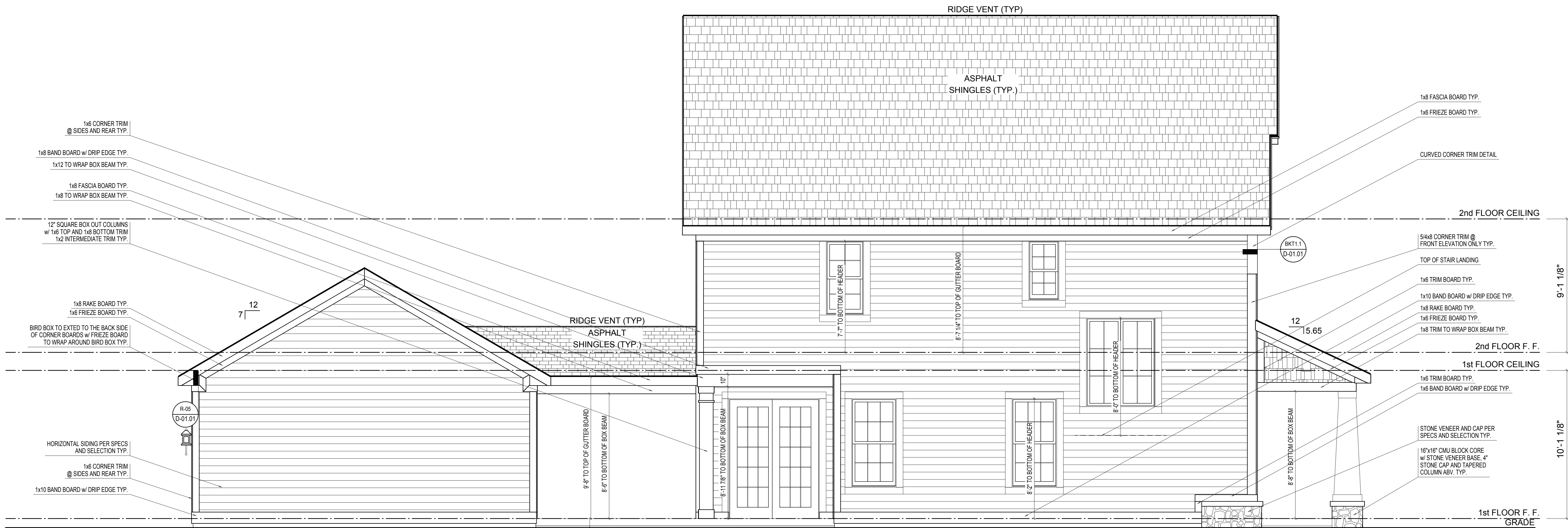
© CGVisions 2004 PLAN CREATION DATE 04/25/2014



REAR-LEFT



FRONT-LEFT



LEFT ELEVATION

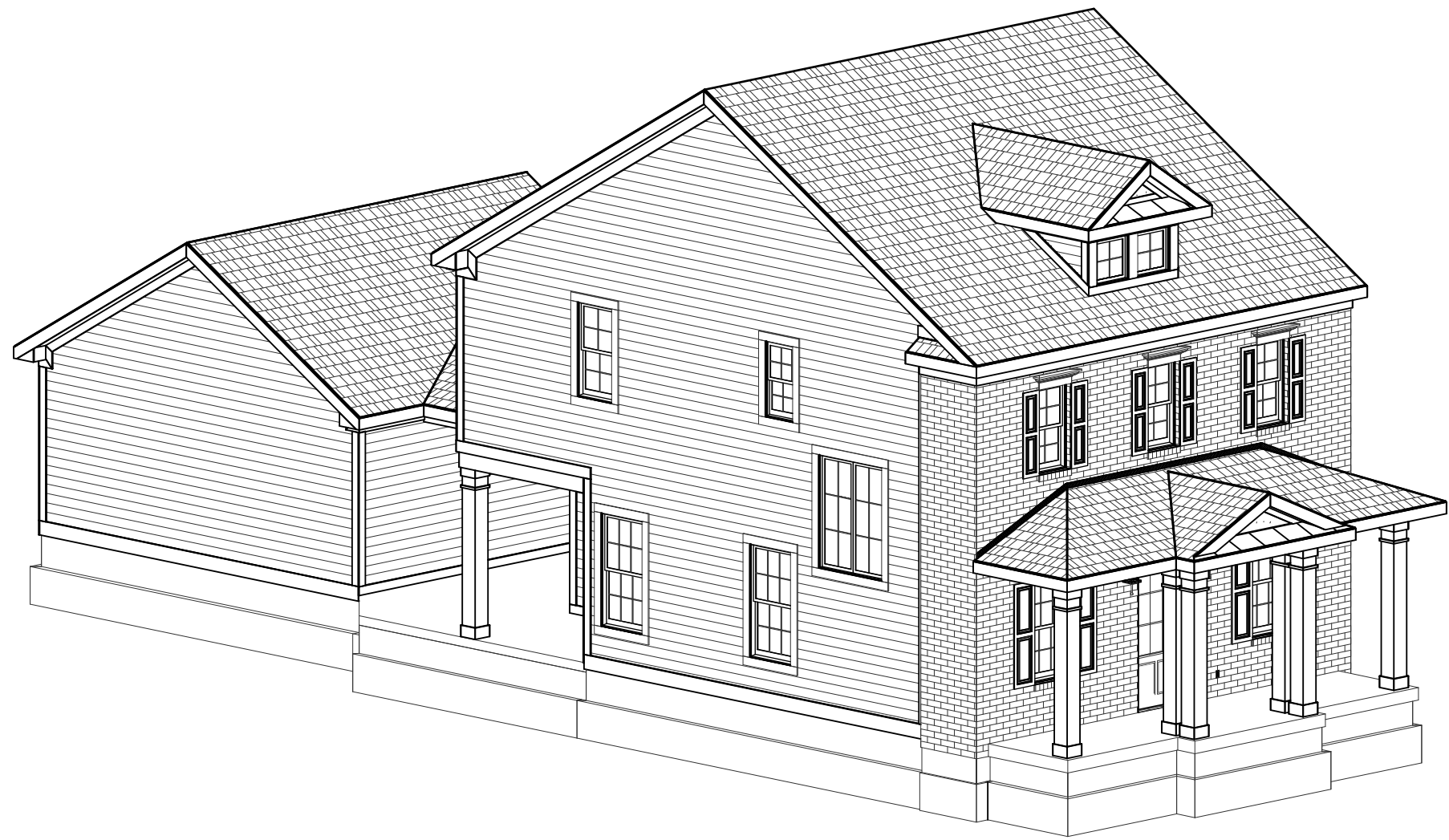
ELEVATION 'A' BASE FINAL

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

ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			



PRINT DATE: 10/08/2014		
EH_1000	FOR:	Estridge Homes
	LOCATION:	
SHEET NUMBER		
A-04		



FRONT-LEFT



FRONT-RIGHT



FRONT ELEVATION

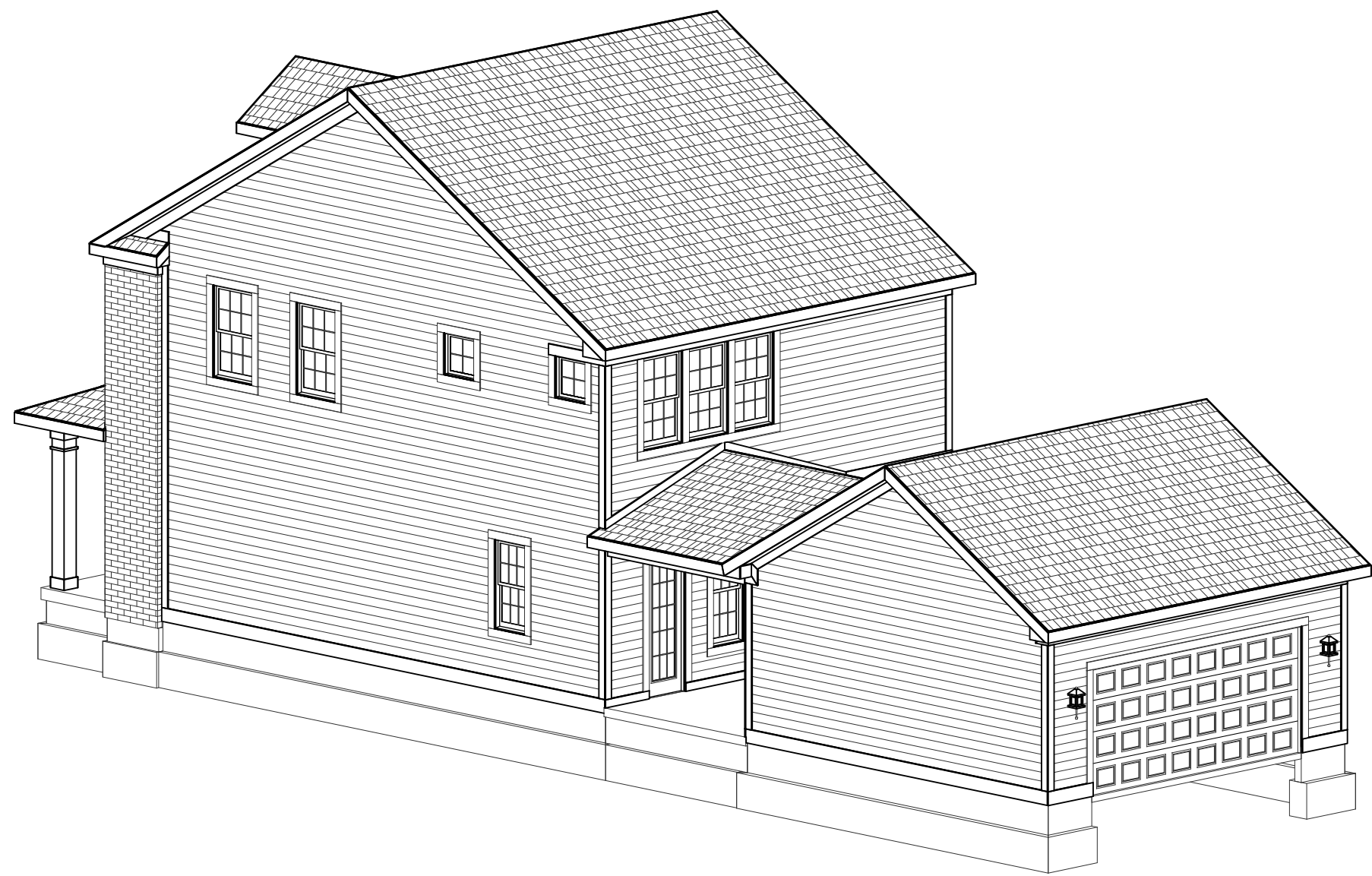
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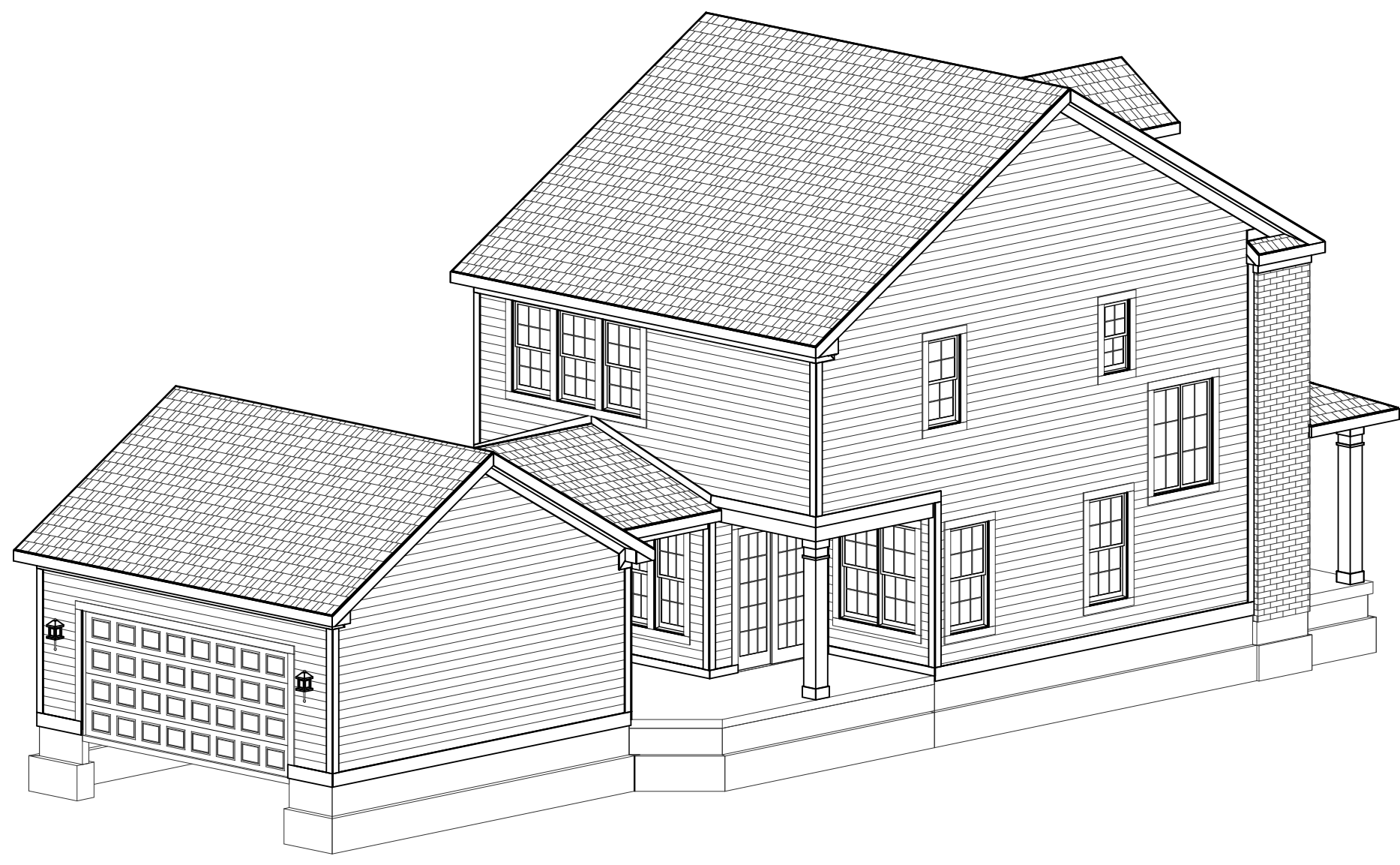
ELEVATION B	REV. NO.	DATE	REMARKS
GARAGE REAR			



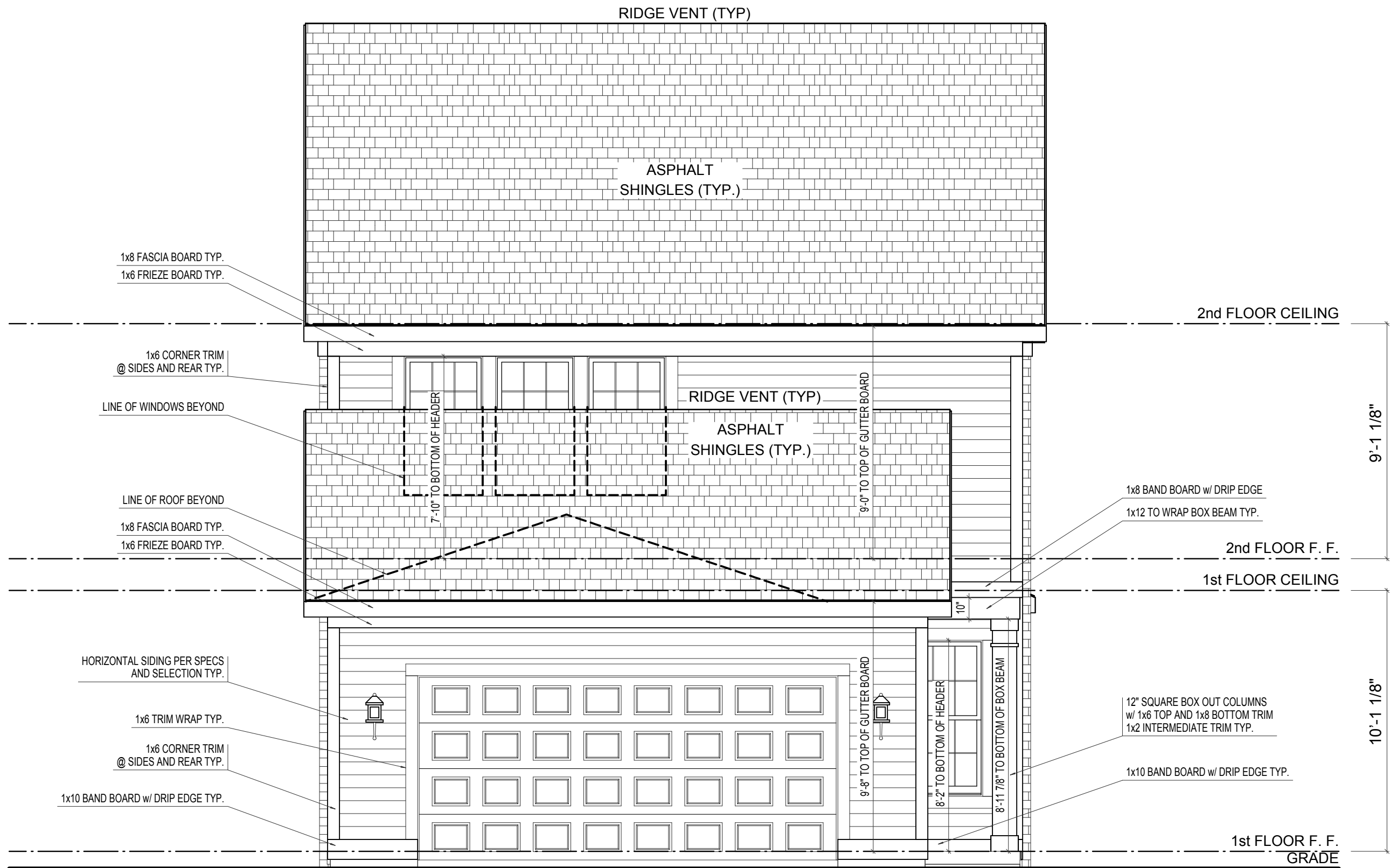
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SHEET NUMBER		A-01	



REAR-RIGHT



REAR-LEFT



REAR ELEVATION

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

ELEVATION 'B' BASE FINAL

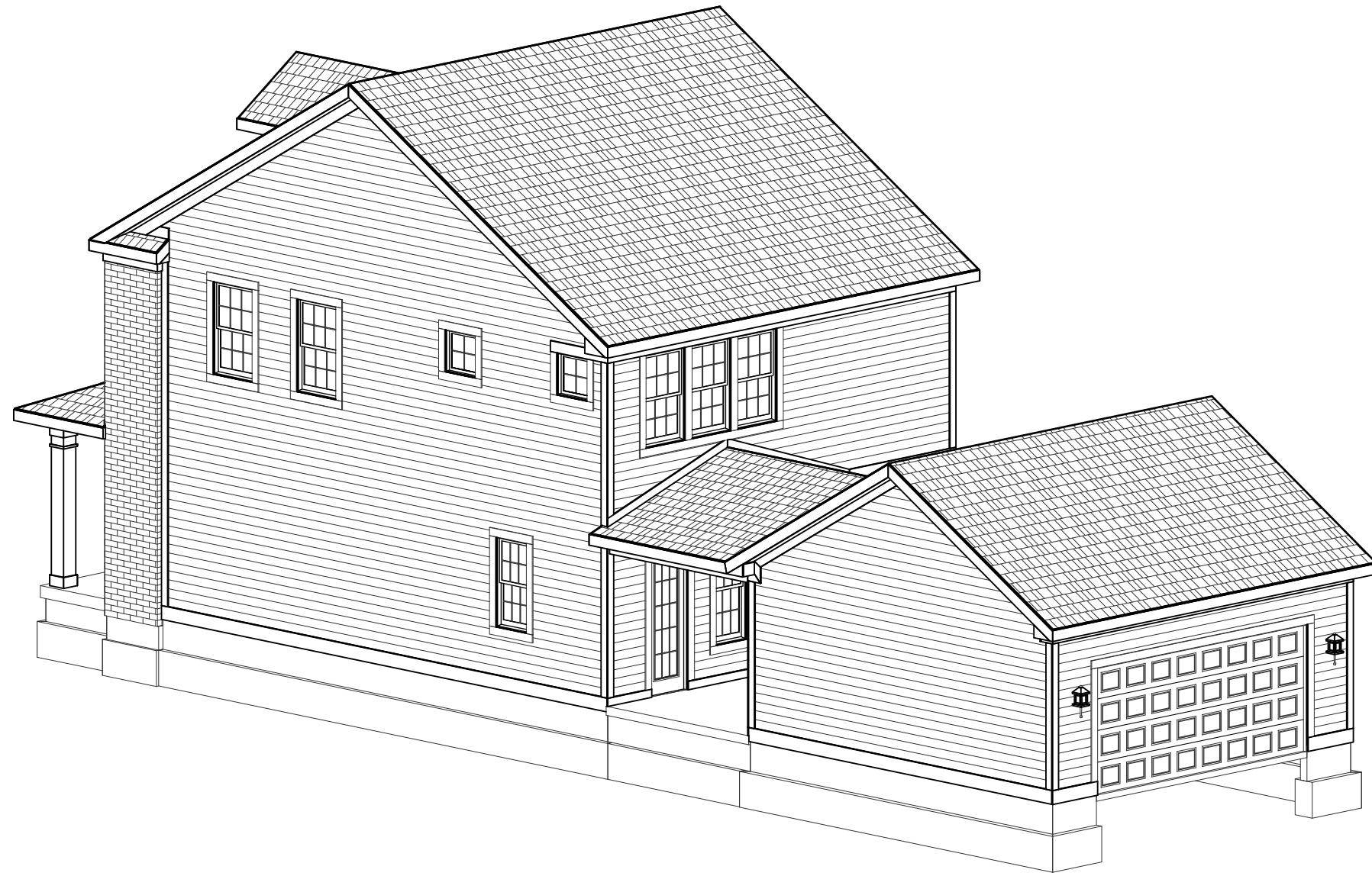
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GARAGE REAR				



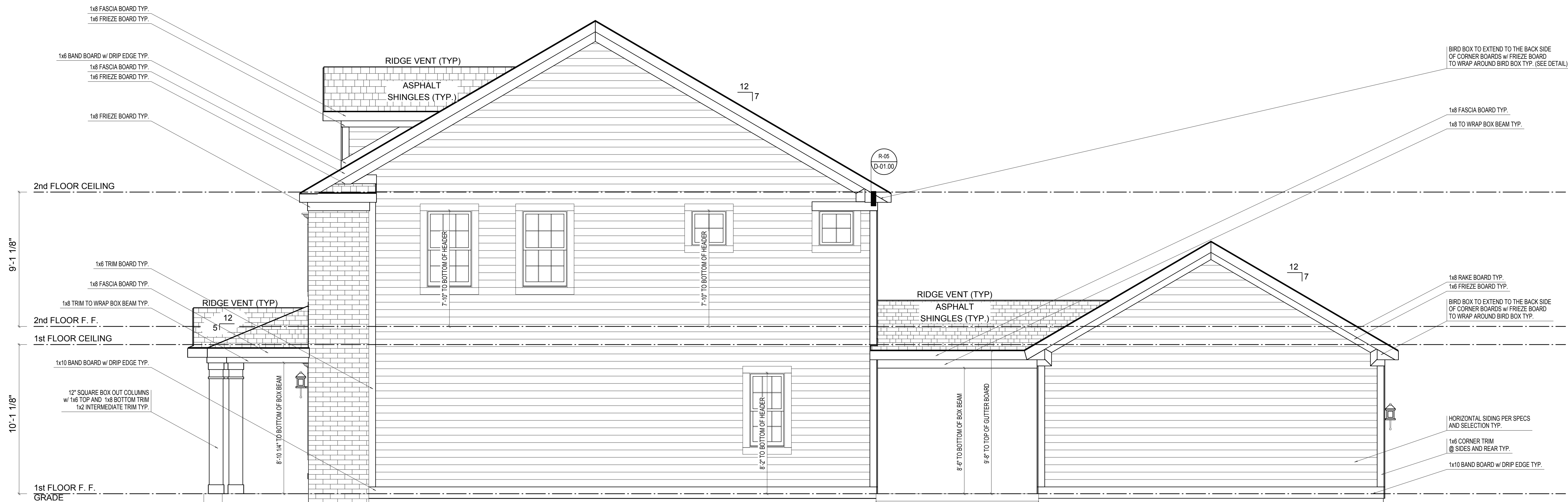
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SHEET NUMBER			
A-02			



FRONT-RIGHT



REAR-RIGHT



RIGHT ELEVATION

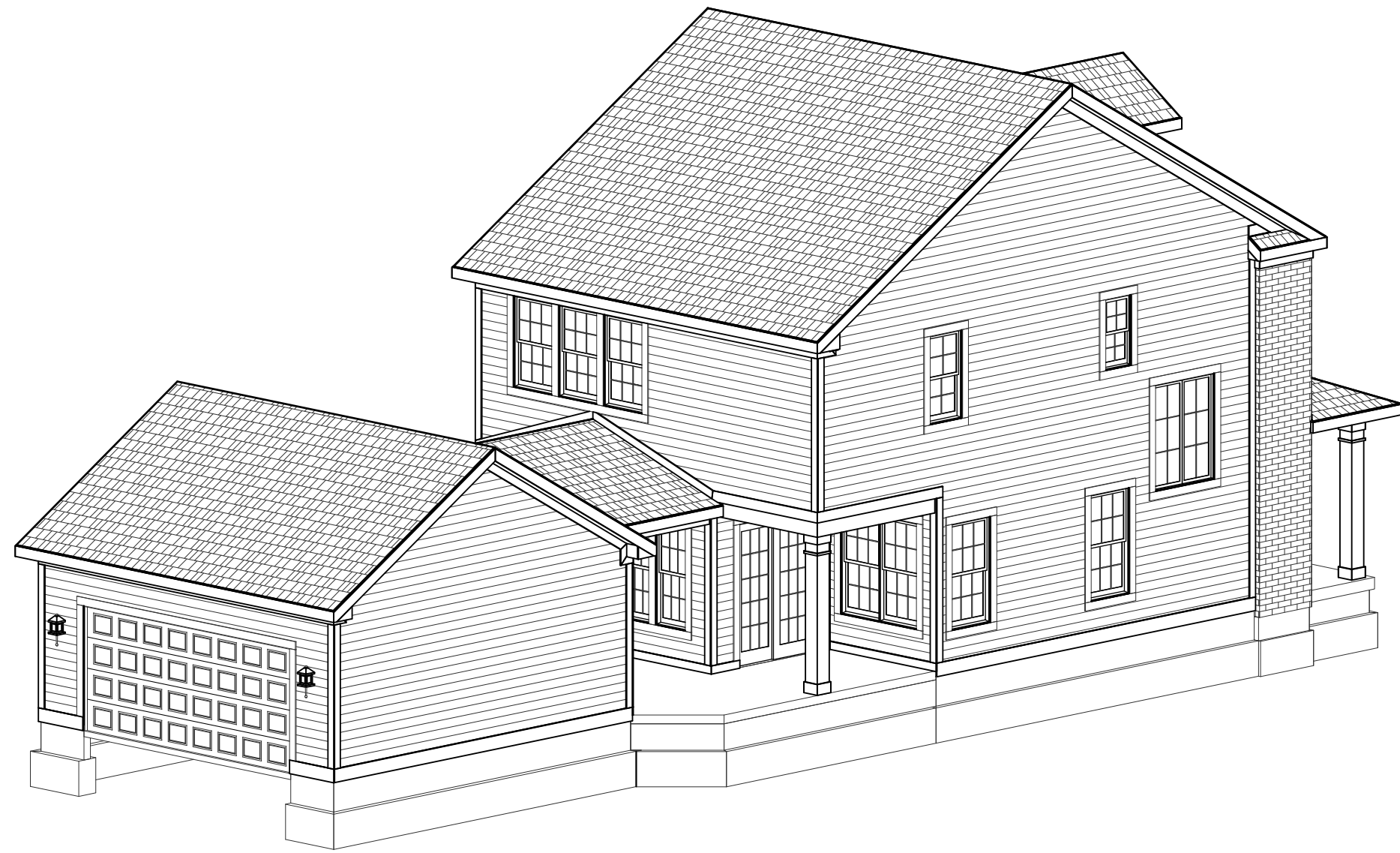
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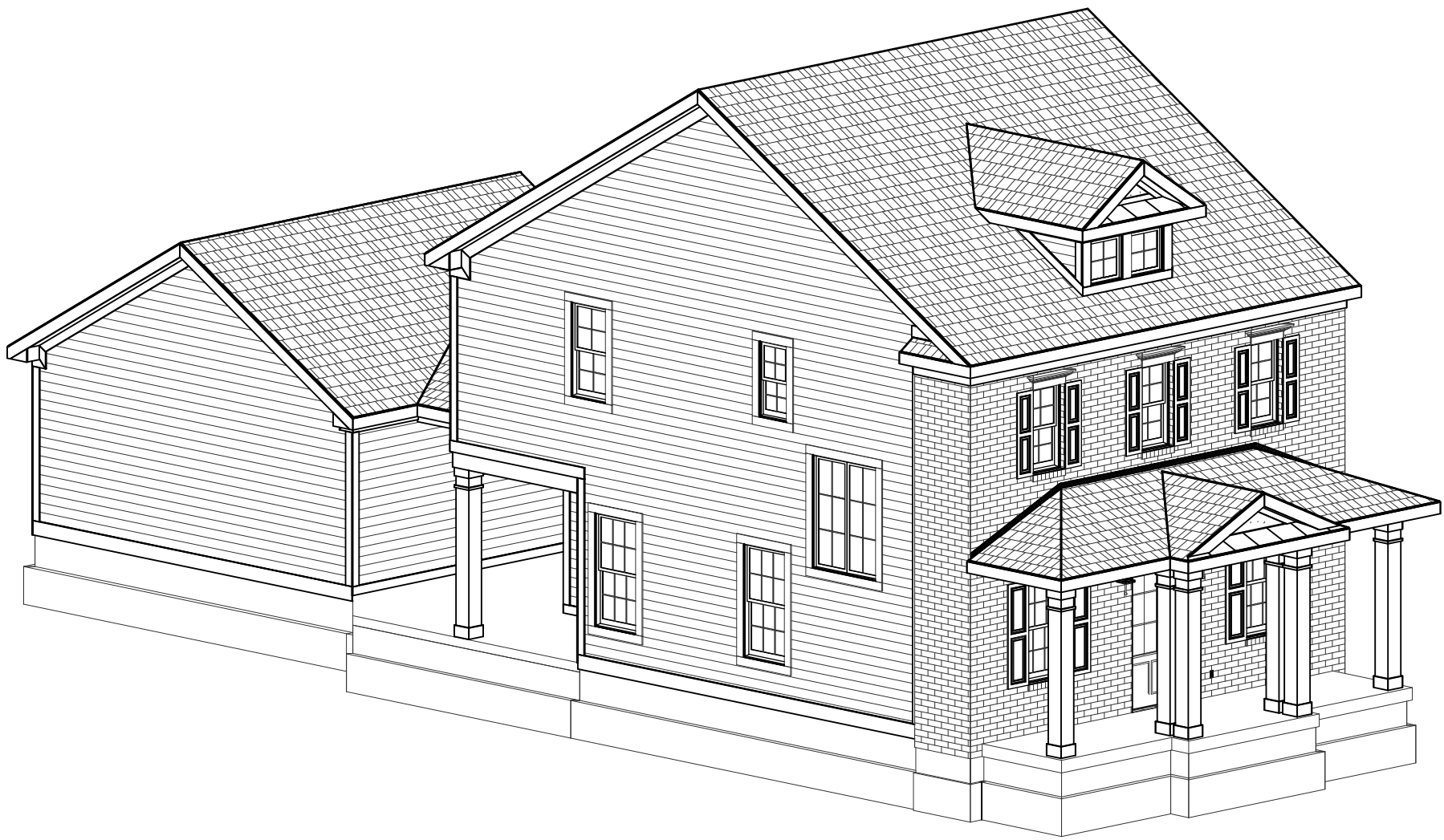
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GARAGE REAR			



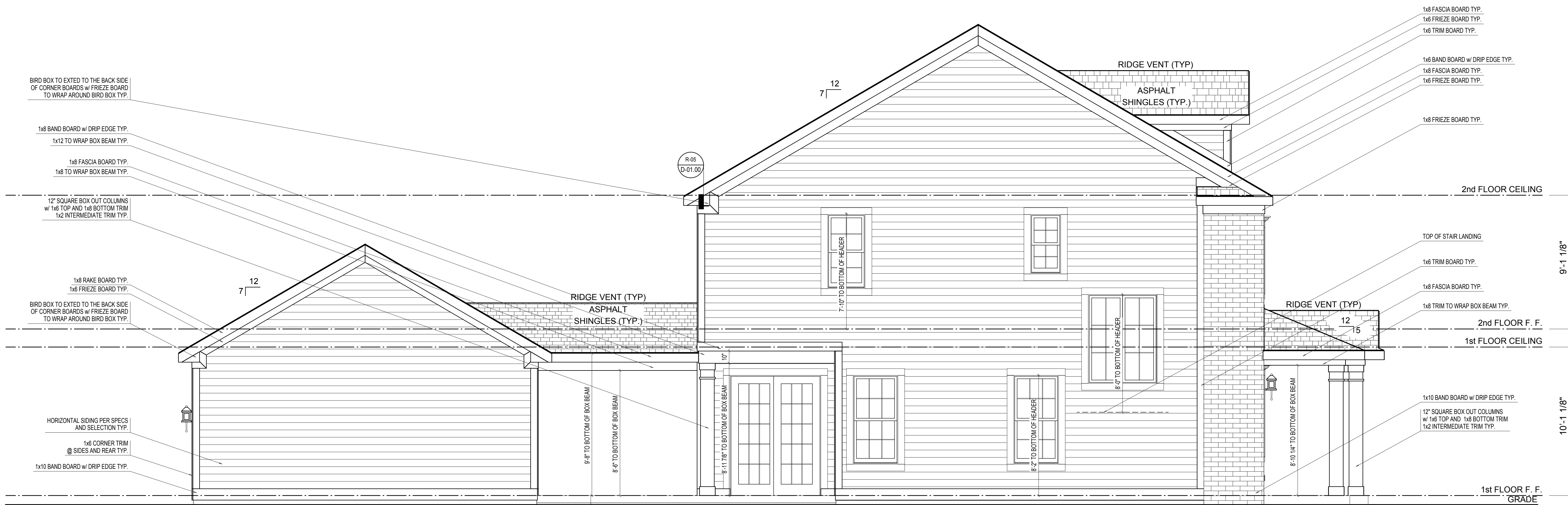
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A-03			



REAR-LEFT



FRONT-LEFT



LEFT ELEVATION

ELEVATION 'B' BASE FINAL

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

ELEVATION B		REV. NO.	DATE	REMARKS
GARAGE REAR				



PRINT DATE: 09/12/2014			
EH_1000	FOR:	Estridge Homes	LOCATION:
	SHEET NUMBER		
	A-04		



1000 Plan

Elevation Concept C

SCALE 1/4" = 1'-0"



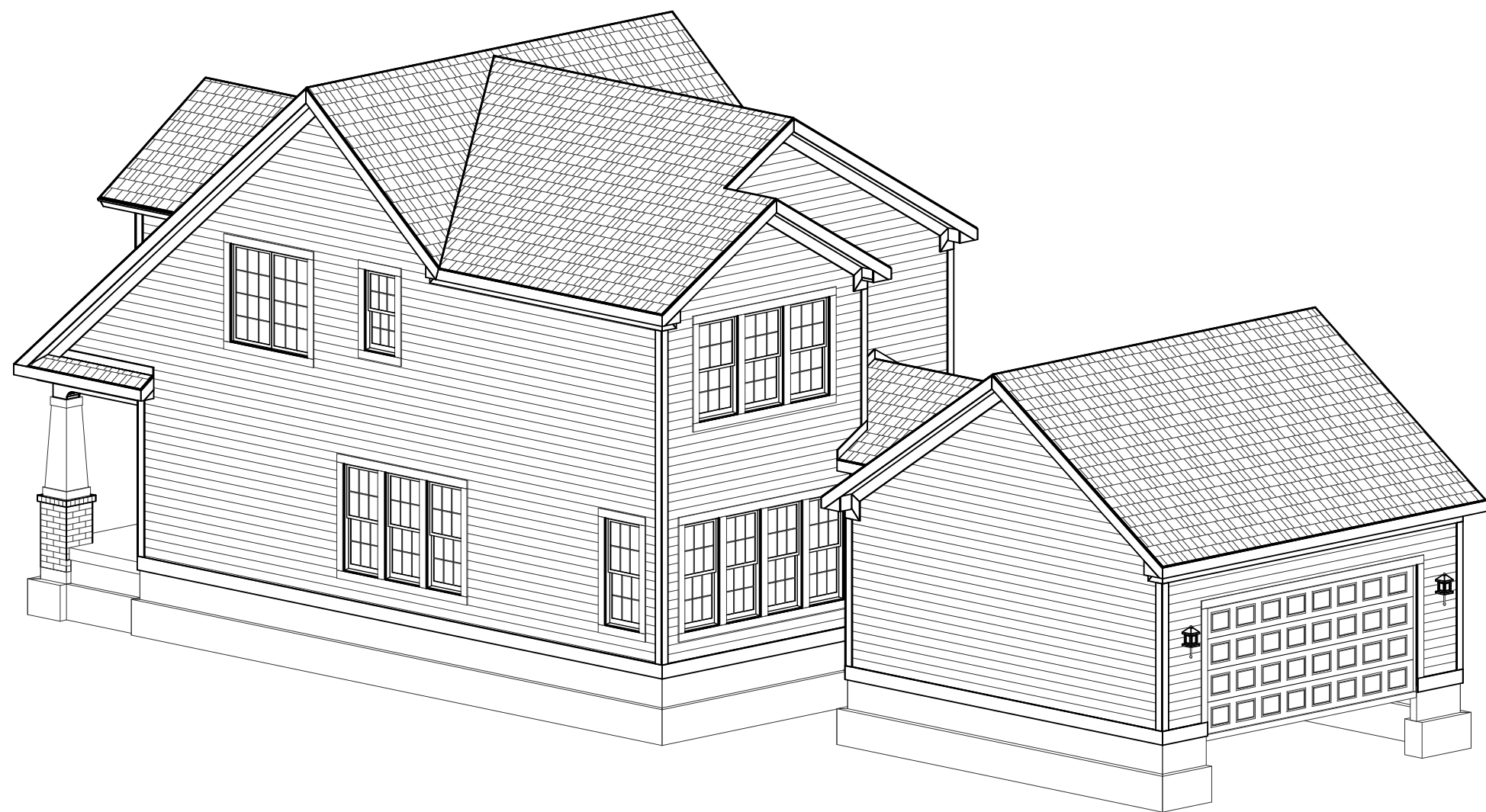
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EH_1015	FOR:	Estridge Homes	LOCATION:	
SHEET NUMBER				
A-01				

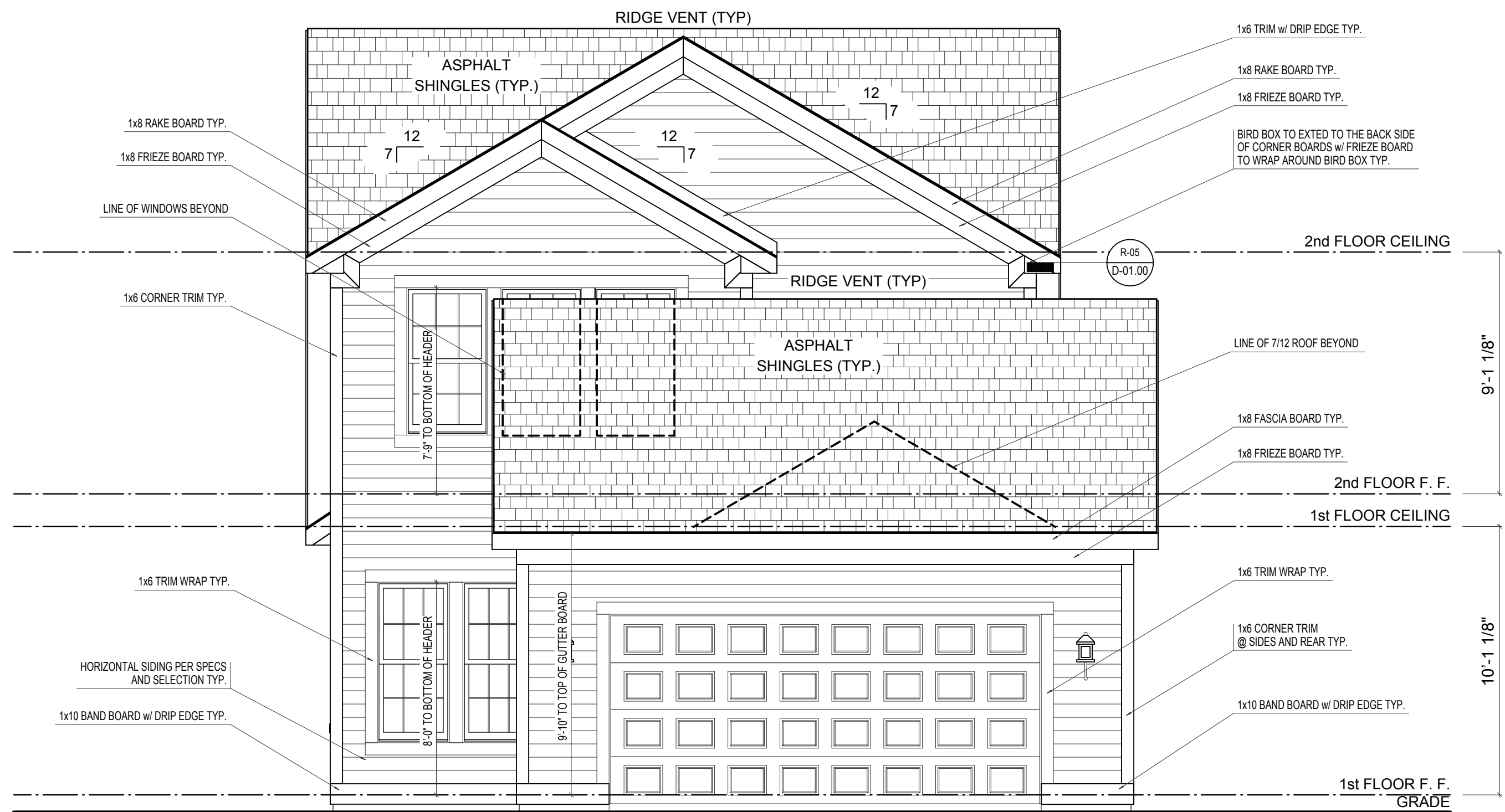
© CGVisions 2004 PLAN CREATION DATE 04/30/2014



REAR-RIGHT



REAR-LEFT



REAR ELEVATION

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

ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			



PRINT DATE: 09/11/2014			
EH_1015	FOR:	Estridge Homes	LOCATION:
	SHEET NUMBER		
	A-02		



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



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PRINT DATE:
09/11/2014

EH_1015

FOR: Estridge Homes

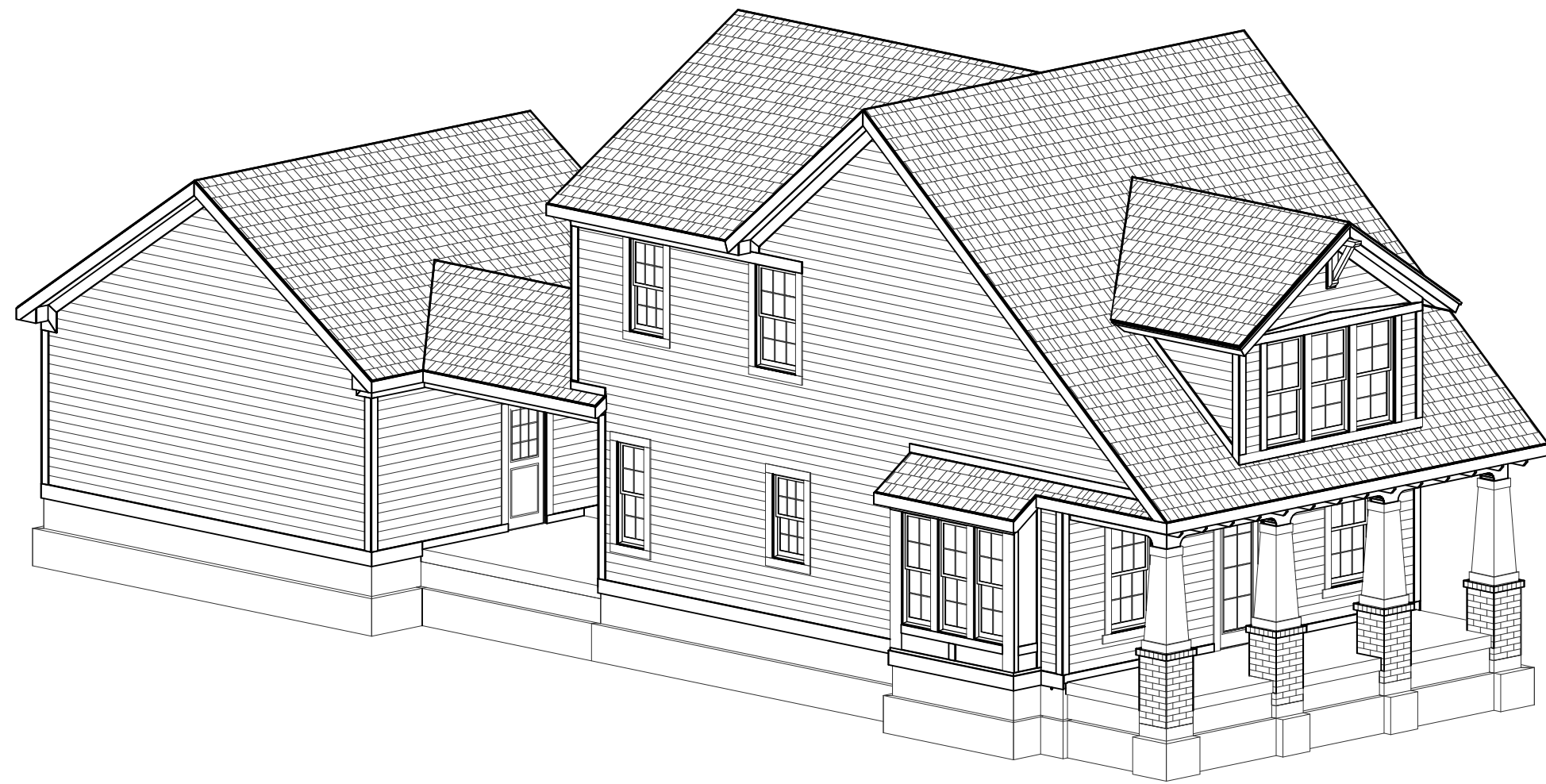
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LOCATION:
SHEET NUMBER

A-03

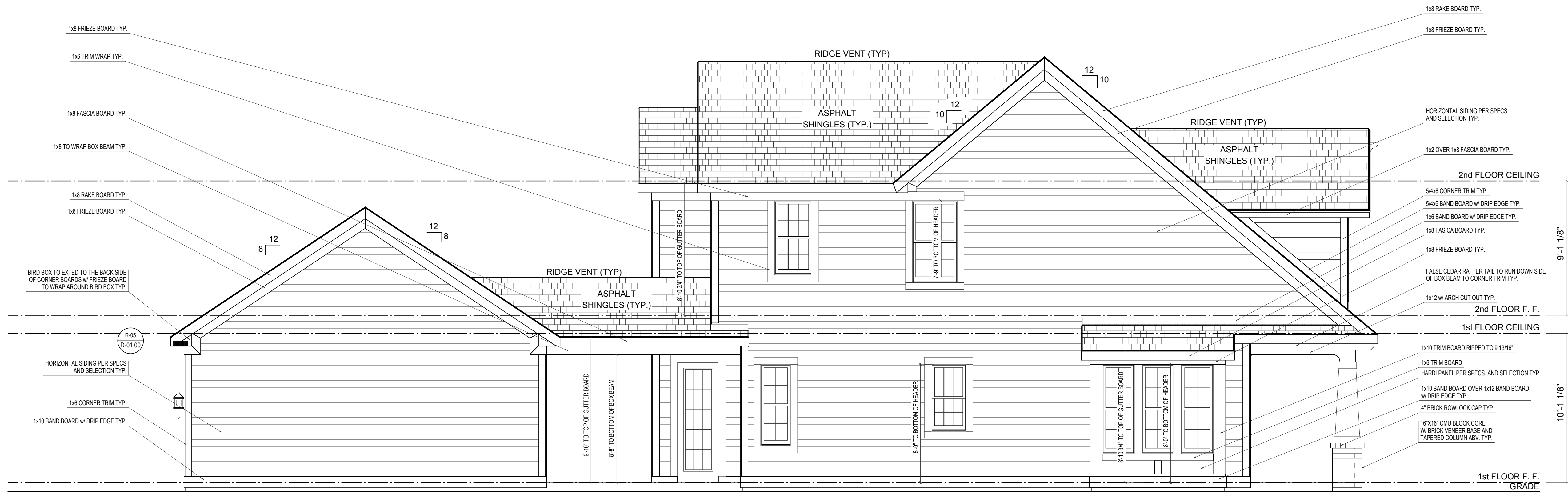
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REAR-LEFT



FRONT-LEFT



LEFT ELEVATION

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

ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			



PRINT DATE:
09/11/2014

EH_1015

FOR: Estridge Homes

LOCATION:

SHEET NUMBER

A-04



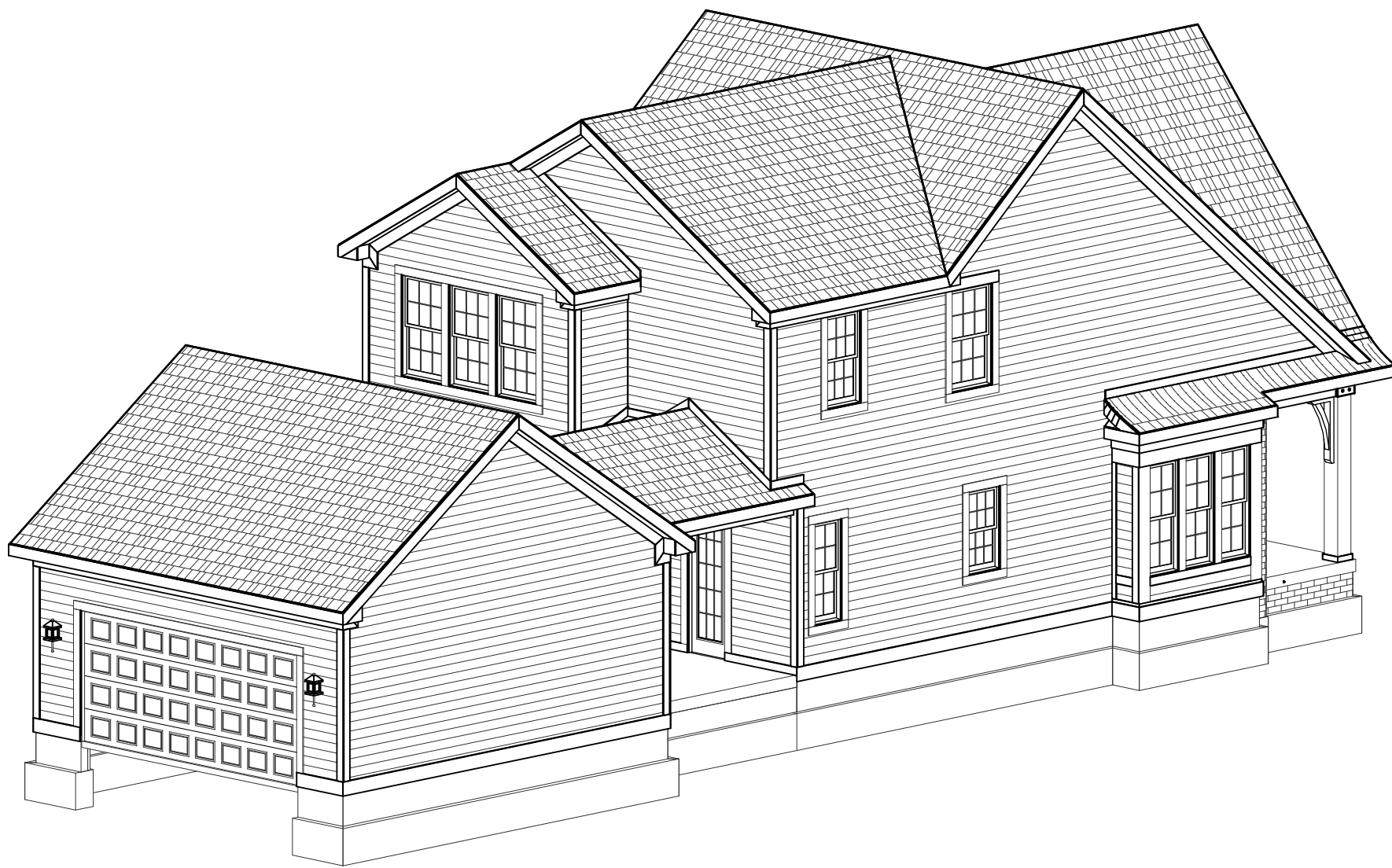
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SHEET NUMBER		
A-01		

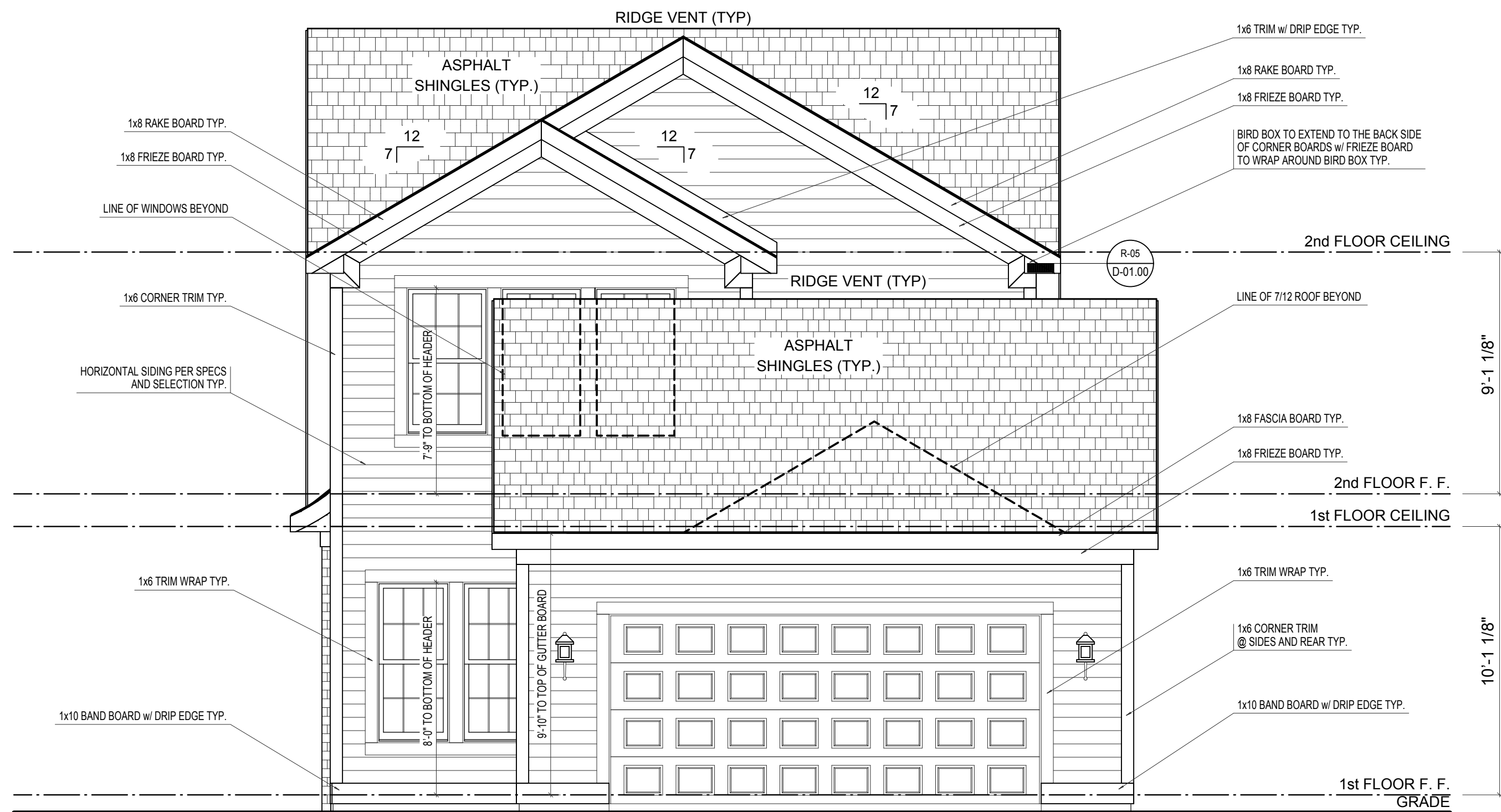
© CGVisions 2004 PLAN CREATION DATE 04/30/2014



REAR-RIGHT



REAR-LEFT



REAR ELEVATION

ELEVATION "B" BASE FINAL

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

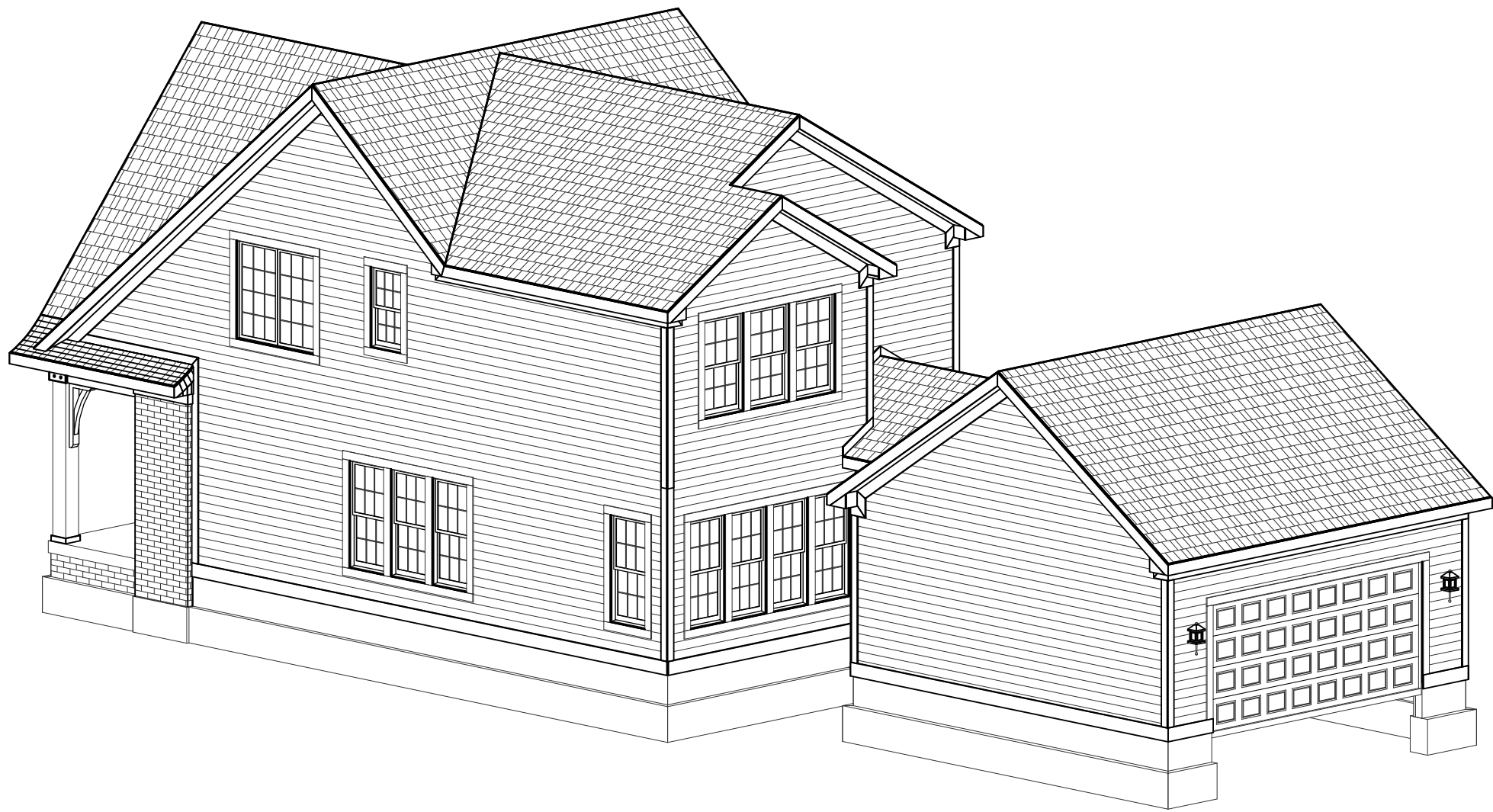
ELEVATION B	REV. NO.	DATE	REMARKS
GARAGE REAR			



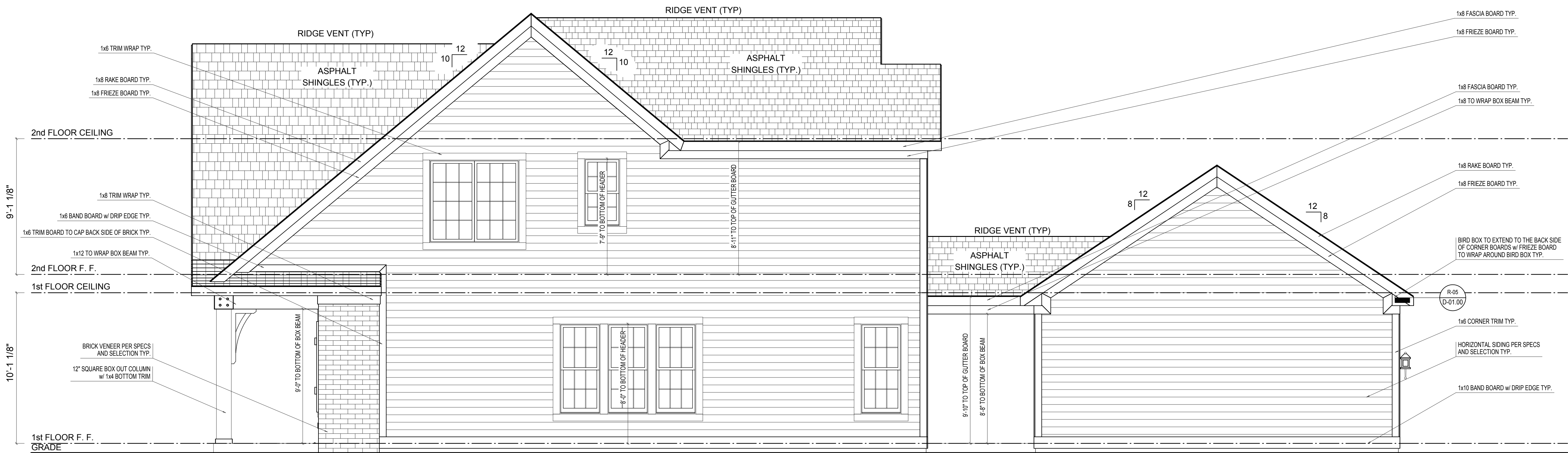
EH_1015		PRINT DATE: 10/10/2014	
FOR:	Estridge Homes		
LOCATION:			
SHEET NUMBER		A-02	



FRONT-RIGHT



REAR-RIGHT



RIGHT ELEVATION

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

ELEVATION "B" BASE FINAL

ELEVATION B	REV. NO.	DATE	REMARKS
GARAGE REAR			



PRINT DATE:
10/10/2014

EH_1015

FOR: Estridge Homes

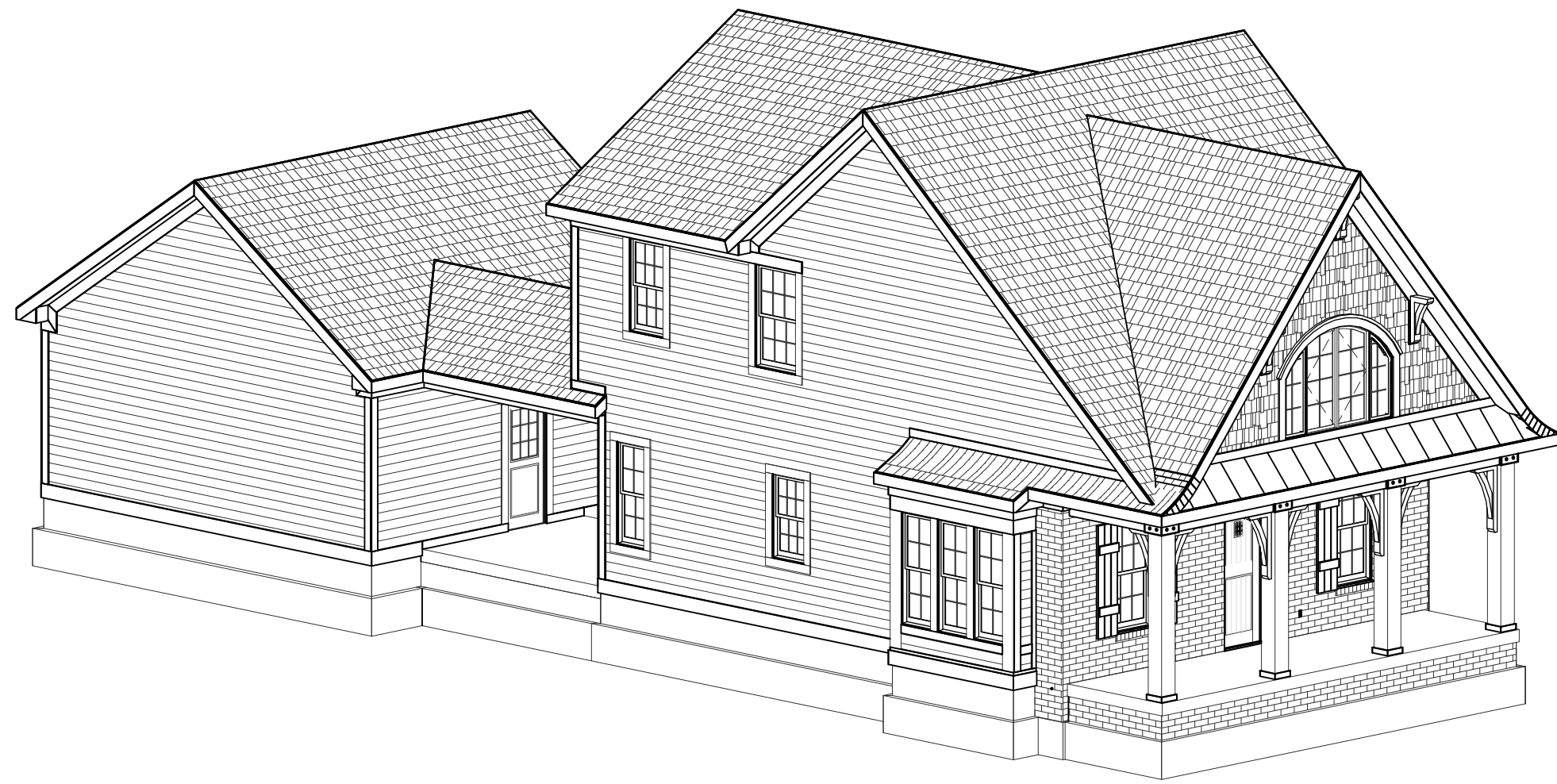
LOCATION:

SHEET NUMBER

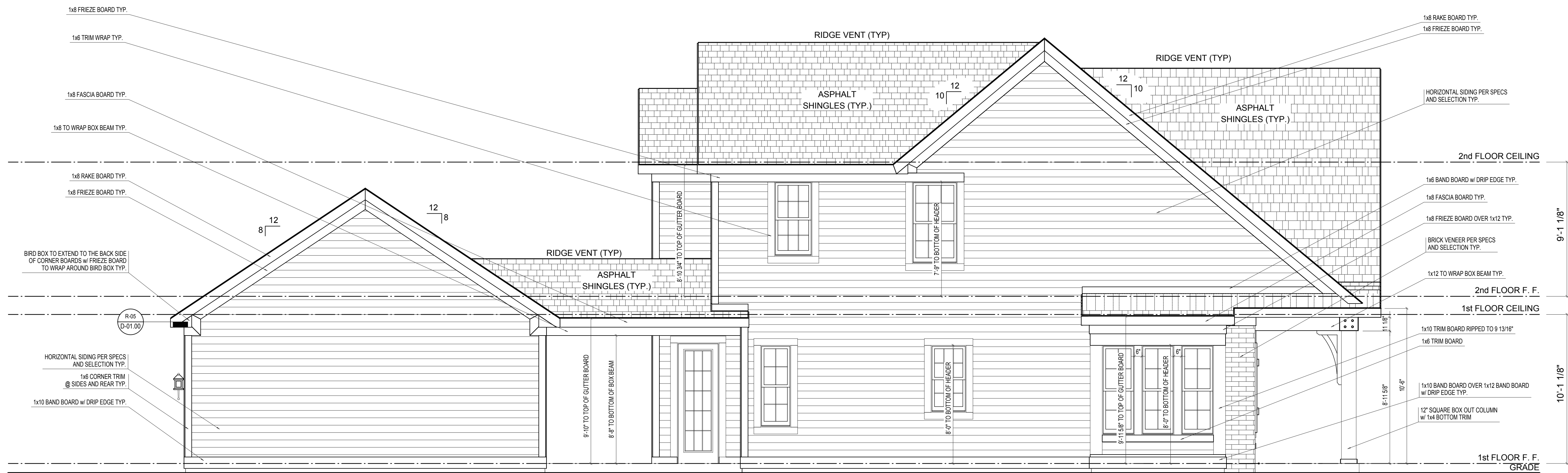
A-03



REAR-LEFT



FRONT-LEFT



LEFT ELEVATION

ELEVATION "B" BASE FINAL

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

ELEVATION B	REV. NO.	DATE	REMARKS
GARAGE REAR			



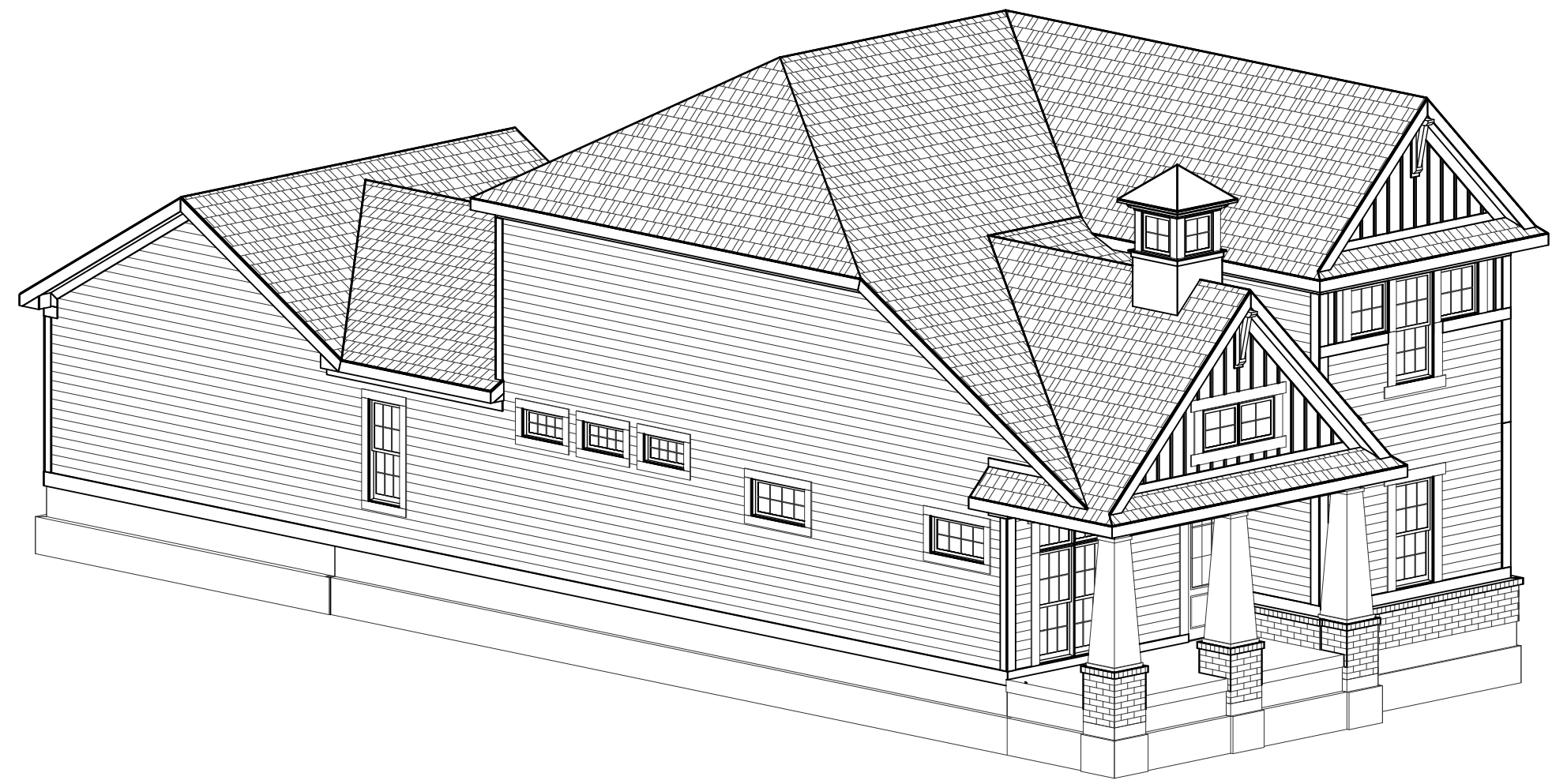
PRINT DATE:
10/10/2014

EH_1015

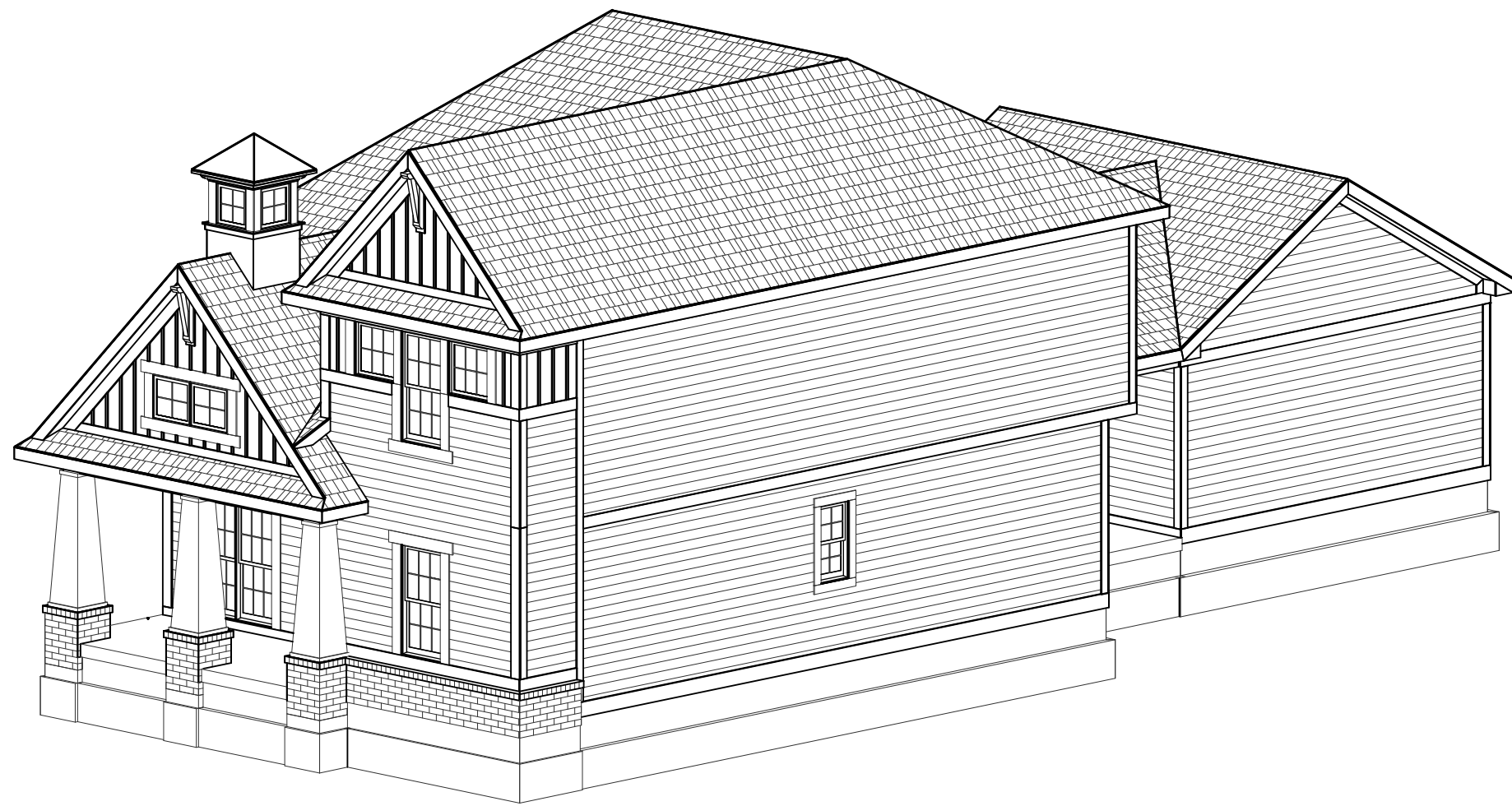
FOR: Estridge Homes
LOCATION:

SHEET NUMBER

A-04



FRONT-LEFT



FRONT-RIGHT



FRONT ELEVATION

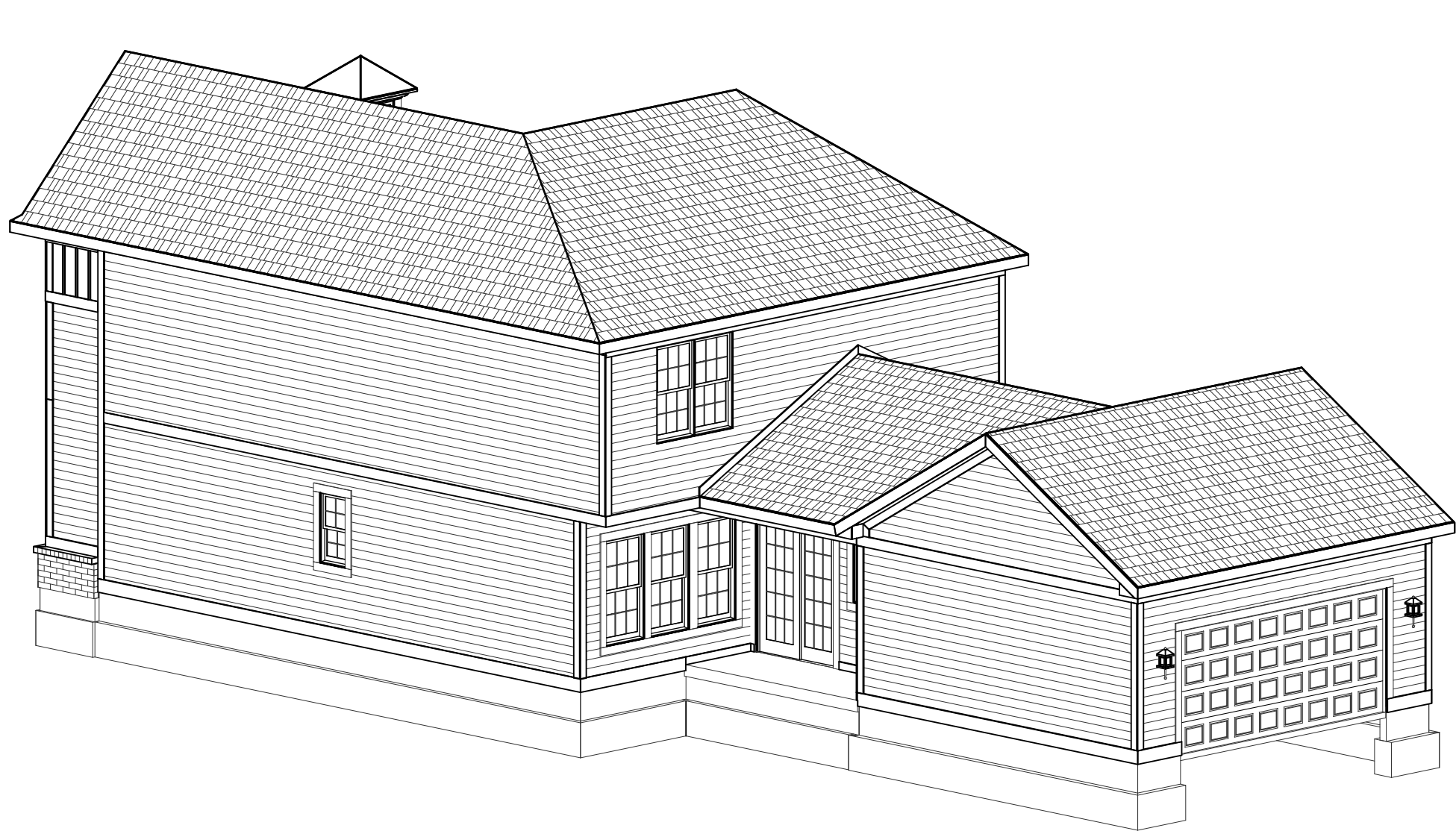
SCALE: 1/4"=1'-0"

ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			

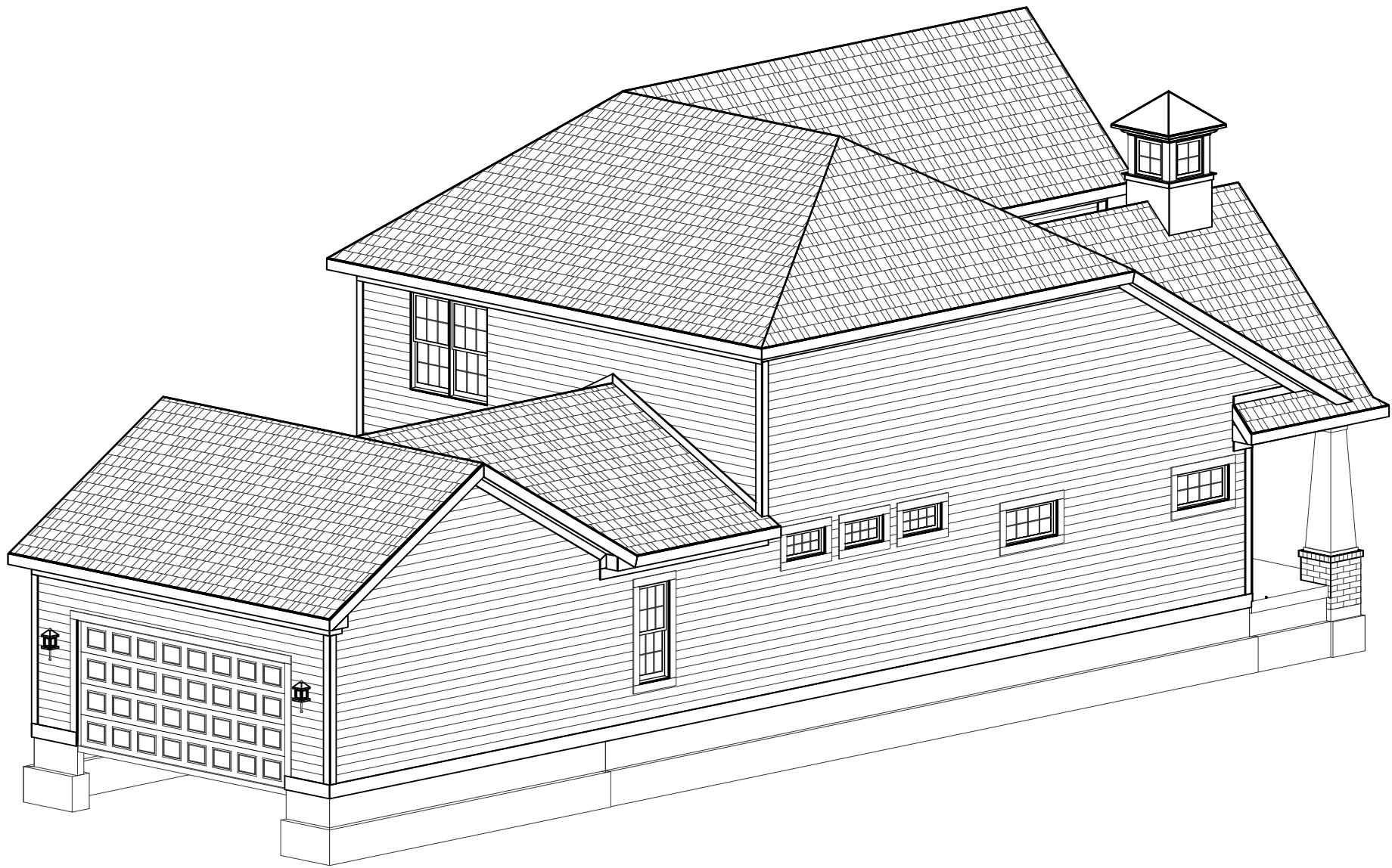


PRINT DATE:
07/11/2014

EH_1030
FOR: Estridge Homes
LOCATION:
SHEET NUMBER
A-01



REAR-RIGHT



REAR-LEFT



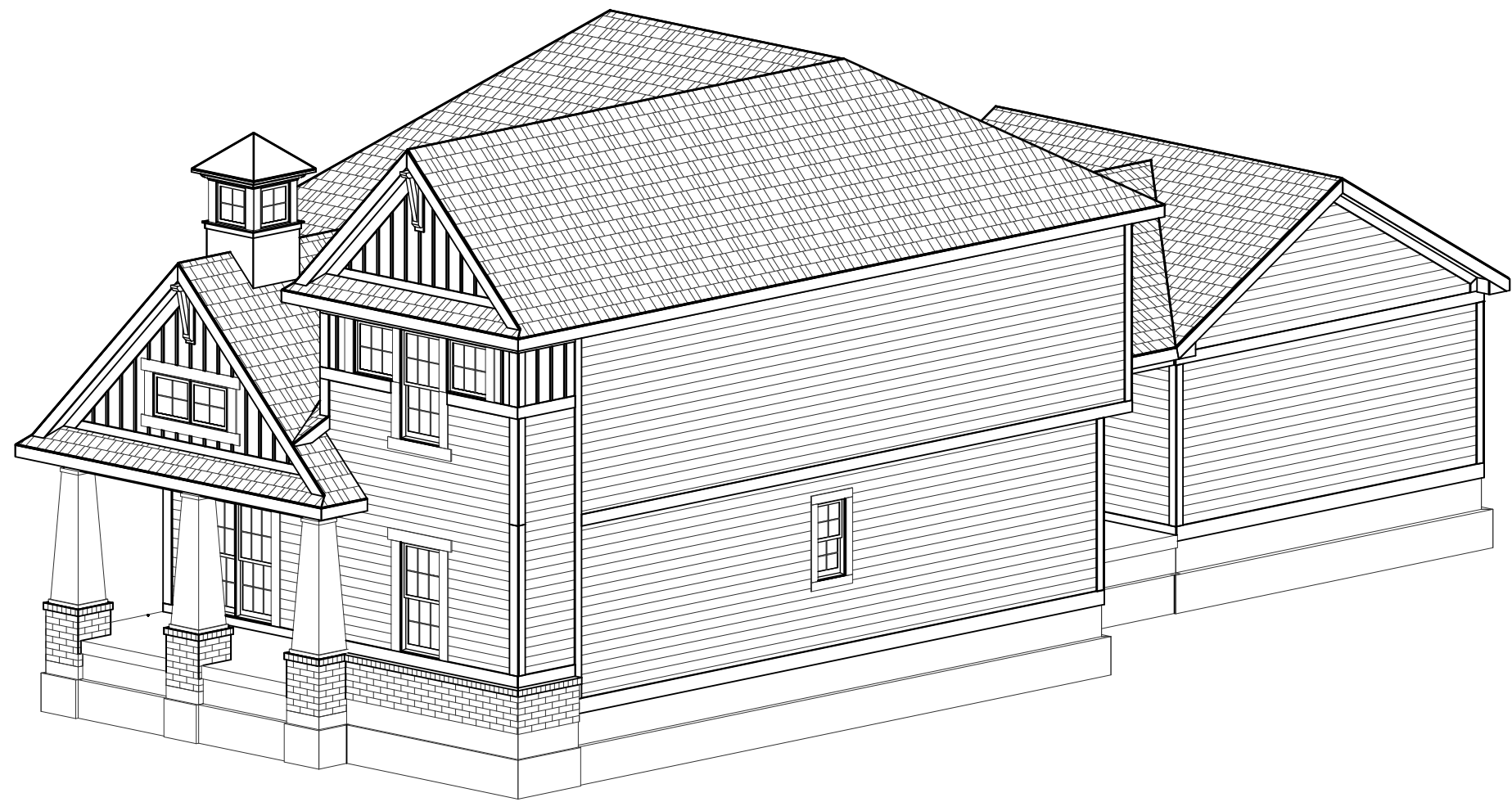
REAR ELEVATION

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

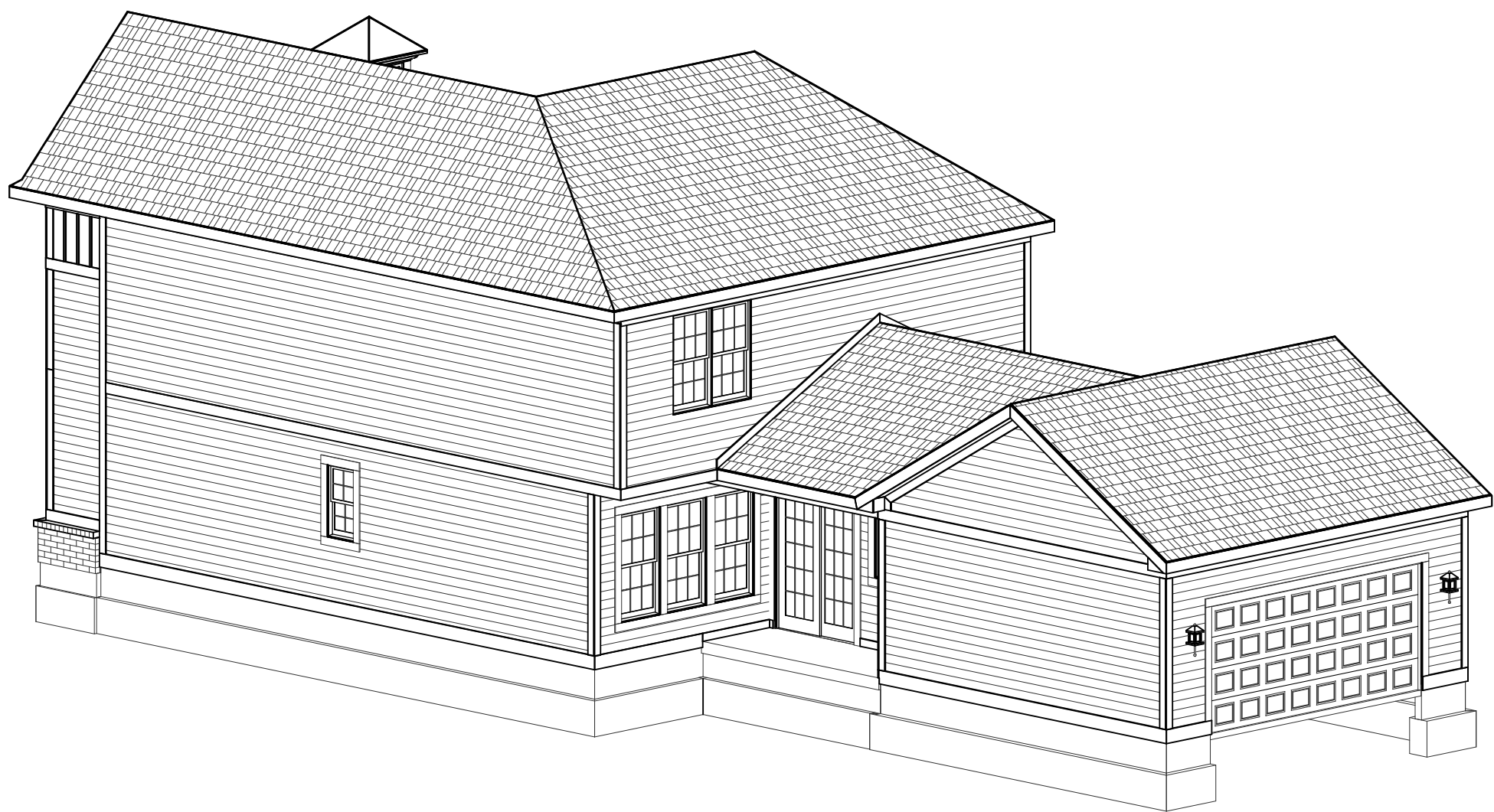
ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			



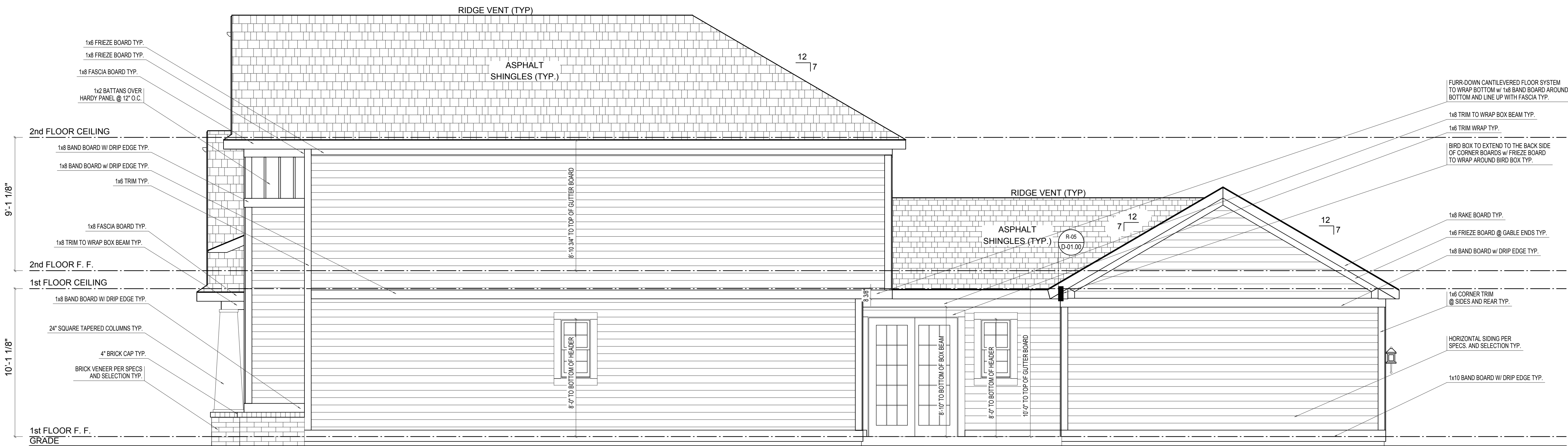
PRINT DATE: 07/11/2014			
EH_1030	FOR:	Estridge Homes	LOCATION:
	SHEET NUMBER		
	A-02		



FRONT-RIGHT



REAR-RIGHT



RIGHT ELEVATION

REMARKS

DATE

REV. NO.

ELEVATION A

GARAGE REAR



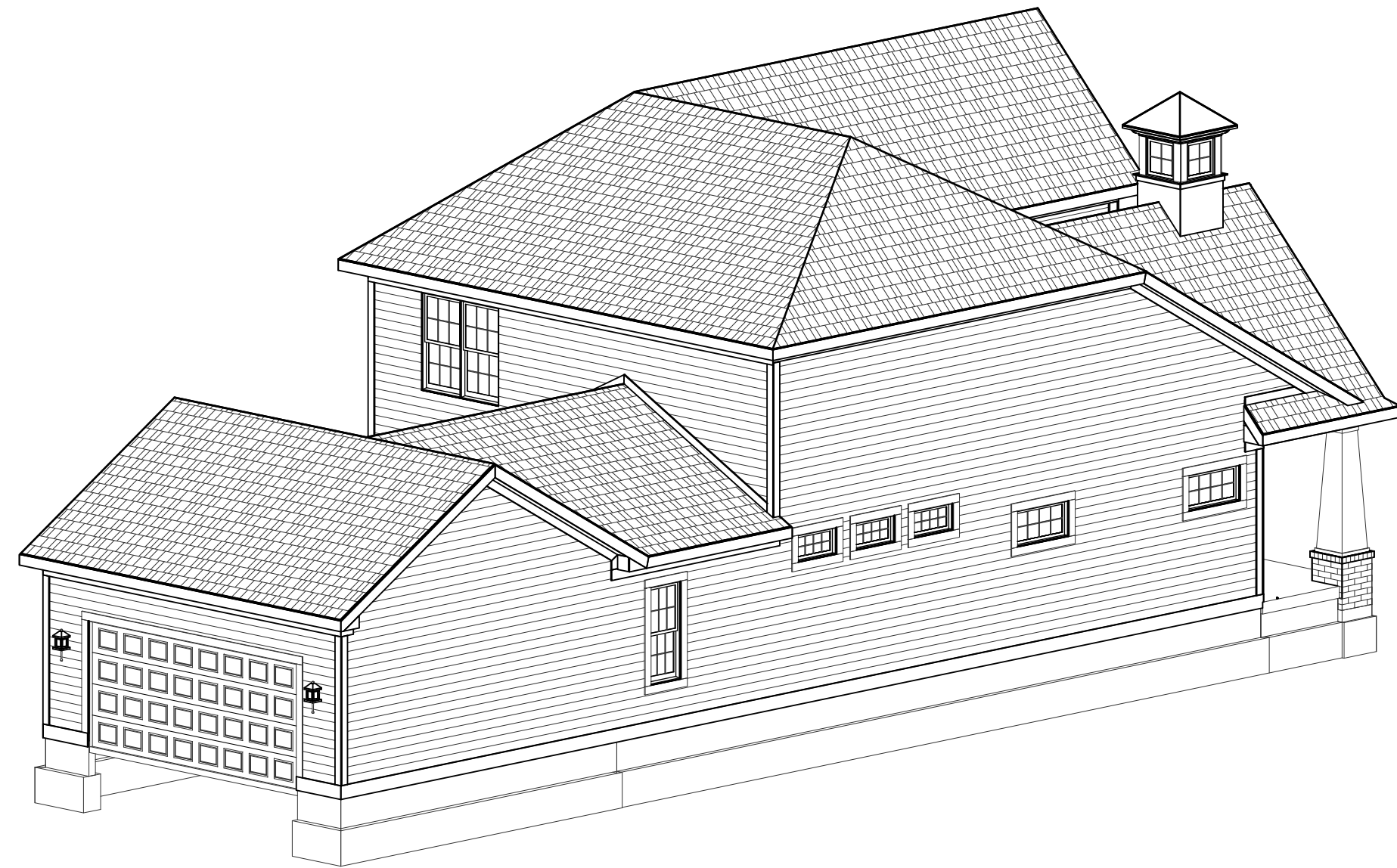
PRINT DATE:
07/11/2014

EH_1030

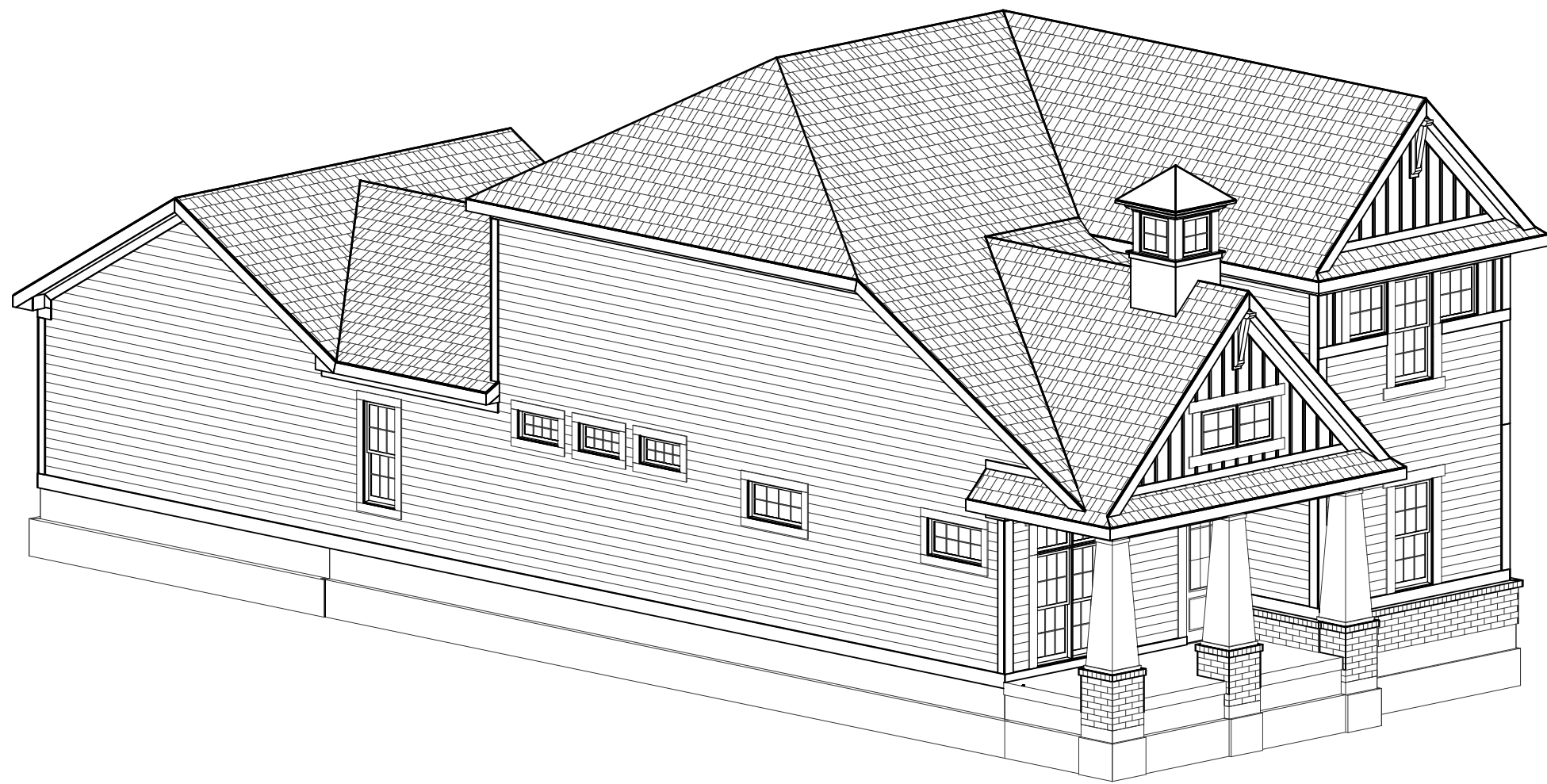
FOR:
Estridge Homes
LOCATION:

SHEET NUMBER

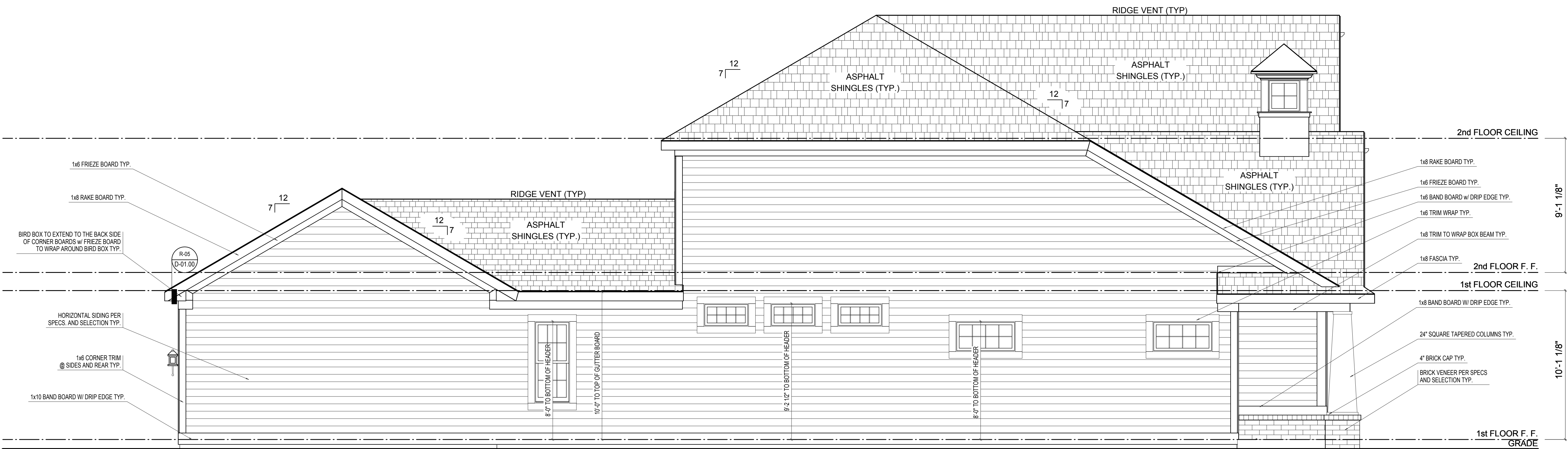
A-03



REAR-LEFT



FRONT-LEFT



LEFT ELEVATION

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

ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			



PRINT DATE: 07/11/2014		
EH_1030	FOR:	Estridge Homes
	LOCATION:	
SHEET NUMBER		
A-04		



1030 Plan

SCALE $1/4'' = 1'-0''$



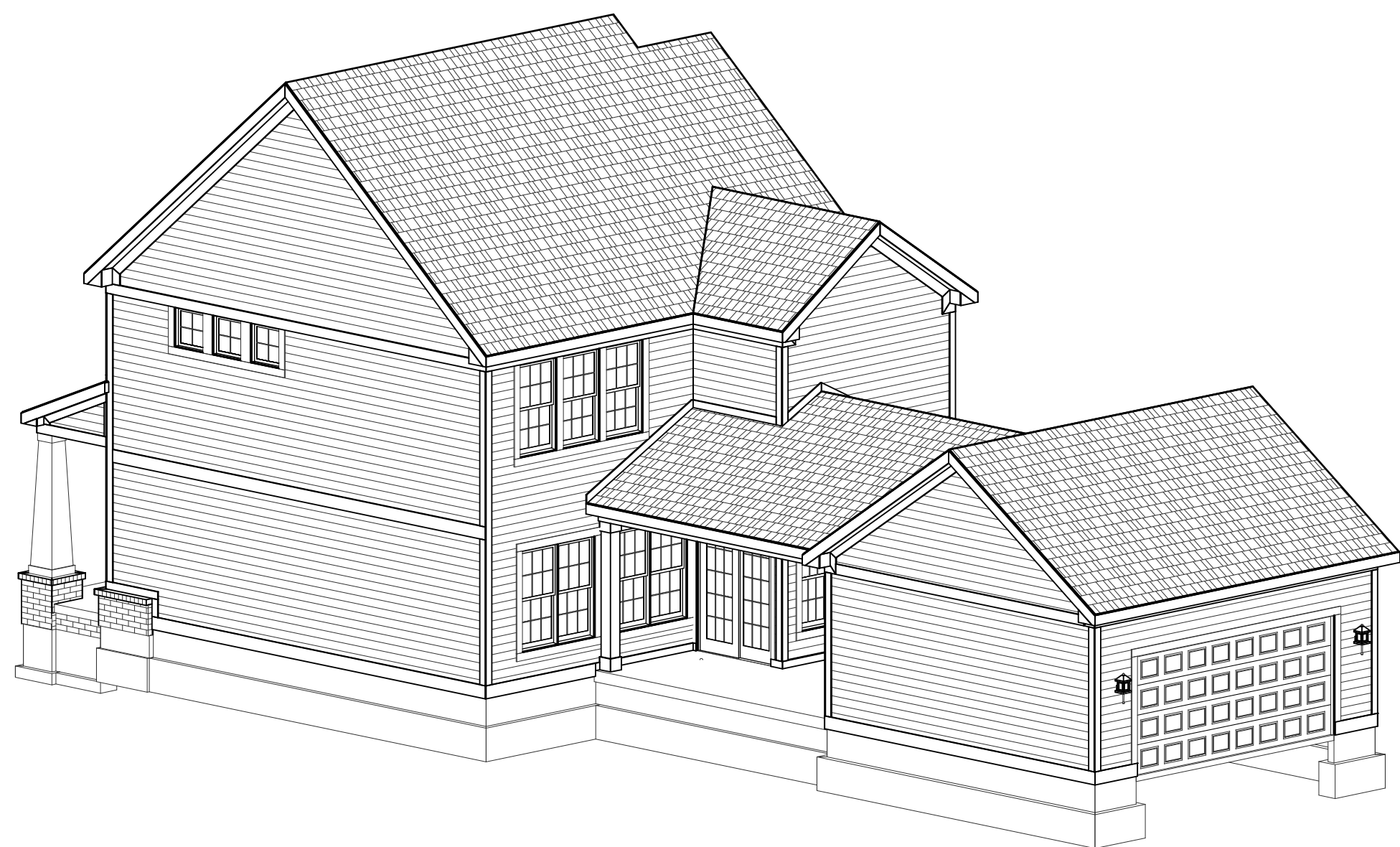
SCALE: 1/4"=1'-0"



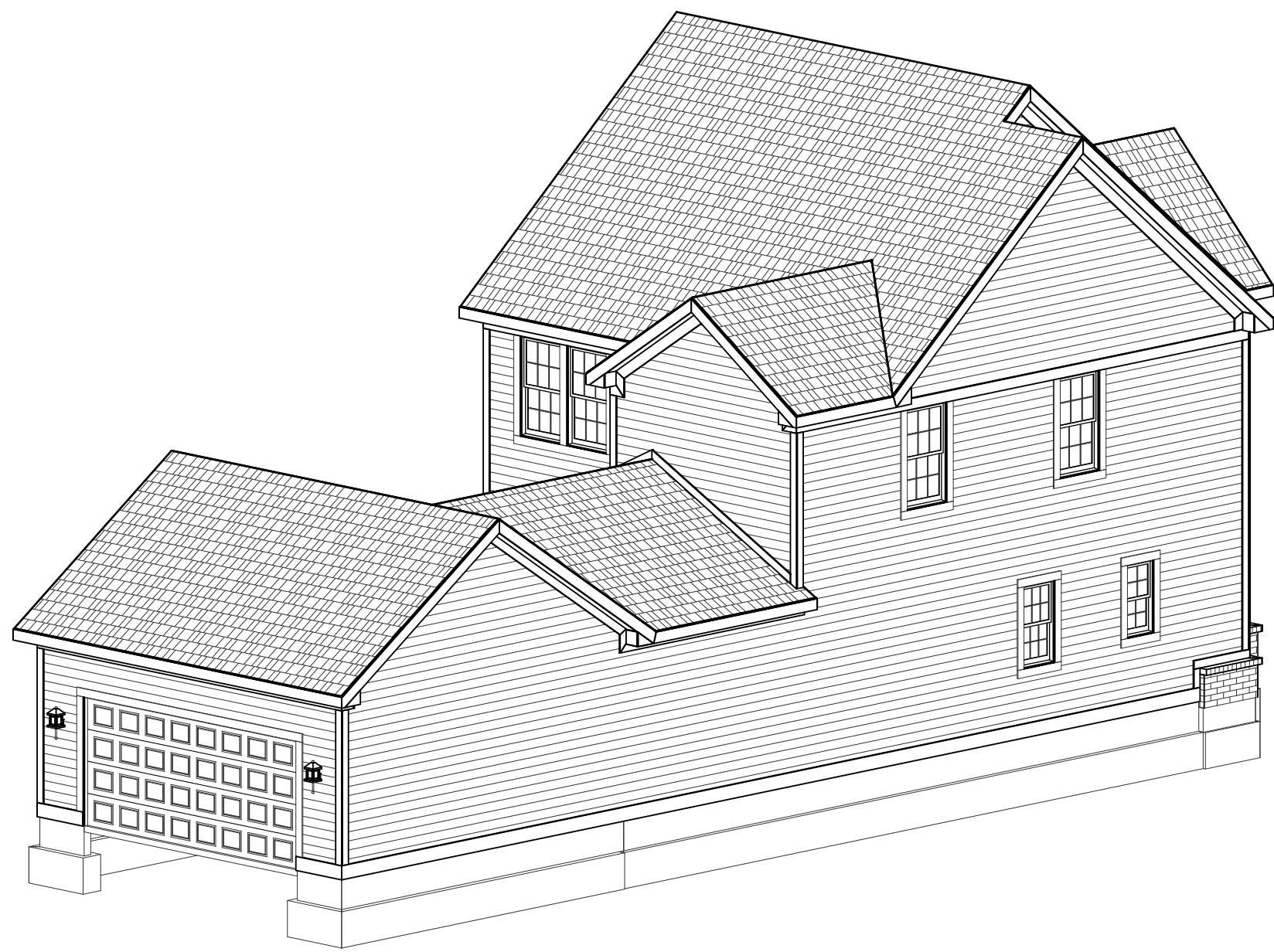
© Estridge Homes 10/08/2014

EH_1045	FOR:	Estridge Homes	LOCATION:	
SHEET NUMBER				
A-01				

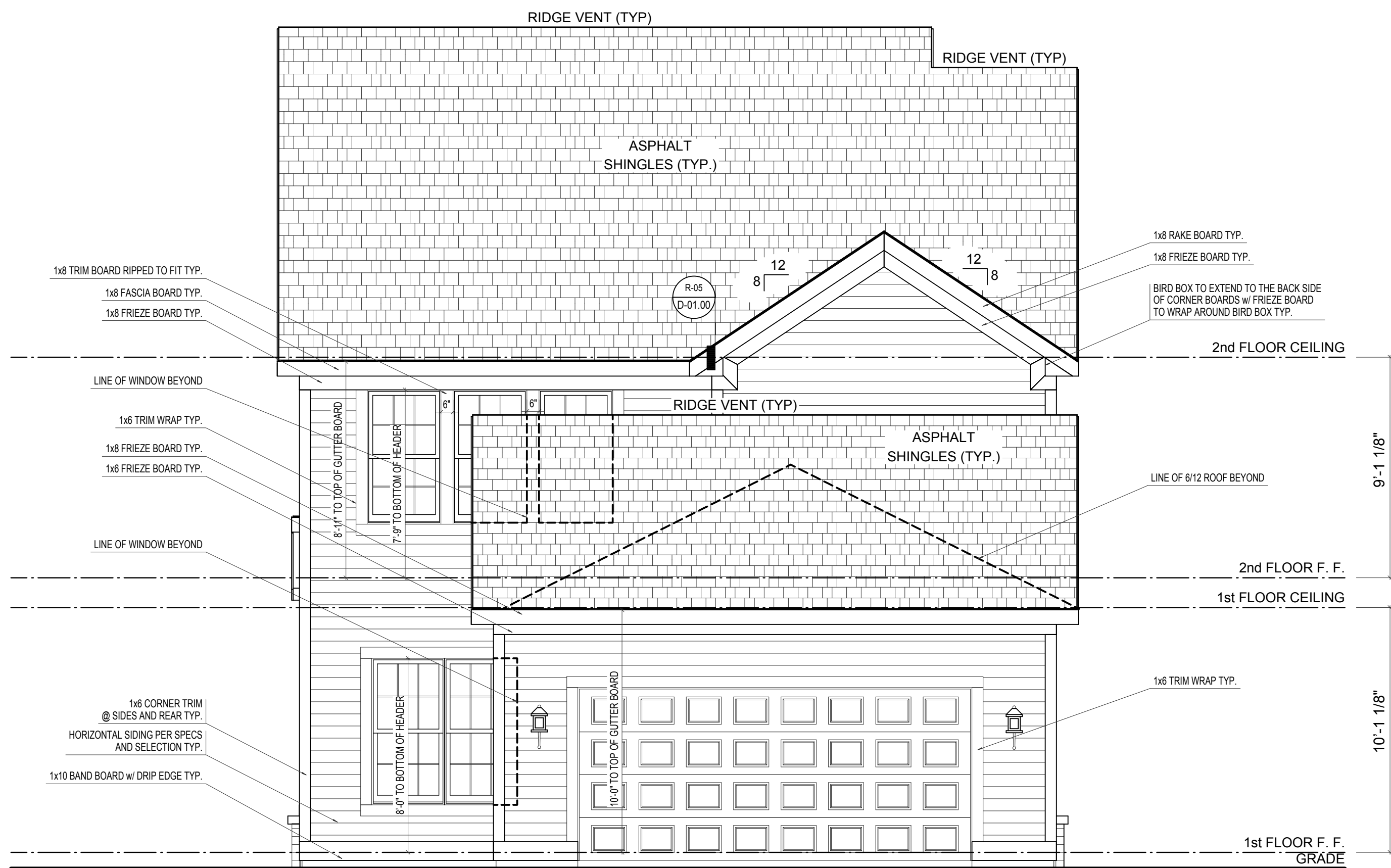
© CGVisions 2004 PLAN CREATION DATE 05/07/2014



REAR-RIGHT



REAR-LEFT



REAR ELEVATION

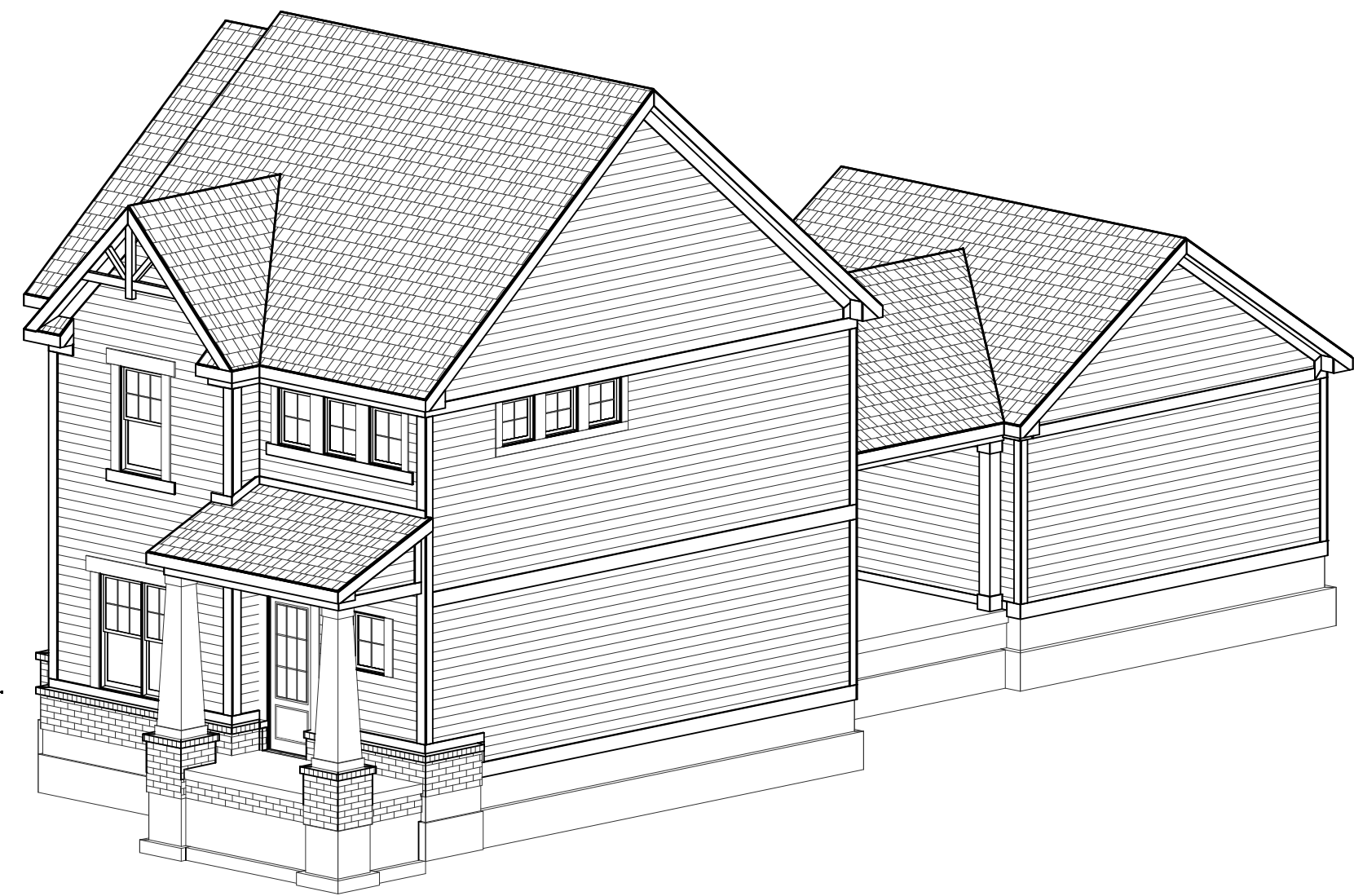
SCALE: 1/4"=1'-0"

ELEVATION 'A' BASE FINAL

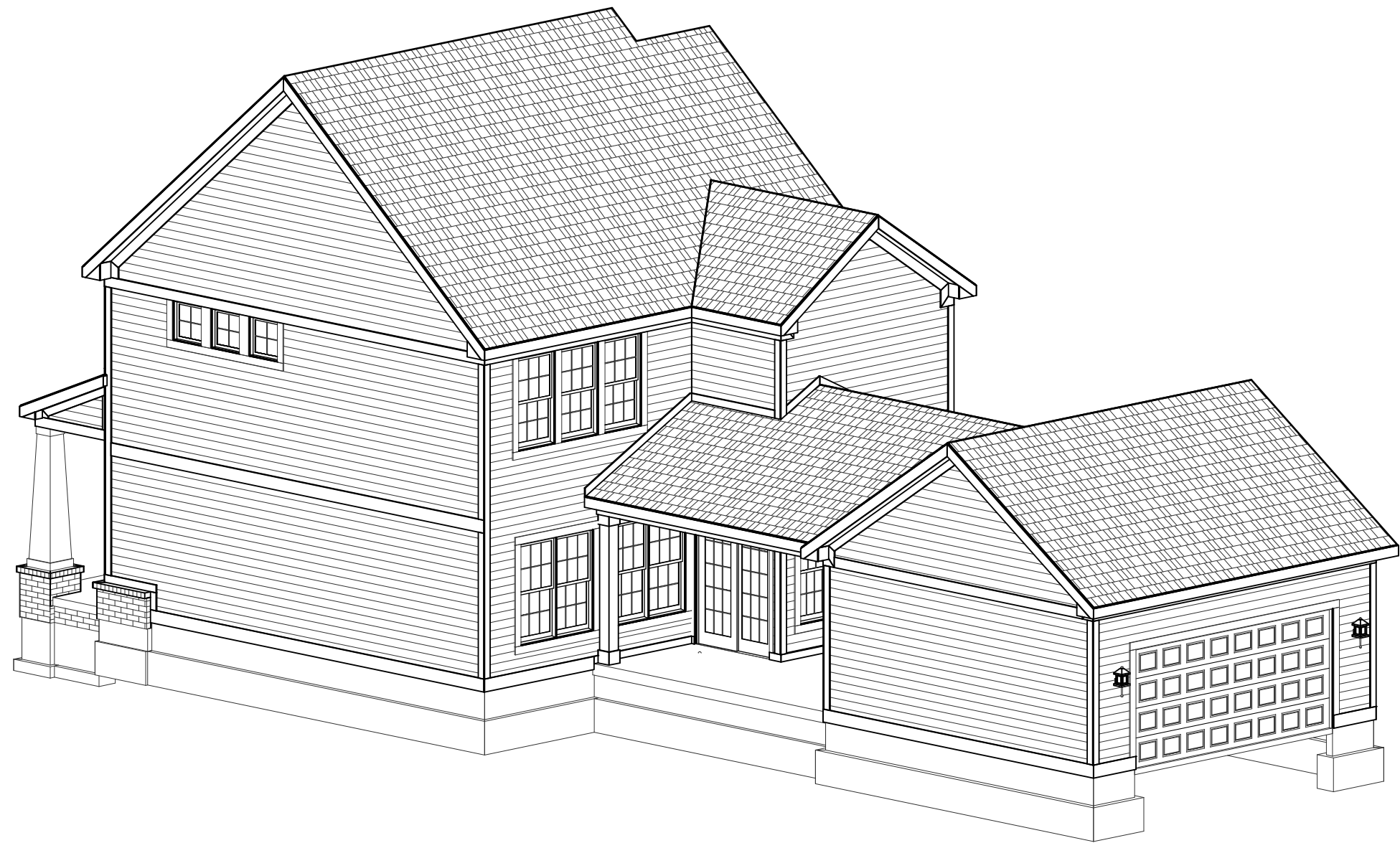
ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			



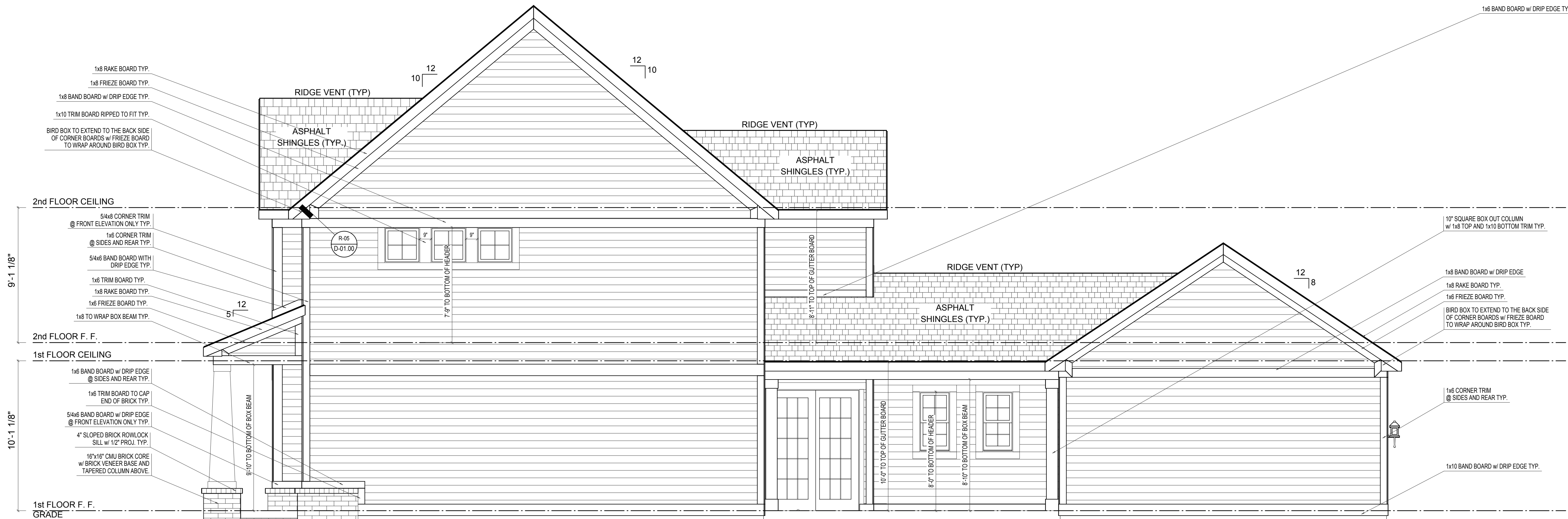
PRINT DATE: 10/08/2014		
EH_1045	FOR:	Estridge Homes
	LOCATION:	
SHEET NUMBER		
A-02		



FRONT-RIGHT



REAR-RIGHT



RIGHT ELEVATION

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

ELEVATION 'A' BASE FINAL

ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			



EH_1045

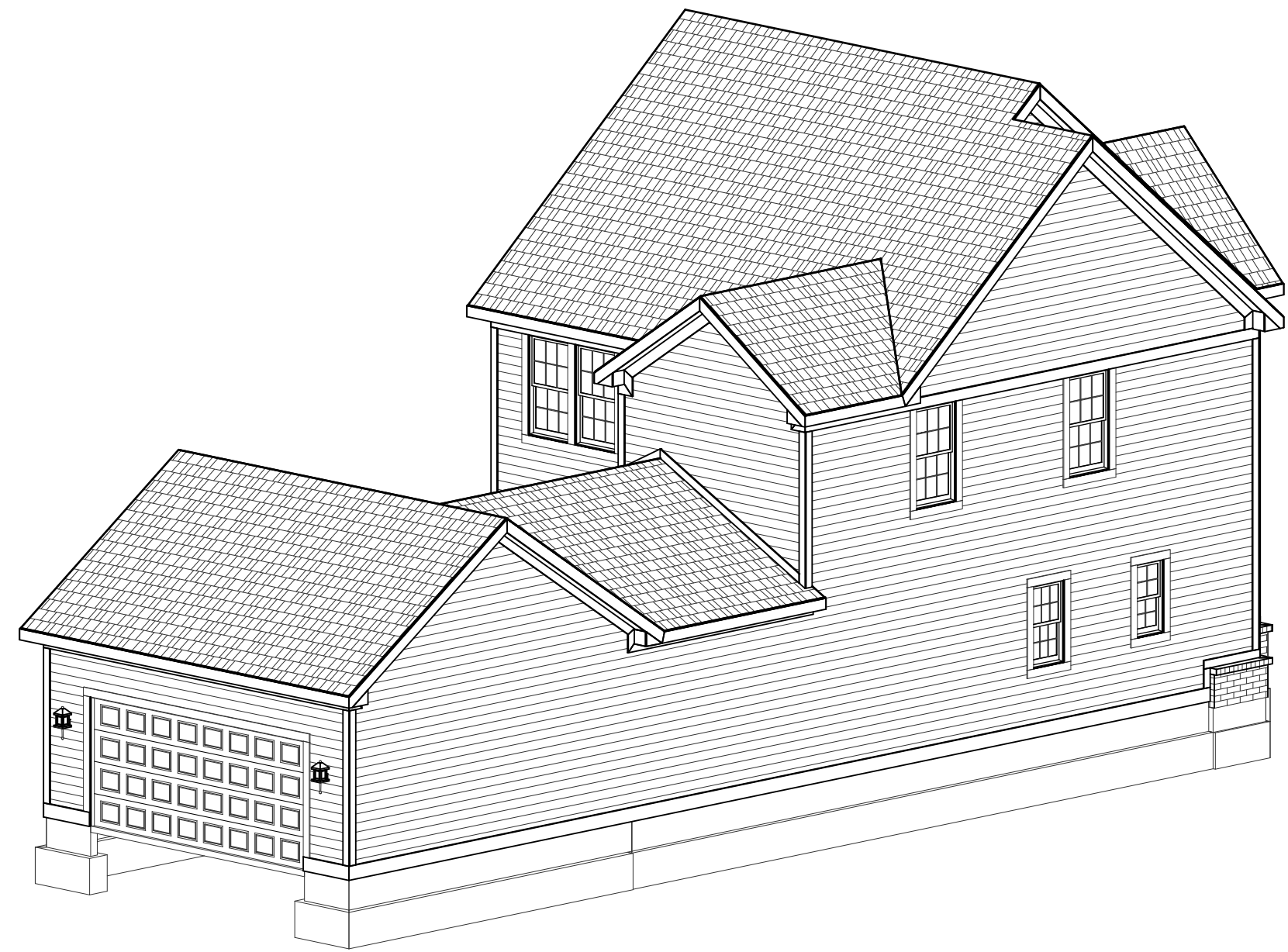
FOR: Estridge Homes

LOCATION:

PRINT DATE: 10/08/2014

SHEET NUMBER

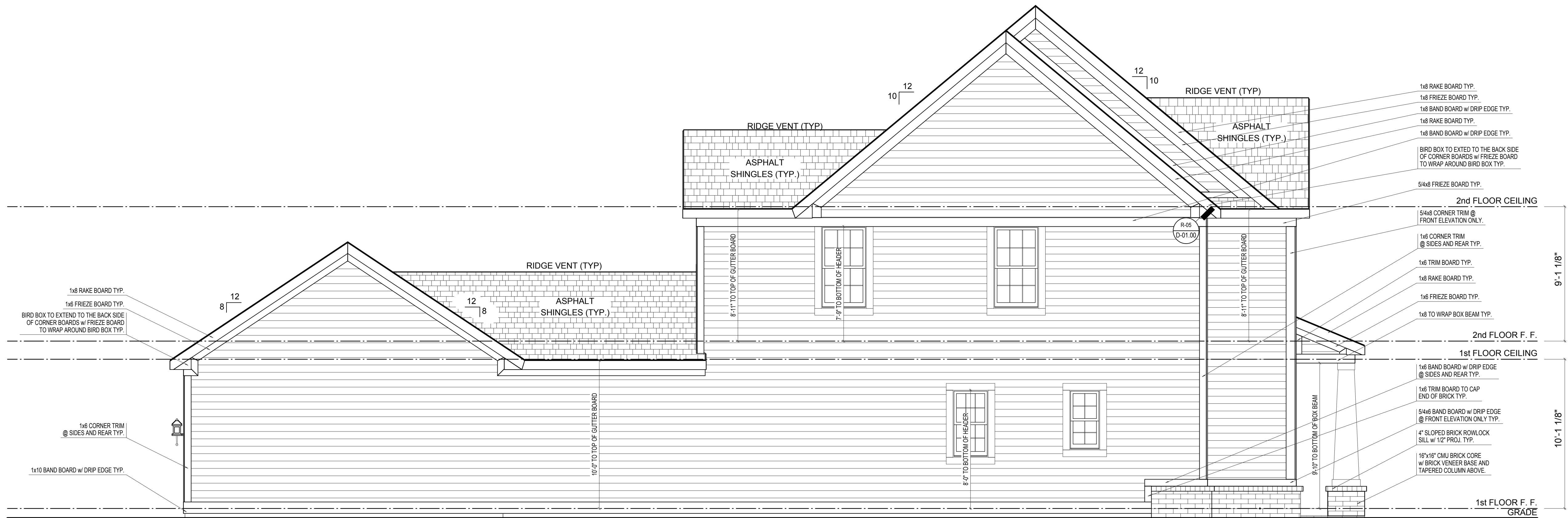
A-03



REAR-LEFT



FRONT-LEFT



LEFT ELEVATION

ELEVATION 'A' BASE FINAL

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

ELEVATION A		REV. NO.	DATE	REMARKS
GARAGE REAR				



EH_1045		FOR: Estridge Homes		PRINT DATE: 10/08/2014	
		LOCATION:			
		SHEET NUMBER			
		A-04			



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

[illegible]

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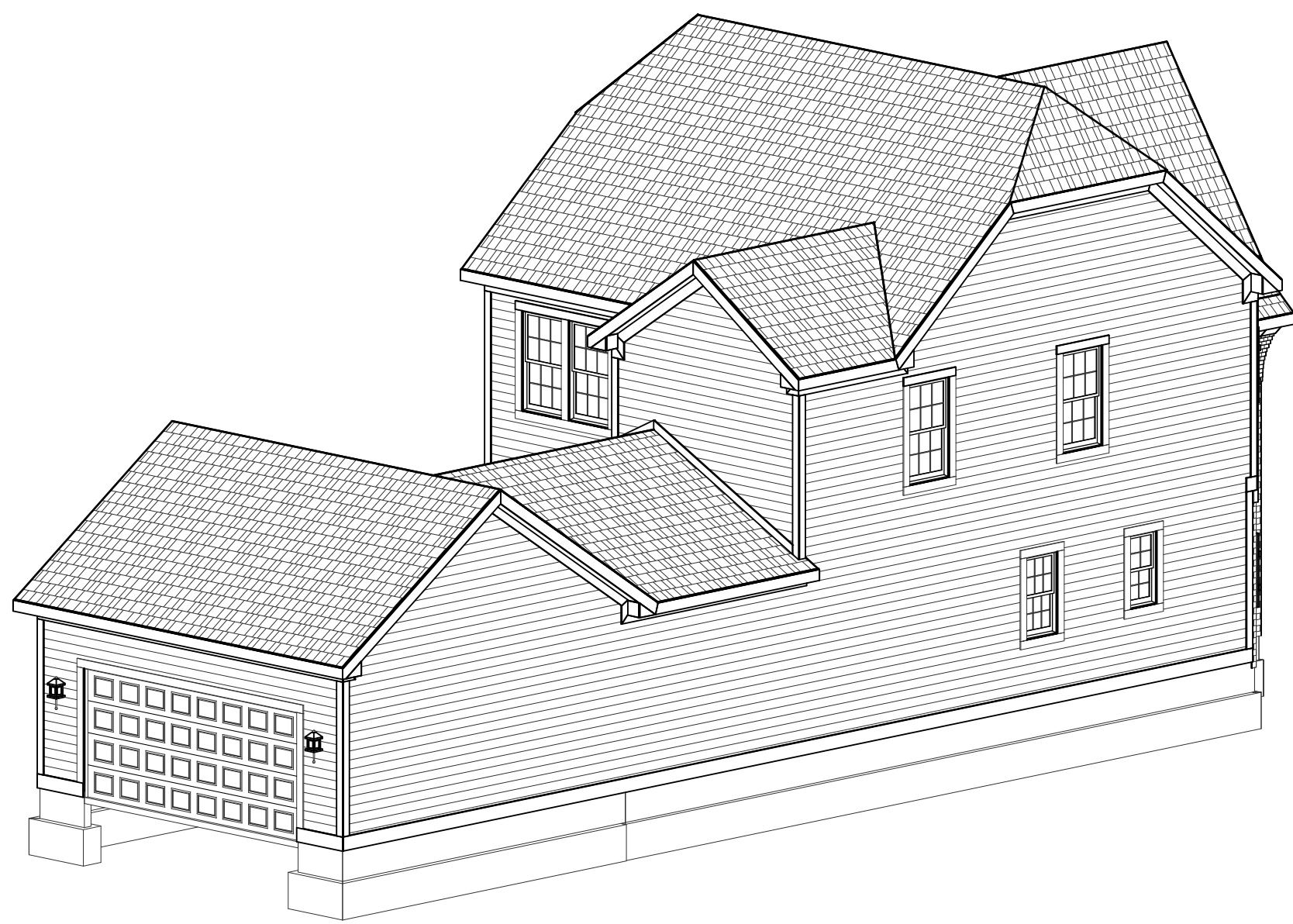
PRINT DATE:
09/11/2014

EH_1045	FOR:	Estridge Homes	LOCATION:	
SHEET NUMBER				
A-01				

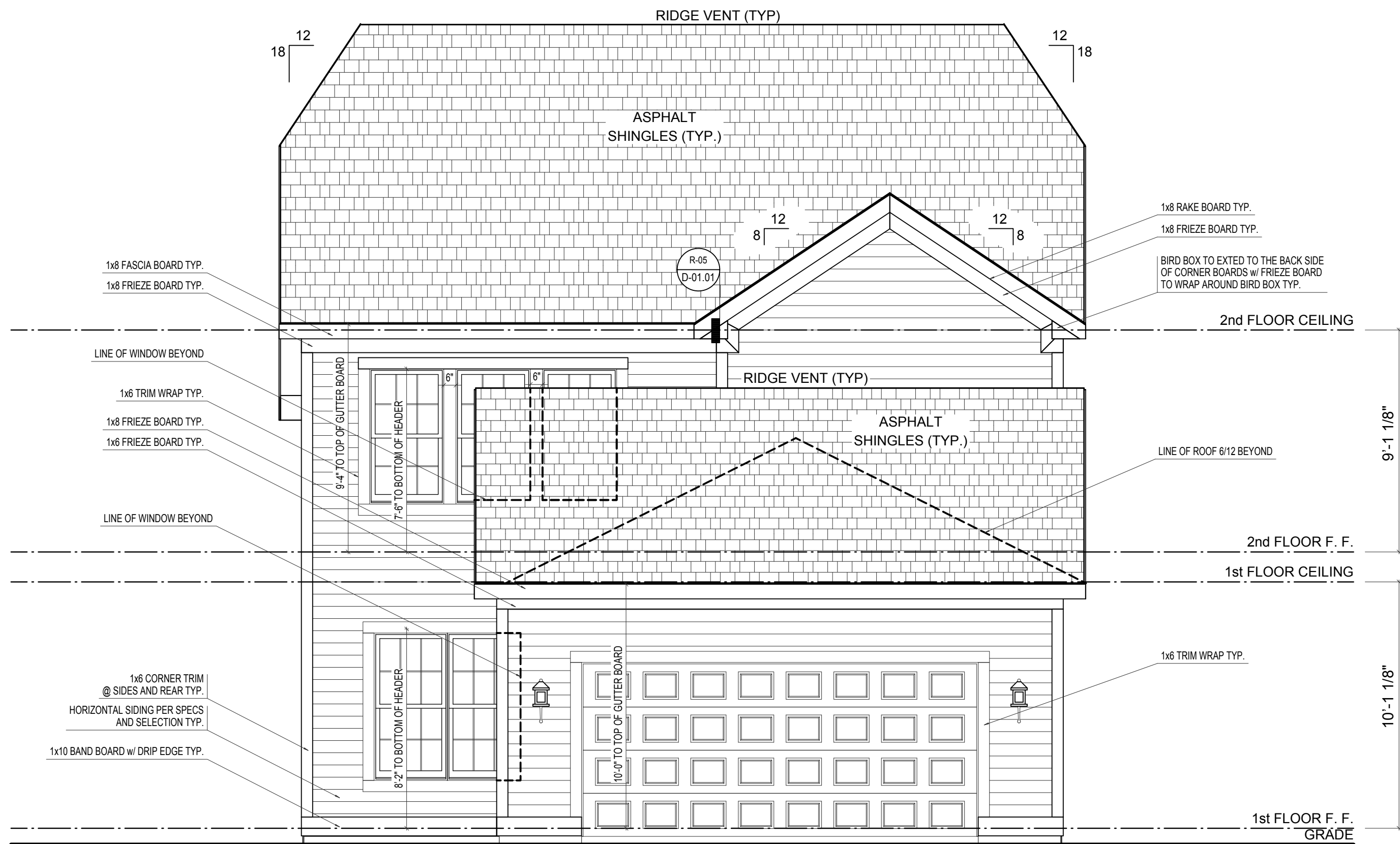
© CGVisions 2004 PLAN CREATION DATE 05/07/2014



REAR-RIGHT



REAR-LEFT



REAR ELEVATION

ELEVATION B BASE FINAL

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

ELEVATION B		REV. NO.	DATE	REMARKS
GARAGE REAR				



EH_1045		PRINT DATE: 09/11/2014	
FOR:	Estridge Homes	SHEET NUMBER	
LOCATION:			
A-02			

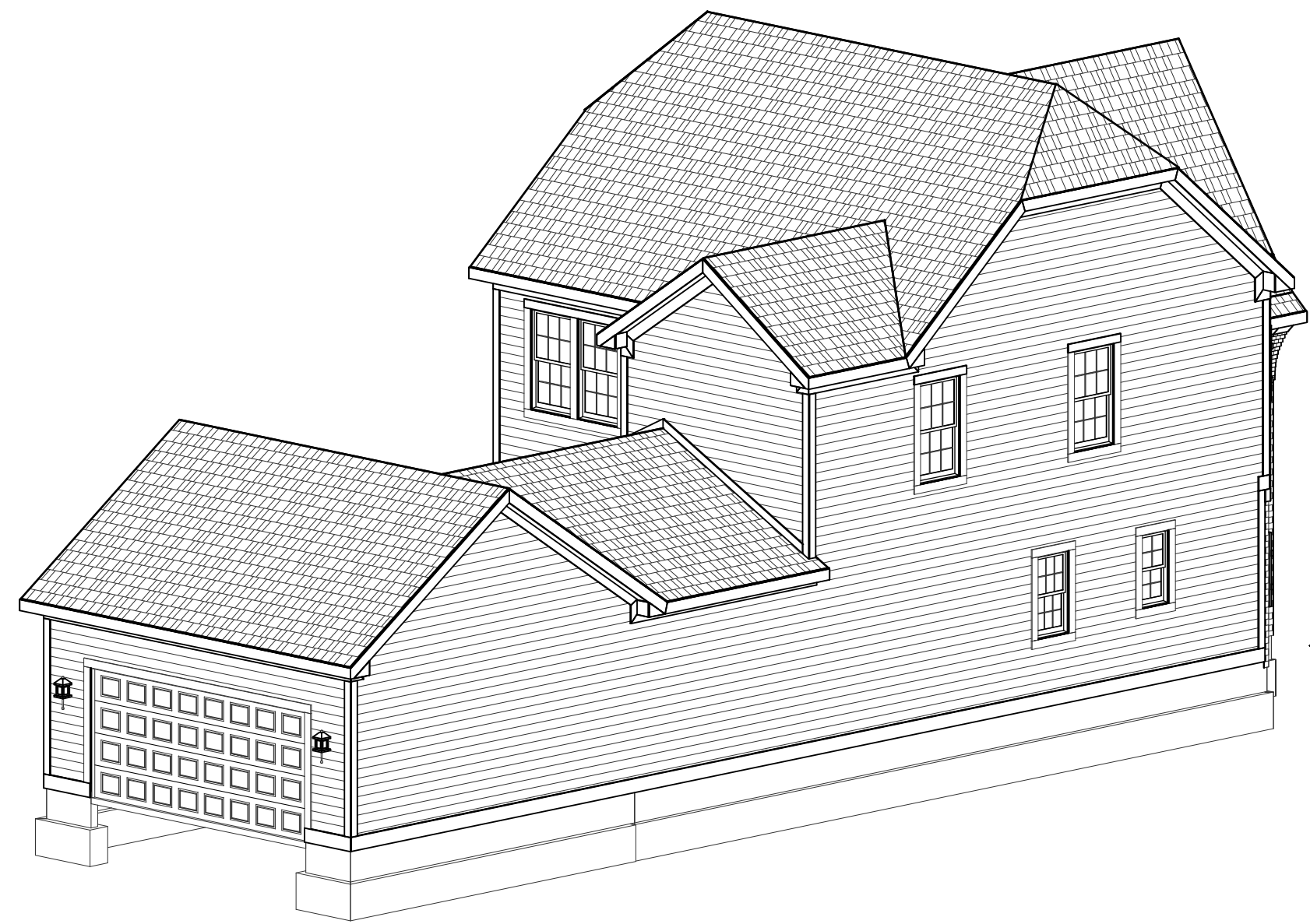


SCALE: 1/4"=1'-0"

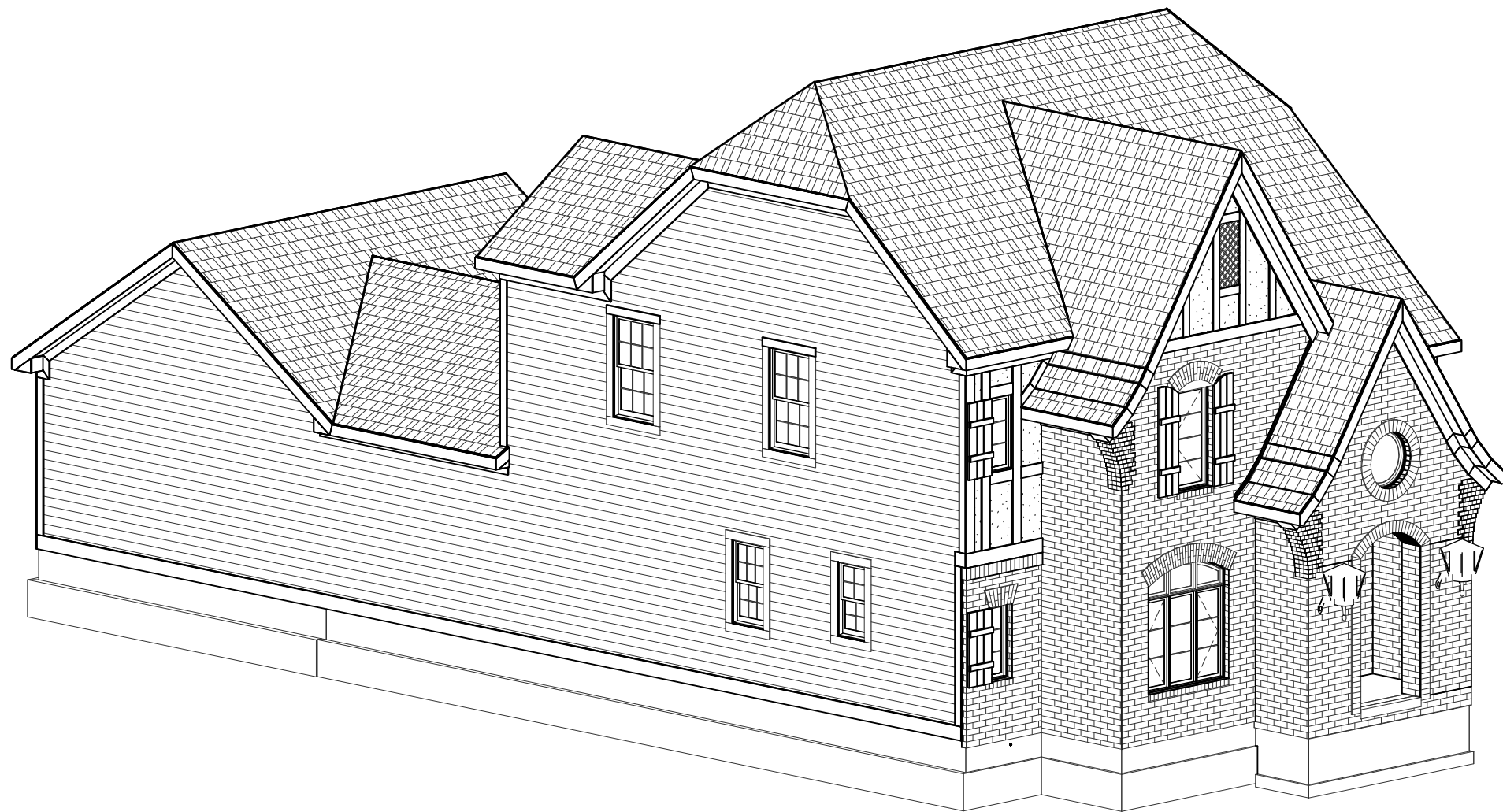


A-03

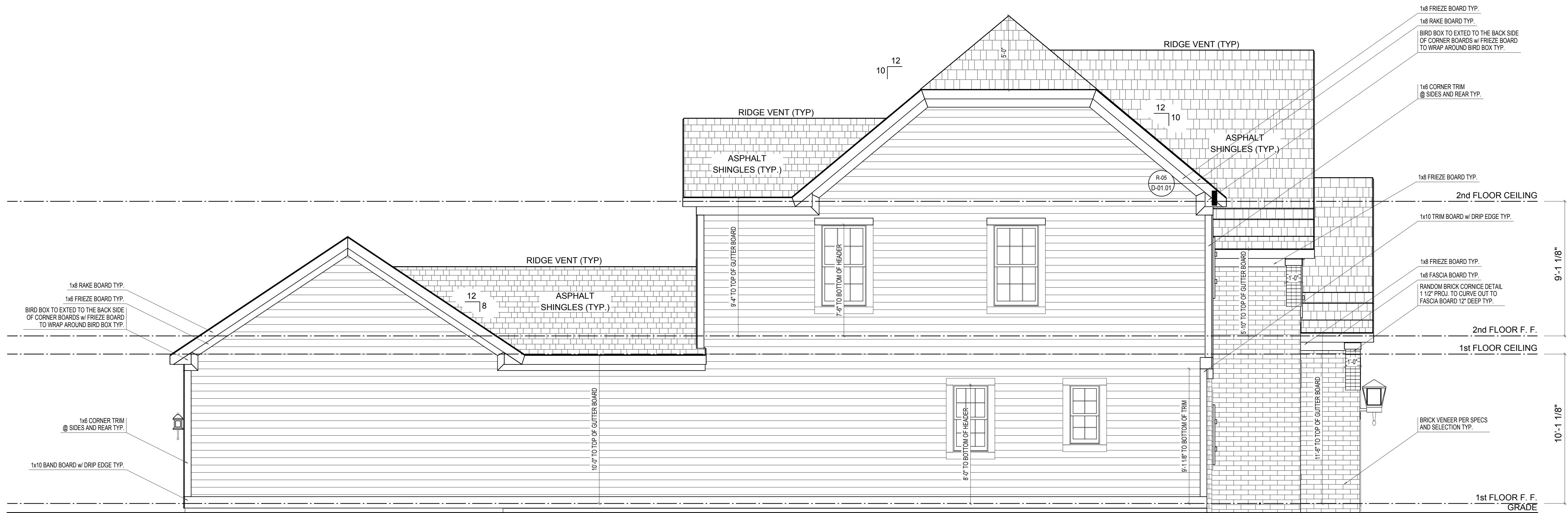
© CGVisions 2004 PLAN CREATION DATE 05/07/2014



REAR-LEFT



FRONT-LEFT



LEFT ELEVATION

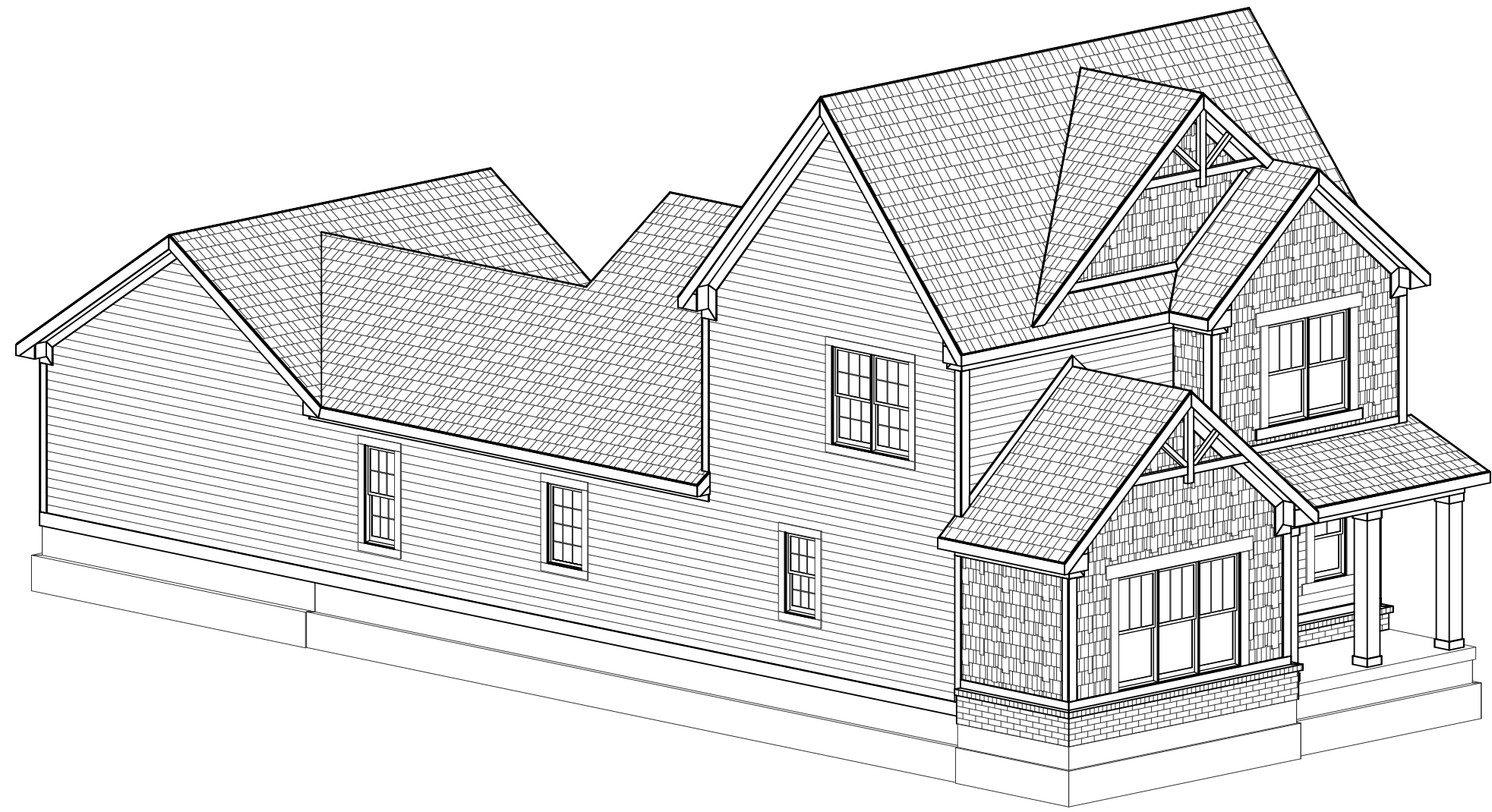
SCALE: 1/4"=1'-0"

ELEVATION B BASE FINAL

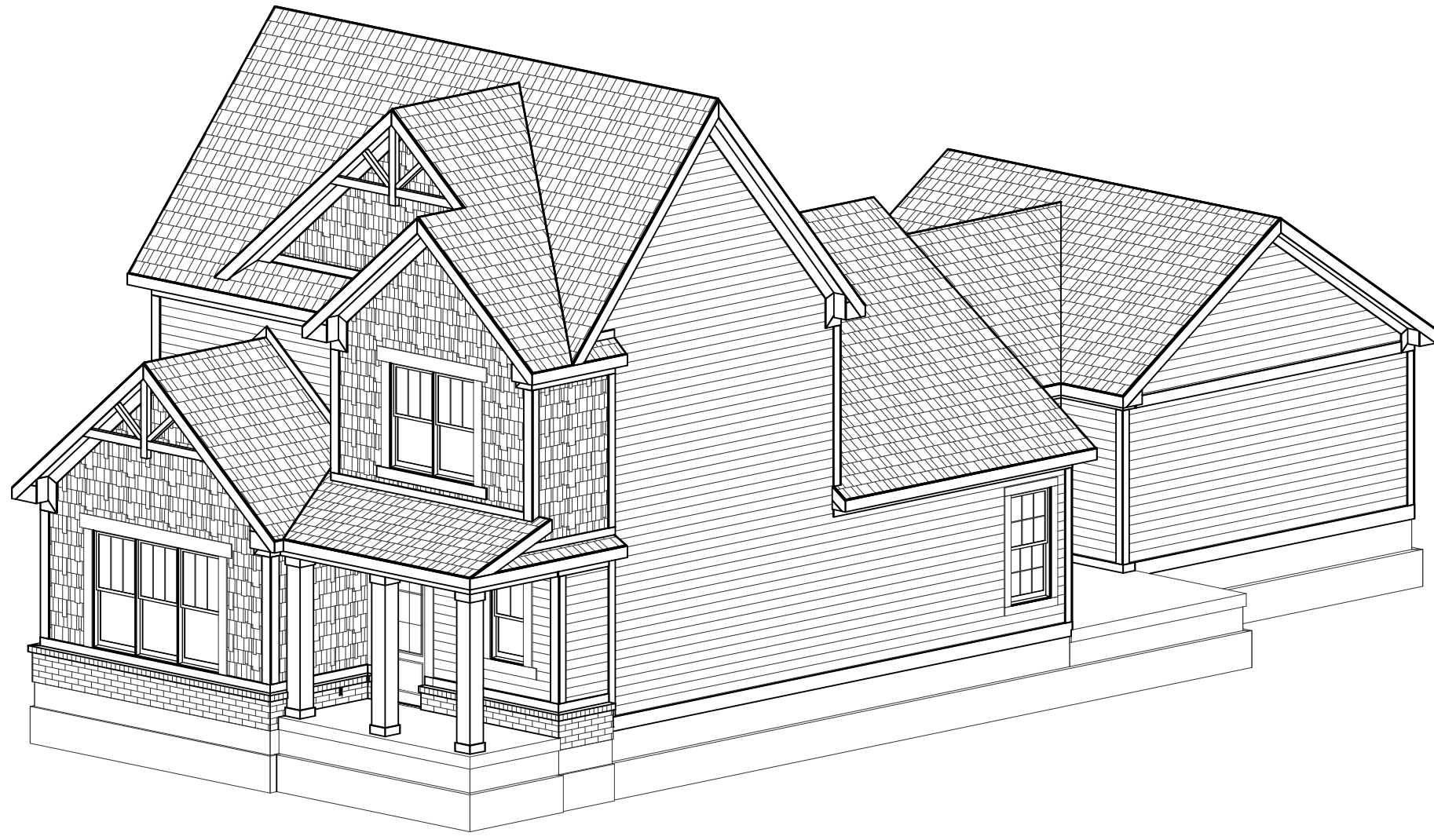
ELEVATION B	REV. NO.	DATE	REMARKS
GARAGE REAR			



PRINT DATE: 09/11/2014		
EH_1045	FOR:	Estridge Homes
	LOCATION:	
SHEET NUMBER		
A-04		



FRONT-LEFT



FRONT-RIGHT



FRONT ELEVATION

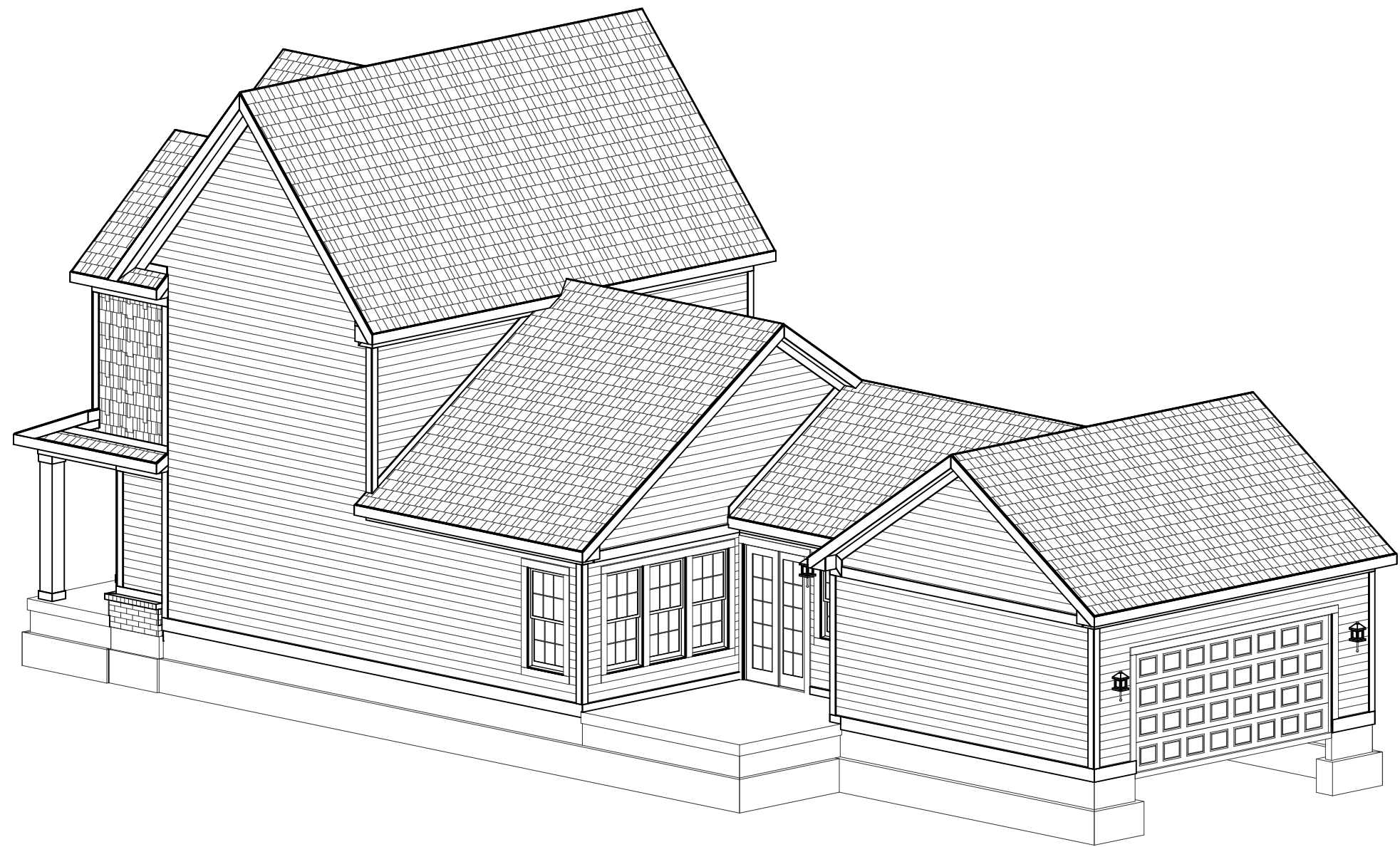
SCALE: 1/4"=1'-0"

ELEVATION 'A' BASE FINAL

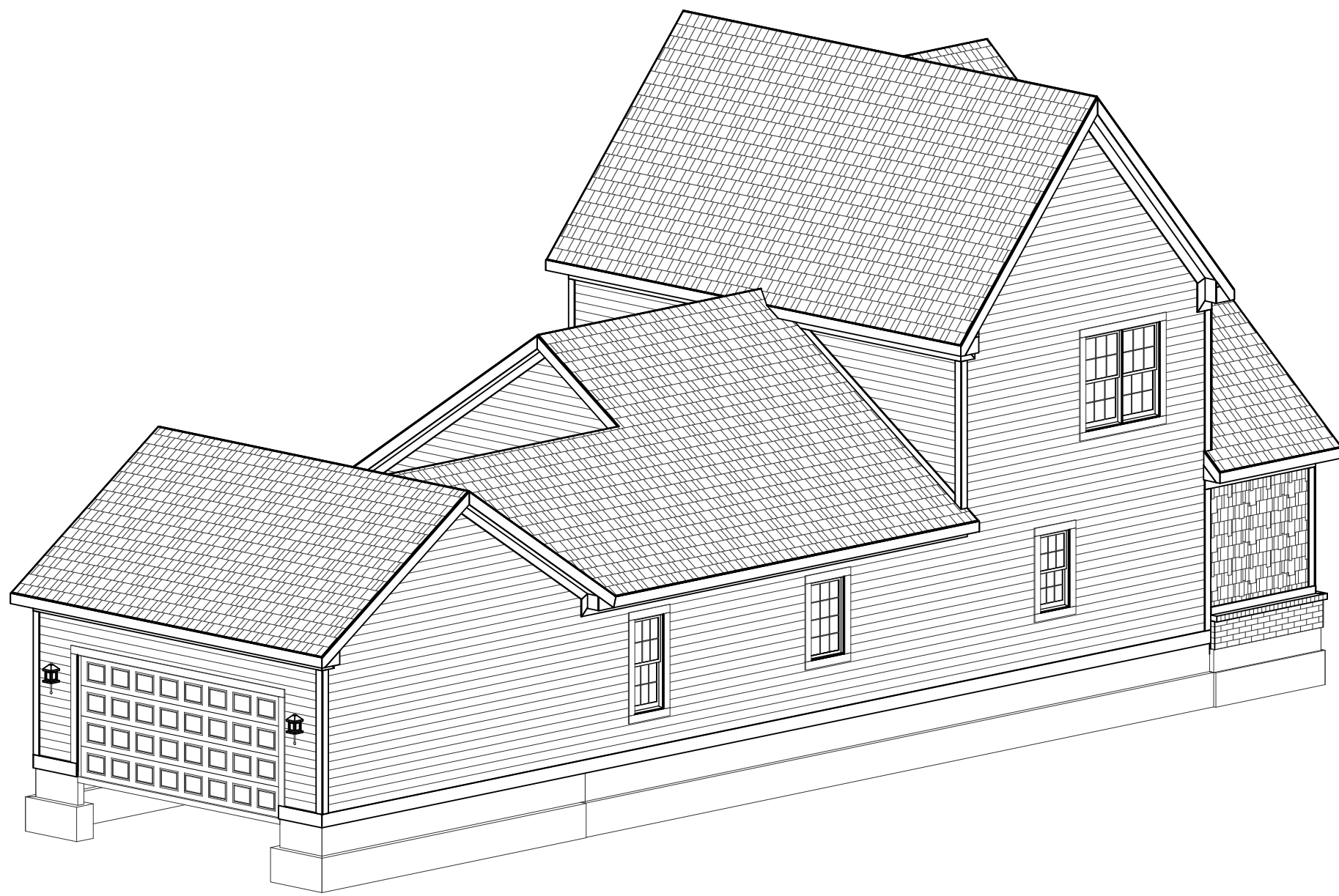
ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			



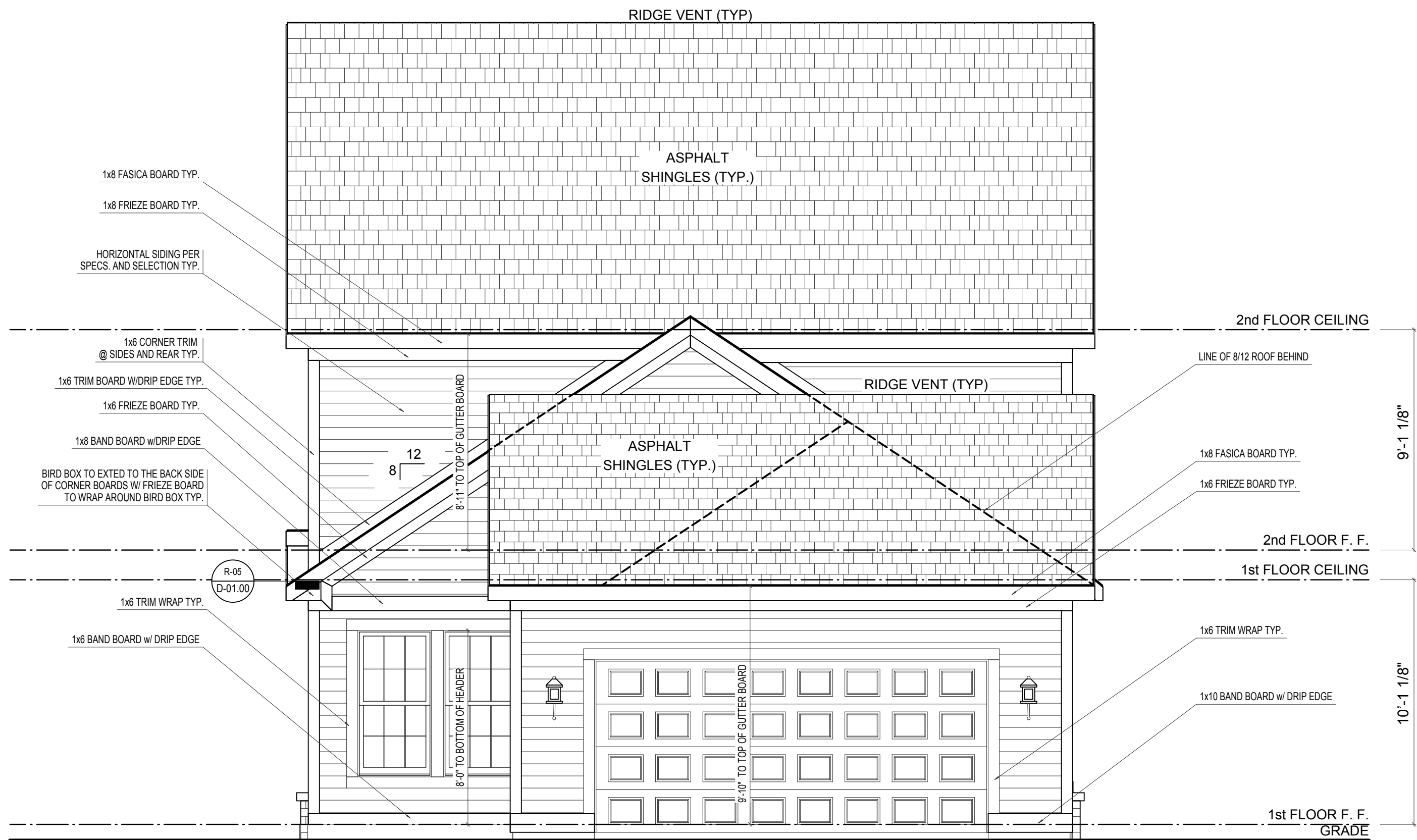
PRINT DATE: 10/07/2014		
EH_1060	FOR:	Estridge Homes
	LOCATION:	1060
SHEET NUMBER		
A-01		



REAR-RIGHT



REAR-LEFT



REAR ELEVATION

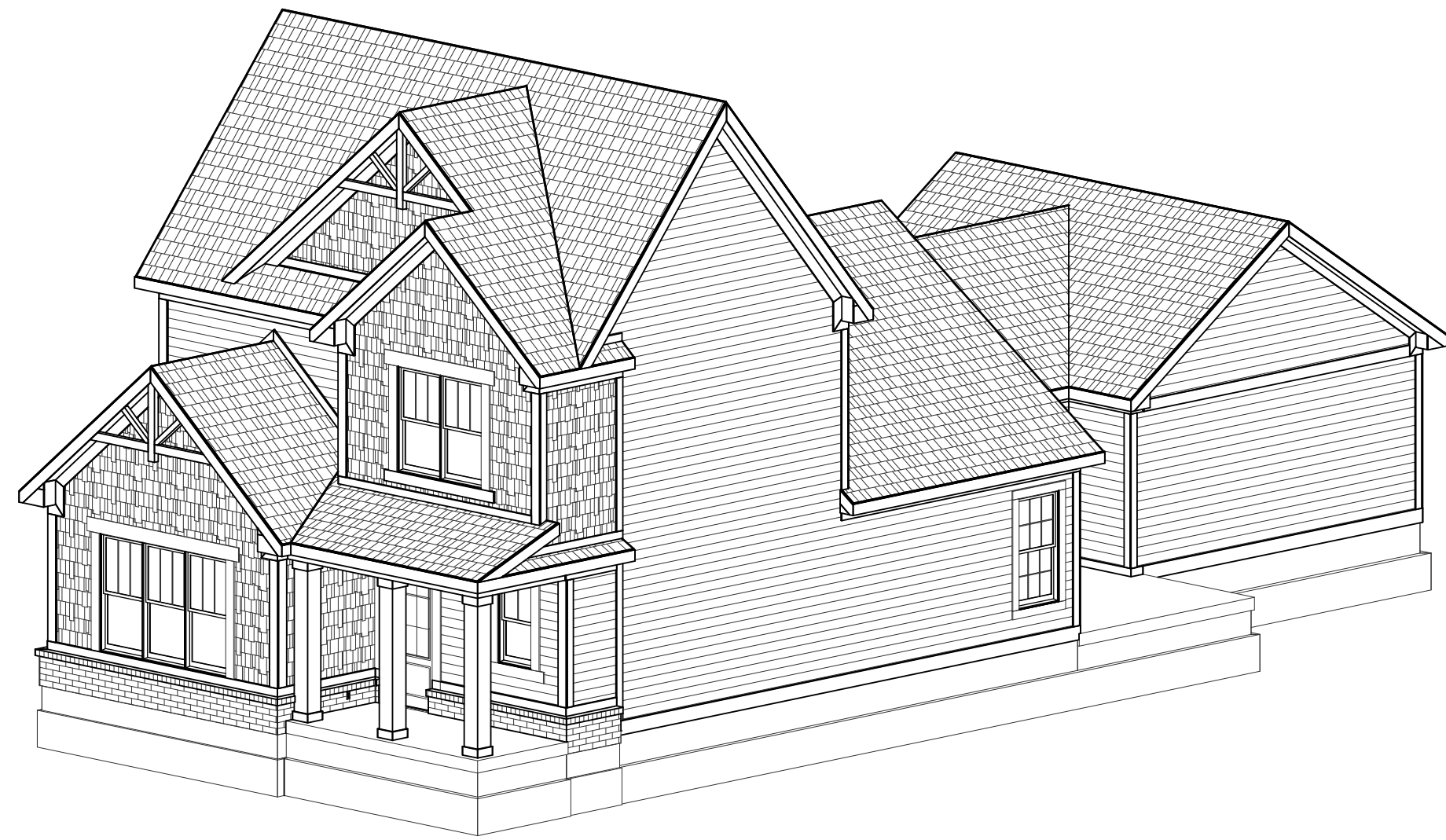
SCALE: 1/4"=1'-0"

ELEVATION 'A' BASE FINAL

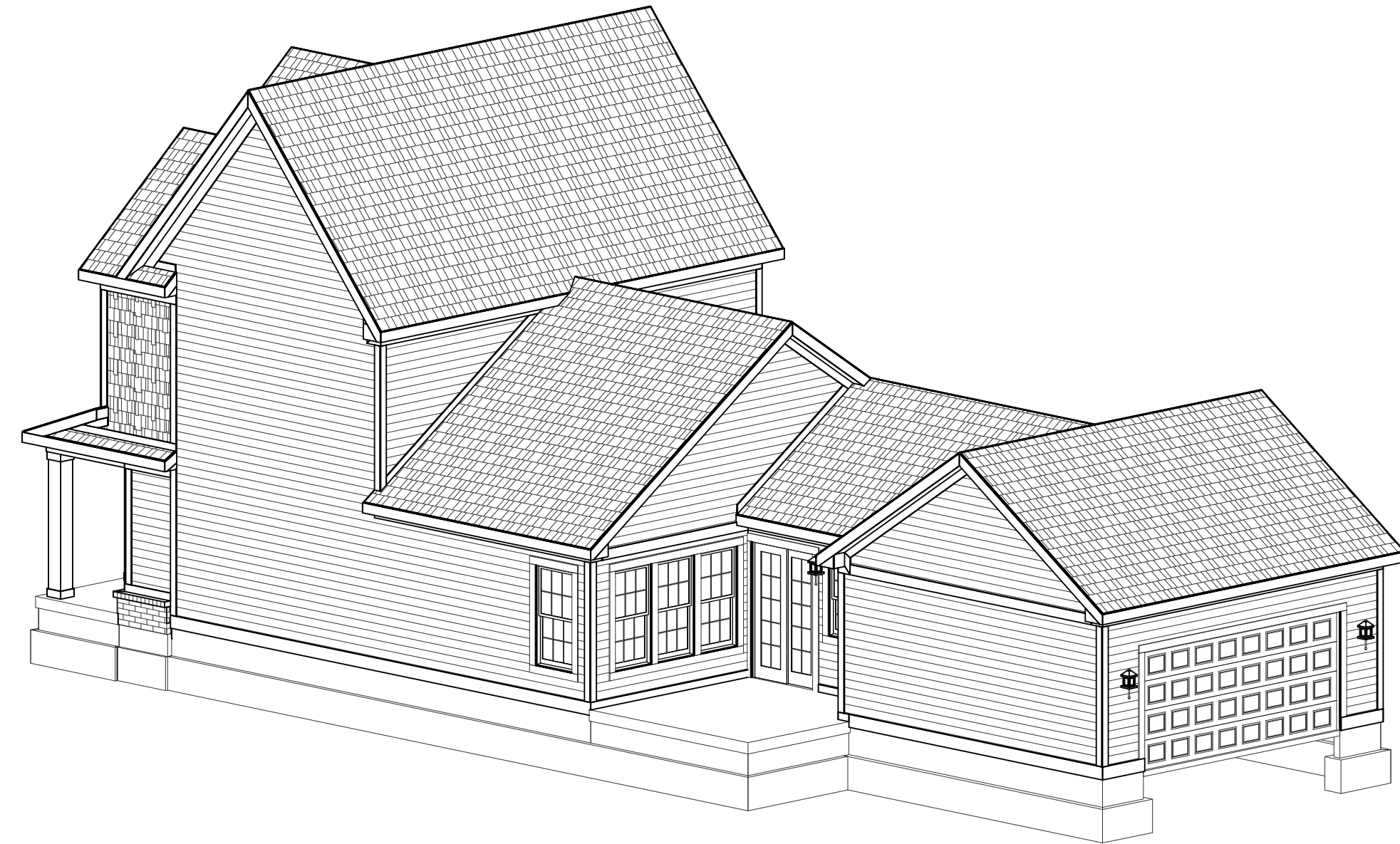
ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			



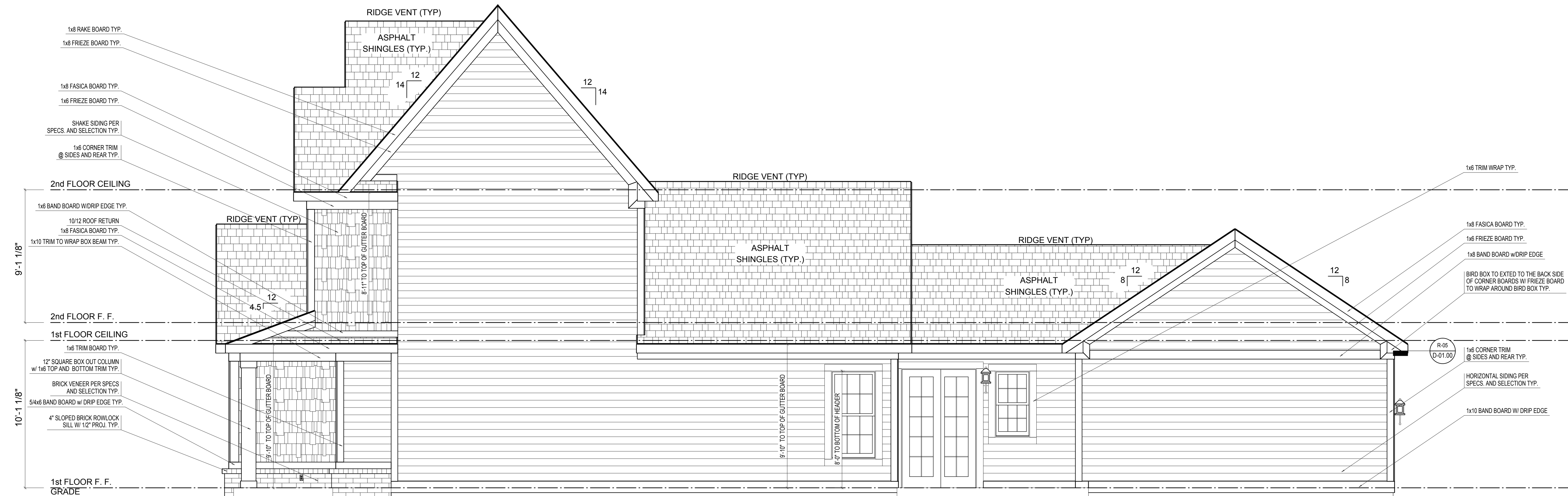
PRINT DATE: 10/07/2014		
EH_1060	FOR:	Estridge Homes
	LOCATION:	1060
SHEET NUMBER		
A-02		



FRONT-RIGHT



REAR-RIGHT



RIGHT ELEVATION

ELEVATION 'A' BASE FINAL

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

REMARKS

DATE

REV. NO.

ELEVATION A

GARAGE REAR



PRINT DATE:
10/07/2014

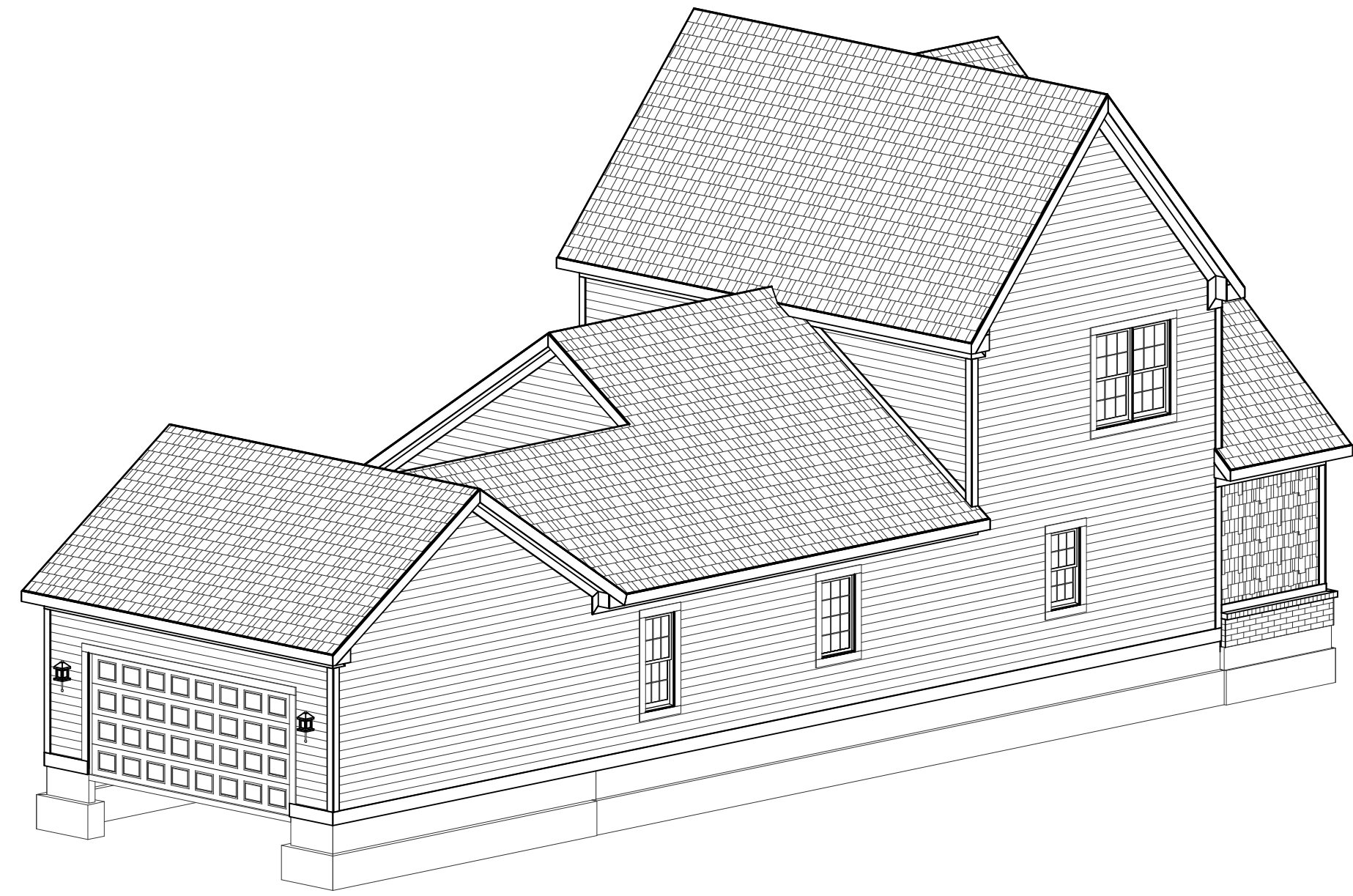
EH_1060

FOR: Estridge Homes

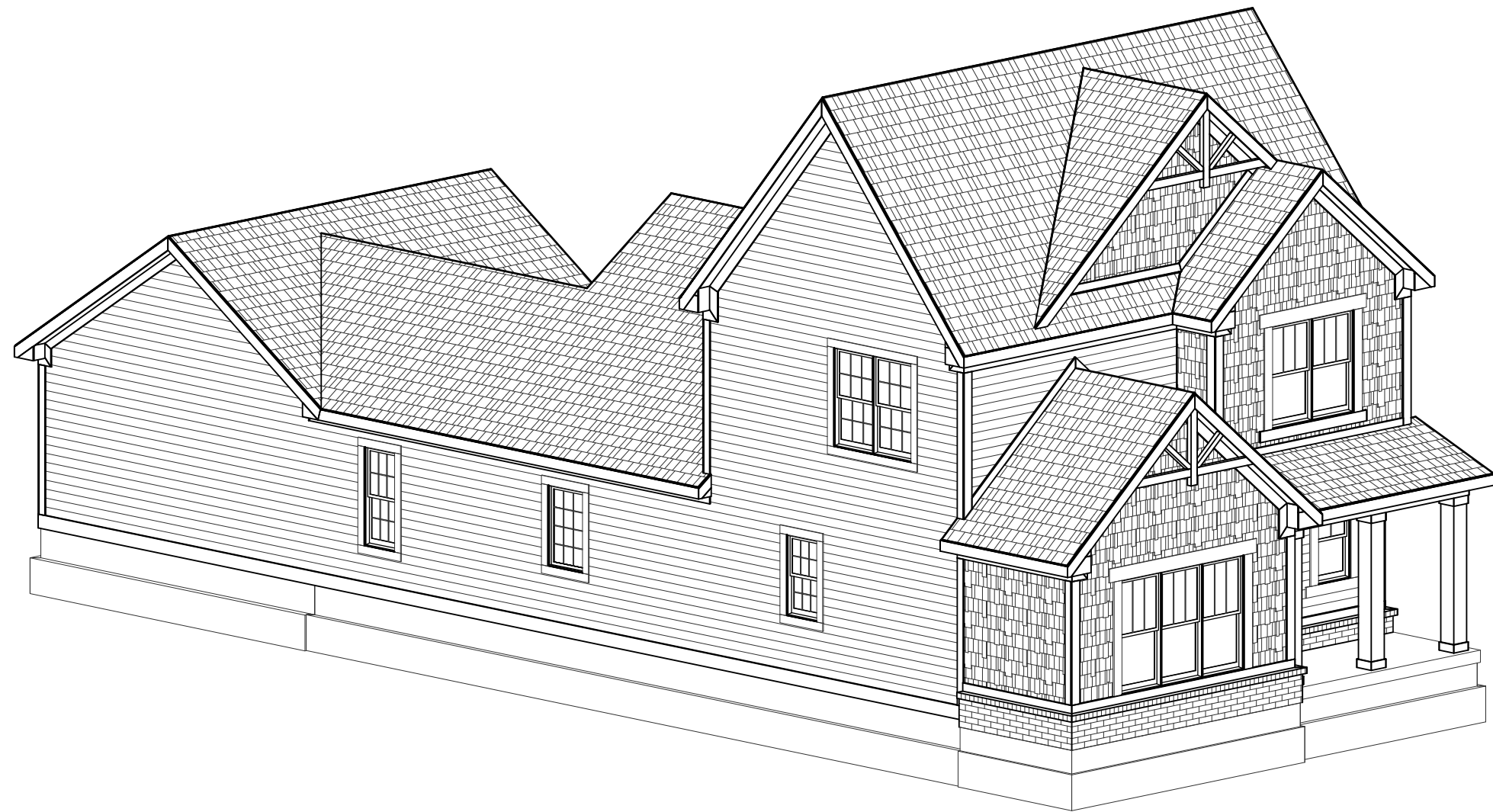
LOCATION: 1060

SHEET NUMBER

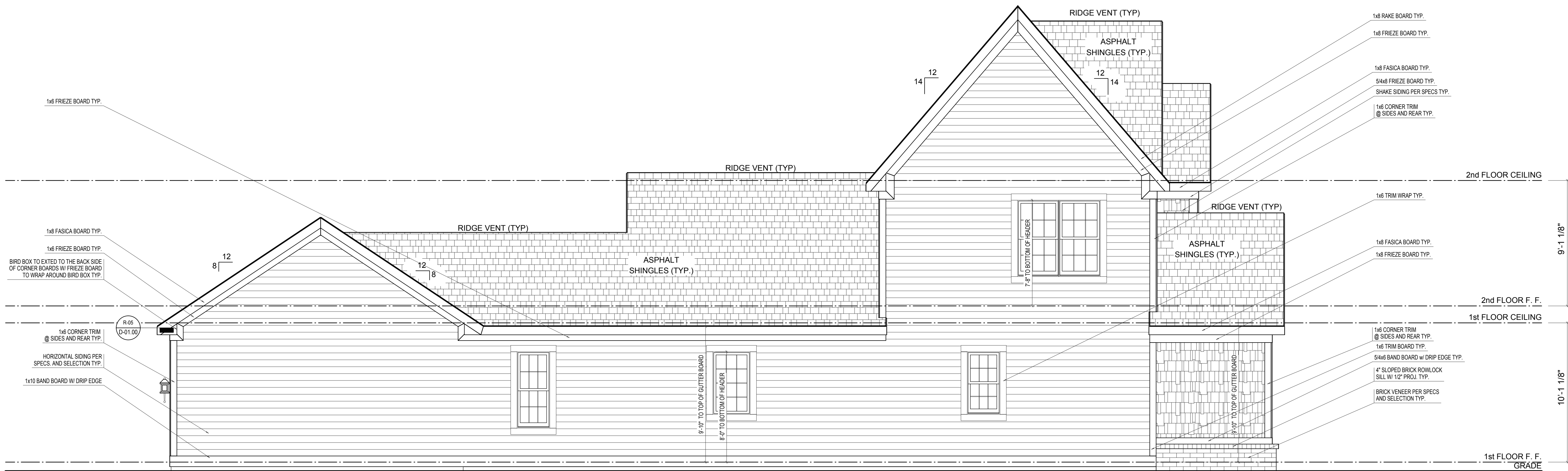
A-03



REAR-LEFT



FRONT-LEFT



LEFT ELEVATION

ELEVATION 'A' BASE FINAL

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

ELEVATION A		REV. NO.	DATE	REMARKS
GARAGE REAR				



EH_1060		PRINT DATE: 10/07/2014	
FOR:	Estridge Homes	LOCATION:	1060
SHEET NUMBER		A-04	



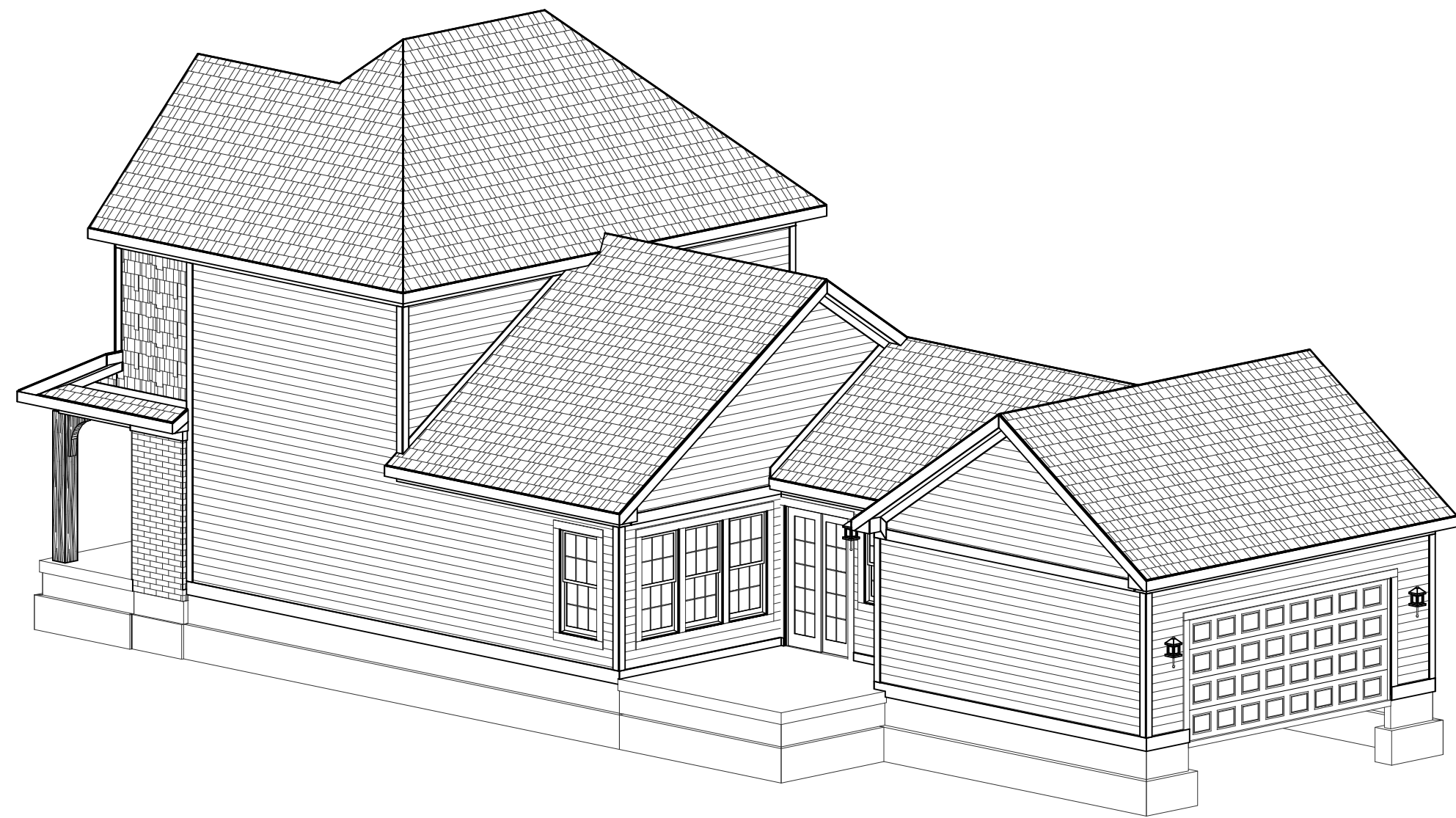
SCALE: 1/4"=1'-0"



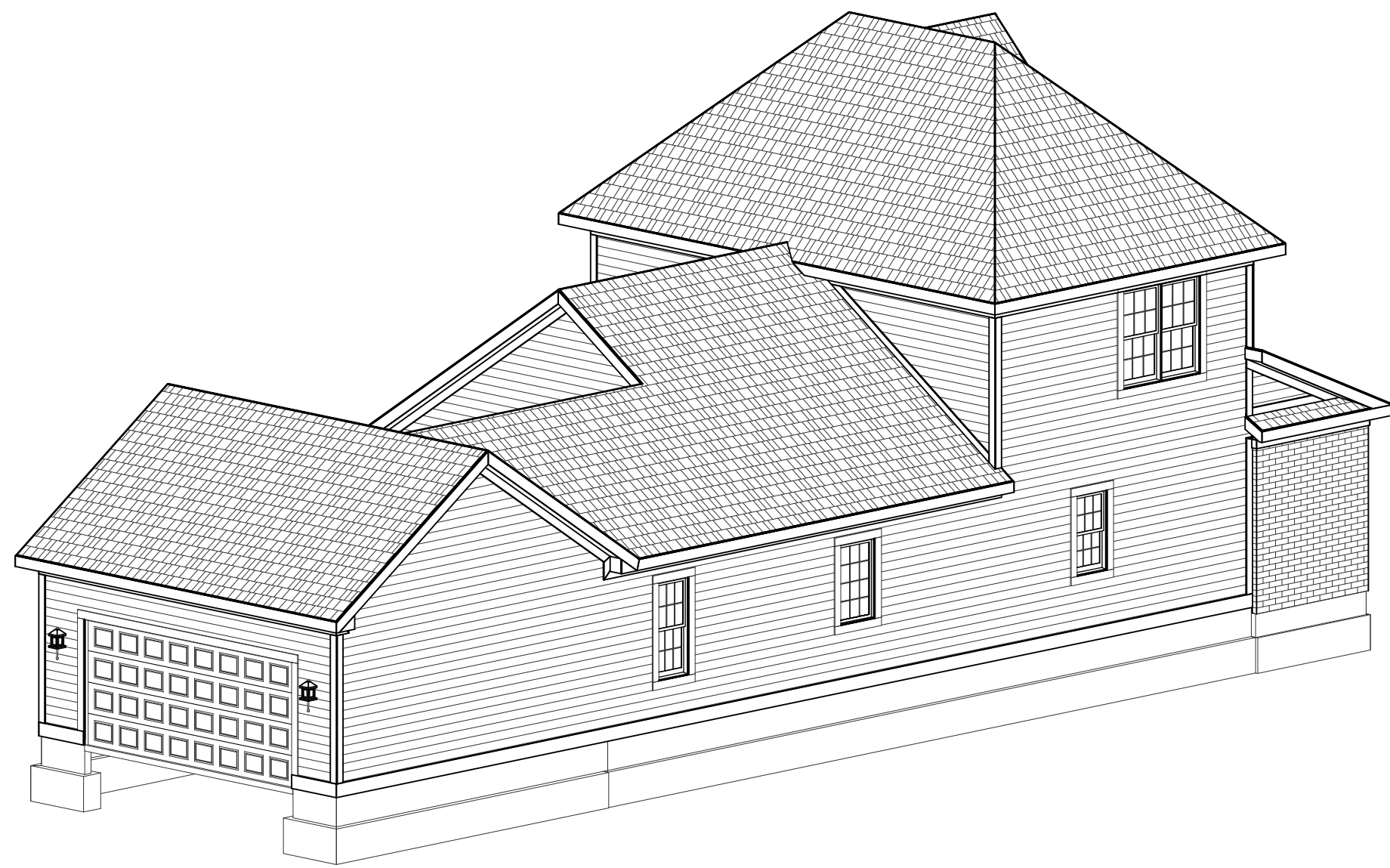
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EH_1060	FOR:	Estridge Homes	LOCATION:	1060	
SHEET NUMBER					
A-01					

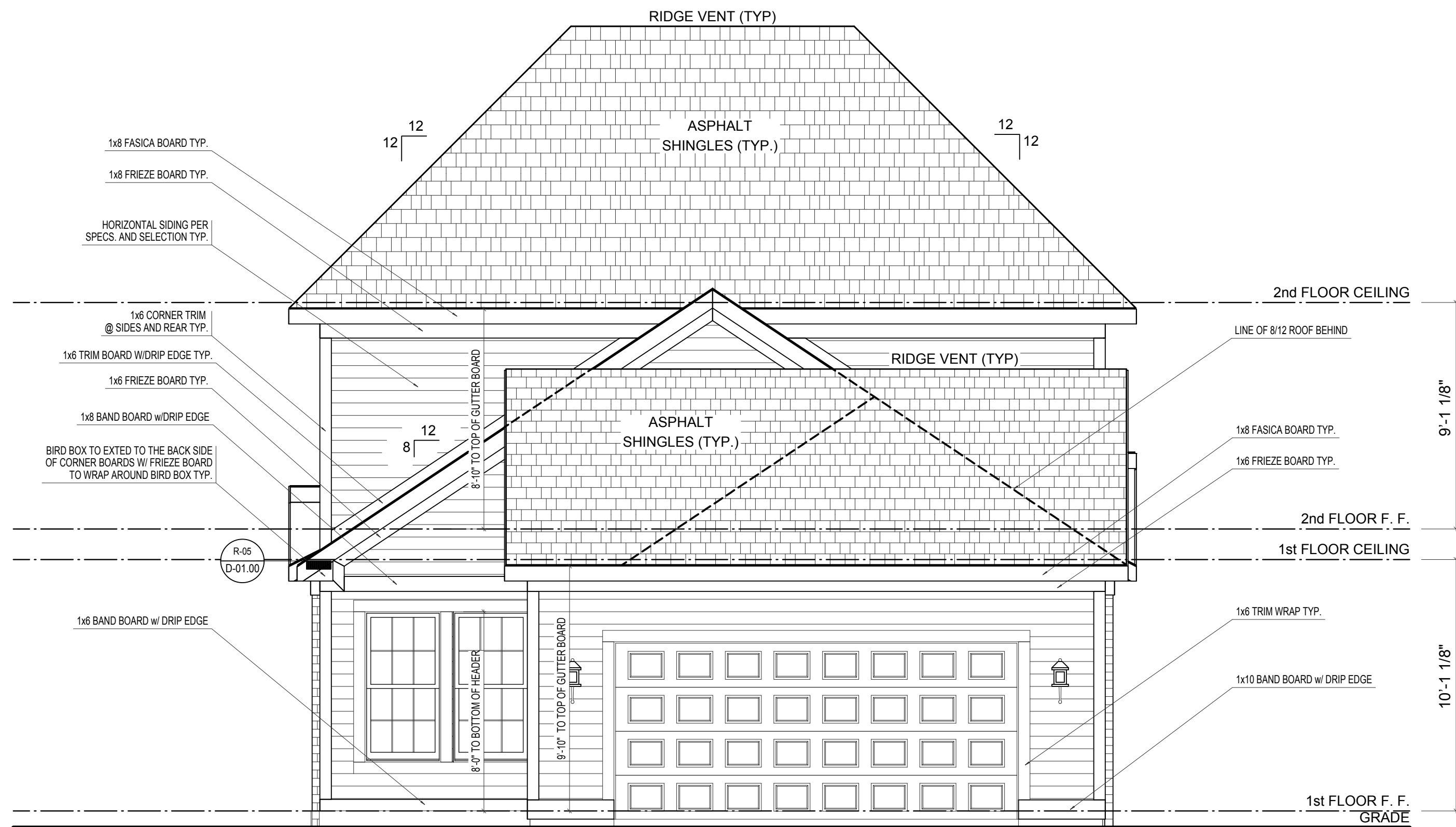
© CGVisions 2004 PLAN CREATION DATE 05/06/2014



REAR-RIGHT



REAR-LEFT



REAR ELEVATION

ELEVATION "B" BASE FINAL

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

ELEVATION B		REV. NO.	DATE	REMARKS
GARAGE REAR				



EH_1060		PRINT DATE: 09/10/2014	
FOR:	Estridge Homes	LOCATION:	1060
SHEET NUMBER		A-02	



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



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A-03

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ELEVATION 'B' BASE FINAL

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

[illegible]

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© CGVisions 2004 PLAN CREATION DATE 05/06/2014

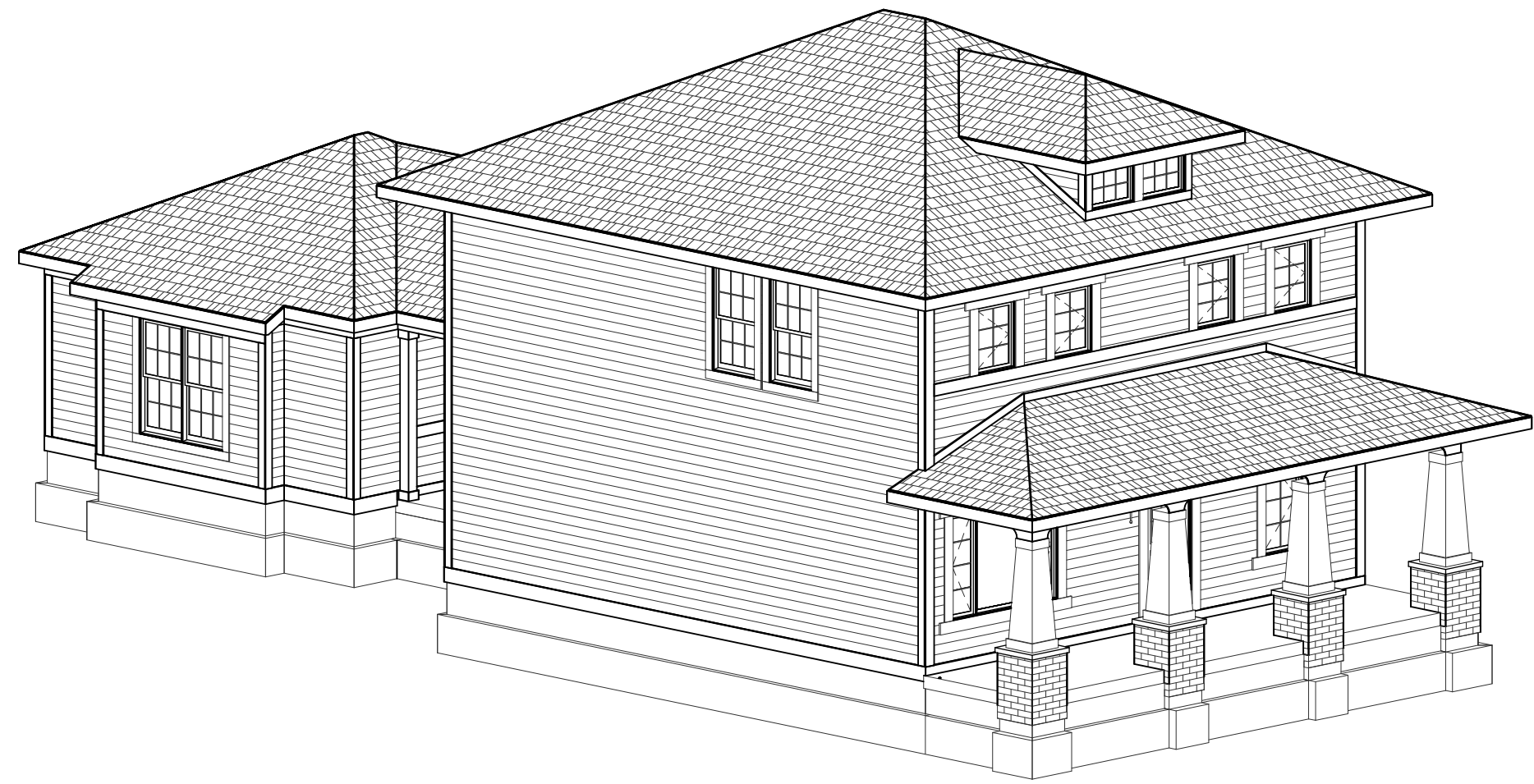
EH 1060

FOR:

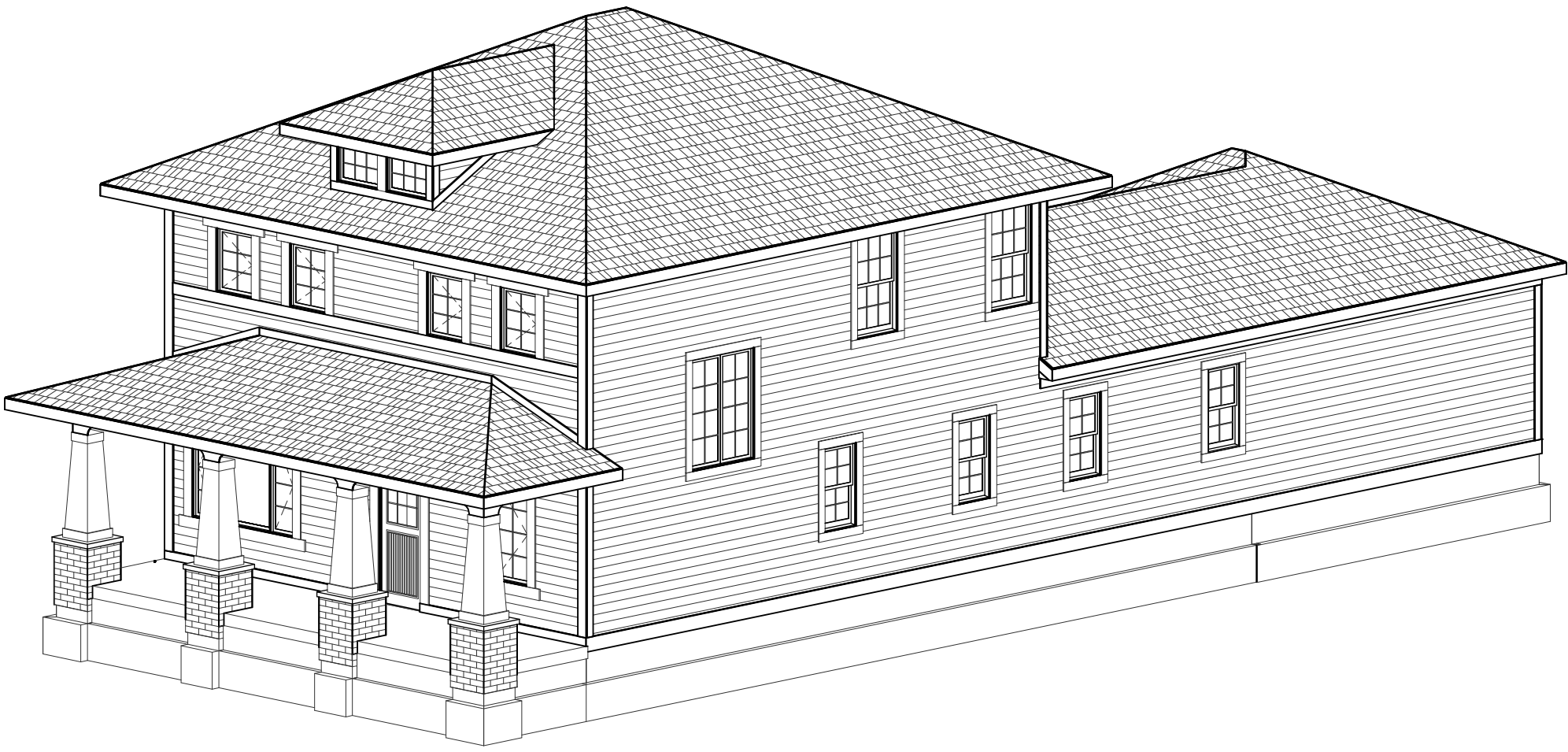
LOCATION:
1060

PRINT DATE:
09/10/2014

A-04



FRONT-LEFT



FRONT-RIGHT



FRONT ELEVATION

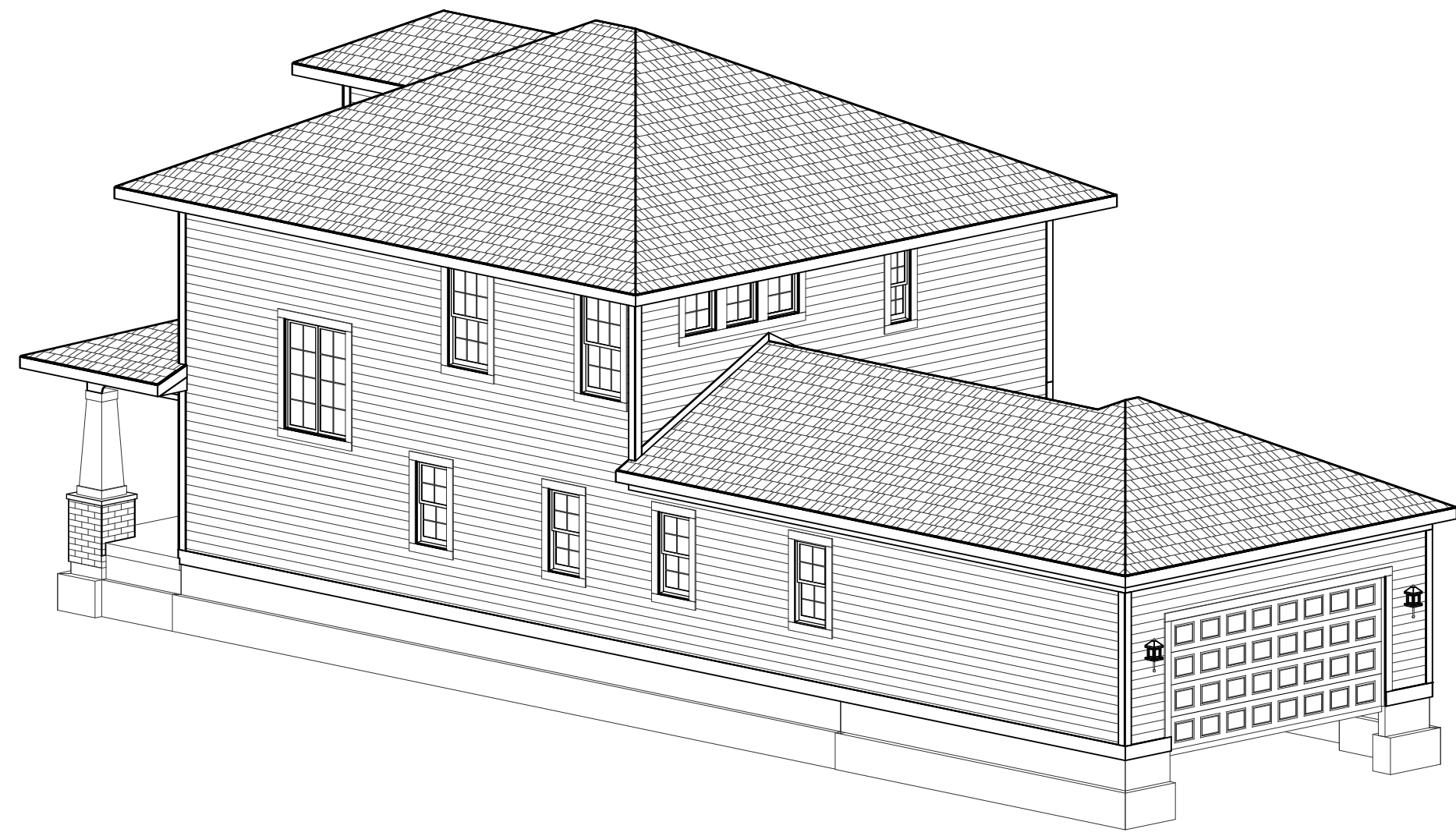
SCALE: 1/4"=1'-0"

ELEVATION 'A' BASE FINAL

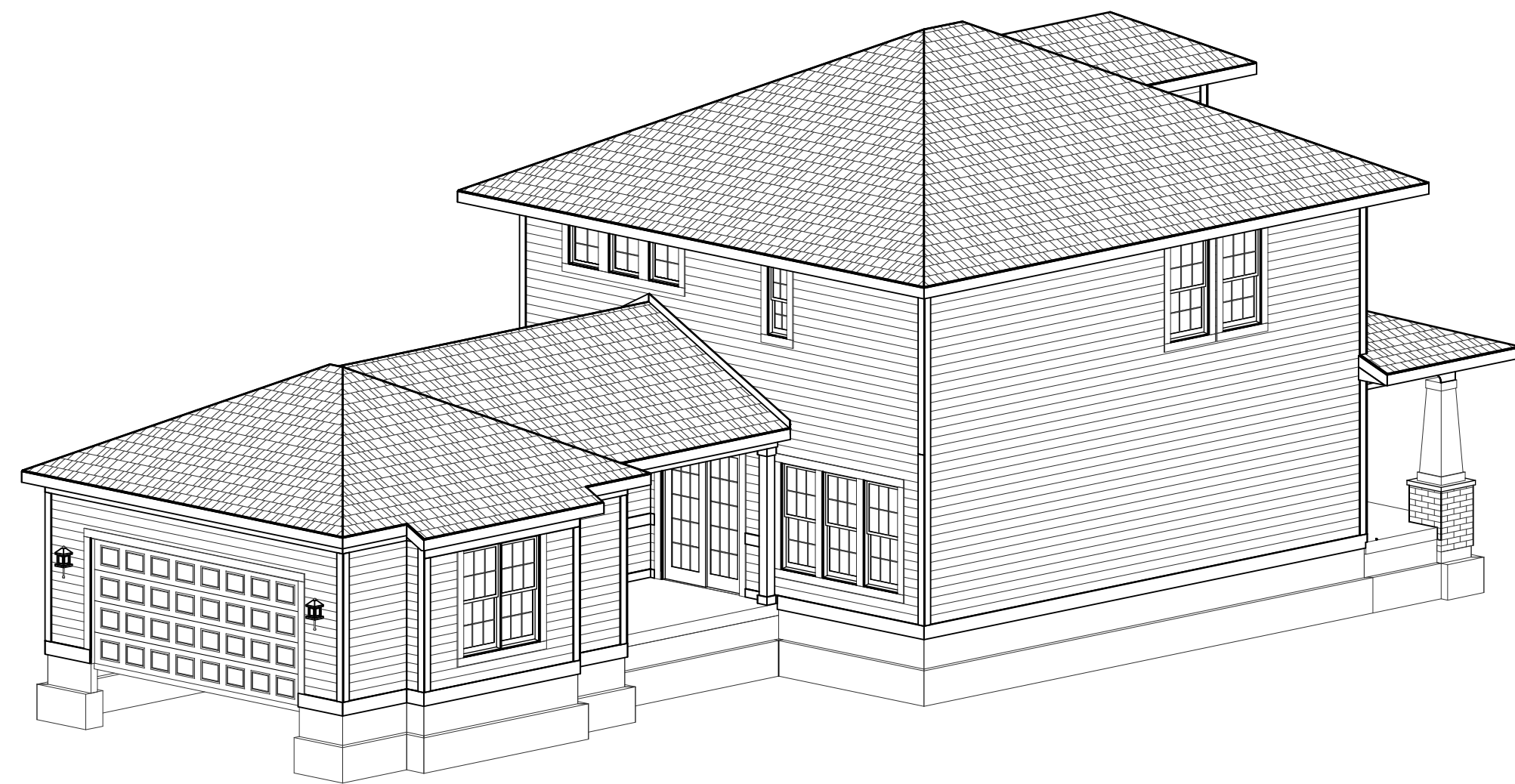
ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			



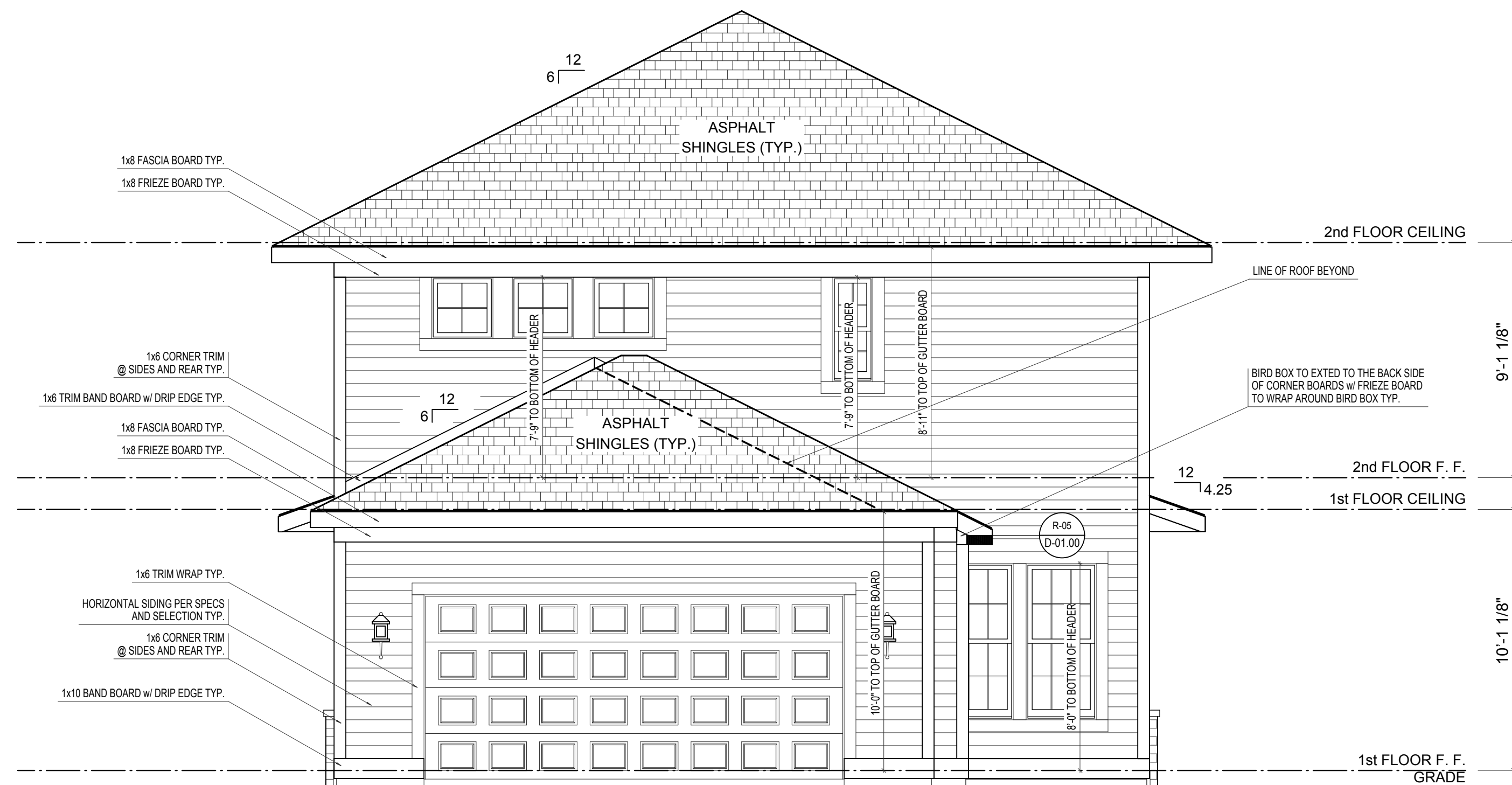
PRINT DATE: 09/12/2014		
EH_1075	FOR:	Estridge Homes
	LOCATION:	
SHEET NUMBER		
A-01		



REAR-RIGHT



REAR-LEFT



REAR ELEVATION

ELEVATION 'A' BASE FINAL

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

ELEVATION A		REV. NO.	DATE	REMARKS
GARAGE REAR				



EH_1075		PRINT DATE: 09/12/2014	
FOR:	Estridge Homes	LOCATION:	
SHEET NUMBER		A-02	



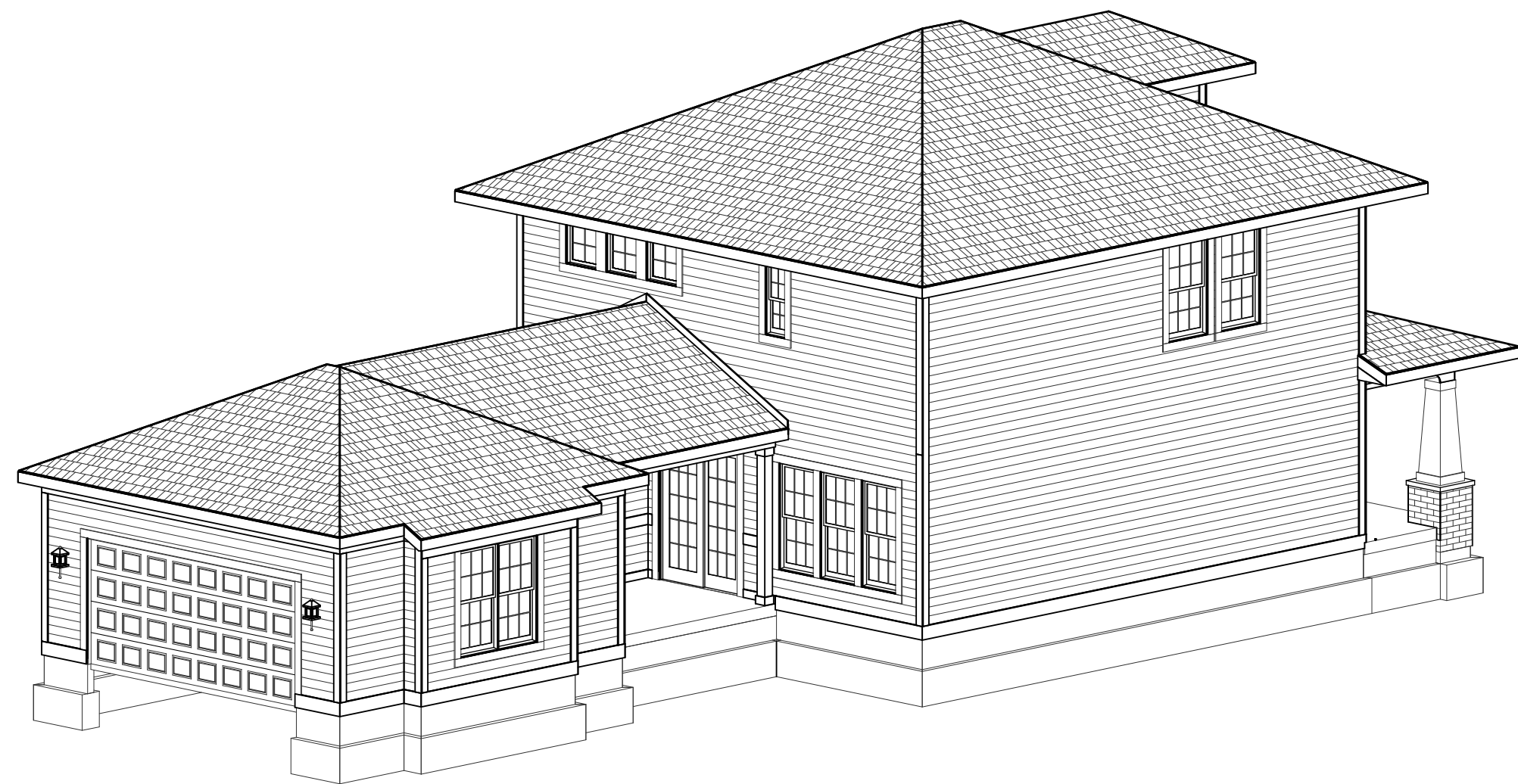
SCALE: 1/4"=1'-0"



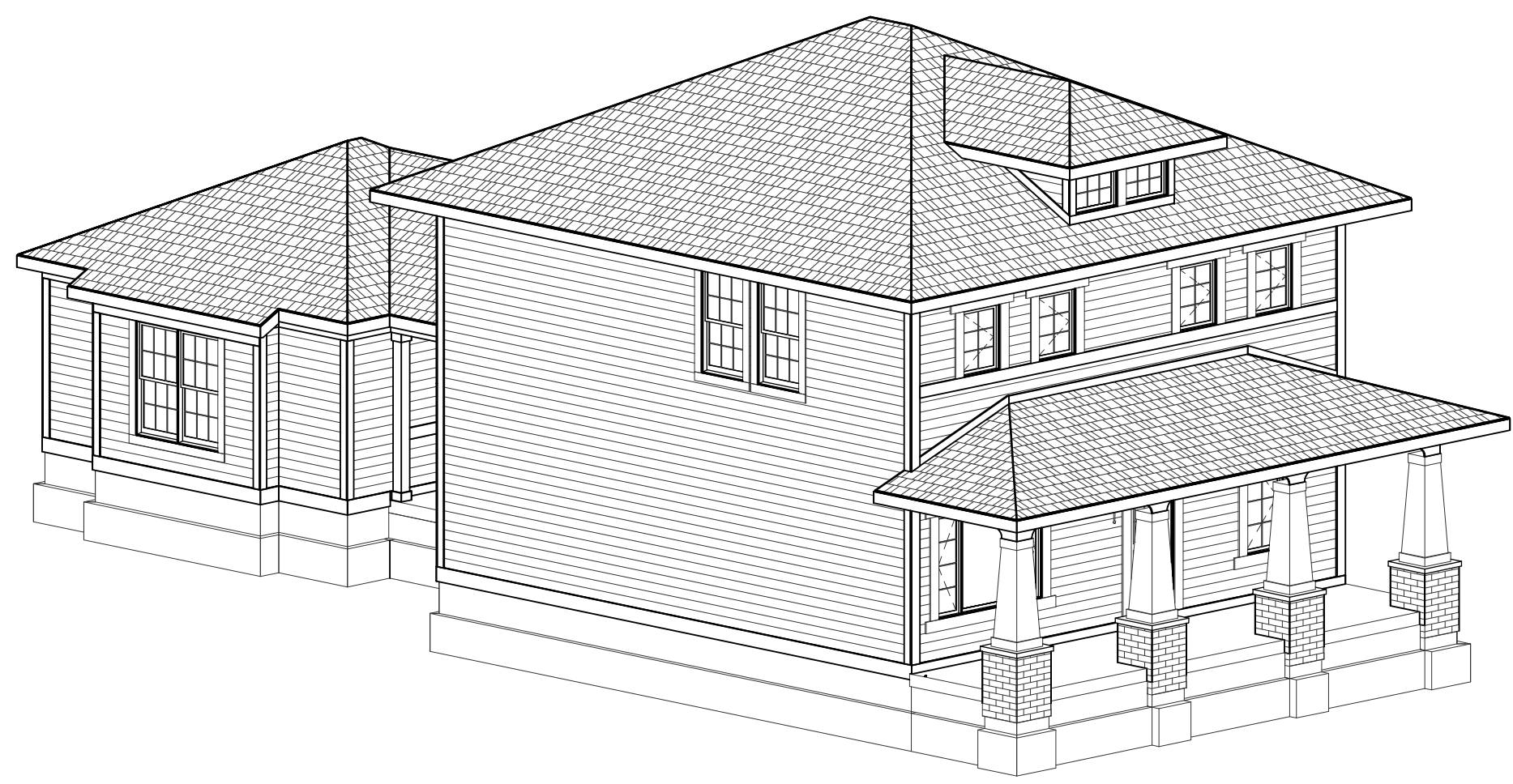
PRINT DATE:
09/12/2014

© CGVisions 2004 PLAN CREATION DATE 05/06/2014

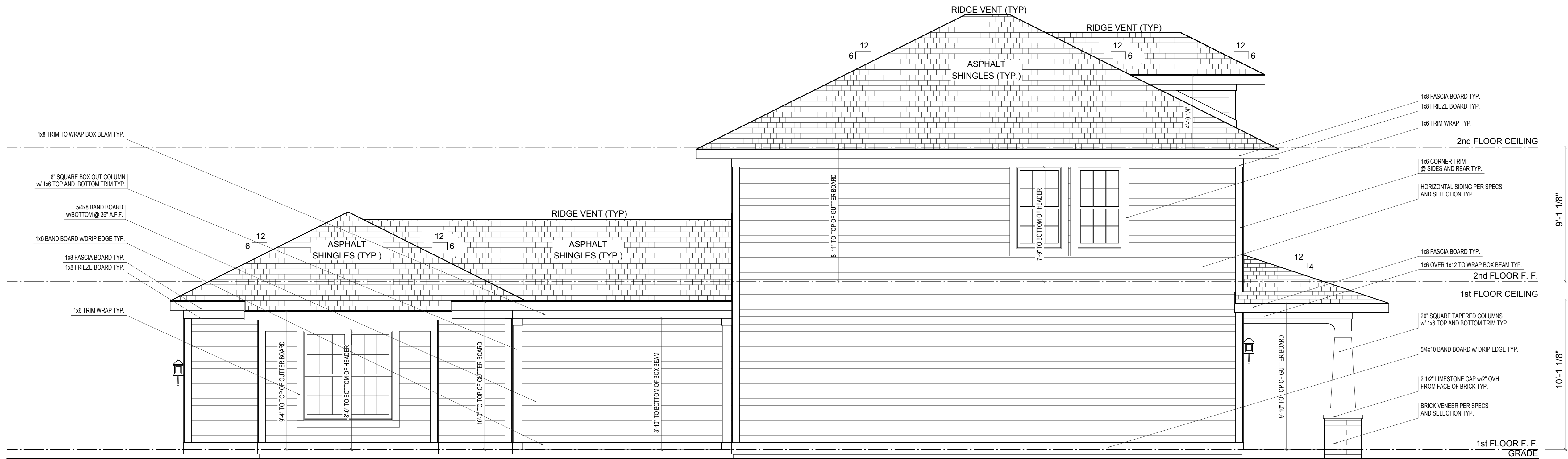
A-03



REAR-LEFT



FRONT-LEFT



LEFT ELEVATION

ELEVATION 'A' BASE FINAL

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

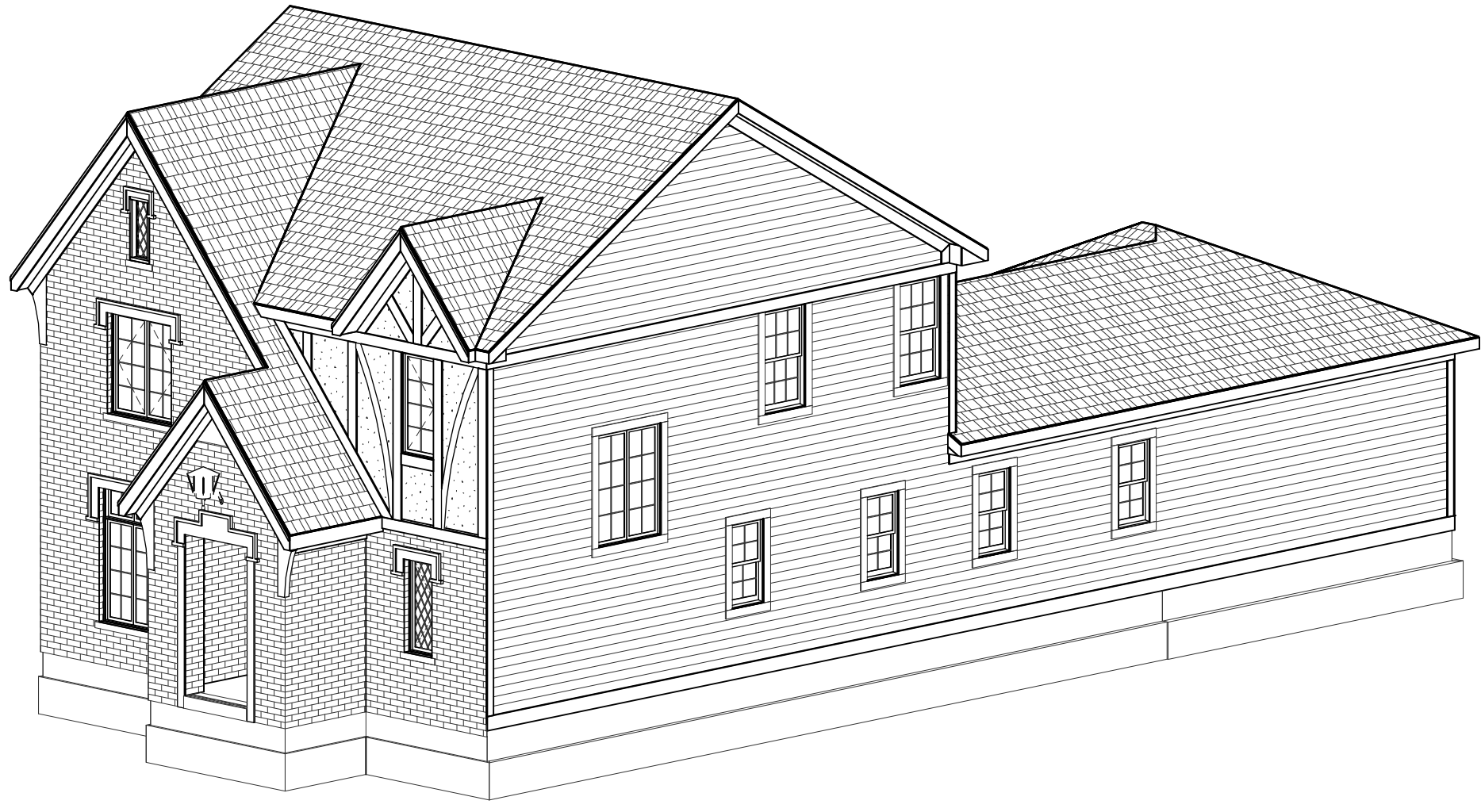
ELEVATION A		REV. NO.	DATE	REMARKS
GARAGE REAR				



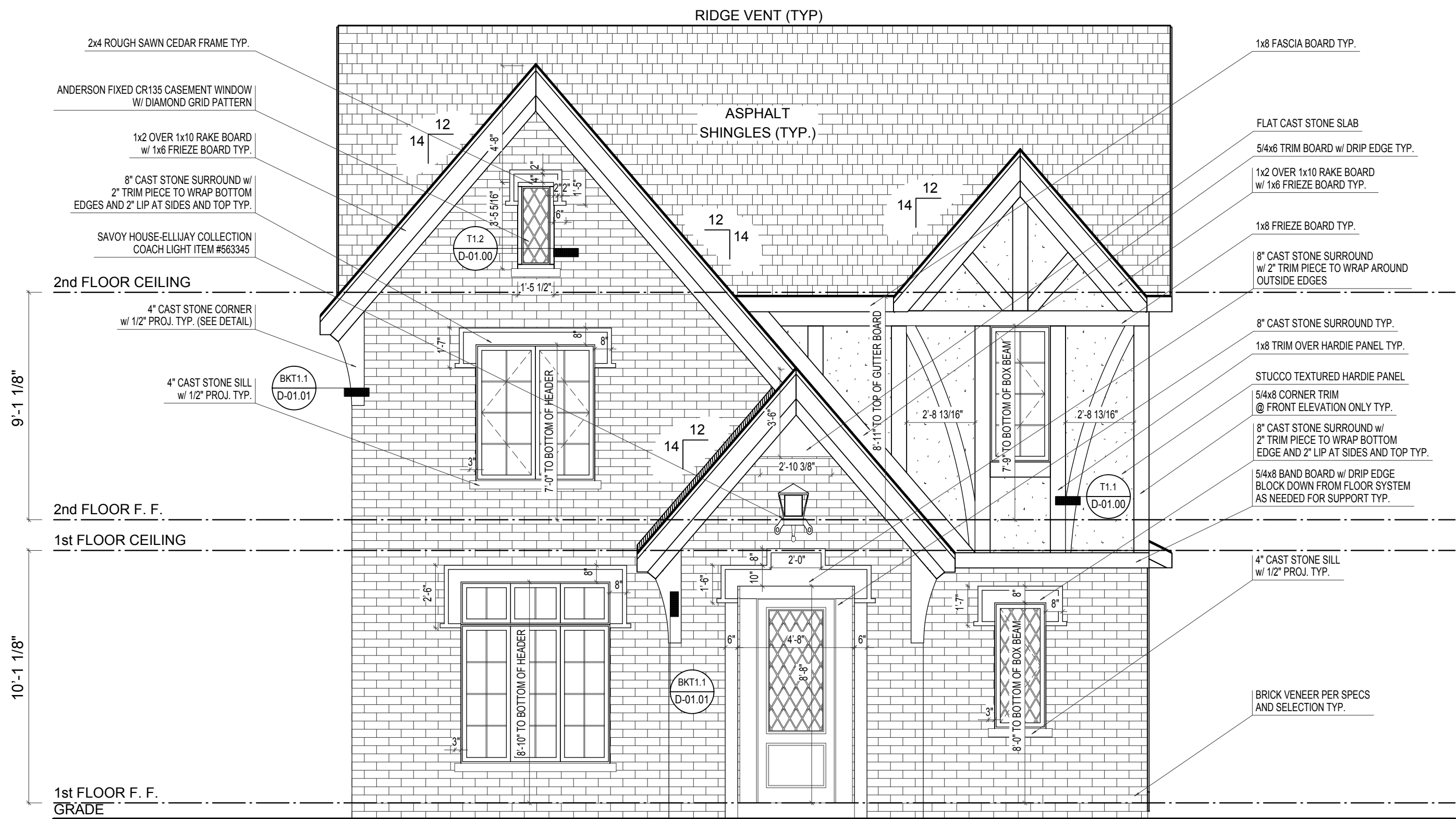
PRINT DATE: 09/12/2014			
EH_1075	FOR:	Estridge Homes	LOCATION:
	SHEET NUMBER		
	A-04		



FRONT-LEFT



FRONT-RIGHT



FRONT ELEVATION

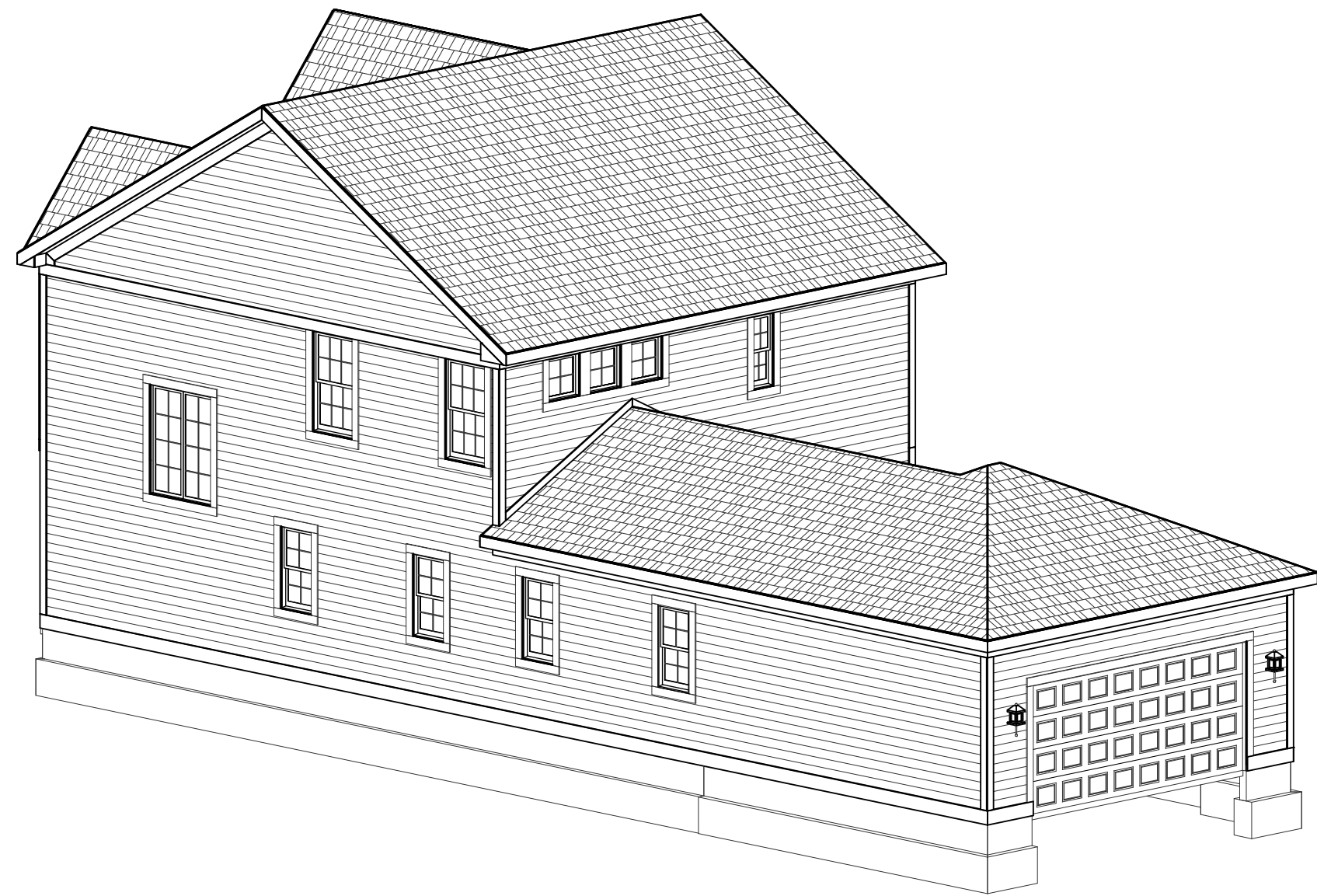
SCALE: 1/4"=1'-0"

ELEVATION 'B' BASE FINAL

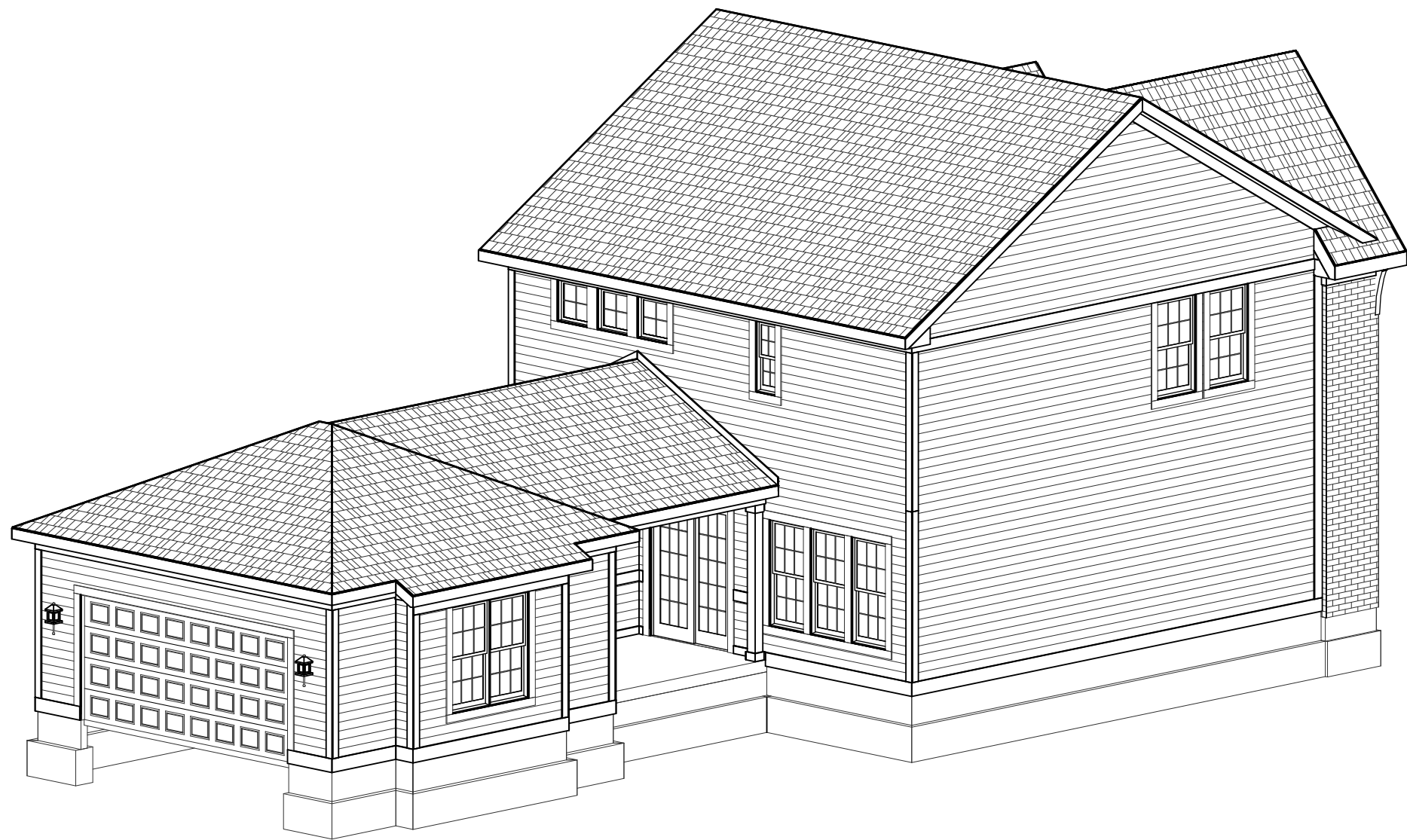
ELEVATION B	REV. NO.	DATE	REMARKS
GARAGE REAR			



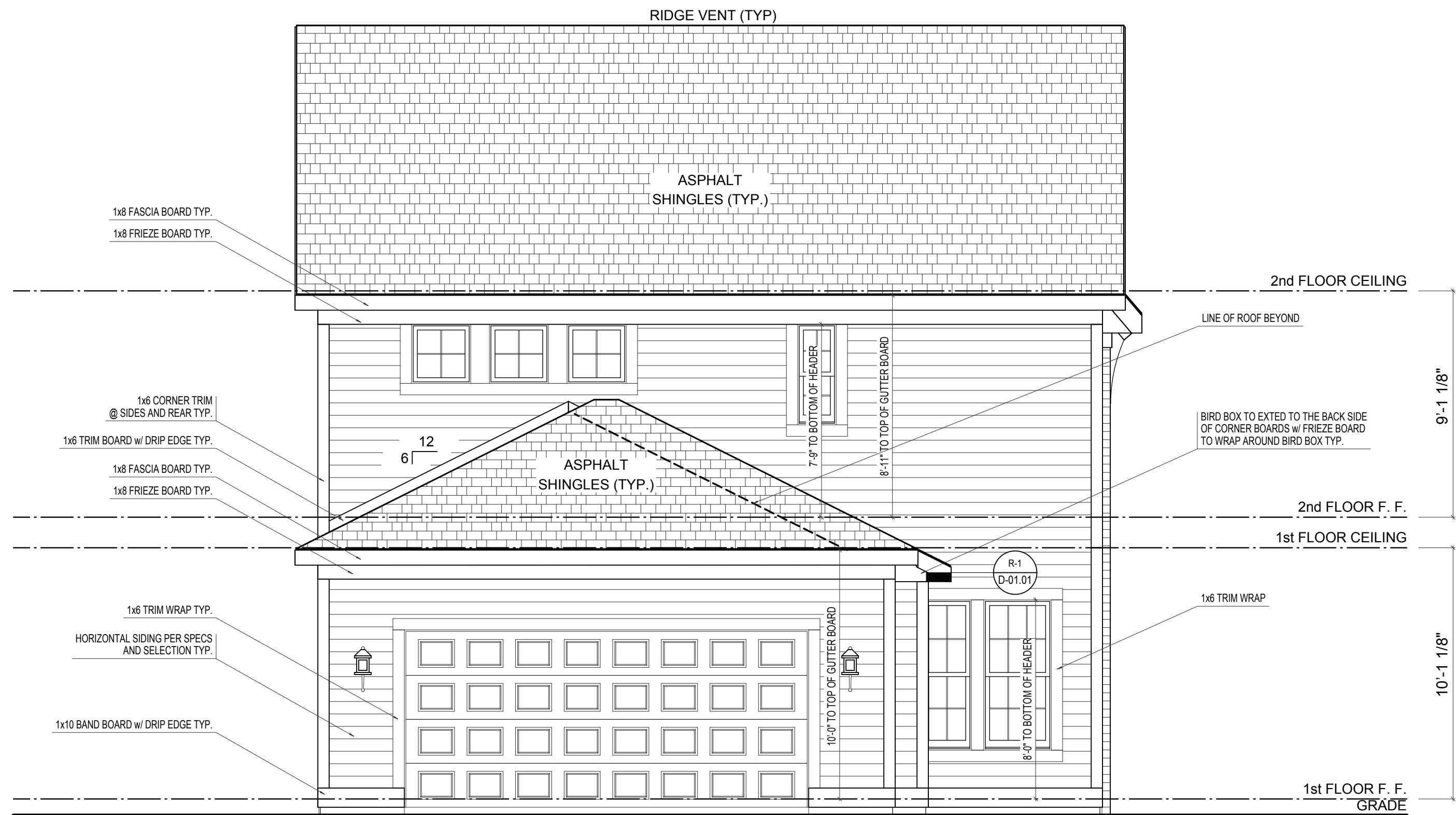
PRINT DATE: 10/08/2014		
EH_1075	FOR:	Estridge Homes
	LOCATION:	
SHEET NUMBER		
A-01		



REAR-RIGHT



REAR-LEFT



REAR ELEVATION

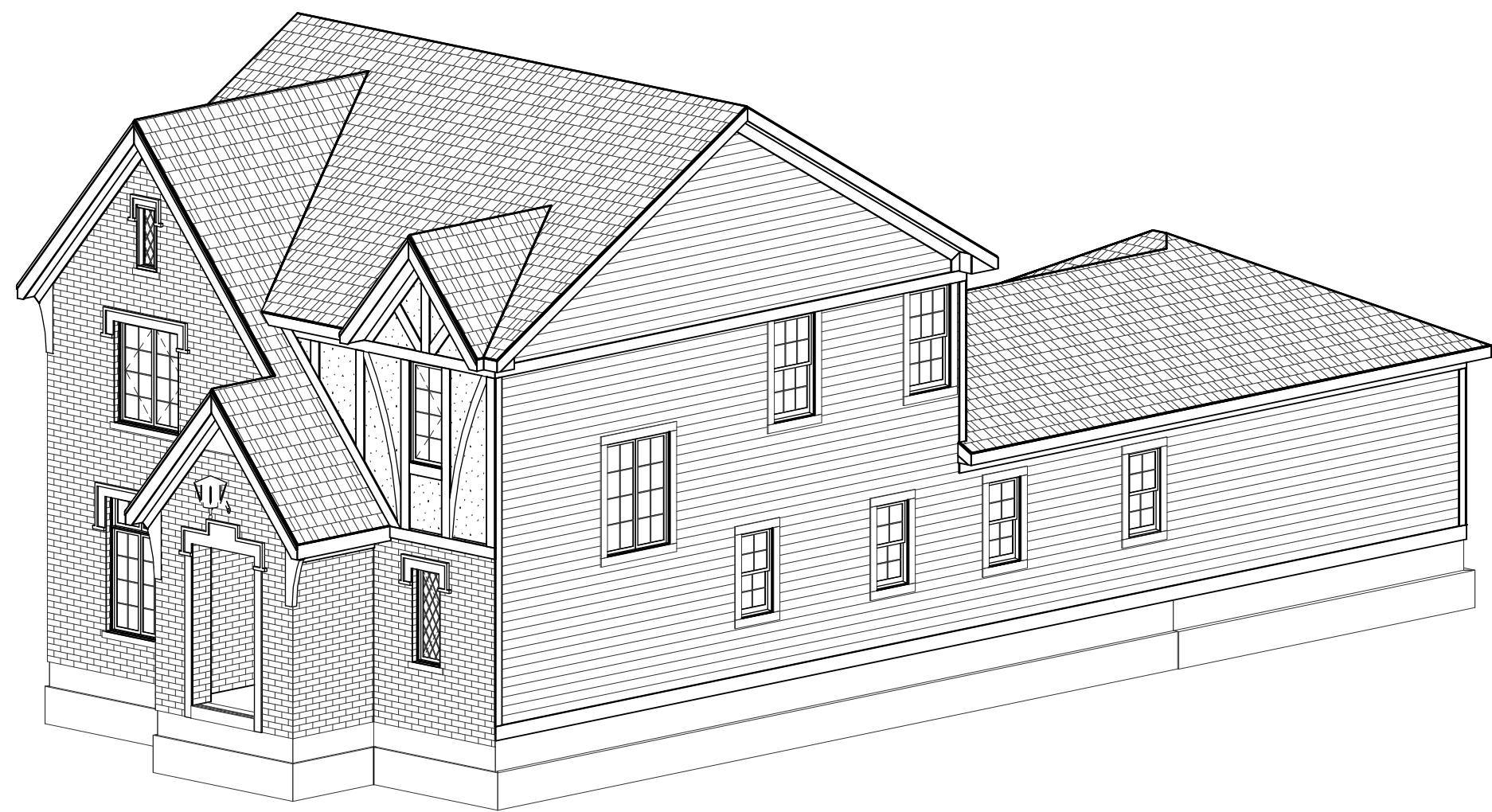
SCALE: 1/4"=1'-0"

ELEVATION 'B' BASE FINAL

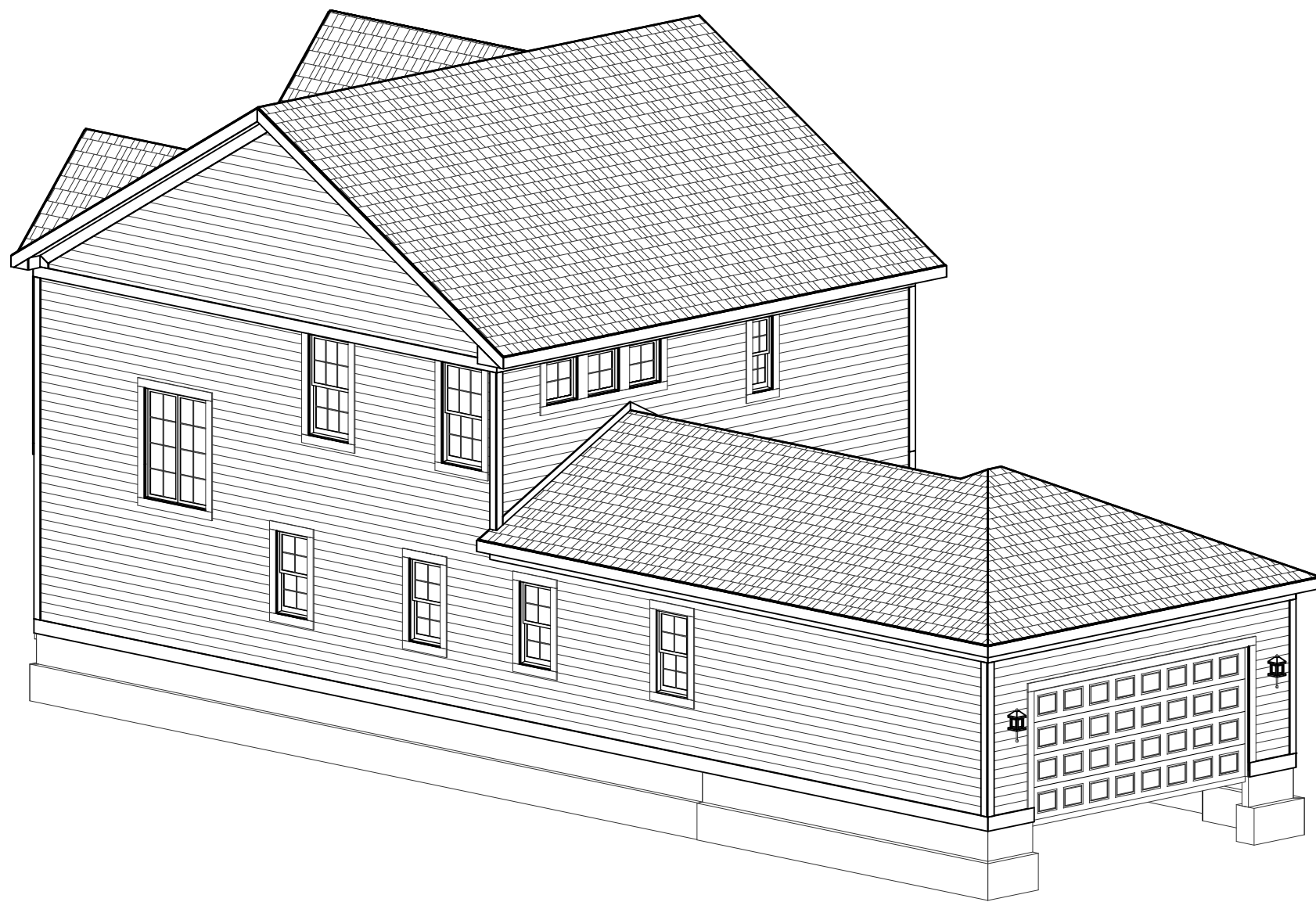
ELEVATION B	REV. NO.	DATE	REMARKS
GARAGE REAR			



PRINT DATE: 10/08/2014			
EH_1075	FOR:	Estridge Homes	LOCATION:
	SHEET NUMBER		
	A-02		



FRONT-RIGHT



REAR-RIGHT



RIGHT ELEVATION

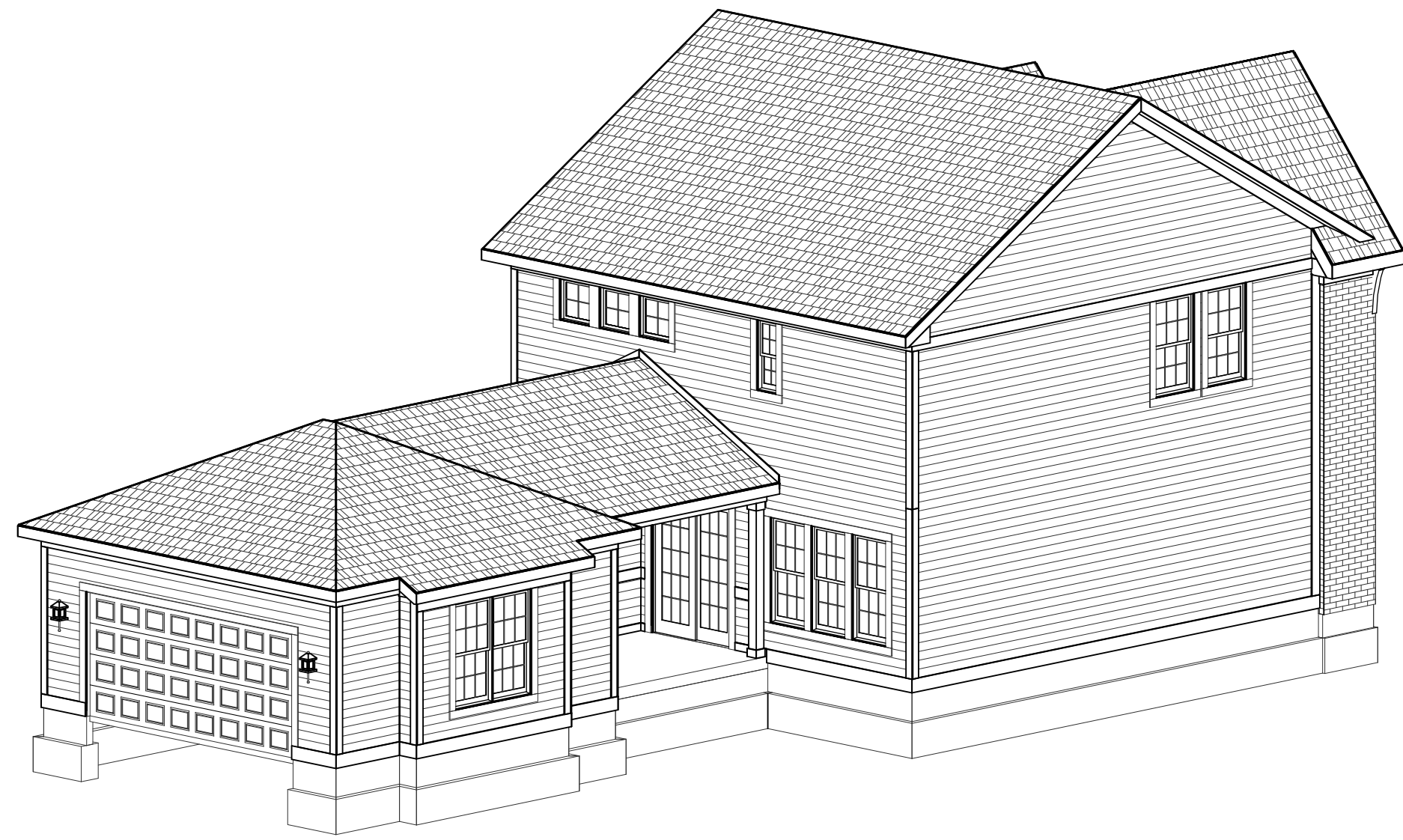
ELEVATION 'B' BASE FINAL

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

ELEVATION B	REV. NO.	DATE	REMARKS
GARAGE REAR			



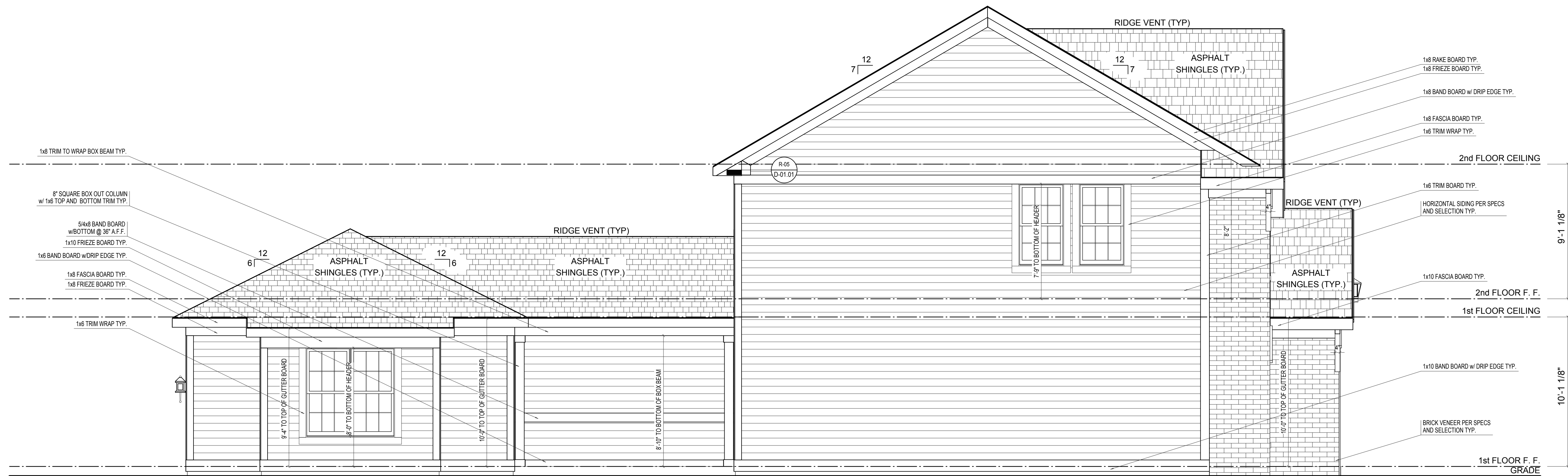
PRINT DATE: 10/08/2014			
EH_1075	FOR:	Estridge Homes	LOCATION:
	SHEET NUMBER		
	A-03		



REAR-LEFT



FRONT-LEFT



LEFT ELEVATION

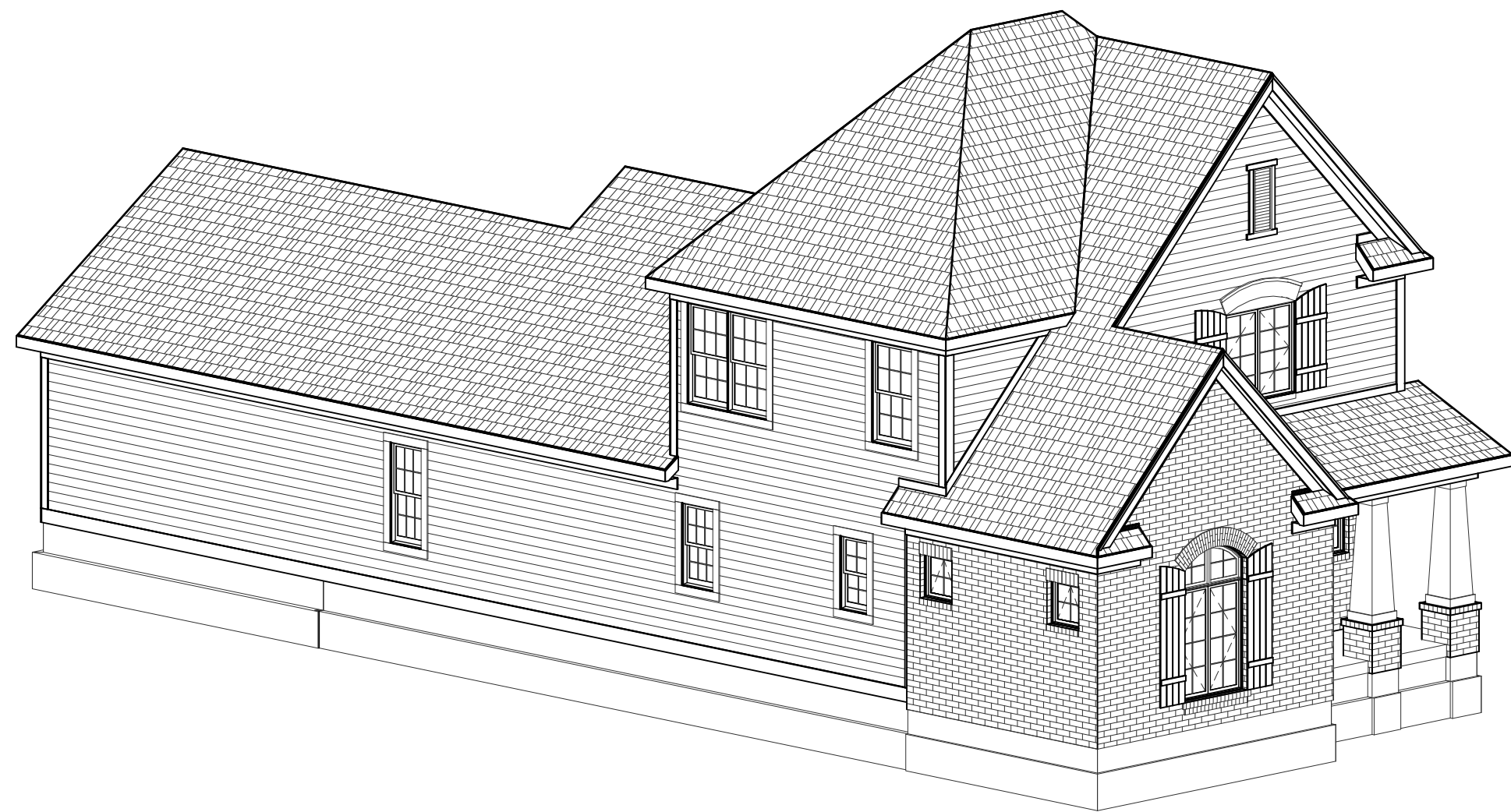
ELEVATION 'B' BASE FINAL

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

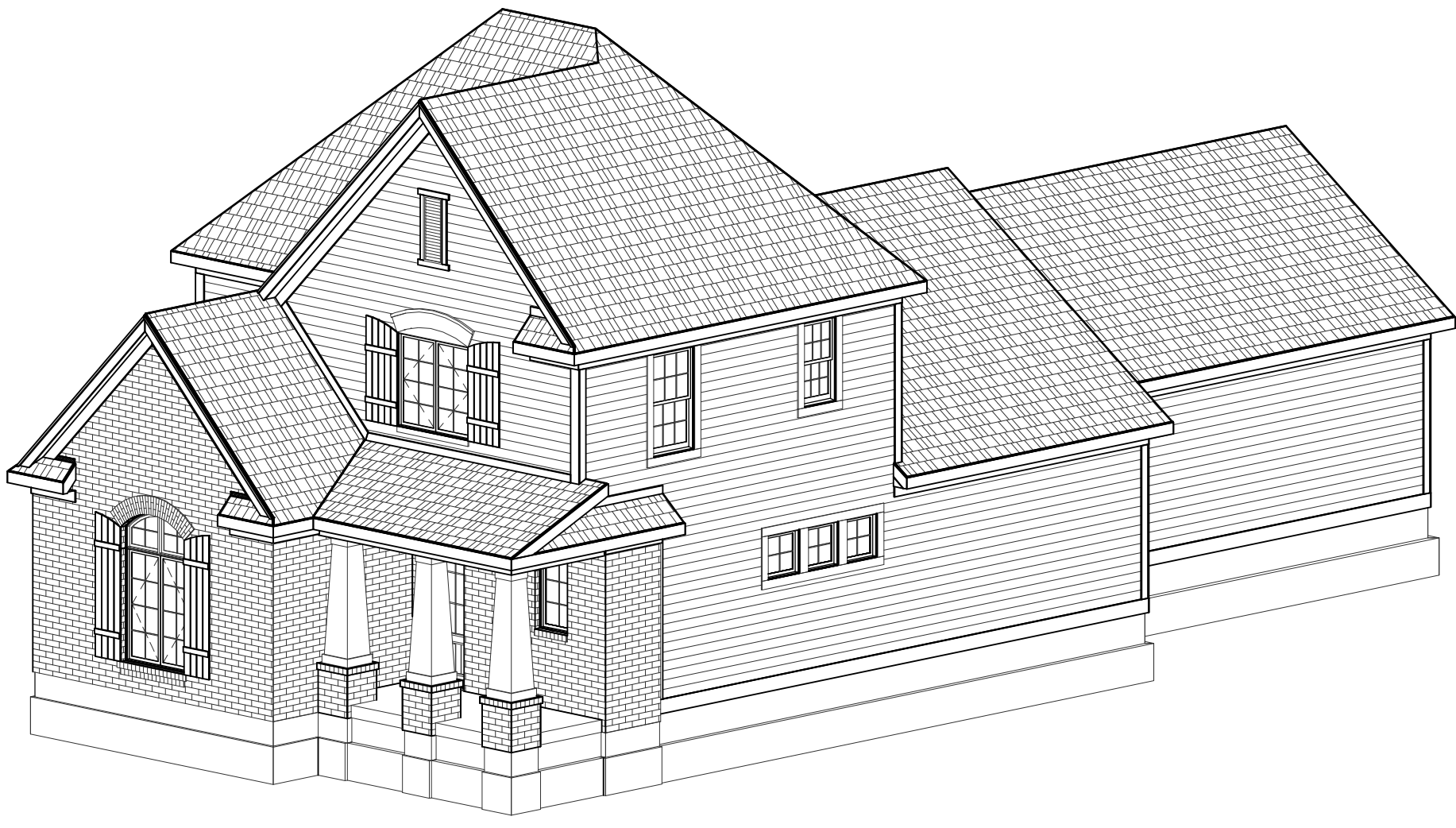
ELEVATION B	REV. NO.	DATE	REMARKS
GARAGE REAR			



PRINT DATE: 10/08/2014			
EH_1075	FOR:	Estridge Homes	LOCATION:
	SHEET NUMBER		
	A-04		



FRONT-LEFT



FRONT-RIGHT



FRONT ELEVATION

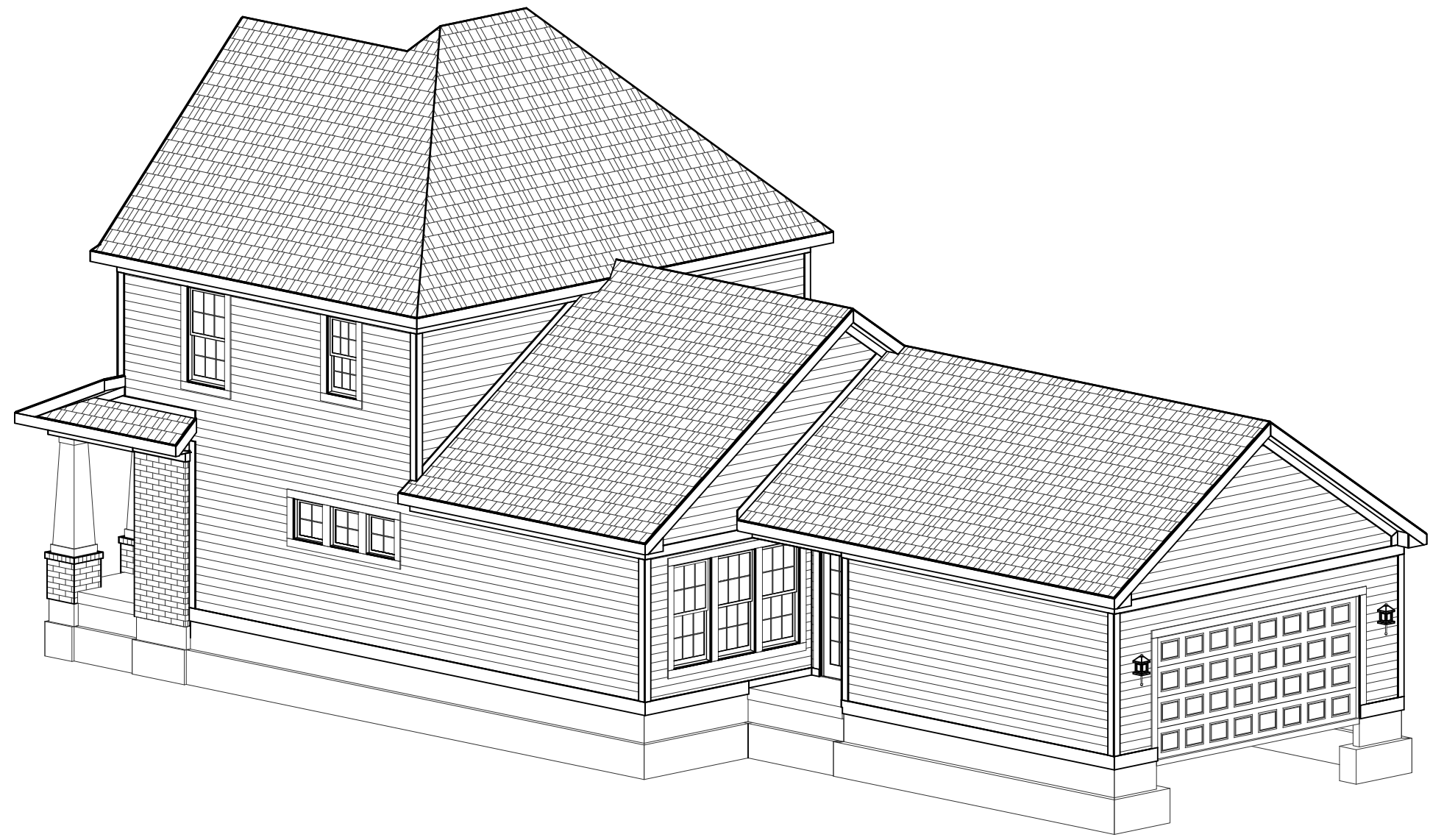
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ELEVATION REVIEW ONLY

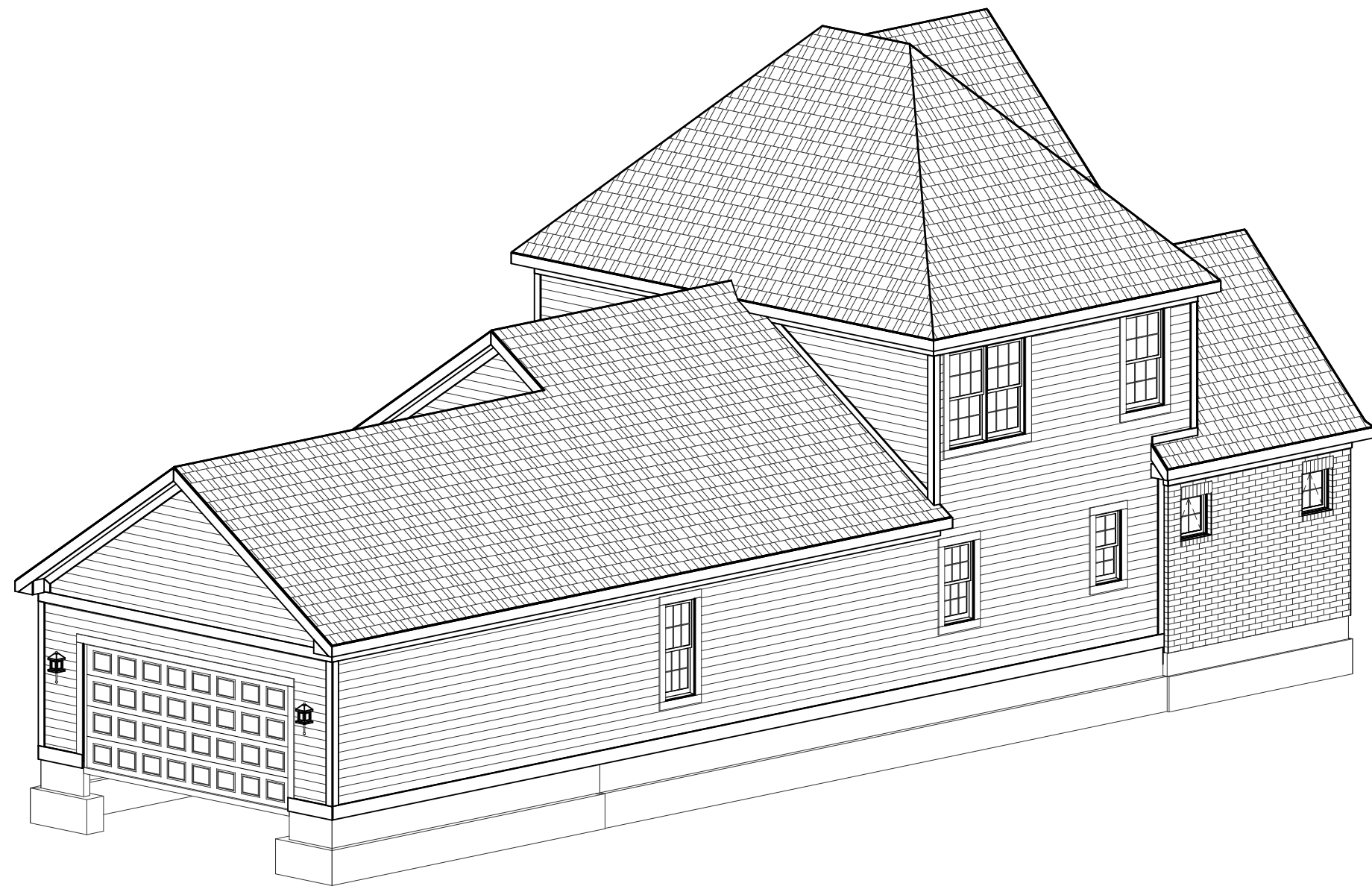
ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			



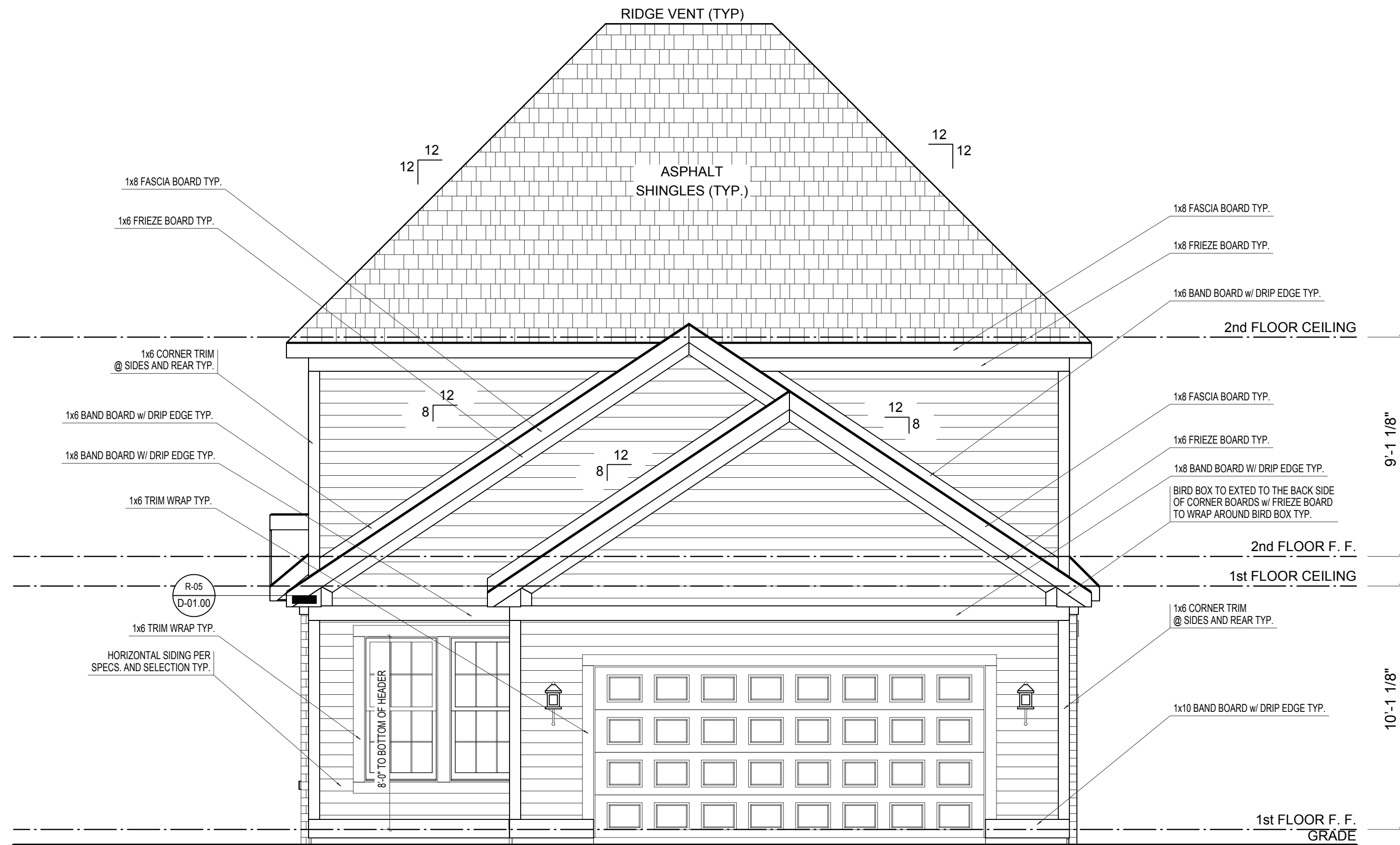
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FOR:	Estridge Homes	SHEET NUMBER	A-01
LOCATION:			



REAR-RIGHT



REAR-LEFT



REAR ELEVATION

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

ELEVATION REVIEW ONLY

ELEVATION A	REV. NO.	DATE	REMARKS
GARAGE REAR			



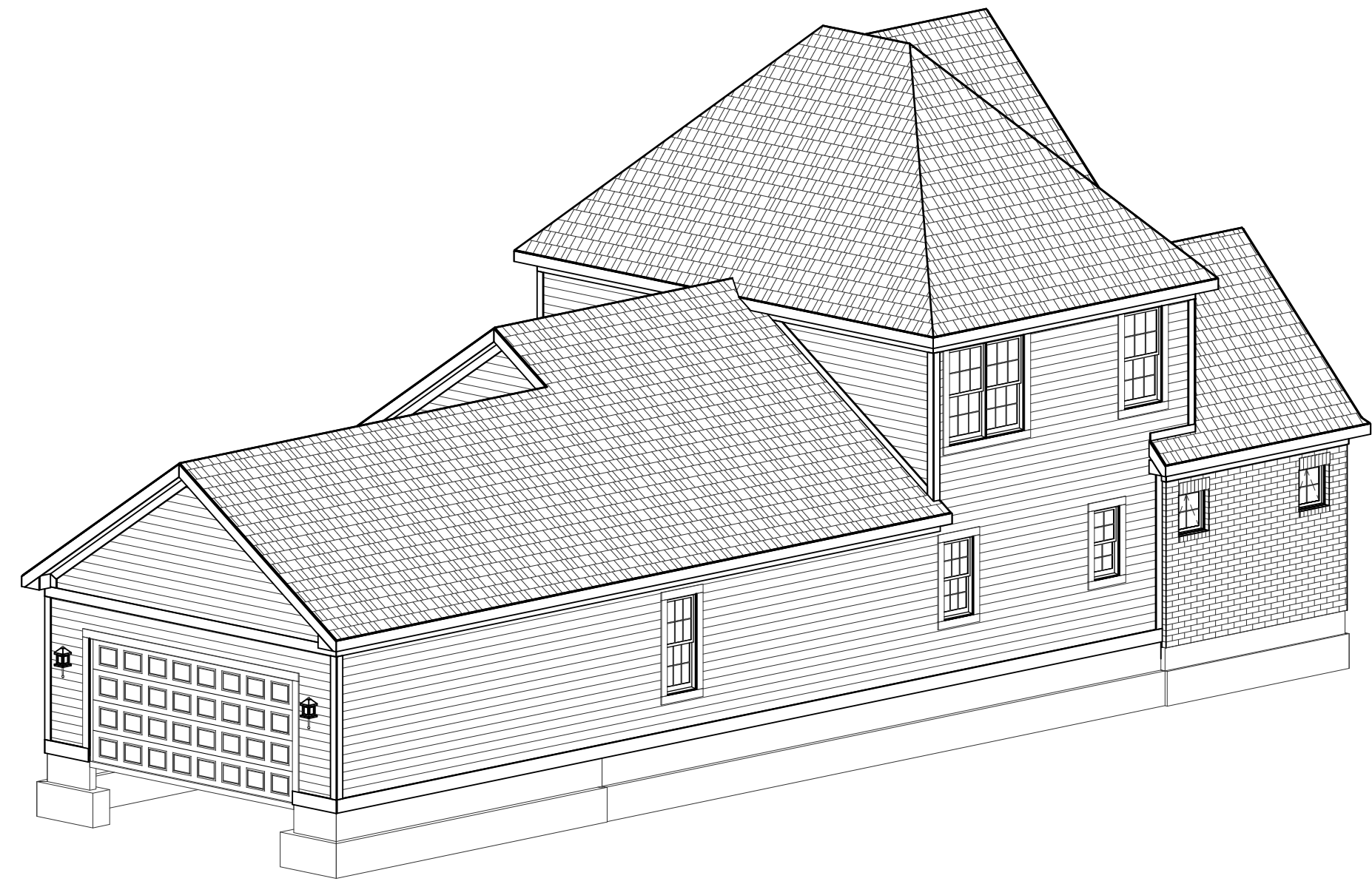
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FOR:	Estridge Homes		
LOCATION:			
SHEET NUMBER		A-02	



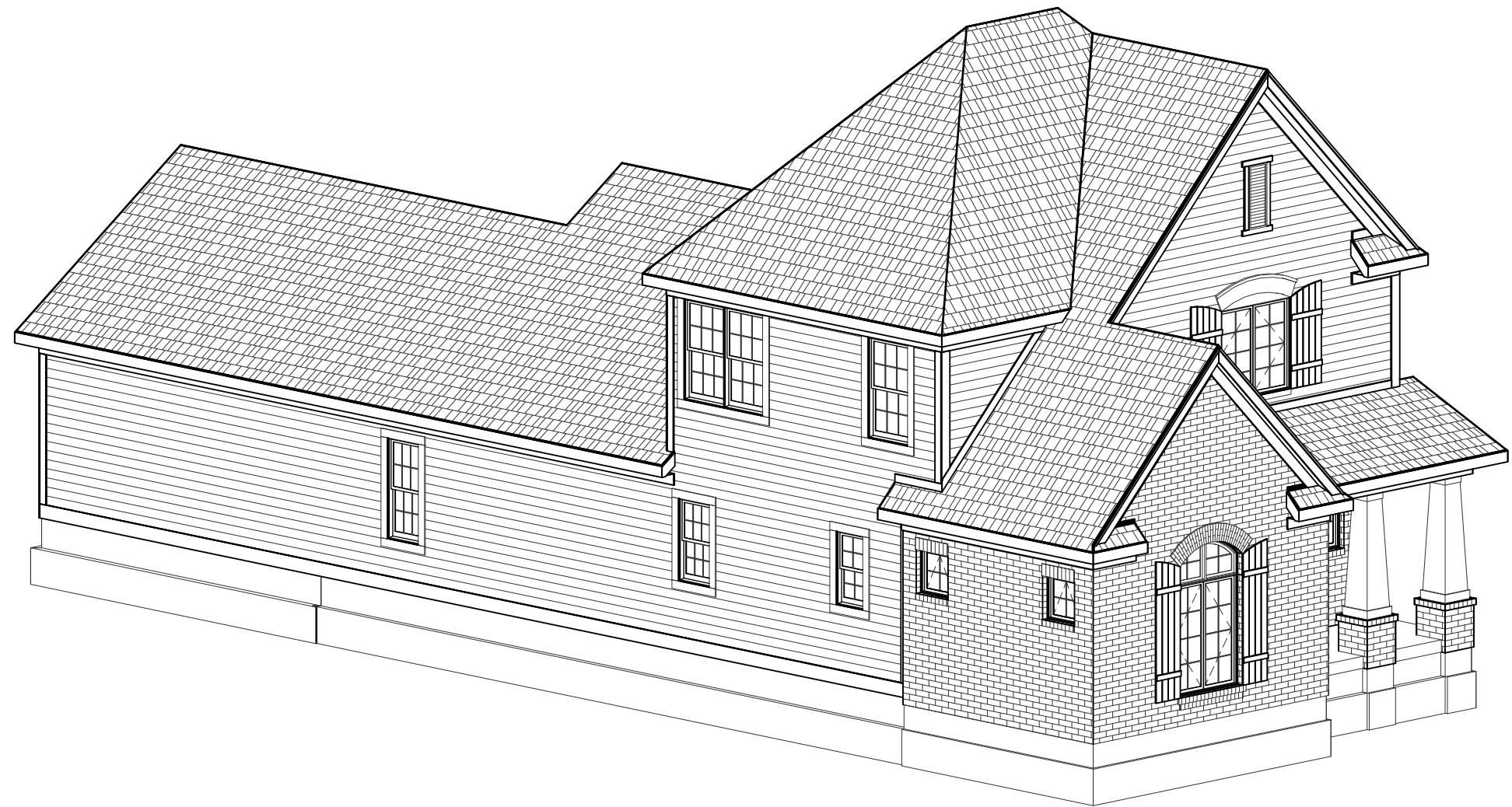
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EH_1090		FOR:	Estridge Homes	LOCATION:	
SHEET NUMBER					
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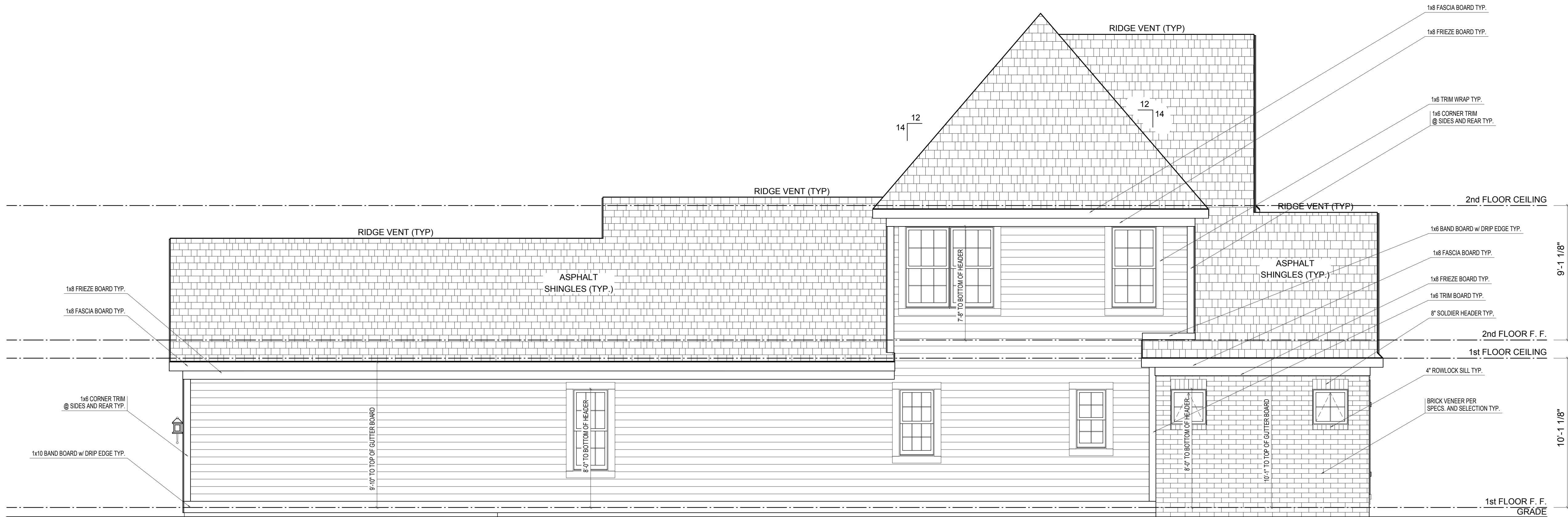
© CGVisions 2004 PLAN CREATION DATE 04/25/2014



REAR-LEFT



FRONT-LEFT



LEFT ELEVATION

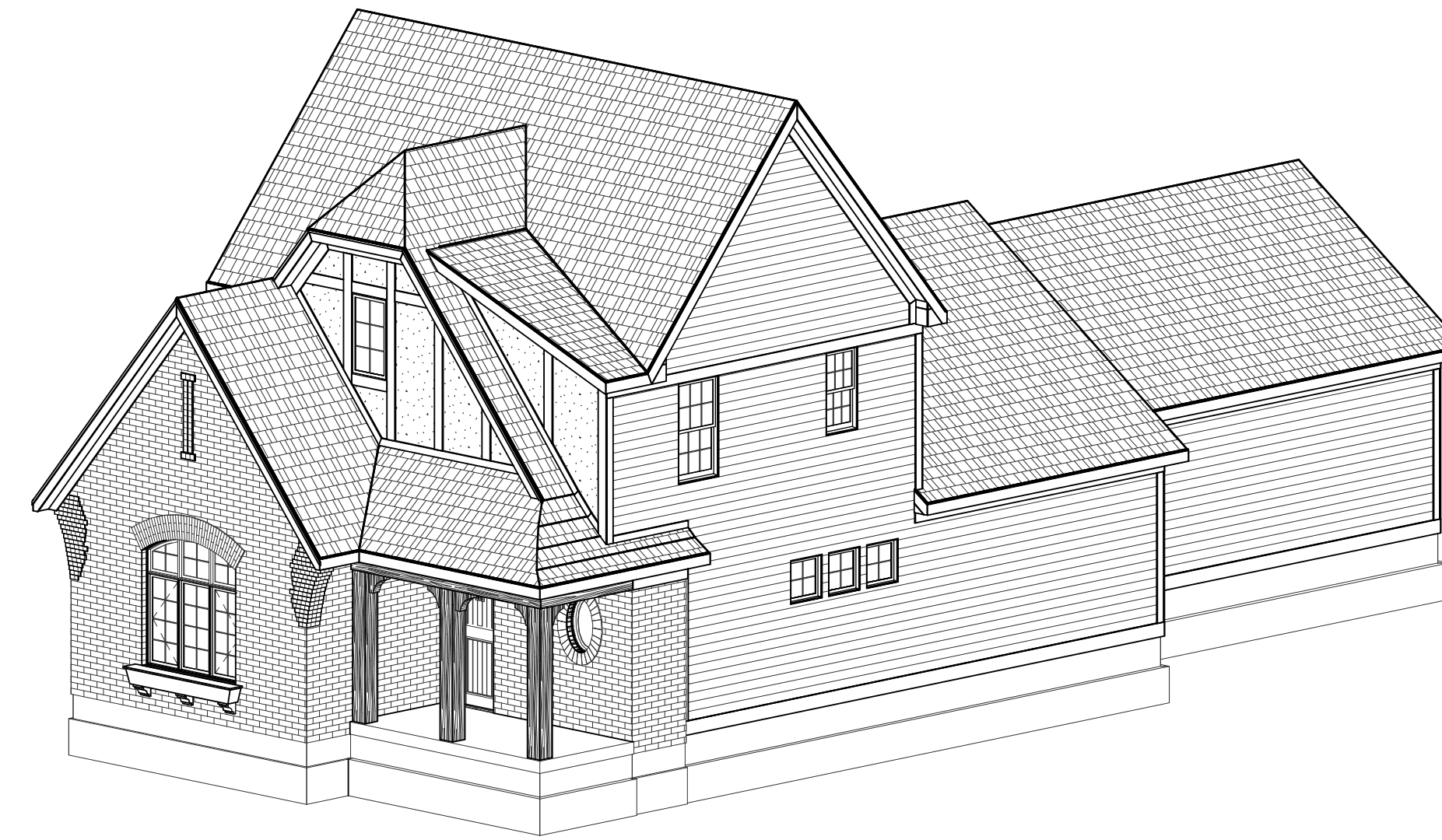
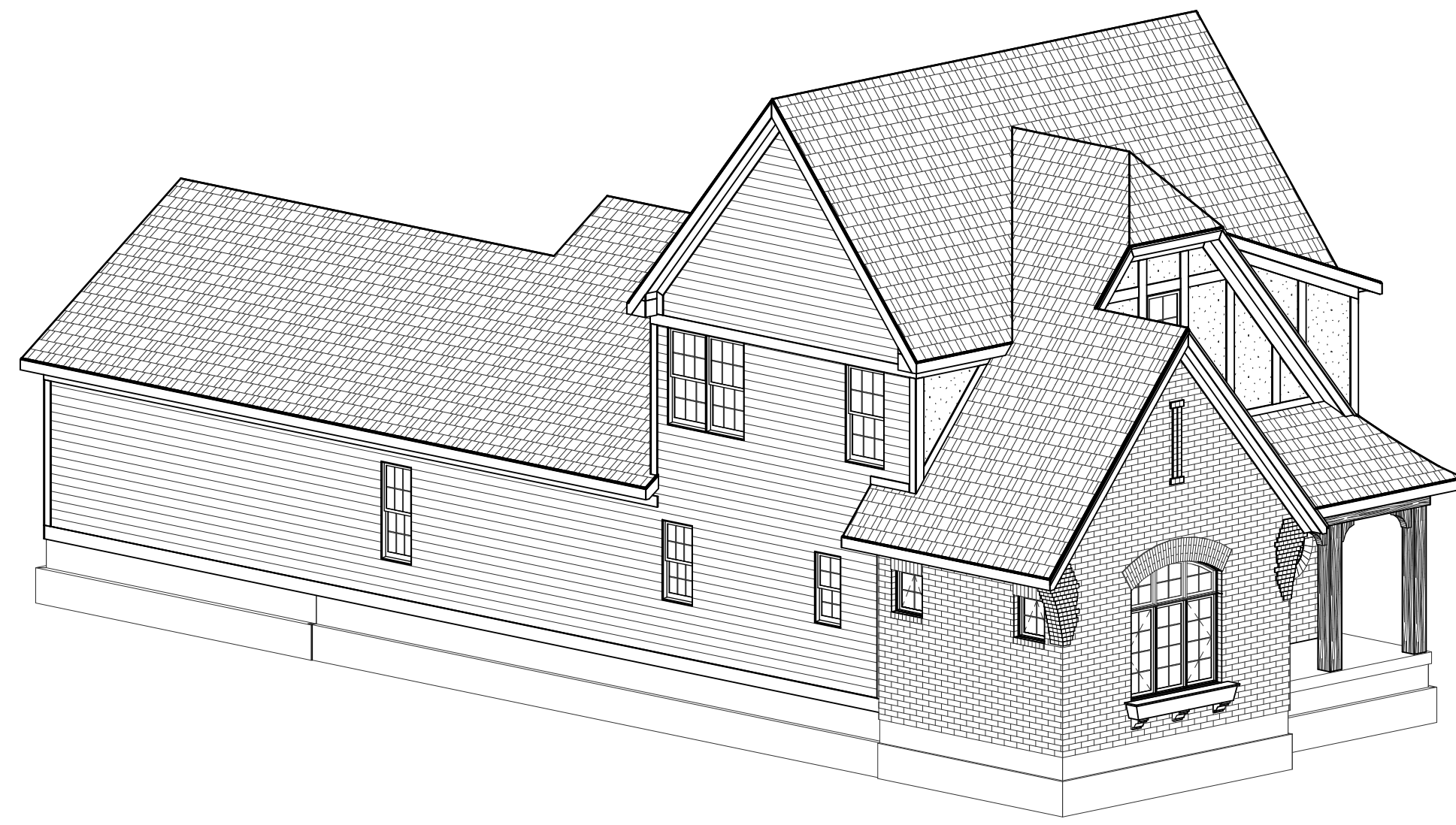
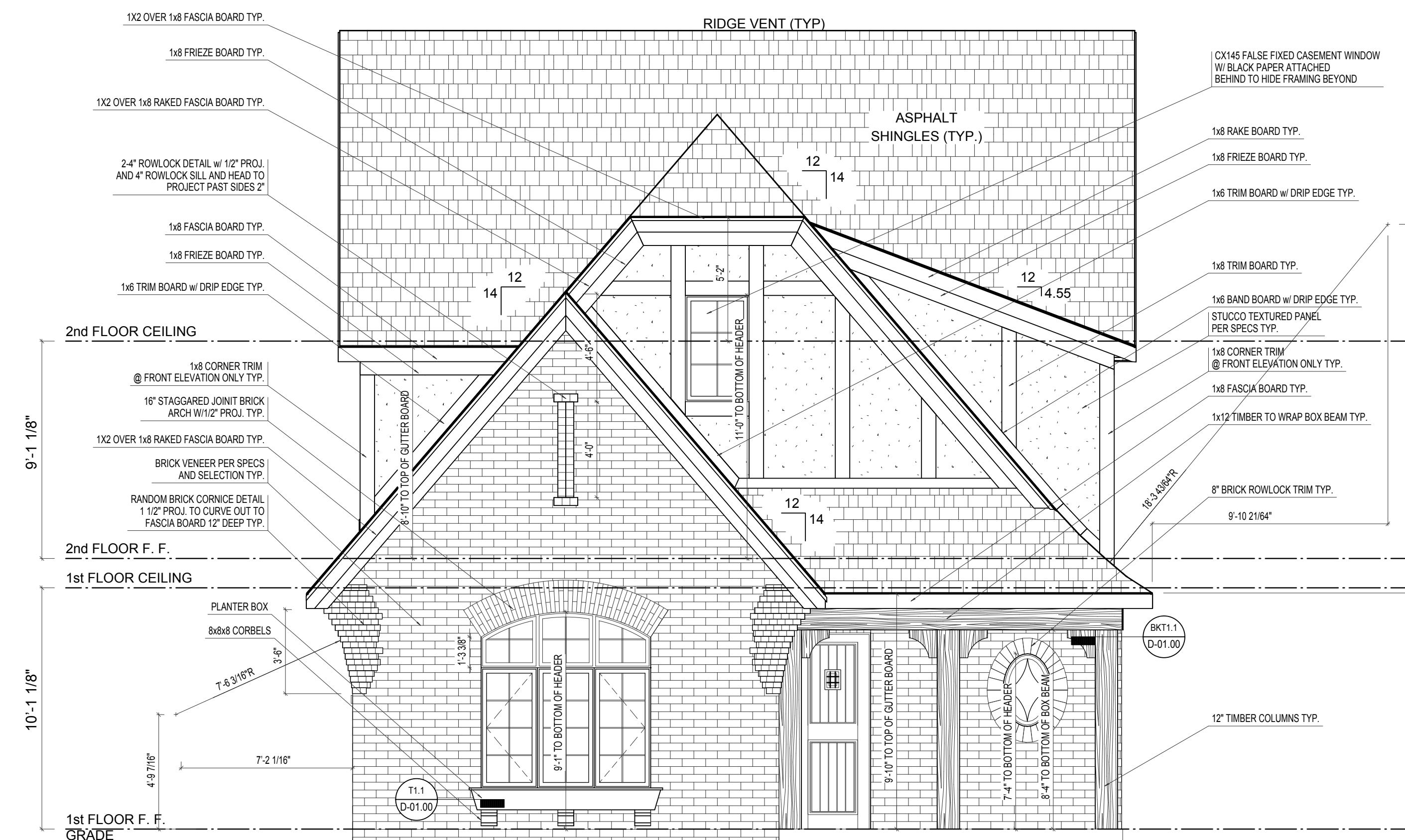
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ELEVATION REVIEW ONLY

ELEVATION A		REV. NO.	DATE	REMARKS
GARAGE REAR				



EH_1090		PRINT DATE: 08/01/2014	
FOR:	Estridge Homes		
LOCATION:			
SHEET NUMBER			
A-04			

[illegible]

FRONT ELEVATION

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



© Estridge Homes 06/10/2014

PRINT DATE:
06/10/2014

EH_1090

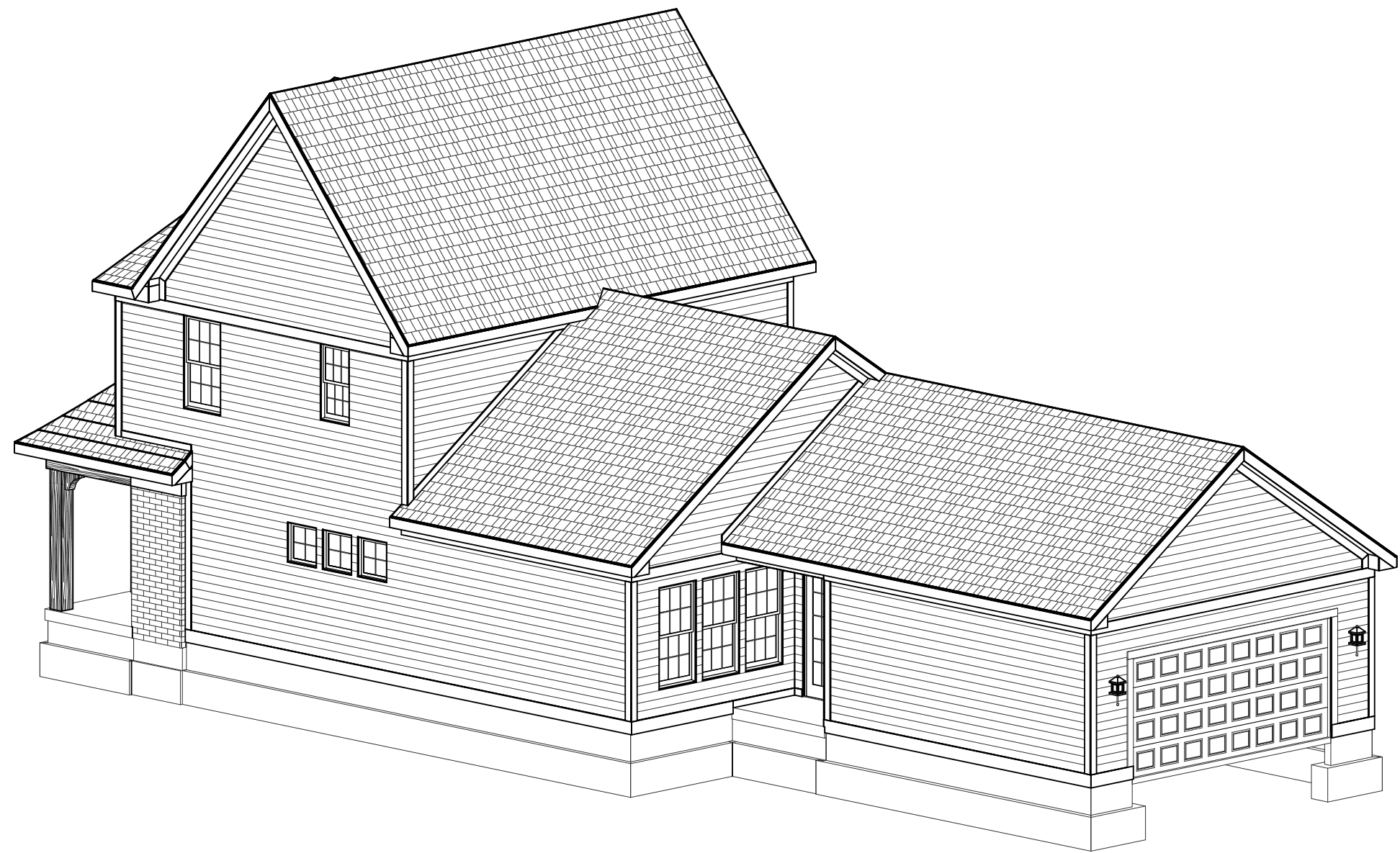
FOR: Estridge Homes

LOCATION:

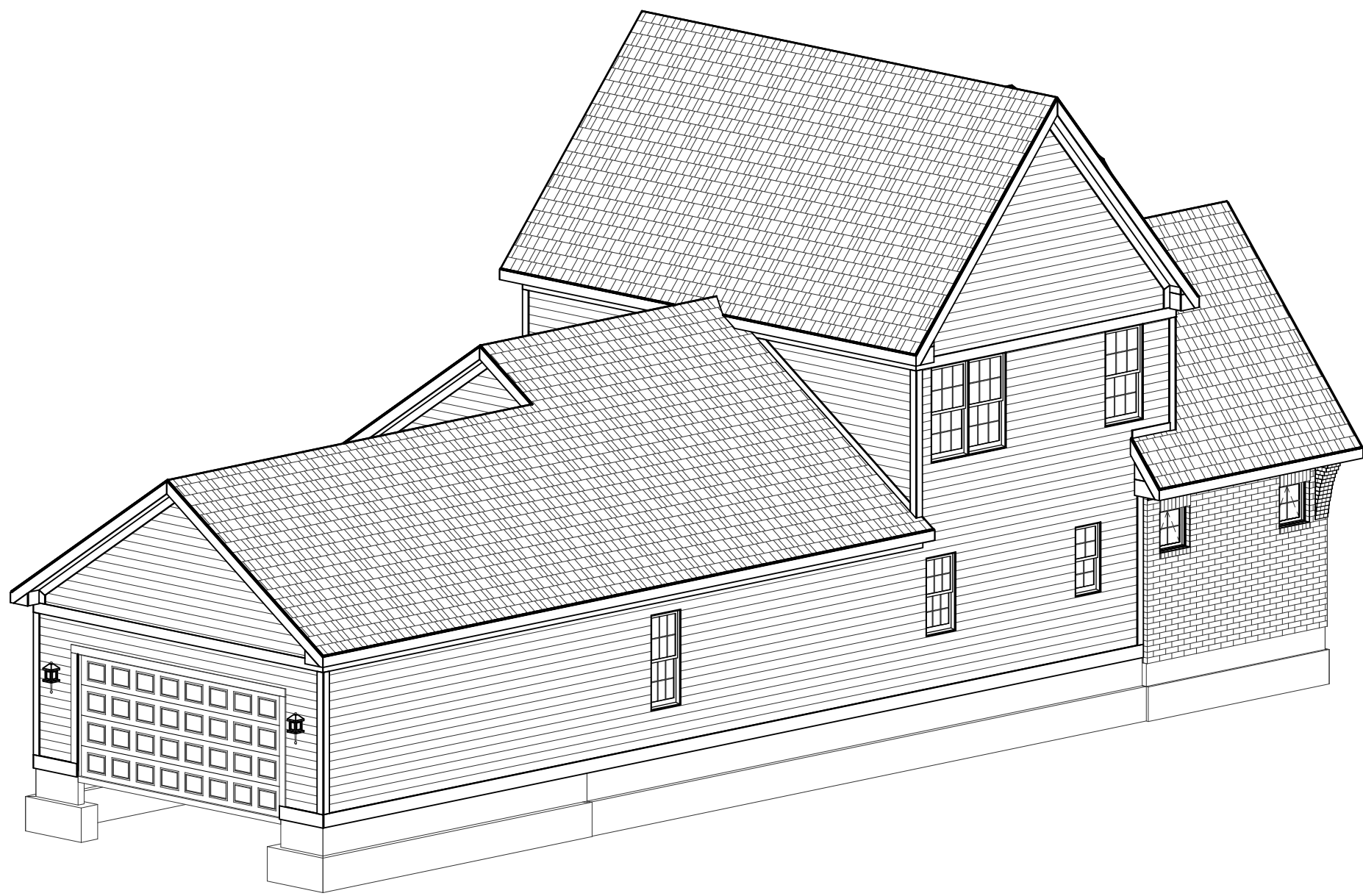
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A-01

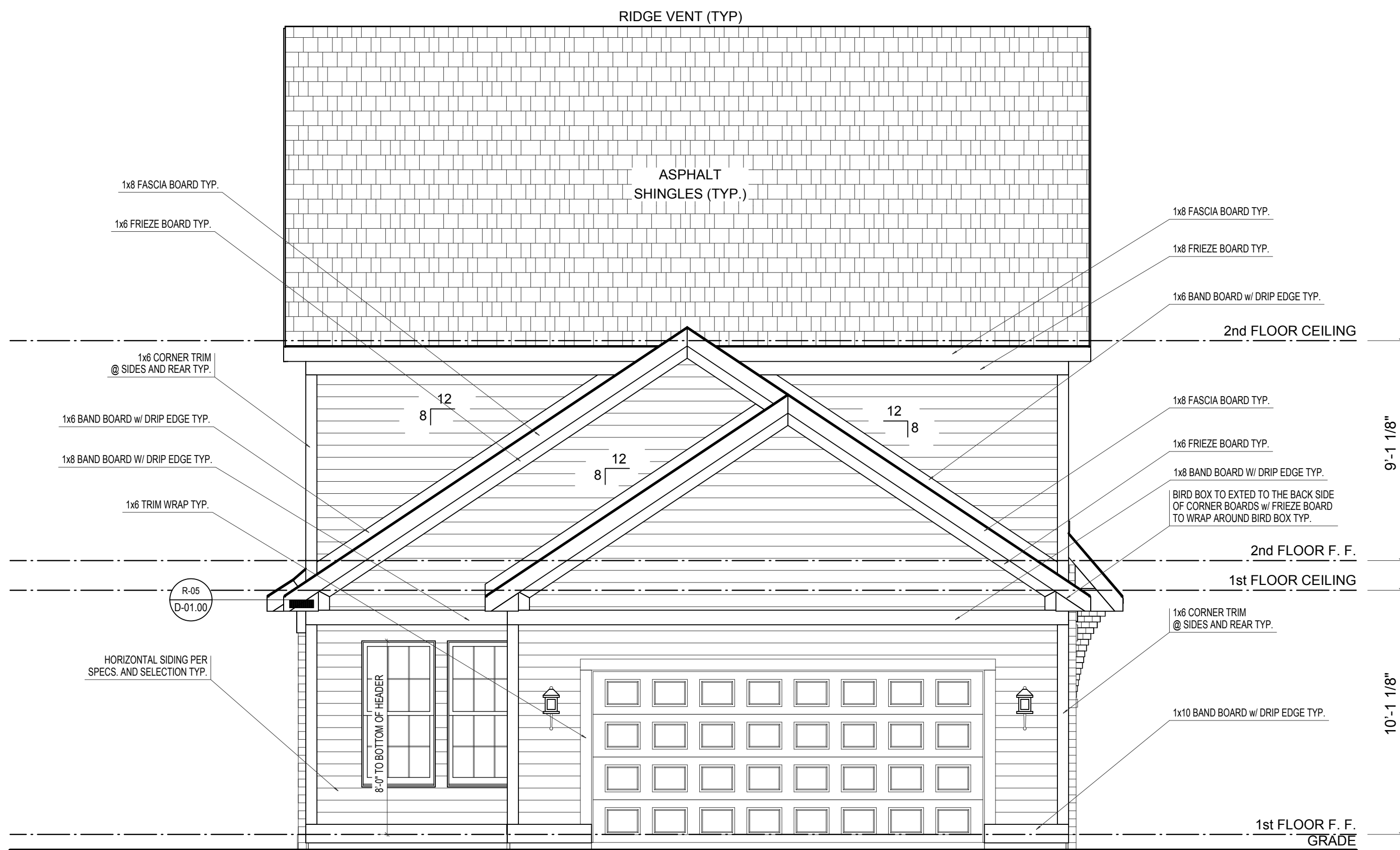
© CGVisions 2004 PLAN CREATION DATE 04/25/2014



REAR-RIGHT



REAR-LEFT



REAR ELEVATION

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

ELEVATION B		REV. NO.	DATE	REMARKS
GARAGE REAR				



PRINT DATE:
06/10/2014

EH_1090
FOR: Estridge Homes
LOCATION:
SHEET NUMBER
A-02



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

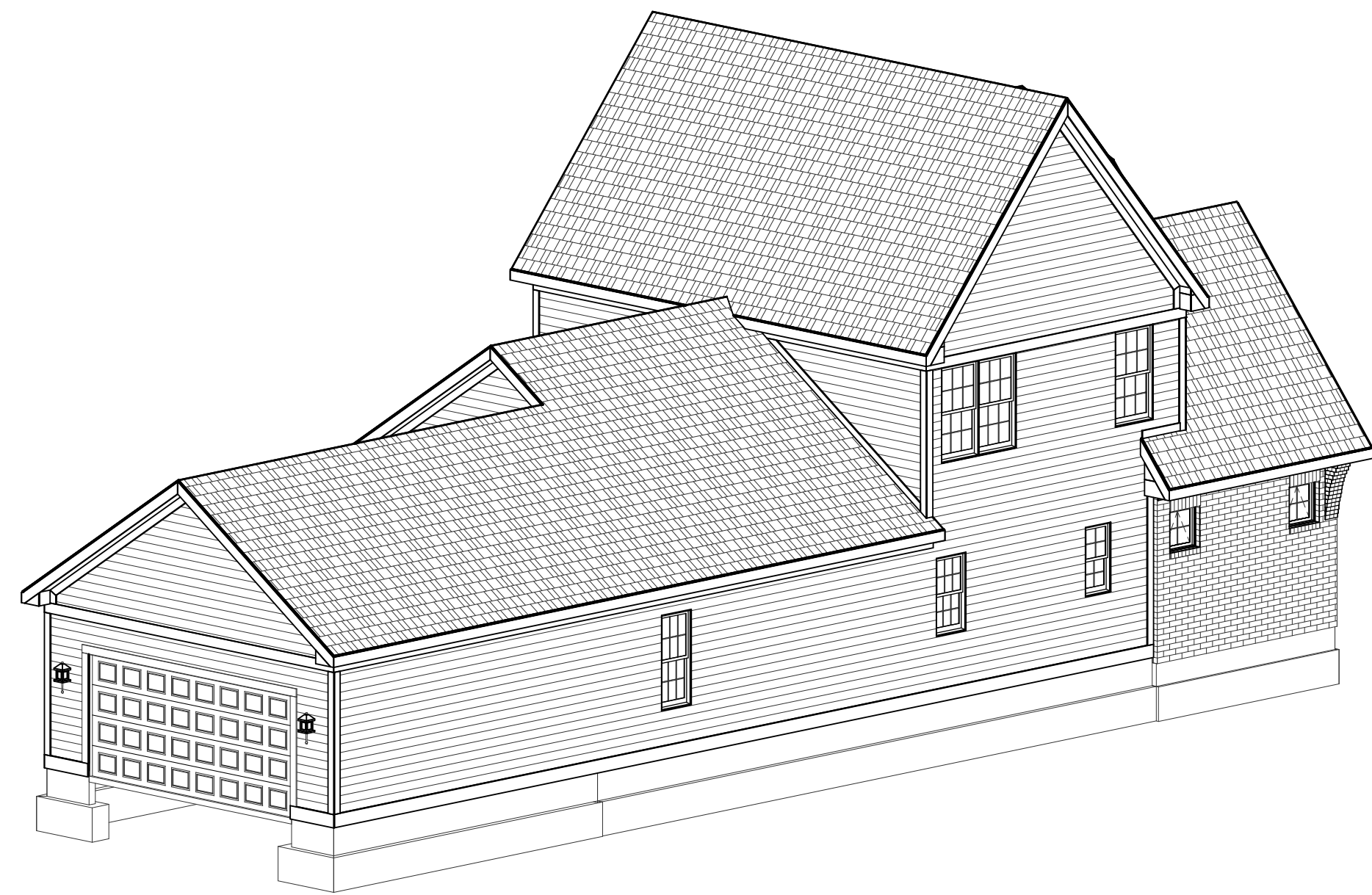


© Estridge Homes 06/10/2014

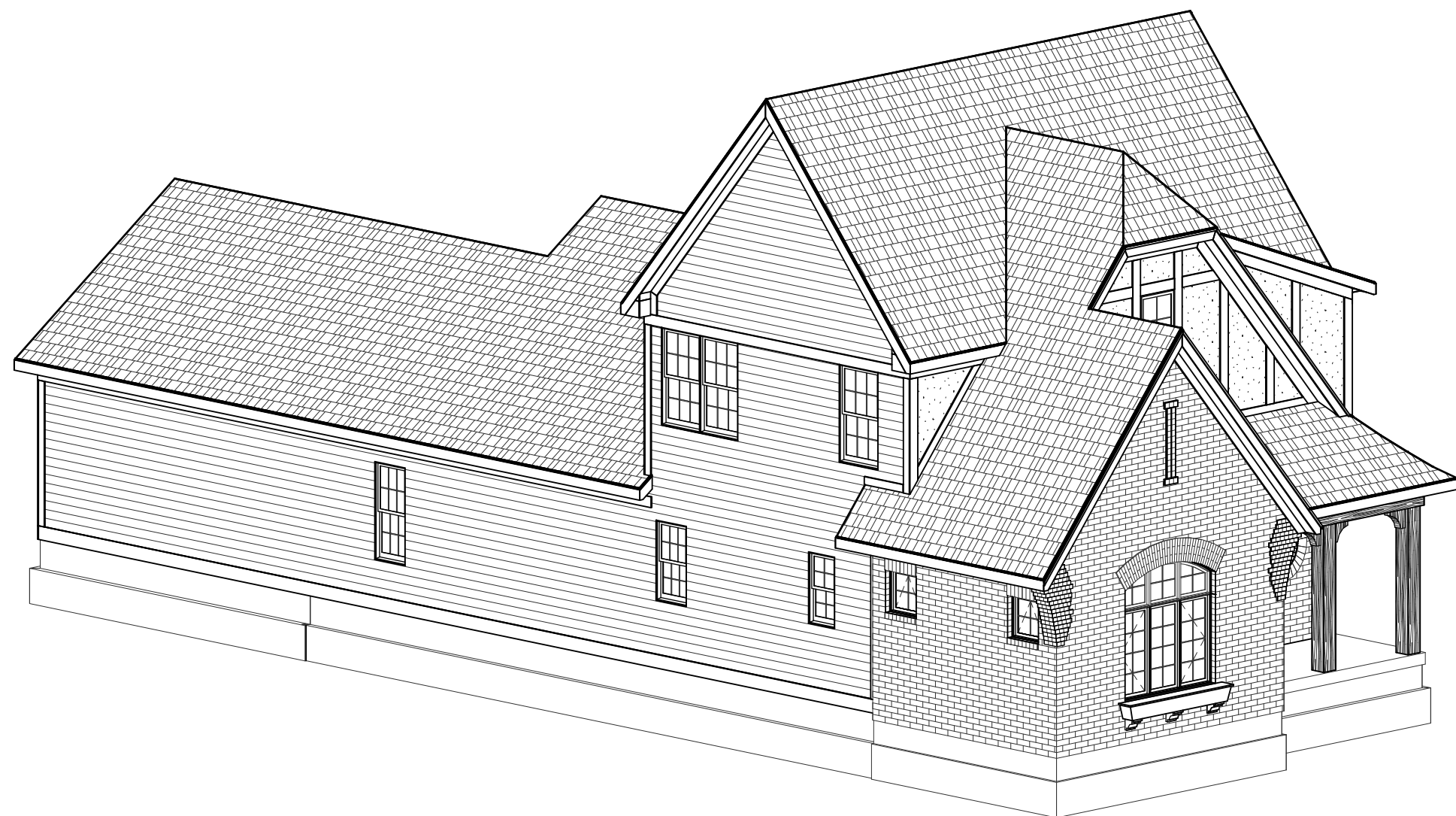
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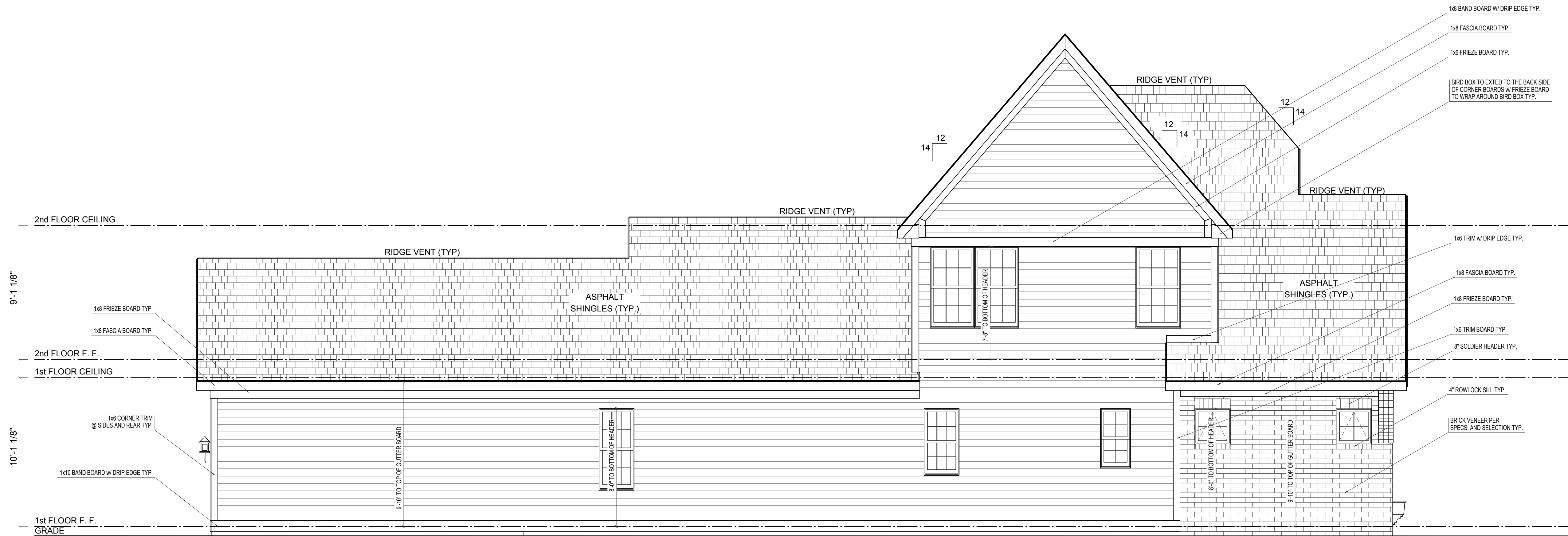
REVISIONS #2 CHECKSET
NOT FOR CONSTRUCTION



REAR-LEFT



FRONT-LEFT



LEFT ELEVATION

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ELEVATION B	REV. NO.	DATE	REMARKS
GARAGE REAR			



PRINT DATE: 06/10/2014		
EH_1090	FOR:	Estridge Homes
	LOCATION:	
SHEET NUMBER		
A-04		



ORDINANCE NUMBER 15-18

AN ORDINANCE OF THE CITY OF WESTFIELD AND WASHINGTON TOWNSHIP, HAMILTON COUNTY, INDIANA CONCERNING A SECOND AMENDMENT TO THE UNIFIED DEVELOPMENT ORDINANCE AND THE HARMONY PLANNED UNIT DEVELOPMENT DISTRICT ORDINANCE

This is an Ordinance (this "Ordinance") to amend the Unified Development Ordinance of the City of Westfield and Washington Township, Hamilton County, Indiana (the "Unified Development Ordinance"), enacted by the City of Westfield pursuant to its authority under the laws of the State of Indiana, Ind. Code § 36-7-4 et seq., as amended;

WHEREAS, the City of Westfield, Indiana (the "City") and the Township of Washington, both of Hamilton County, Indiana are subject to the Unified Development Ordinance;

WHEREAS, the Council enacted Ordinance No. 12-14, the Harmony Planned Unit Development District (the "Harmony PUD Ordinance"), on January 14, 2014 as amended by Ordinance 14-55 (the "Harmony PUD Ordinance First Amendment");

WHEREAS, the Westfield-Washington Advisory Plan Commission (the "Commission") considered a petition (**Petition No. 1507-PUD-12**), requesting an amendment to the Harmony PUD Ordinance with regard to the subject real estate more particularly described in **Exhibit A** attached hereto (the "Real Estate");

WHEREAS, the Commission forwarded **Petition No. 1507-PUD-12** to the Common Council of the City of Westfield, Hamilton County, Indiana (the "Common Council") with a favorable recommendation (8-0) in accordance with Indiana Code § 36-7-4-608, as required by Indiana Code § 36-7-4-1505;

WHEREAS, the Secretary of the Commission certified the action of the Commission to the Common Council on July 7, 2015;

WHEREAS, the Common Council is subject to the provisions of the Indiana Code §36-7-4-1507 and Indiana Code § 36-7-4-1512 concerning any action on this request; and

NOW, THEREFORE, BE IT ORDAINED by the Common Council of the City of Westfield, Hamilton County, Indiana, meeting in regular session, that the Harmony PUD Ordinance and the Unified Development Ordinance and are hereby amended as follows:

Section 1. Applicability of Ordinance.

- 1.1 This Ordinance shall amend the Harmony PUD Ordinance, as applicable to the Real Estate. Development of the Real Estate shall be governed by (i) the Harmony PUD Ordinance, as amended by this Ordinance and its exhibits, and (ii) the provisions of the Unified Development Ordinance, as amended and applicable to the Underlying Zoning District or a Planned Unit Development District, except as modified, revised, supplemented or expressly made inapplicable by the Harmony PUD Ordinance, as amended.
- 1.2 Chapter (“*Chapter*”) and Article (“*Article*”) cross-references of this Ordinance shall hereafter refer to the section as specified and referenced in the Unified Development Ordinance.
- 1.3 All other provisions of the Harmony PUD Ordinance shall remain in effect with the adoption of this Ordinance.
- 1.4 All provisions and representations of the Unified Development Ordinance that conflict with the provisions of this Ordinance are hereby made inapplicable to the Real Estate and shall be superseded by the terms of the Harmony PUD Ordinance, as amended.

Section 2. Definitions. The following definition shall be added to *Article 6 Definitions*:

Primary plane of the Front Elevation of a home: the vertical portion of the front building façade that most contributes to establishing the volume of the house closest to the street. Typically, the primary plane is the solid wall of the house creating the enclosed living area. However, an open porch may qualify as the primary plane if it contains a gable a minimum of thirty (30) percent of the width of the house (as measured from the outer extent of the foundation upon which the gable resides) with an Architectural Treatment on Gable End, as generally depicted in **Exhibit B**.

Section 3. Development Standards for Multifamily Uses within the Mixed Use District.

The standards of *Section 2.4: Development Standards for Multifamily Uses within the Mixed Use District* of the Harmony PUD Ordinance shall apply to the development of the District, except as otherwise modified below:

- 3.1 Minimum Setback from Internal Driveways/Parking Areas: *Section 2.4(D) Minimum Setback from Internal Driveways/Parking Areas* shall be removed.
- 3.2 Maximum Building Height: *Section 2.4(I) Maximum Building Height* shall be amended to provide that multi-family dwelling units shall have a maximum building height of three (3) stories.

Section 4. Architectural Standards. The standards of *Section 3.4: Architectural Standards* of the Harmony PUD Ordinance shall apply to the development of the District, except as otherwise modified below:

4.1 Architectural Design Standards: *Section 3.4(A) Architectural Design Standards* shall be amended to provide that single-family detached dwelling units on a fifty (50) foot Mew Lots or fifty (50) foot Alley-load Lots shall either: (i) comply with one of the defined architectural designs detailed in *Section 3.4(A)(3) Defined Architectural Designs*; or (ii) shall be substantially similar to the homes depicted in **Exhibit C** attached hereto (the "Village Collection Homes").

A. Enhanced End Lots: Enhanced End Lots are identified in **Exhibit D**. In order to enhance the architectural interest of the streetscape, a Village Collection Home on an Enhanced End Lot shall be subject to the following:

1) Orientation: The patio area on the side or rear Building Façade (as depicted in **Exhibit C**) (the "Patio Area") shall be oriented towards the Street.

2) Specific Plan Enhancements: The following plans (as included in **Exhibit C**) shall incorporate the following additional architectural enhancements on the Side Building Façade oriented towards the Street.

- i. Plan 4528-B ELV-2: Incorporate one (1) additional window in garage façade. Incorporate minimum six (6) inch window trim around all windows.
- ii. Plan 4528-D ELV-1: Incorporate one (1) additional window in the garage façade. Incorporate minimum six (6) inch window trim around all windows.
- iii. Plan 4671-A ELV-2: Incorporate two (2) additional windows in garage façade (single or double hung). Incorporate minimum six (6) inch window trim around all windows.
- iv. Plan 4671-B ELV-2: Incorporate two (2) additional windows in garage façade (single or double hung). Incorporate minimum six (6) inch window trim around all windows.
- v. Plan 4671-C ELV-1: Incorporate two (2) additional windows in garage façade (single or double hung). Incorporate minimum six (6) inch window trim around all windows.
- vi. Plan 5862-A ELV-1: Incorporate one (1) additional window in garage façade. Repeat shutter feature provided on front elevation on single windows. Incorporate minimum six (6) inch window trim around all windows.

- vii. Plan 5862-B ELV-1: Provide double window in dwelling façade near front of home, if floorplan allows. If not, then one (1) additional window in dwelling façade. Incorporate one (1) additional window in garage façade. Incorporate minimum six (6) inch trim around all windows.
- viii. Plan 5863-A ELV-1: Incorporate two (2) additional windows in garage façade (single or double hung). Incorporate minimum six (6) inch trim around all windows and incorporate window mullions consistent with those of front elevation.
- ix. Plan 5863-A ELV-3: Incorporate two (2) additional windows in garage façade (single or double hung). Incorporate minimum six (6) inch trim around all windows and incorporate window mullions consistent with those of front elevation.
- x. Plan 5863-B ELV-2: Incorporate one (1) additional window in garage façade. Incorporate minimum six (6) inch trim around all window and incorporate window mullions consistent with front elevation on all single or double hung windows. Extend three (3) foot tall masonry along the side of the dwelling façade to the corner break of the patio area.
- xi. Plan 5864-C ELV-1: Incorporate two (2) additional windows in garage façade (single or double hung). Incorporate minimum six (6) inch trim around all windows and incorporate window mullions consistent with front elevation.
- xii. Plan 5864-B ELV-2: Incorporate two (2) additional windows in garage façade (single or double hung). Incorporate minimum six (6) inch trim around all windows and incorporate window mullions consistent with front elevation.
- xiii. Plan 5864-A ELV-2: Incorporate two (2) additional windows in garage façade (single or double hung). Incorporate minimum six (6) inch trim around all windows and incorporate window mullions consistent with front elevation.

ALL OF WHICH IS HEREBY ADOPTED BY THE CITY COUNCIL OF WESTFIELD,
HAMILTON COUNTY, INDIANA THIS 13 DAY OF July, 2015.

Voting For

Voting Against

Abstain

Jim Ake
Jim Ake

Jim Ake

Jim Ake

Steven Hoover
Steven Hoover

Steven Hoover

Steven Hoover

Robert L. Horkay
Robert L. Horkay

Robert L. Horkay

Robert L. Horkay

Charles Lehman
Charles Lehman

Charles Lehman

Charles Lehman

Robert J. Smith
Robert J. Smith

Robert J. Smith

Robert J. Smith

Cindy L. Spoljaric
Cindy L. Spoljaric

Cindy L. Spoljaric

Cindy L. Spoljaric

Robert W. Stokes
Robert W. Stokes

Robert W. Stokes

Robert W. Stokes



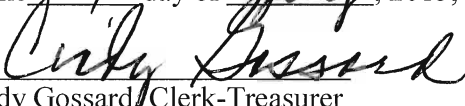
Cindy Gossard
Cindy Gossard, Clerk Treasurer

I affirm, under the penalties of perjury,
that I have taken reasonable care to redact
each Social Security Number in this
document, unless required by law"

Cindy Gossard
Signed

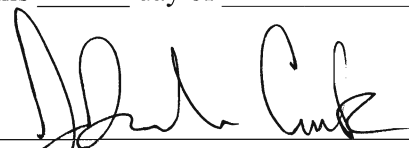
I hereby certify that **ORDINANCE 15-18** was delivered to the Mayor of Westfield

on the 14 day of July, 2015, at 2:00 pm.


Cindy Gossard, Clerk-Treasurer

I hereby APPROVE **ORDINANCE 15-18**

this _____ day of _____, 2015.


J. Andrew Cook, Mayor

I hereby VETO **ORDINANCE 15-18**

this _____ day of _____, 2015.

J. Andrew Cook, Mayor

This document prepared by:
Bryan D. Stumpf, PLA, AICP
12965 Old Meridian Street
Carmel, IN 46032

I affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security Number in this document, unless required by law. Bryan D. Stumpf

SCHEDULE OF EXHIBITS

Exhibit A Real Estate (Legal Description)

Exhibit B Front Façade Gable Examples

Exhibit C Village Collection Homes

Exhibit D End Lot Map

EXHIBIT A

REAL ESTATE

LEGAL DESCRIPTION

Part of the Northeast, Southeast and Northwest Quarters of Section 16, Township 18 North, Range 3 East in Hamilton County, Indiana, more particularly described as follows:

BEGINNING at the northeast corner of said Northeast Quarter; thence South 00 degrees 00 minutes 00 seconds East (assumed basis of bearings) along the east line of said Northeast Quarter 2,630.58 feet to the northeast corner of said Southeast Quarter; thence South 00 degrees 12 minutes 08 seconds East along the east line of said Southeast Quarter 2,636.09 feet to the southeast corner thereof; thence South 89 degrees 25 minutes 04 seconds West along the south line of said Southeast Quarter 1,352.43 feet to the southwest corner of the East Half of said Southeast Quarter; thence North 00 degrees 18 minutes 09 seconds West along the west line of said East Half 2,633.15 feet to the southeast corner of the West Half of said Northeast Quarter; thence South 89 degrees 17 minutes 41 seconds West along the south line of said West Half 1,357.06 feet to the southeast corner of said Northwest Quarter; thence South 89 degrees 01 minute 52 seconds West along the south line of said Northwest Quarter 678.57 feet to the southwest corner of the East Half of the Southeast Quarter of said Northwest Quarter; thence North 00 degrees 11 minutes 39 seconds West along the West line of said East Half 1,315.85 feet to the northwest corner thereof; thence South 89 degrees 07 minutes 05 seconds West along the south line of the Northeast Quarter of said Northwest Quarter 679.24 feet to the southwest corner thereof; thence North 00 degrees 13 minutes 25 seconds West along the west line of the Northeast Quarter of said Northwest Quarter 823.62 feet to a point that is 493.24 feet South 00 degrees 13 minutes 26 seconds East from the northwest corner of the Northeast Quarter of said Northwest Quarter; thence North 89 degrees 12 minutes 17 seconds East parallel with the north line of said Northwest Quarter 794.85 feet; thence North 00 degrees 13 minutes 25 seconds West 3.82 feet; thence North 89 degrees 12 minutes 17 seconds East parallel with the north line of said Northwest Quarter 285.30 feet to an east line of the 119.55-acre tract described in Instrument Number 200300107178, on file in the Office of the Recorder of Hamilton County, Indiana, the following six (6) courses are along the east, south and west lines of said 119.55-acre tract; 1) thence South 00 degrees 09 minutes 53 seconds East 108.70 feet; 2) thence North 89 degrees 12 minutes 17 seconds East 279.15 feet to the west line of said Northeast Quarter; 3) thence North 89 degrees 16 minutes 38 seconds East 450.00 feet; 4) thence South 00 degrees 09 minutes 53 seconds East 57.15 feet; 5) thence North 89 degrees 16 minutes 38 seconds East 518.47 feet; 6) thence North 00 degrees 00 minutes 00 seconds West parallel with the east line of said Northeast Quarter 655.30 feet to a point in the north line of said Northeast Quarter that is 1,751.34 feet west of the northeast corner of said Northeast Quarter; thence North 89 degrees 16 minutes 38 seconds East along said north line 1,751.34 feet to the POINT OF BEGINNING. Containing 277.55 acres, more or less.

EXHIBIT B

FRONT FAÇADE GABLE EXAMPLES

[see following pages]





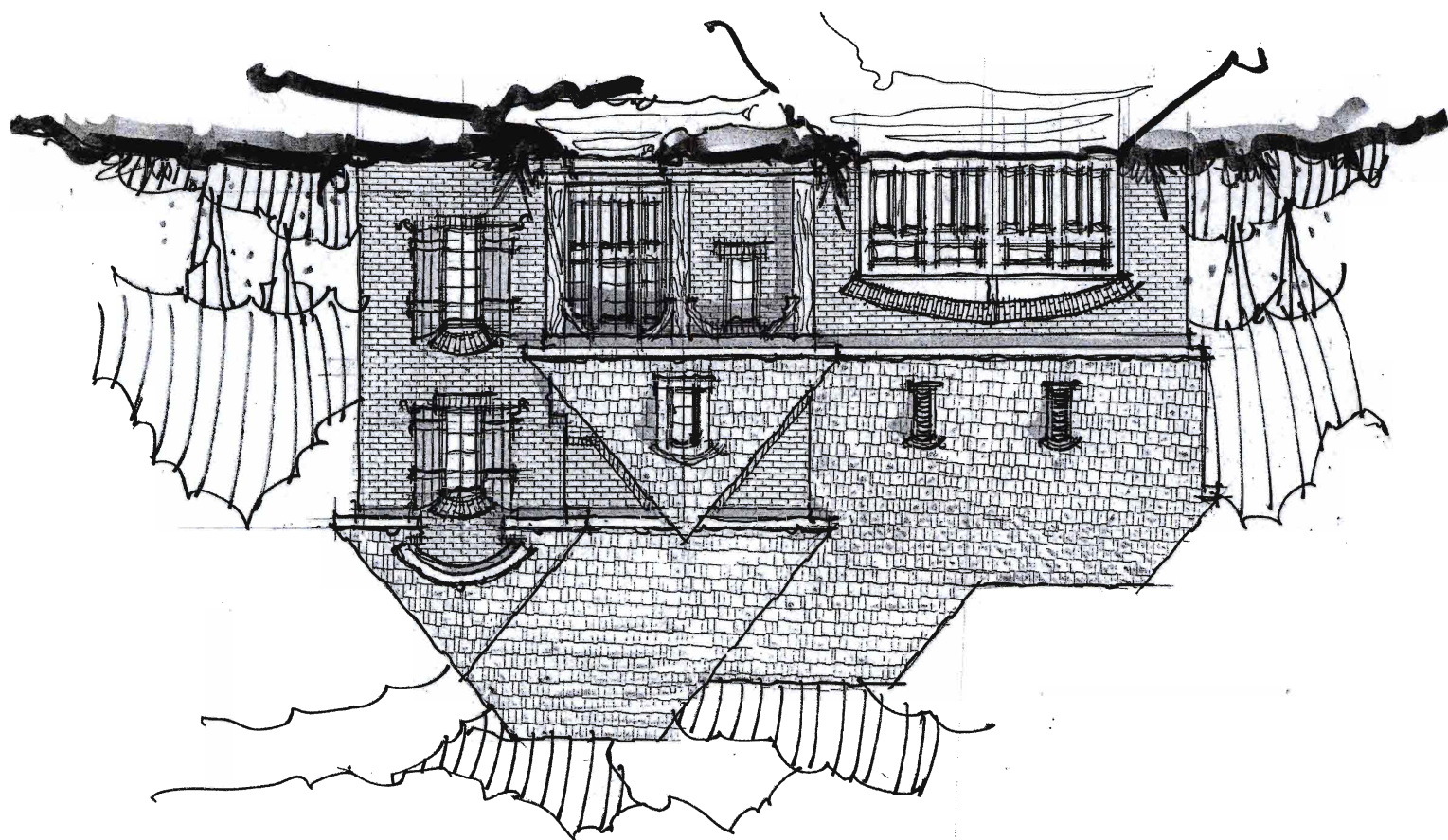
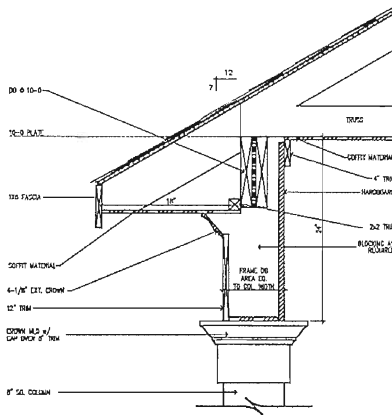


EXHIBIT C

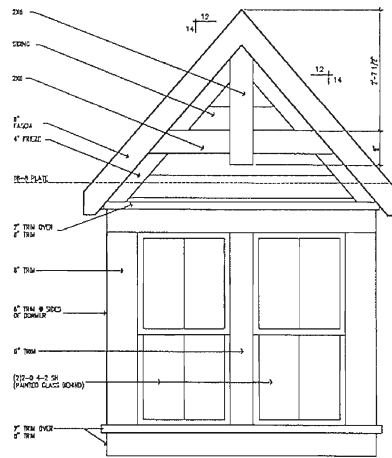
VILLAGE COLLECTION HOMES

[see following pages]



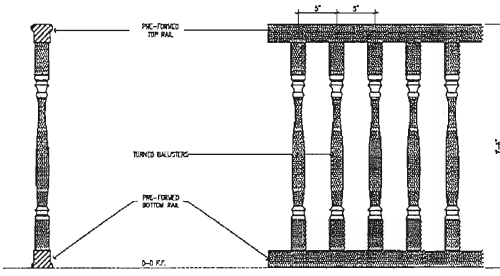
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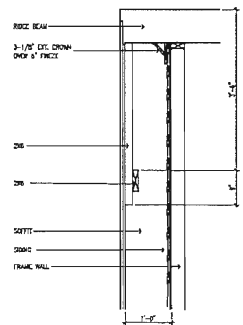
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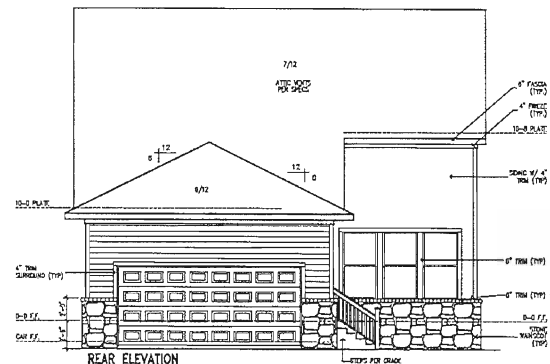
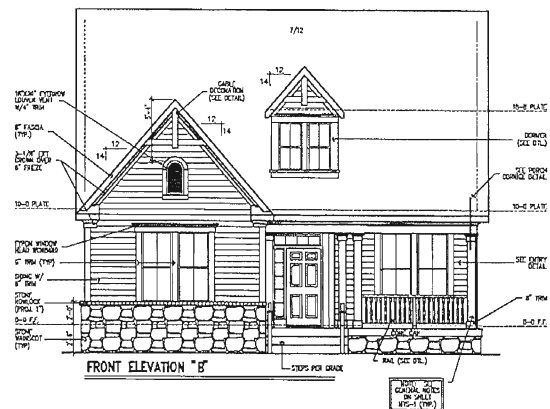
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GABLE END DETAIL

1/2" = 1'-0"

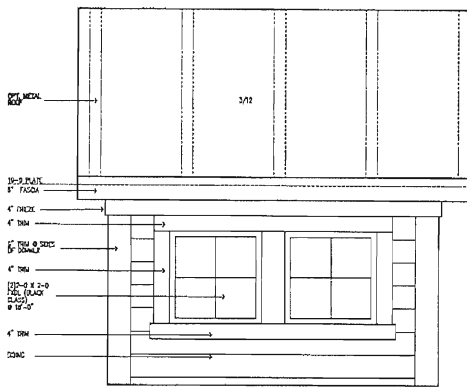


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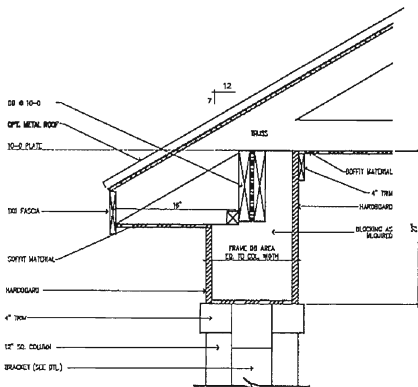
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Sect:

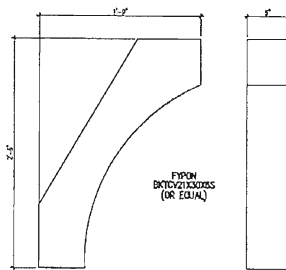
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ELV-1
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INDIANAPOLIS



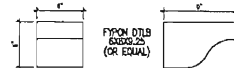
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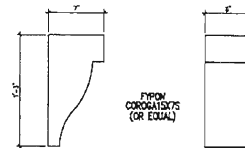
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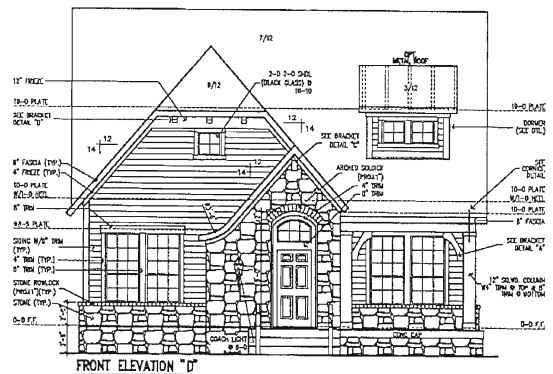


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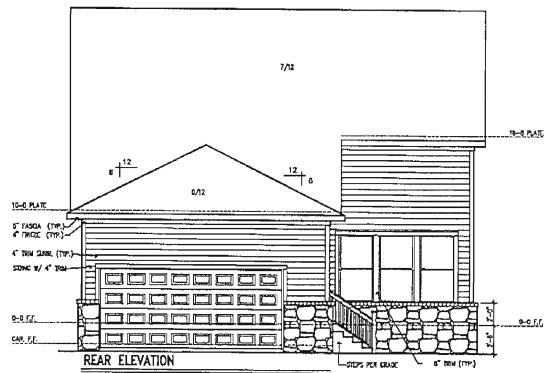


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TYP. PLATE HEIGHTS	MINIMUM	NOMINAL
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8-0 PLATE	5'-11 3/4"	6'-0"
6-0 PLATE	3'-11 3/4"	4'-0"
4-0 PLATE	1'-11 3/4"	2'-0"
2-0 PLATE	0'-11 3/4"	1'-0"
10-0 PLATE	13'-11 3/4"	14'-0"
8-0 PLATE	11'-11 3/4"	12'-0"
6-0 PLATE	9'-11 3/4"	10'-0"
4-0 PLATE	7'-11 3/4"	8'-0"
2-0 PLATE	5'-11 3/4"	6'-0"



FRONT ELEVATION "D"



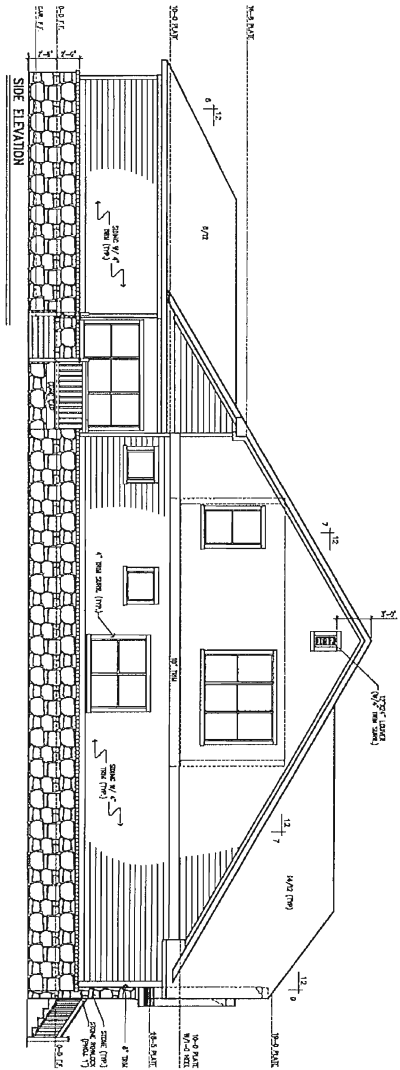
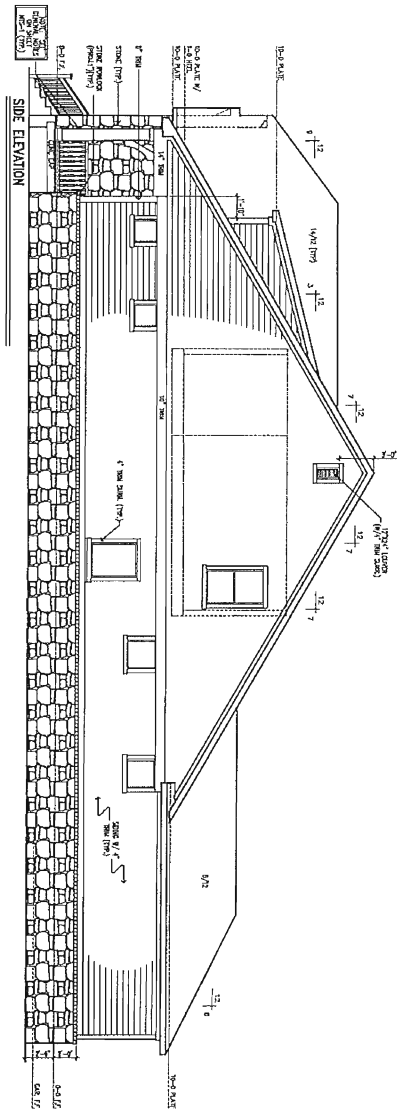
REAR ELEVATION

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David Weekley Homes
GS/XS/EM/JR Scale: 1/8" = 1'-0"
Date: 12/16/14 Rev: 01/15/15 JR

Proj. No.:
Job No.:
Lot:
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Sect:

NORTH
4528-D
ELV-1
INFINITY
INDIANAPOLIS



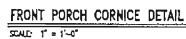
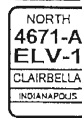
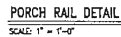
NORTH
4528-D
ELV-2
INFINITY
NOVEMBER 2014

Proj No:	
Job No:	

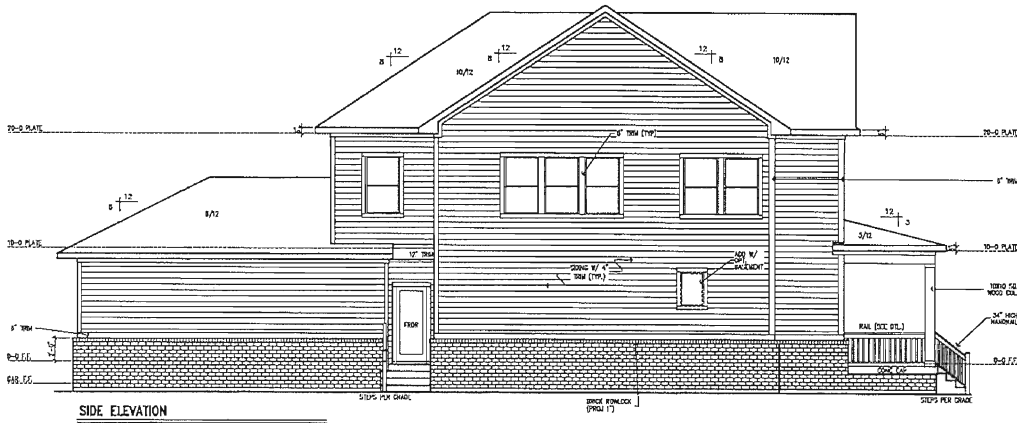
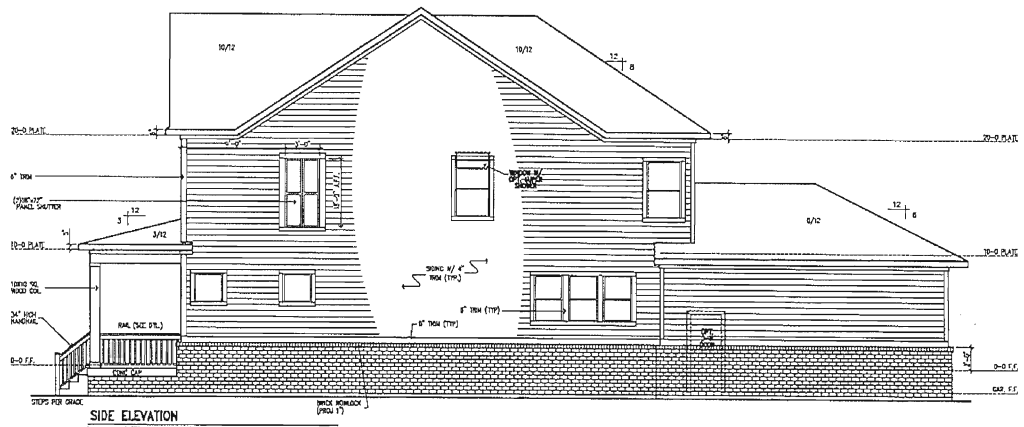
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Block:	
Section:	

David Weekley Homes
GS/XS/EM/JR Scale: 1/8" = 1'-0"
Date: 12/16/14 Rev: 01/15/15 JR

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[illegible]

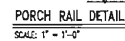
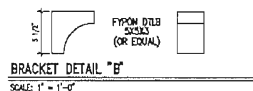
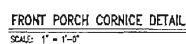
TYP. PLATE HEIGHTS	
8'-0" PLATE	7'-11 5/8"
8'-0" PLATE	8'-11 5/8"
10'-0" PLATE	9'-11 5/8"
11'-0" PLATE	10'-11 5/8"
12'-0" PLATE	11'-11 5/8"
13'-0" PLATE	12'-11 5/8"
14'-0" PLATE	13'-11 5/8"
15'-0" PLATE	14'-11 5/8"
16'-0" PLATE	15'-11 5/8"
17'-0" PLATE	16'-11 5/8"
18'-0" PLATE	17'-11 5/8"
19'-0" PLATE	18'-11 5/8"
20'-0" PLATE	19'-11 5/8"
21'-0" PLATE	20'-11 5/8"



David Weekley Homes
CN/RD/JP
Date: 8/13/2012
Rev: 2/4/15EAM

Scale: 1/8" = 1'-0"
Proj. No.:
Job No.:
Sect.:

NORTH
4671-A
ELV-2
CLAIRBELLA
INDIANAPOLIS



TYP. PLATE HEIGHTS	
NOMINAL	ACTUAL
8-0 PLATE	7-11 3/8
9-0 PLATE	8-11 3/8
10-0 PLATE	9-11 5/8
11-0 PLATE	10-11 3/8
2ND FLOOR PLATE HEIGHTS (2ND FL FLOOR SYSTEM)	
10-0 PLATE	10-11 7/8
20-0 PLATE	19-11 7/8
21-0 PLATE	20-11 7/8
3RD FLOOR PLATE HEIGHTS (3RD FL FLOOR SYSTEM)	
10-0 PLATE	10-11 7/8
20-0 PLATE	20-11 7/8
21-0 PLATE	21-11 7/8



OPALIS Series L.P. 2032

David Weekley Homes	
CN/RD/JP	Scale: 1/8" = 1'-0"
Date: 8/13/2012	Rev: 2/4/15EAM

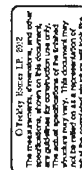
Lot:	Proj No:
Bx:	Job No:
Sheet:	

NORTH
4671-B
ELV-1
CLAIRBELLA
INDIANAPOLIS

Architectural drawing of the side elevation of a house. The drawing shows a two-story structure with a gabled roof and a smaller gabled section on the right. The exterior walls are clad in horizontal siding. The foundation is made of brick. A front porch with a brick chimney and a wooden railing is on the left. The drawing includes various dimensions and labels for materials and features.

Labels and dimensions include:

- 70-0 PLAT
- 12-0 PLAT
- 15-0 PLAT
- 18-0 PLAT
- 20-0 PLAT
- 24-0 PLAT
- 28-0 PLAT
- 32-0 PLAT
- 36-0 PLAT
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- 76-0 PLAT
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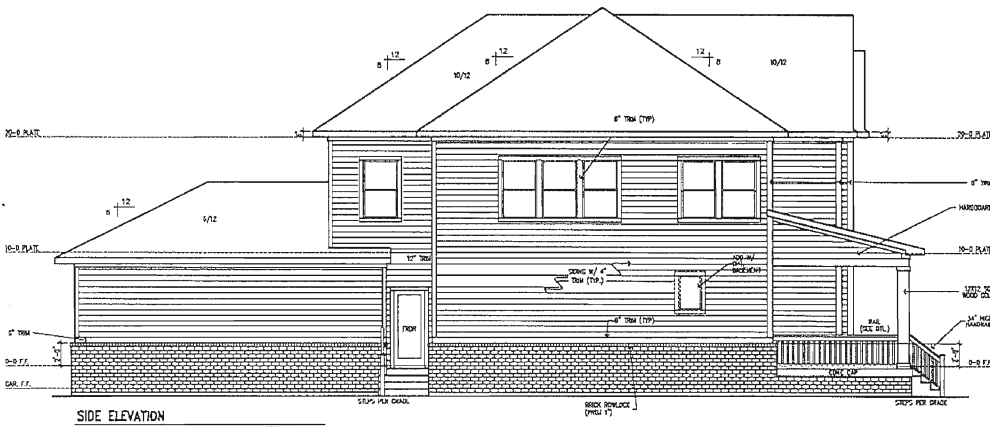
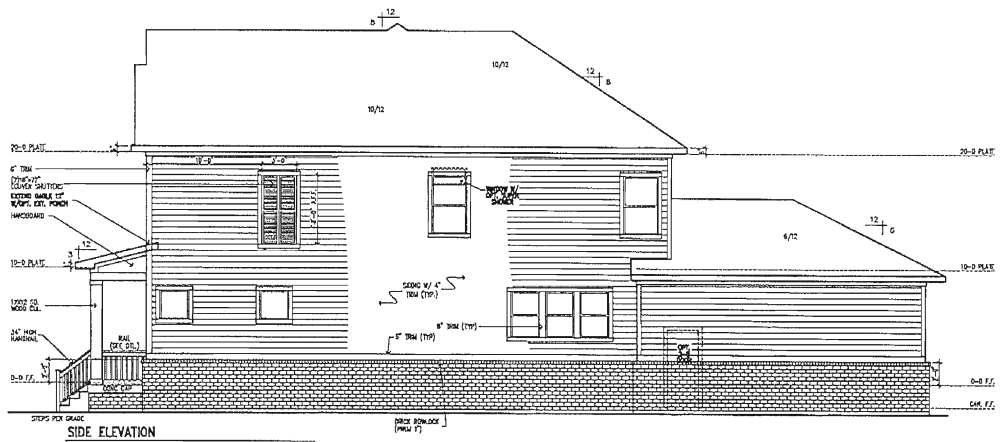
CN/RD/JF	Scale: 1/8" = 1'-0"
Date: 8/13/2012	Drawn: 2/4/15 FAN

Lot:	
B&C:	
Set:	

Proj. No.:	
Job No.:	

NORTH
4671-B
ELV-2
CLAIRBELLA
INDIANAPOLIS

TYP. PLATE HEIGHTS	
VERTICAL	HORIZONTAL
9'-0" PLATE	7'-11 5/8"
10'-0" PLATE	8'-11 5/8"
11'-0" PLATE	9'-11 5/8"
12'-0" PLATE	10'-11 5/8"
TYP. PLATE HEIGHTS	
13'-0" PLATE	11'-11 5/8"
14'-0" PLATE	12'-11 5/8"
15'-0" PLATE	13'-11 5/8"
16'-0" PLATE	14'-11 5/8"
17'-0" PLATE	15'-11 5/8"
18'-0" PLATE	16'-11 5/8"
19'-0" PLATE	17'-11 5/8"
20'-0" PLATE	18'-11 5/8"
21'-0" PLATE	19'-11 5/8"



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David Weekley Homes
CN RD, JP Scale: 1/8" = 1'-0"
Date: 8/13/2012 Rev: 2/4/15EAM

Proj. No.:
Lvl.:
Bk.:
Sect.:
Job No.:

NORTH
4671-C
ELV-2
CLAIREBELLA
INDIANAPOLIS

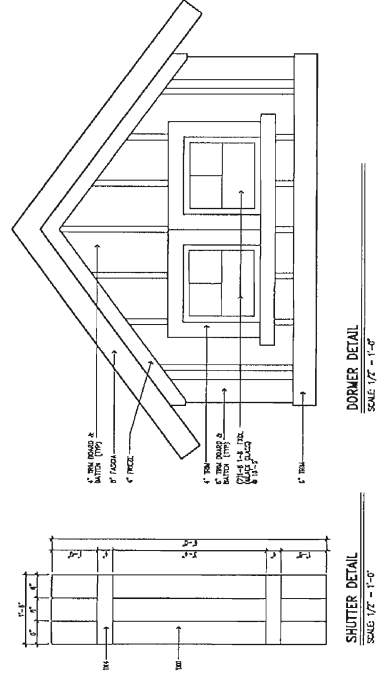
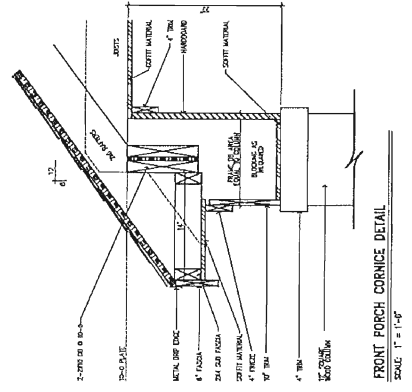
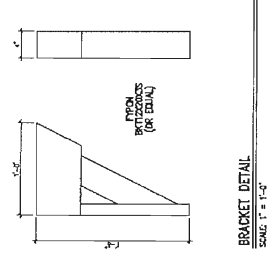
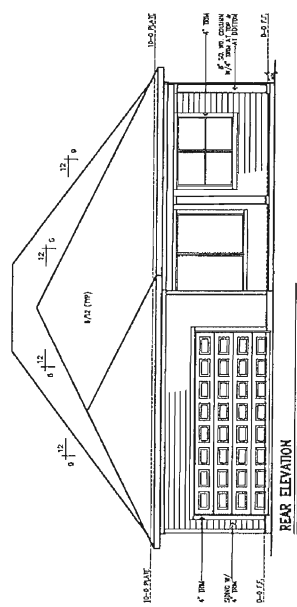
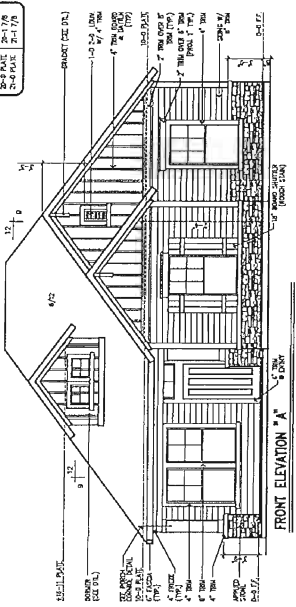
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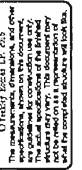
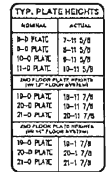
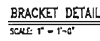
David Weekley Homes
 Scale 1/8" = 1'-0"
 Date 02/27/15
 GS/MS/IN/V
 Rev:

Proj No:
 Sub No:
 Scale:
 Date:

NORTH
 5862-A
 ELV-1
 ALLENWOOD
 INDIANAPOLIS

TYPE	PLATE HEIGHT
1x4	1'-0"
1x6	1'-0"
1x8	1'-0"
1x10	1'-0"
2x4	1'-0"
2x6	1'-0"
2x8	1'-0"
2x10	1'-0"
2x12	1'-0"
4x4	1'-0"
4x6	1'-0"
4x8	1'-0"
4x10	1'-0"
4x12	1'-0"
6x6	1'-0"
6x8	1'-0"
6x10	1'-0"
6x12	1'-0"
8x8	1'-0"
8x10	1'-0"
8x12	1'-0"
10x10	1'-0"
10x12	1'-0"
12x12	1'-0"



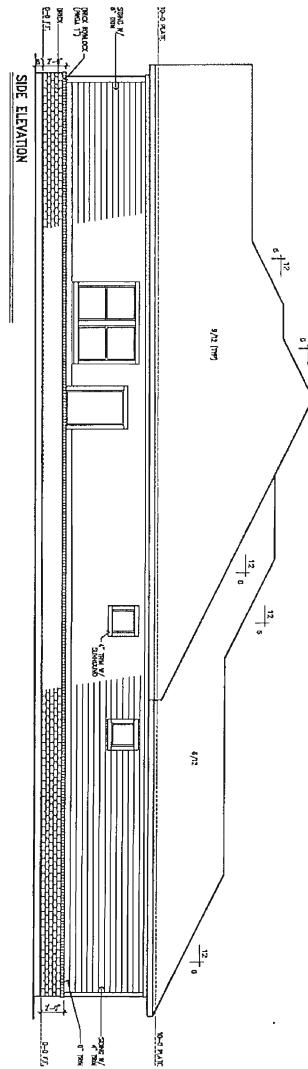
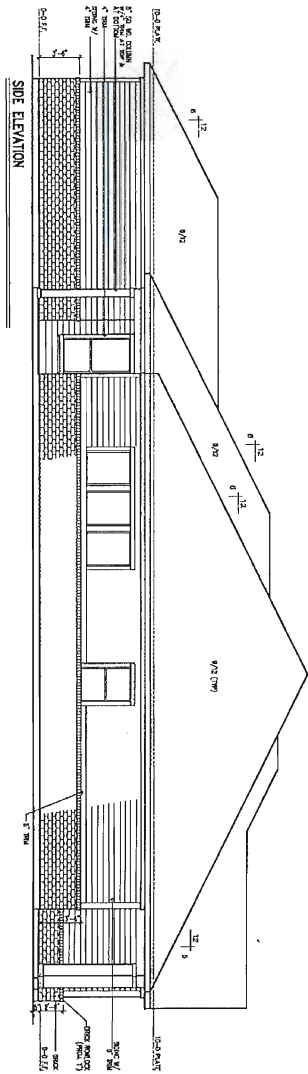


David Weekley Homes	
GS/M5/MV	Scale: 1/8" = 1'-0"
Date: 02/27/15	Rev.:

Lot:	
B%:	
Seat:	

Ref. No.:	Lab. No.:
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NORTH
5862-B
ELV-1
ALLENWOOD
INDIANAPOLIS

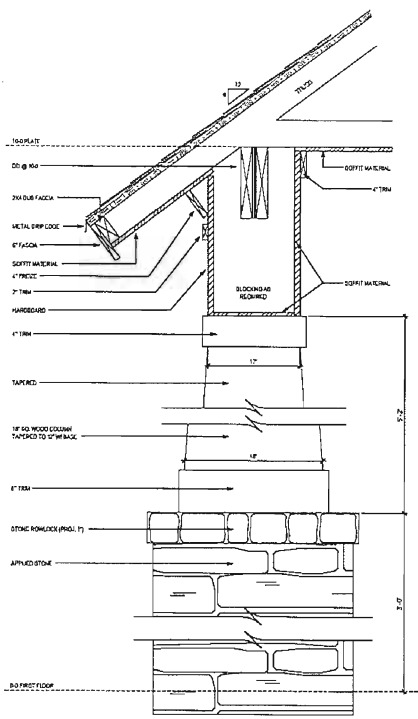


NORTH
5862-B
ELEV-2
ALLEENWOOD
INDIANAPOLIS, IN

Proj No:
Job No:
Lot:
Bk:
Sect:

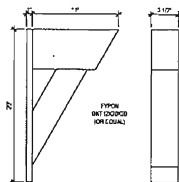
David Weekley Homes
GS/MS/MV
Date: 02/27/15
Scale: 1/8" = 1'-0"
Rev:

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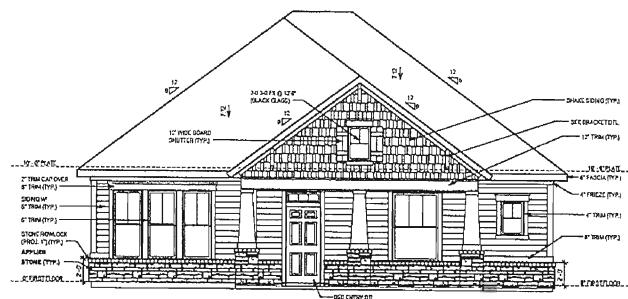


CORNICE DETAIL
SCALE: 1" = 1'-0"

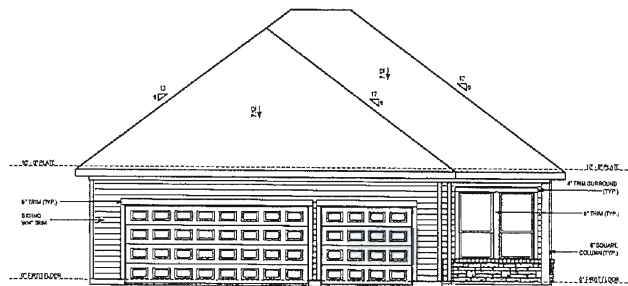
TYP. PLATE HEIGHTS	
NOMINAL	ACTUAL
8'-0" PLATE	7'-11 5/8"
9'-0" PLATE	8'-11 5/8"
10'-0" PLATE	9'-11 5/8"
11'-0" PLATE	10'-11 5/8"
2ND FLOOR PLATE HEIGHTS (W/ 12" FLOOR SYSTEM)	
19'-0" PLATE	18'-11 5/8"
20'-0" PLATE	19'-11 5/8"
21'-0" PLATE	20'-11 5/8"
2ND FLOOR PLATE HEIGHTS (W/ 14" FLOOR SYSTEM)	
19'-0" PLATE	18'-1 7/8"
20'-0" PLATE	19'-1 7/8"
21'-0" PLATE	20'-1 7/8"



BRACKET DETAIL "A"
SCALE: 1" = 1'-0"



FRONT ELEVATION "A"



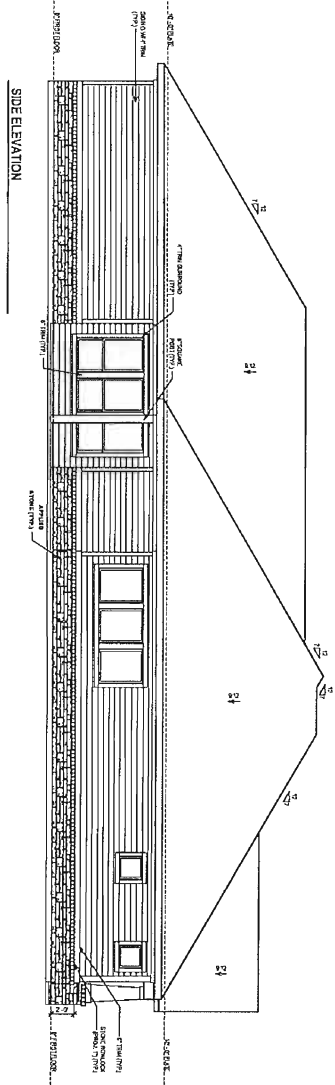
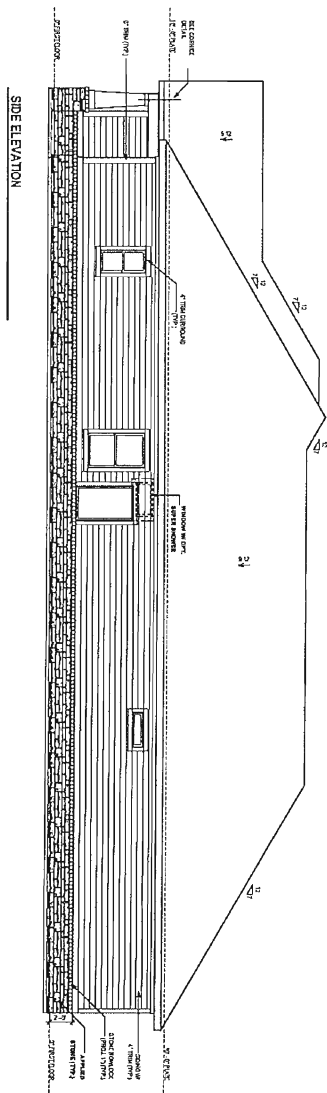
REAR ELEVATION

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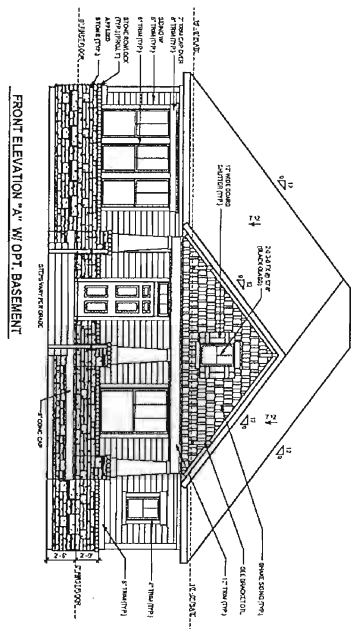
David Weekly Homes
GSD/GEM
Scale: 1/8" = 1'-0"
Date: 02/24/15 Rev:

Proj. No.:
Job No.:
Lot:
Block:
Sect:

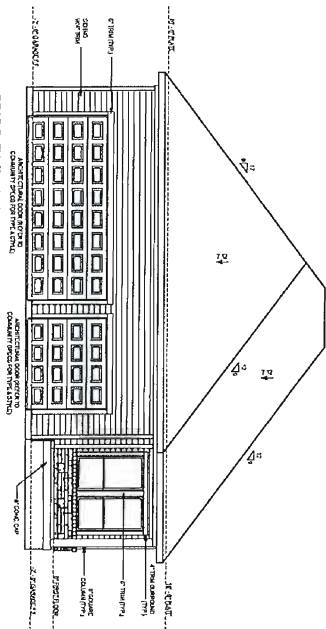
NORTH
5863-A
ELV-1
LOCKTON
INDIANAPOLIS



NORTH 5863-A ELV-2 LOCATION INDIANAPOLIS		Proj. No.: Lot: Job No.: Block: Sect.:		David Weekley Homes GS/DG/EM Date: 02/24/15 Scale: 1/8" = 1'-0" Rev:		© Weekley Homes L.P., 2015 The drawings, specifications, and other information herein are the property of David Weekley Homes L.P. and are not to be used, copied, or reproduced in any form without the written permission of David Weekley Homes L.P. The drawings are not to be used for any other purpose than the construction of the project shown hereon. The drawings are not to be used for any other purpose than the construction of the project shown hereon.	
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FRONT ELEVATION "A" W/ OPT. BASEMENT



REAR ELEVATION W/ OPT. BASEMENT

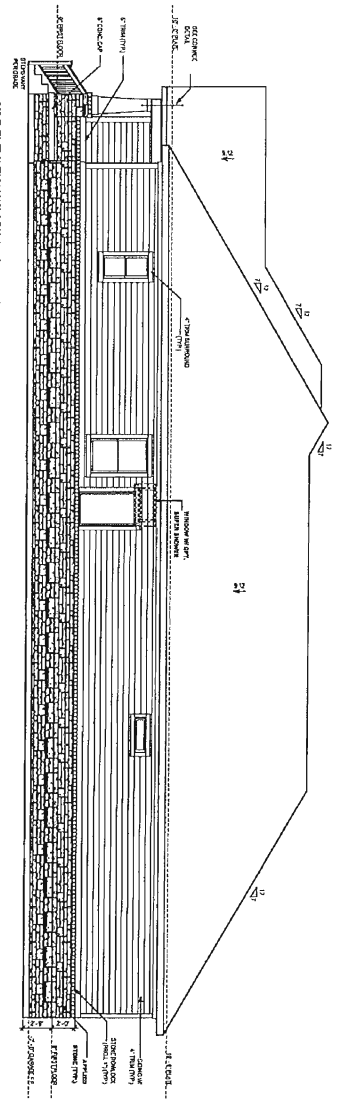
NORTH
5863-A
ELEV-3
LOOKING

Proj. No.:	Lot:
Job No.:	Block:
	Section:

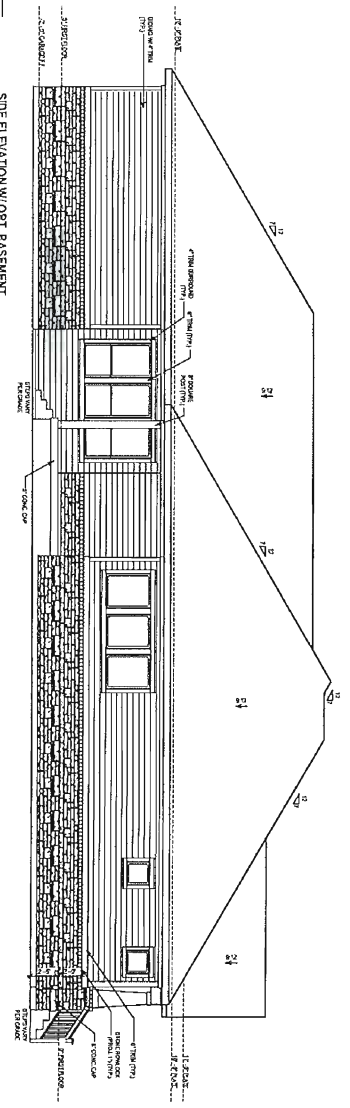
David Weekley Homes
GS/DG/EM
Date: 02/24/15

Scale: 1/8" = 1'-0"
Rev:

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SIDE ELEVATION W/ OPT. BASEMENT



SIDE ELEVATION W/ OPT. BASEMENT

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David Weekly Homes
GS/DG/EM
Date: 02/24/15
Scale: 1/8"=1'-0"
Rev:

Proj. No.:
Job No.:
Lot:
Block:
Sect:

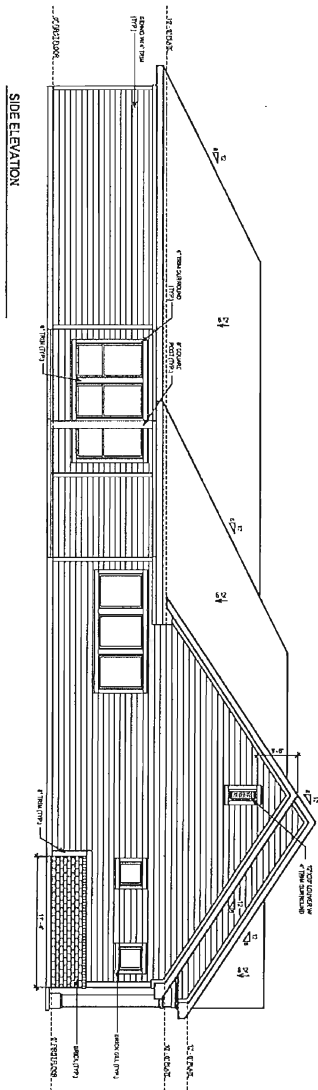
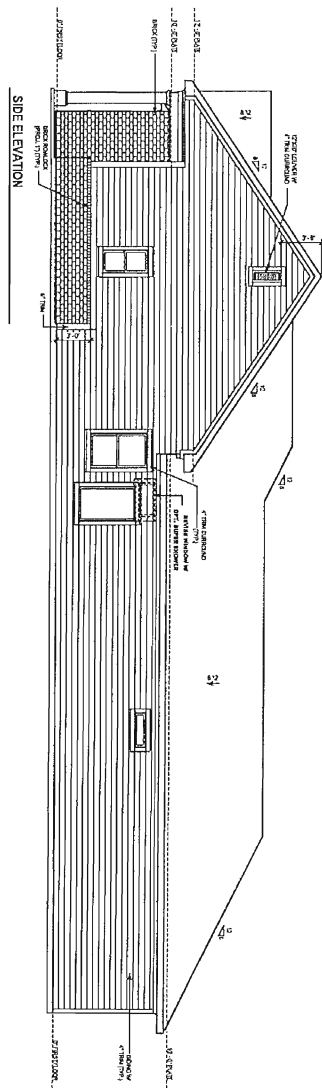
5863-A
Elev-4
NORTH
LOCKTON
INDIANAPOLIS

[illegible]

FRONT ELEVATION "B"



NORTH
5863-E
ELV-1
LOCKTON
INDIANAPOLIS

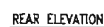
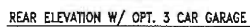
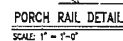
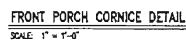


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David Weekley Homes
GS/DG/EM
Date: 02/24/15
Scale: 1/8"=1'-0"
Rev:

Proj. No.:
Job No.:
Sect:

North
5863-B
ELV-2
LOCATION
BONAPARIS



Only by Means I.P. 354
The measurements, dimensions, and other specifications shown on this document, are guidelines for construction use only. The actual specifications of the finished structure may vary. This document may not be relied on as a representation of what the completed structure will look like.

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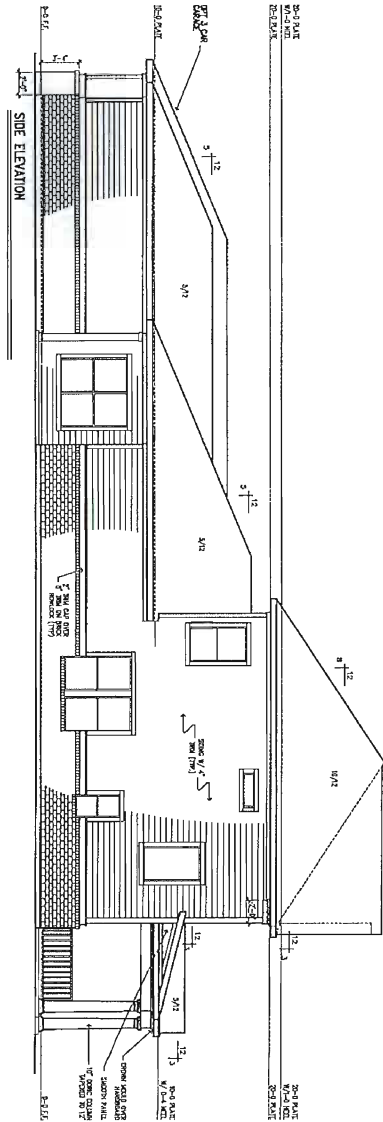
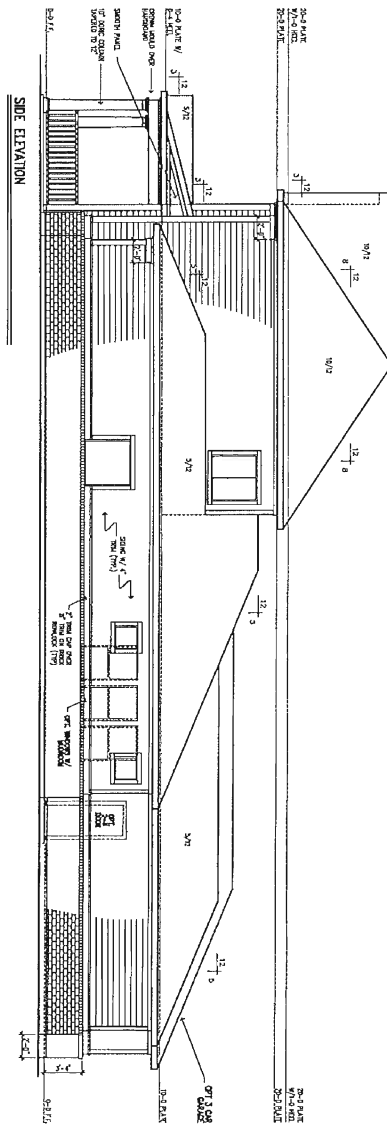
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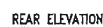
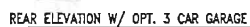
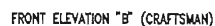
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structure may vary. This document may
not be relied on as a representation of
what the completed structure will look like.

David Weekley Homes
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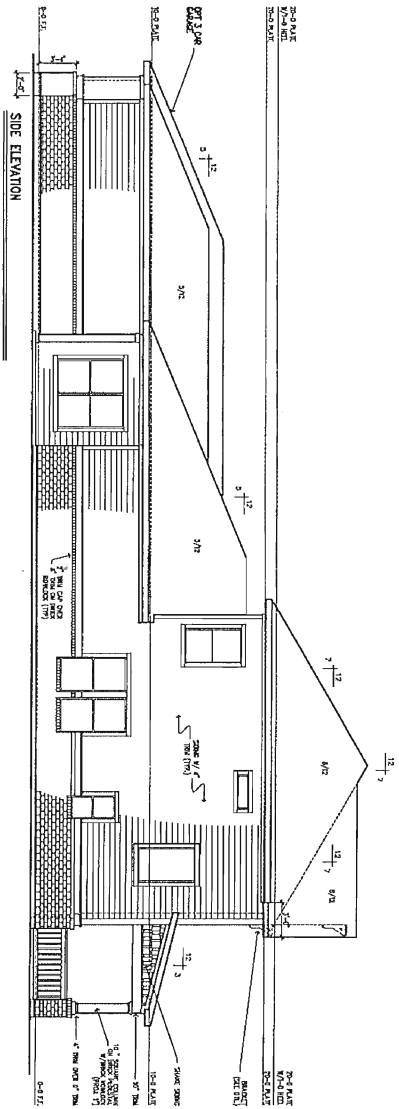
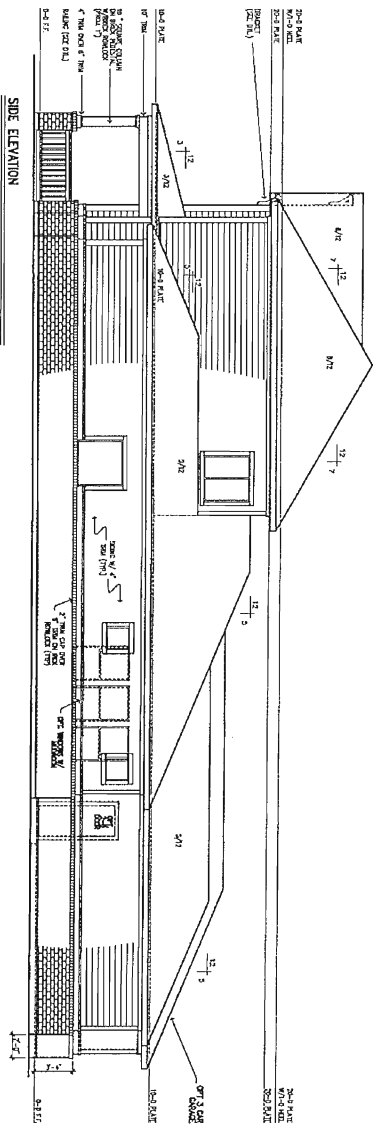
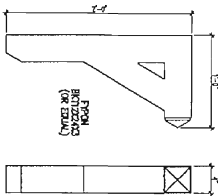
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NORTH
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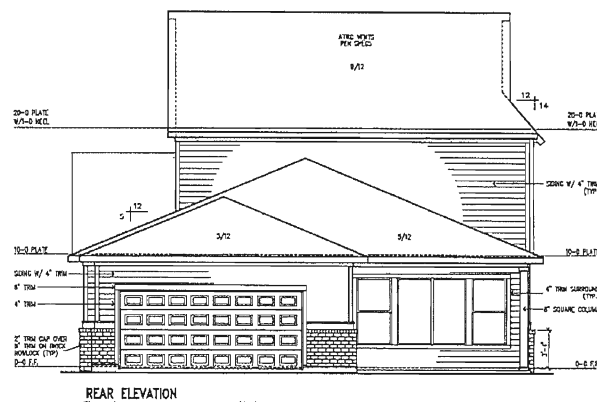
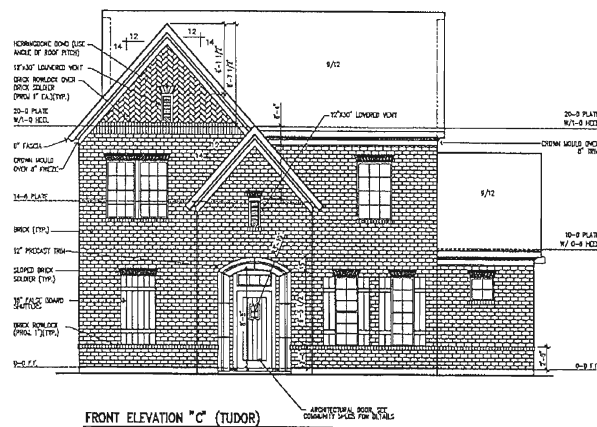
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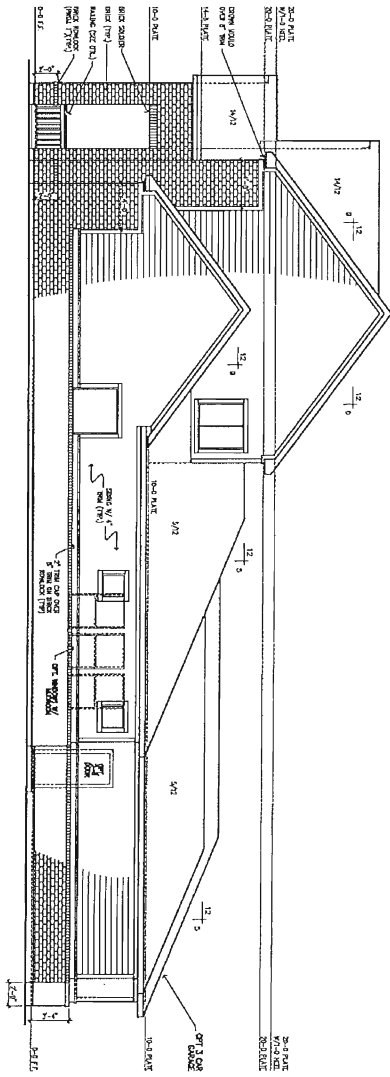
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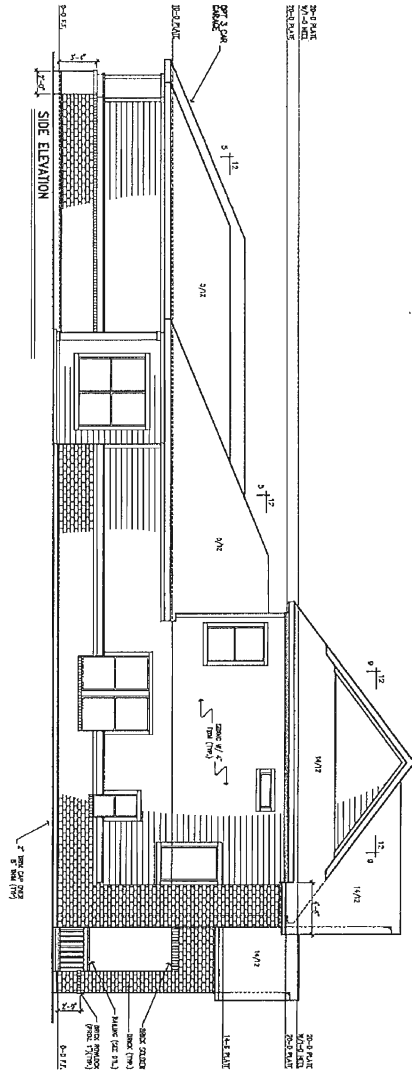
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SIDE ELEVATION



SIDE ELEVATION

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INDIANAPOLIS

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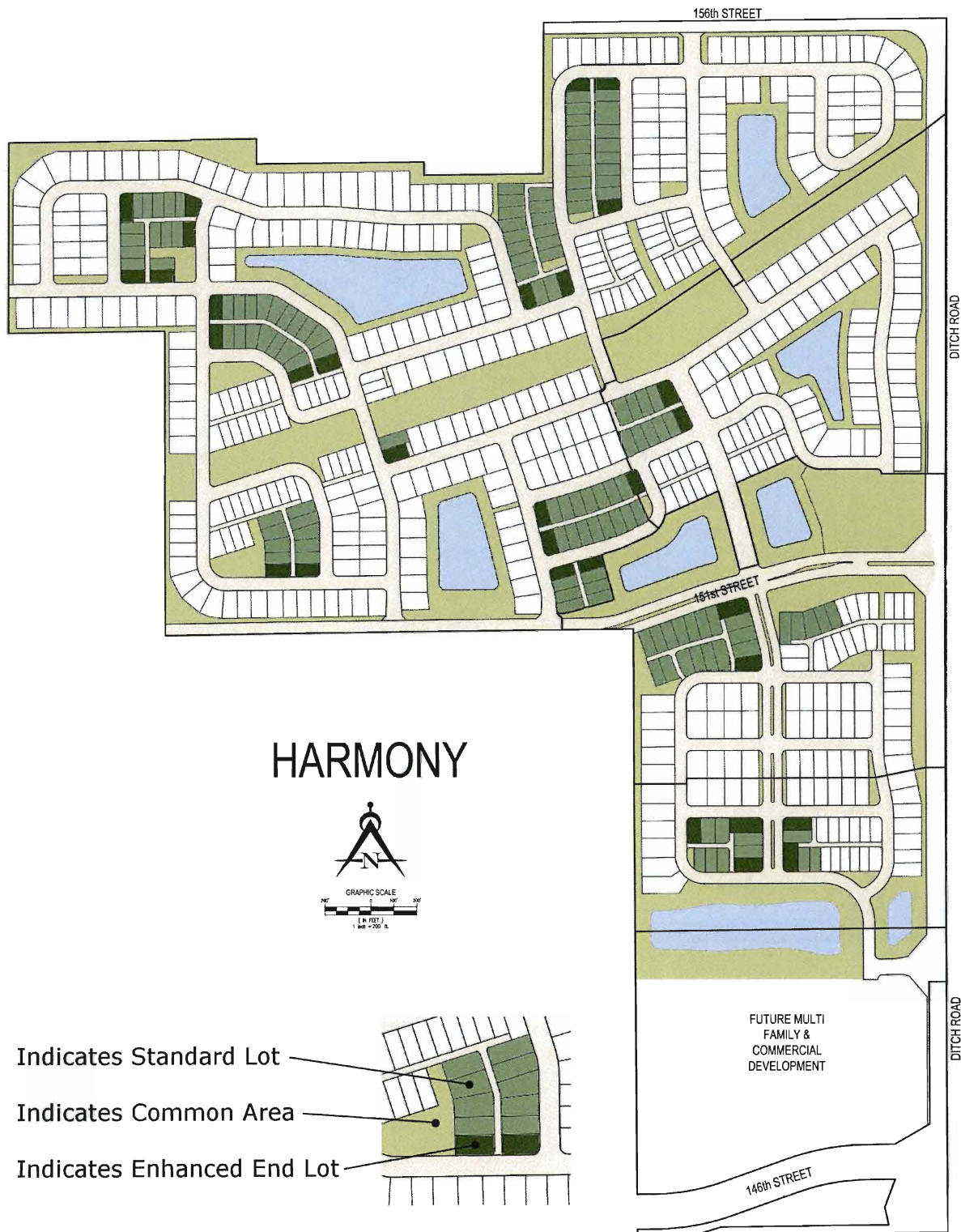
David Weekley Homes
GS/JCA/MH Scale: 1/8" = 1'-0"
Date: 11/18/2014 Rev:

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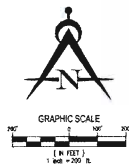
EXHIBIT D

End Lot Map

[see following pages]



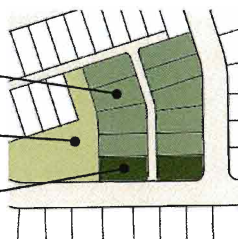
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Indicates Standard Lot

Indicates Common Area

Indicates Enhanced End Lot



FUTURE MULTI
FAMILY &
COMMERCIAL
DEVELOPMENT



WESTFIELD-WASHINGTON
ADVISORY PLAN COMMISSION

March 21, 2016
1506-ZC-02

Petition Number: 1506-ZC-02

Subject Site Address: *NWC 159th Street and Towne Road*

Petitioner: Langston Residential Development, LLC by Nelson & Frankenberger, P.C.

Request: Primary Plat and Overall Development Plan review for **Bent Creek** consisting of 162 single-family lots.

Current Zoning: SF2: Single-Family Low Density District with Zoning Commitments

Current Land Use: Vacant

Approximate Acreage: 129.74 acres+/-

Property History: 0407-REZ-05, Change of Zoning, Ordinance 04-43 (12/13/04)

Associated Cases: 1506-SPP-15, Primary Plat (pending)
1506-ODP-16, Overall Development Plan (pending)

Exhibits:

1. Staff Report
2. Location Map
3. Commitment Modification
4. Ordinance 04-43

Staff Reviewer: Kevin M. Todd, AICP

PROCEDURAL

In accordance with Article 10.6 Commitments of the Unified Development Ordinance (the “UDO”), a commitment made pursuant to the UDO, may be modified or terminated only by a decision of the Plan Commission or Board to which the commitment was made.

The decision must be made: (i) at a public hearing by the Plan Commission or Board, as the case may be, after notice of the hearing has been provided under the applicable Rules of Procedure; and (ii) following an introductory presentation of the proposed modification to the Council, prior to the public hearing, if the proposed modification is to a commitment originally made in connection with a change of zoning petition.

Any modification or termination of the commitments shall not be effective until: (i) reduced to writing in a form approved by the City; (ii) approved by the Plan Commission or Board, as the case may be; (iii) executed and notarized by the current Property Owner of the real estate; and, (iv) recorded in the Office of the Recorder of Hamilton County, Indiana.

An introductory presentation of the proposed modification of commitments was made at the May 11, 2015, Council meeting. This petition received a public hearing at the Plan Commission’s June 1, 2015, meeting. Because the petition did not have any action within six (6) months of its initial hearing, the



Department has required this petition to receive an additional public hearing at the February 16, 2016 APC meeting, in accordance with the APC Rules of Procedure.

PROJECT OVERVIEW

The 129.74-acre +/- site is located on the north side of 159th Street and the west side of Towne Road (see **Exhibit 2**), and is currently undeveloped. The property is zoned the SF2: Single-Family Low Density ("SF2") District, pursuant to Ordinance No. 04-43, adopted by the Council on December 13, 2004, with commitments (see **Exhibit 4**).

The petitioner desires to develop the site and has concurrently filed a request for approval of a Primary Plat (see 1506-SPP-15) and Overall Development Plan (see 1506-ODP-16), which are scheduled for a public hearing at the Plan Commission's February 16, 2016, meeting. The petitioner is requesting to modify the commitments (see **Exhibit 3**) in order to accommodate the proposed 162 lot single-family residential subdivision.

This modification of commitments is primarily intended to address the following:

1. Refine commitments to address the petitioner's particular home plans and desired neighborhood character; and
2. Remove commitments that are no longer necessary as a result of the Unified Development Ordinance.

The Modified Commitments are included at **Exhibit 3**. As proposed, the Modified Commitments would replace and supersede the commitments that were made in conjunction with the 2004 rezoning of the subject property under Ordinance 04-43 (see **Exhibit 4**). The Modified Commitments differ from the original commitments as follows:

1. The commitment for specific buffer yard requirements along the southern perimeter of the project along (referred to in the original commitments under Section 3, Item 6 as "Buffer Area Two") is proposed to be removed. The City's UDO requires more restrictive street frontage planting and mounding treatment in this situation, so the previous Buffer Area Two standards would be redundant and unnecessary.
2. The petitioner is requesting to modify the masonry requirement for homes within this development. The current commitment calls for masonry on the first-floor of all sides of the building. The Modified Commitments would change that to require an 18-inch masonry wrap (minimum) on all sides of the building and masonry on all exposed basement walls. The Modified Commitments also include a character exhibit which demonstrates the style of homes that could be built within this development.



WESTFIELD-WASHINGTON
ADVISORY PLAN COMMISSION

March 21, 2016
1506-ZC-02

DEPARTMENT COMMENTS

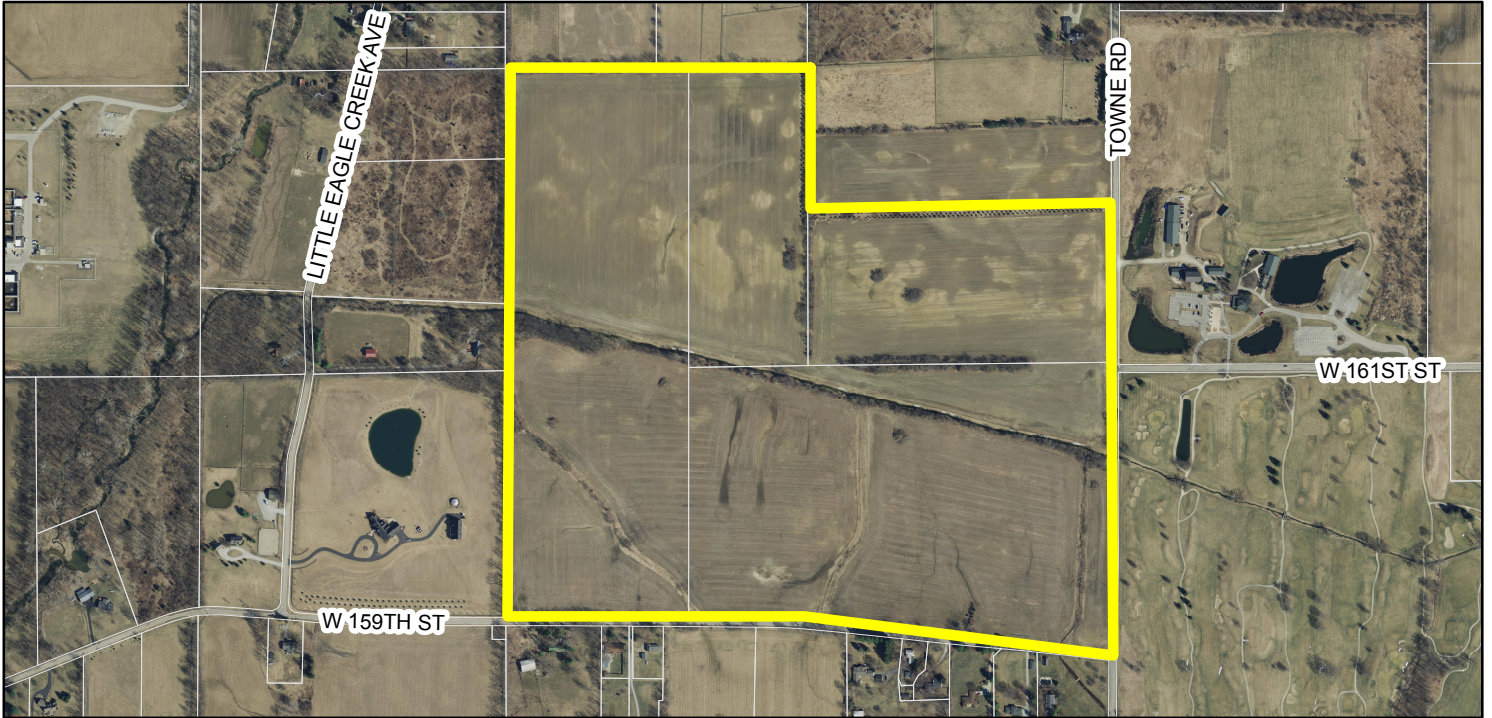
Staff recommends approving the requested commitment modification with the following condition:

- That the commitment modification instrument shall be recorded prior to the approval of the secondary plat for the property and that the recorded commitment modification shall be cross-referenced on the recorded secondary plat.

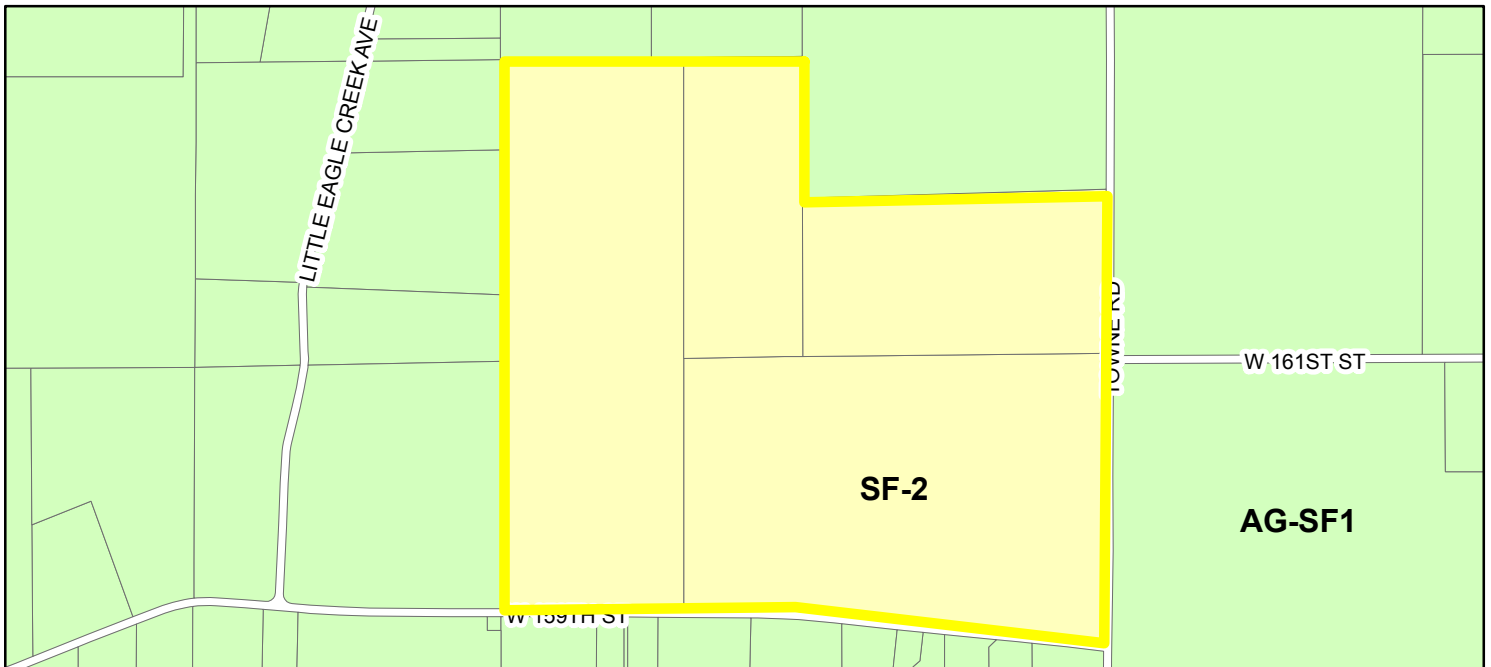
If any Plan Commission member has questions prior to the public hearing, then please contact Kevin Todd at 317.379.56467 or ktodd@westfield.in.gov.

Aerial Location Map

Site



Zoning Map



Zoning  AG-SF1 (Agriculture - Single Family - 1)  SF-2 (Single Family - 2)

EXHIBIT B

MODIFICATION OF COMMITMENTS
CONCERNING USE AND DEVELOPMENT OF REAL ESTATE

Document Cross Reference No. _____,
_____ and _____.

WHEREAS, the City of Westfield, Indiana (“City”) and Township of Washington, both of Hamilton County, Indiana are subject to the Westfield-Washington Township Unified Development Ordinance (“Unified Development Ordinance”);

WHEREAS, on December 13, 2004, the Westfield Council (“Council”) enacted Ordinance 04-43, recorded as Instrument No. 200500009748 in the Office of the Recorder of Hamilton County, Indiana, which rezoned the subject real estate more particularly described in **Exhibit A** (“Real Estate”) from AG-SF1: Agriculture / Single Family Rural District to SF-2: Single-Family Low Density District;

WHEREAS, commitments concerning the use and development of the Real Estate, recorded as Instrument No. 200500009748 in the Office of the Recorder of Hamilton County, Indiana, were made to the Council effective upon the Council’s enactment of Ordinance 04-43 (“Previous Commitments”);

WHEREAS, Langston Residential Development, LLC (“Langston”) has filed a petition (Petition No. _____), with the Westfield-Washington Advisory Plan Commission (“Plan Commission”) requesting modification of the Previous Commitments with regard to the Real Estate, incorporated herein (the “Modified Commitments”);

WHEREAS, the Real Estate subject to the Modified Commitments is the real estate that was subject to Ordinance 04-43 and the Previous Commitments;

WHEREAS, in accordance with the Unified Development Ordinance (Article 10.6), an introductory presentation of the Modified Commitments was made to the Council on May 11, 2015;

WHEREAS, the Plan Commission held a public hearing regarding the Modified Commitments on June 1, 2015 (“Public Hearing”) and approved the Modified Commitments in accordance with Resolution No. 150-ZC-0;

NOW THEREFORE, Towne Road Development, Inc., (“Owner”) makes the following Modified Commitments to the Westfield-Washington Township Advisory Plan Commission regarding the use and development of the Real Estate:

Section 1. Modification of Previous Commitments. These Modified Commitments replace and supersede the Previous Commitments in their entirety as applicable to the Real Estate.

Section 2. Definitions.

1. ARB. The Architectural Review Road established by the Developer in the Declaration of Covenants.
2. Buffer Area One. That area of the Real Estate along part of the northern boundary of the Real Estate as indicated on the Drawing.
3. Corner Home. A home that is constructed on a Corner Lot.
4. Corner Lot. A Lot having frontage on two (2) public streets.
5. Declaration of Covenants. A Declaration of Covenants, Conditions and Restrictions for the Real Estate which shall be prepared by the Developer and recorded in the Office of the Recorder of Hamilton County, Indiana, Indiana, which may, from time to time, be amended.
6. Department. The Economic and Community Development Department of the City of Westfield.
7. Developer. Towne Road Development, Inc., its successor and assigns.
8. Drawing. The map which is attached hereto and incorporated herein by reference as **Exhibit B** and which outlines the perimeter of the Real Estate in yellow and identifies Buffer Area 1 in red.
9. Front Facing Garage Doors. A garage door that is parallel to the front elevation of the home.
10. Historical Architectural Style. Historical Architectural Styles are established by and shall mean and refer to such homes as (i) colonial homes, (ii) cape cod homes, (iii) craftsman homes, (iv) traditional farmhouse homes, (v) French country homes, or (vi) homes with various exterior architectural elements, taken from the foregoing, to create more recent versions of the foregoing.

The Departments shall have the authority to determine whether a specific house plan qualifies as a Historical Architectural Style entitled to the modification, in the manner specified in these guidelines, of the standards set forth in these guidelines. The Department shall have the authority to approve a house plan as Historical Architectural Style. The denial by the Department of a house plan as a Historical Architectural Style may be appealed by the Developer to the Plan Commission.

11. Homeowner's Association. A nonprofit corporation established by for the promotion of the health, safety and welfare of the residents of the Real Estate once developed, and to manage, maintain, and repair the common areas within the Real Estate and any improvements located thereon.
12. Lot. A parcel of land designated as such upon the Plat (as hereinafter defined) upon which there is constructed one (1) single detached home.
13. Masonry. (i) Brick, limestone, natural stone, cultured stone, or other similar material or a combination of the same, bonded together with mortar to form a wall, buttress or similar mass and (ii) EIFS and stucco.
14. Overhang. The portion of the roof structure that extends beyond the exterior framing walls of a home.
15. Permitted Exterior Building Materials. Masonry, wood, concrete fiber board (Hardi-Plank or similar materials) or resin based products (fypon).
16. Plat. The subdivision plat or plats for the Real Estate recorded with the Hamilton County Recorder.
17. Ridgeline. The intersection of two (2) horizontal roof planes, or the angle formed by them, which form a peak or a pitched roof.

Section 3. Commitments Applicable to the Real Estate. The following commitments are applicable to the Real Estate:

1. Density:
 - a. No more than 168 single family residences shall be constructed upon the Real Estate.
2. Masonry Requirements:
 - a. All homes shall have Masonry (i) a minimum of 18" in height from foundation wrapped around the entire foundation and (i) on all exposed basement walls.
3. Character Exhibits. The Character Exhibits, attached hereto as **Exhibit C**, are hereby incorporated as a compilation of images designed to capture the intended quality of structures to be constructed in the District. Although the exhibits do not necessarily represent the final design or specify a required architectural style or element, they do hereby establish a benchmark for the quality and appearance of structures that are required to be constructed and that contribute to the District's intent and vision. It is not the intent to limit the architectural styles shown in the Character Exhibit, but to encourage diversity in architectural styles of Dwellings within the District. The

Department shall determine whether a structure is consistent with the established benchmark and complies with the standards of this Ordinance. The Department's determination may be appealed to the Plan Commission.

4. Minimum Square Footage:

- a. One-story homes shall have a minimum living area of 2,300 square feet, exclusive of garages, basements, porches, carports and any unfinished area. This commitment shall be incorporated into the Declaration of Covenants.
- b. Two-story homes shall have a minimum living area of 2,800 square feet, exclusive of garages, basements, porches, carports and any unfinished area. This commitment shall be incorporated into the Declaration of Covenants.
- c. At least seventy percent (70%) of the homes shall have a minimum living area in excess of 2,800 square feet, exclusive of garages, basements, porches, carports and any unfinished area. This commitment shall be incorporated into the Declaration of Covenants.

5. Permitted Exterior Building Materials.

- a. Permitted Exterior Building Materials shall be used in all exterior areas other than windows, doors, garage doors and roofs. Vinyl siding and aluminum siding are prohibited building materials.

6. Buffer Area One.

- a. The Developer shall install the Buffer Area One consisting of fifty (50) feet in width, which shall be common area and shall not be part of any Lot or Lots.
- b. Within such Buffer Area One, the Developer shall plant two (2) rows of spruce evergreen trees, each row being twenty (20) feet on center with such spruce evergreen trees being at least five (5) feet in height at time of planting. Such trees shall be installed contemporaneously with the commencement of the development of the Real Estate and shall be completed prior to the initial paving of any roads.
- c. The Declaration of Covenants shall provide (i) for the establishment of such Buffer Area One, (ii) that such Buffer Area One shall be maintained by the Homeowner's Association and (iii) that any trees located in Buffer Area One that die or are damaged shall be replaced by the Homeowner's Association.

7. Declaration of Covenants and Homeowner's Association.

- a. In connection with the development of the Real Estate, a Declaration of Covenants shall be recorded and a Homeowner's Association shall be established.

8. Roof Pitch.

- a. The roof pitch on the main roofline shall be 8 feet vertical to 12 feet horizontal, from front to back for homes with Historical Architectural Style and the roof pitch on front gables shall be 10 feet vertical to 12 feet horizontal. Ancillary roofs such as porches, bays or walkways may be less than the minimum requirement.

9. Roof Ridgeline.

- a. A one-story home shall have a minimum of three (3) ridgelines, provided however, that when fewer is consistent with a Historical Architectural Style, a minimum of two (2) ridgelines shall be permitted.
- b. A two-story home shall have a minimum of three (3) ridgelines, provided however, that when fewer is consistent with a Historical Architectural Style, a minimum of two (2) ridgelines shall be permitted.
- c. Ridgelines shall only be considered if they are horizontal ridges which form the peak of a pitched roof area. Covered and enclosed porches shall count as ridgelines.

10. Corner Breaks.

- a. Each home shall have a minimum of three (3) corner breaks on the front and rear elevations. The exterior corners of a covered porch, the outermost corners of the home, and a projection with a height of less than six (6) feet shall count toward this requirement.

11. Front Landscaping.

- a. Front yard landscaping shall include sixteen (16) shrubs, eighteen (18) inches in height at the time of planting.
- b. Front yard landscaping shall include at least one (1) yard tree (2" minimum caliper outside plating bed).

12. Miscellaneous.

- a. All new homes, landscaping and exterior color plans must be approved by the ARB prior to beginning construction.

- b. All driveways shall be concrete unless otherwise approved by the ARB.
- c. Uniform mailboxes, as determined by the ARB, shall be required.
- d. Dusk to dawn lights shall be required in a uniform location, as determined by the ARD.

Section 4. Modification of Commitments. These Modified Commitments shall continue in effect until modified or terminated. These Modified Commitments may be modified or terminated only in accordance with the Unified Development Ordinance, following a decision made at a public hearing after notice has been given in accordance with the Unified Development Ordinance and the Plan Commission's Rules of Procedure.

Section 5. Effective Date. These Modified Commitments shall be effective upon approval of Resolution No. 150-ZC-0 by the Plan Commission and after these Modified Commitments have been executed and notarized by the current property owner of the Real Estate and recorded in the Office of the Recorder of Hamilton County, Indiana.

Section 6. Recording. The undersigned hereby authorizes the Department to record these Modified Commitments in the Office of the Recorder of Hamilton County, Indiana, upon approval of Resolution No. 150-ZC-0.

Section 7. Enforcement. These Modified Commitments may be enforced by the Department, the Plan Commission, property owners of real estate adjoining the Real Estate, and all property owners of real estate within the Real Estate.

Section 8. Binding on Successors. These Modified Commitments are binding upon (i) each owner of the Real Estate and (ii) upon each owner's successors, assigns and grantees with respect to the portion of the Real Estate owned by such successor, assign and grantee and during such successor's, assign's and grantee's ownership, unless modified or terminated by the Plan Commission pursuant to the requirements herein. Notwithstanding the provisions of this Section 8, these Modified Commitments shall terminate as to any part or parts of the Real Estate for which the zoning district or classification is later changed after the Effective Date.

[REMAINDER PAGE INTENTIONALLY LEFT BLANK; SIGNATURE PAGE FOLLOWS.]

IN WITNESS WHEREOF, Towne Road Development, Inc., has caused these Modified Commitments to be executed as of the date identified on the Notary below.

Towne Road Development, Inc.

By: _____
James A. Caito, President

Date: _____, 2015

STATE OF INDIANA)
) SS:
COUNTY OF _____)

Before me, a Notary Public in and for said County and State, personally appeared James A. Caito, President of Towne Road Development, Inc., who acknowledged the execution and the foregoing Modified Commitments Concerning Use and Development of Real Estate this _____ day of _____, 2015 for and on behalf of said entity.

My Commission Expires: _____
_____ Notary Public

Residing in _____
County of _____ Printed Name

This instrument prepared by James E. Shinaver, Nelson & Frankenberger, Indianapolis, Indiana.

Return to: James E. Shinaver, Nelson & Frankenberger, 3105 East 98th Street, Suite 170 Indianapolis, IN 46280 Indianapolis, Indiana.

I affirm under the penalties of perjury that I have taken reasonable care to redact each social security number in this document, unless required by law. James E. Shinaver.

Exhibit A

(LEGAL DESCRIPTION)

A part of the Northeast Quarter and the Southeast Quarter Section 8, Township 18 North, Range 3 East, Washington Township, Hamilton County, Indiana, more particularly described as follows:

Beginning at the Northeast corner of said Southeast Quarter Section; thence South 00 degrees 17 minutes 04 seconds West along the East line of said Quarter Section a distance of 1,253.47 feet to the centerline of 159th Street; thence along the centerline of 159th Street by the next two (2) courses; 1) North 84 degrees 08 minutes 56 seconds West 1,409.41 feet; 2) North 89 degrees 46 minutes 19 seconds West 1,237.76 feet to the West line of said Southeast Quarter Section; thence North 00 degrees 07 minutes 02 seconds East along said West line 1,089.99 feet to the Southwest corner of said Northeast Quarter Section; thence North 00 degrees 02 minutes 15 seconds East along the West line of said Quarter Section a distance of 1,308.29 feet to the Northwest corner of the Southwest Quarter of said Quarter Section; thence North 89 degrees 30 minutes 21 seconds East along the North line of said Quarter-Quarter Section a distance of 1,323.83 feet to the Northeast corner of said Quarter-Quarter Section; thence along the westerly and southerly boundary lines of the real estate described in Instrument Number 98-39293 in the Office of the Recorder of Hamilton County, Indiana by the next three (3) courses; 1) South 00 degrees 38 minutes 10 seconds West 292.77 feet; 2) South 00 degrees 03 minutes 47 seconds West 349.85 feet; 3) North 88 degrees 08 minutes 00 seconds East 1,325.98 feet to the East line of said Northeast Quarter Section; thence South 00 degrees 12 minutes 04 seconds West along said East line 705.44 feet to the place of beginning, **containing 129.742 acres, more or less.**

EXHIBIT B

(Drawing)



EXHIBIT C
(Character Exhibits)



33.00
13 2.00
none

200500009748
Filed for Record in
HAMILTON COUNTY, INDIANA
JENNIFER J HAYDEN
02-18-2005 At 11:39 am.
ORDINANCE 33.00

ORDINANCE NO. 04-43

AN ORDINANCE OF THE TOWN OF WESTFIELD CONCERNING AMENDMENT TO TITLE 16 - LAND USE CONTROLS

WHEREAS, The Town of Westfield, Indiana and the Township of Washington, both of Hamilton County, Indiana are subject to the Westfield Washington Township Zoning Ordinance; and

WHEREAS, the Westfield-Washington Township Plan Commission ("Commission") considered a petition (docket 0407-REZ-05) filed with the Commission to rezone certain lands; and

WHEREAS, the Westfield Washington Township Plan Commission did take action to forward the request to the Westfield town Council with a positive recommendation under the provision of IC 36-7-4-605; and

WHEREAS, the Secretary of the Commission certified the action of the commission to the Town Council on November 23, 2004; and

WHEREAS, the Westfield Town Council is subject to the provision of IC 36-7-4-608(g) concerning any action on this request.

**NOW THEREFORE BE IT ORDAINED BY THE WESTFIELD TOWN COUNCIL
THAT TITLE 16 OF THE WESTFIELD CODE OF ORDINANCE BE AMENDED AS
FOLLOWS:**

SECTION 1. WC-16-04.

The Zoning Ordinance and the Zone Map of the Zoning Ordinance are hereby amended as described in the attached "Change in Zoning Classification 129 acres, North of 159th Street and West of Towne Road" document. The real estate property is reclassified from AG-SF1 to SF-2.

12/8/2004

Ordinance 04-43
159th and Town Road

SECTION 2. This ordinance shall be in full force and effect from and after its passage.

ALL OF WHICH IS HEREBY ADOPTED BY THE TOWN COUNCIL OF

WESTFIELD, HAMITON COUNTY, INDIANA THIS 13 **DAY OF**
Dec **2004**

WESTFIELD TOWN COUNCIL

Voting For

Teresa Otis Skelton
Teresa Otis Skelton

Jack Hart
Jack Hart

David Mikesell

Bob Smith
Bob Smith

Ronald W Thomas
Ron Thomas

Voting Against

Teresa Otis Skelton

Jack Hart

David Mikesell

Bob Smith

Ron Thomas

Abstain

Teresa Otis Skelton

Jack Hart

David Mikesell

Bob Smith

Ron Thomas

ATTEST:

Cindy Gossard
Clerk-Treasurer, Cindy Gossard

This ordinance prepared by
Jerry Rosenberger, Town Manager

12/8/2004

Ordinance 04-43
159th and Town Road

**WESTFIELD WASHINGTON TOWNSHIP ADVISORY PLAN COMMISSION
CERTIFICATION**

The Westfield Washington Township Advisory Plan Commission met in regular session on Monday, November 22, 2004, to consider an amendment of the Comprehensive Zoning Ordinance of Westfield-Washington Township 1977, as amended. Notice of public hearing on November 22, 2004, was presented to the Plan Commission. Notice was shown to have been published in a newspaper of general circulation in Hamilton County, Indiana. The proposed amendment is as follows:

A change in zoning classification, from AG SF 1 to SF 2,
at the northwest corner of 159th Street and Towne Road, generally
(WWTAPC petition 0407-REZ-05).

A motion was approved to forward this request to the Westfield Town Council with a recommendation to approve (7-0-1(Peyton)).

I, Kevin G. Buchheit, AICP, being the Secretary of the Westfield Washington Township Plan Commission, do hereby certify that the above is a true and accurate record of the minutes of the meeting of the Westfield Washington Township Plan Commission held on November 22, 2004.



Kevin G. Buchheit, AICP, Secretary

November 23, 2004

Date

COMMITMENTS CONCERNING THE USE AND DEVELOPMENT OF REAL ESTATE

Towne Road Development, Inc., the contract purchaser of the real estate located in Hamilton County, Indiana, and described in what is attached hereto and incorporated herein by referenced as Exhibit "A" (the "Real Estate"), makes the following Commitments (the "Commitments") applicable to the Real Estate.

Section 1. Exhibits. The following exhibits are attached hereto and incorporated herein by reference:

Exhibit "A". Attached hereto and incorporated herein by reference as Exhibit "A" is the legal description of the real estate (the "Real Estate");

Exhibit "B". Attached hereto and incorporated herein by reference as Exhibit "B" (the "Drawing") is the map outlining the perimeter of the Real Estate.

Section 2. Definitions. Different words and terms are defined throughout these Commitments and, further, the following definitions shall apply throughout these Commitments:

1. ARB: The Architectural Review Board established by the Developer in the Declaration of Covenants.
2. Buffer Area One: That area of the Real Estate along part of the northern boundary of the Real Estate as indicated on the Drawing.
3. Buffer Area Two: The area along the southern boundary of the Real Estate and part of the eastern boundary of the Real Estate, as indicated on the Drawing.
4. Corner Home. A home that is constructed on a Corner Lot.
5. Corner Lot. A Lot having frontage on two (2) public streets.
6. Declaration of Covenants. A Declaration of Covenants, Conditions and Restrictions for the Real Estate which shall be prepared by the Developer and recorded in the office of the Recorder of Hamilton County, Indiana, and which may, from time to time, be amended.
7. Department. The Community Development Department of the Town of Westfield, Indiana.

8. Developer. Towne Road Development, Inc., its successors and assigns.
9. Front Facing Garage Doors. A garage door that is parallel to the front elevation of the home.
10. Historical Architectural Style. Historical Architectural Styles are established by and shall mean and refer to such homes as (i) colonial homes, (ii) cape cod homes, (iii) craftsman homes, (iv) traditional farmhouse homes, (v) french country homes, or (vi) homes with various exterior architectural elements, taken from the foregoing, to create more recent versions of the foregoing.

The Department shall have the authority to determine whether a specific house plan qualifies as a Historical Architectural Style entitled to the modification, in the manner specified in these guidelines, of the standards set forth in these guidelines. The Department shall have the authority to approve a house plan as a Historical Architectural Style. The denial by the Department of a house plan as a Historical Architectural Style may be appealed by the Developer to the Council.

11. Homeowners Association. A nonprofit corporation established for the promotion of the health, safety and welfare of the residents of the Real Estate once developed, and to manage, maintain, and repair the common areas within the Real Estate and any improvements located thereon.
12. Lot. A parcel of land designated as such upon the Plat (as hereinafter defined) upon which there is constructed one (1) single detached home.
13. Masonry. (i) Brick, limestone, natural stone, cultured stone, or other similar building material or a combination of the same, bonded together with mortar to form a wall, buttress or similar mass and (ii) EIFS and stucco.
14. Overhang. The portion of the roof structure that extends beyond the exterior framing walls of a home.
15. Permitted Exterior Building Materials. Masonry, wood, concrete fiber board (Hardi-Plank or similar materials) or resin based products (fypon).
16. Plat. The subdivision plat or plats for the Real Estate recorded with the Hamilton County Recorder.
17. Ridgeline. The intersection of two horizontal roof planes, or the angle formed by them, which form the peak of a pitched area.

Section 3. Commitments Applicable to the Real Estate. The following commitments are applicable to the Real Estate:

1. **Density:**
 - A. No more than 168 single family residences shall be constructed upon the Real Estate.
2. **Masonry Requirements:**
 - A. All homes shall have Masonry on the first floor, front, sides and rear.
 - B. The Masonry requirements may be modified by the Developer's Architectural Review Board (the "ARB") for up to 55 of the residences with a Historical Architectural Style.
3. **Minimum Square Footage:**
 - A. One-story homes shall have a minimum living area of 2,300 square feet, exclusive of garages, basements, porches, carports and any unfinished area. This commitment shall be incorporated into the Declaration of Covenants.
 - B. Two-story homes shall have a minimum living area of 2,800 square feet, exclusive of garages, basements, porches, carports and any unfinished area. This commitment shall be incorporated into the Declaration of Covenants.
 - C. At least seventy percent (70%) of the residences shall have a minimum living area in excess of 2,800 square feet, exclusive of garages, basements, porches, carports, and any unfinished area. This commitment shall be incorporated into the Declaration of Covenants.
4. **Permitted Exterior Building Materials:**
 - A. Permitted Exterior Building Materials shall be used in all exterior areas other than windows, doors, garage doors, and roofs. Vinyl siding and aluminum siding are prohibited as exterior building materials.
5. **Buffer Area One:**
 - A. Developer shall install the Buffer Area One consisting of fifty (50) feet in width, which shall be common area and shall not be part of any Lot or Lots.
 - B. Within such Buffer Area One, Developer shall plant two rows of spruce evergreen trees, each row being twenty (20) feet on center with such evergreen trees being at least five (5) feet in height at time of planting. Such trees shall be installed

contemporaneously with the commencement of development of the Real Estate and shall be completed prior to the initial paving of any roads.

- C. The Declaration of Covenants shall provide (i) for the establishment of such Buffer Area One, (ii) that such Buffer Area One shall be maintained by the Homeowners Association and (iii) that any trees located in Buffer Area One that die or are damaged shall be replaced by the Homeowners Association.
6. Buffer Area Two:
- A. Developer shall install Buffer Area Two consisting of thirty (30) feet in width which, in the Developer's discretion, may be either (i) partially or wholly within a common area or (ii) wholly or partially within a landscape easement located upon an adjacent lot.
 - B. Within such Buffer Area Two, the Developer shall install a mound which shall vary in height between two (2) and three (3) feet and, further, shall install landscaping in compliance with the landscape provisions of the Westfield/Washington Township Zoning Ordinance.
 - C. The Declaration of Covenants shall provide (i) that Buffer Area Two shall be maintained by the Homeowners Association, regardless of whether Buffer Area Two is located entirely within a common area or wholly or partially upon an adjacent lot and (ii) that any trees located within Buffer Area Two that die or are damaged shall be replaced by the Homeowners Association.
7. Declaration of Covenants and Homeowners Association:
- A. In connection with the development of the Real Estate, a Declaration of Covenants shall be recorded, and a Homeowners Association shall be established.
8. Roof Pitch:
- A. The roof pitch on the main roofline shall be 8 feet vertical to 12 feet horizontal, from front to back. The roof pitch on front gables shall be 10 feet vertical to 12 feet horizontal. Ancillary roofs such as porches, bays or walkways may be less than the minimum requirement.
9. Roof Ridgeline:
- A. A one-story home shall have a minimum of three (3) ridgelines; provided, however, that when fewer is consistent with a Historical Architectural Style, a minimum of two (2) ridgelines shall be permitted.

- B. A two-story home shall have a minimum of three (3) ridgelines; provided, however, that when fewer is consistent with a Historical Architectural Style, a minimum of two (2) ridgelines shall be permitted.
 - C. Ridgelines shall only be considered if they are horizontal ridges which form the peak of a pitched area. Covered and enclosed porches shall count as a ridgeline.
10. Corner Breaks:
- A. Each home shall have a minimum of three (3) corner breaks on the front and rear elevations. The exterior corners of a covered porch, the outermost corners of the home, and a projection with a height of no less than six feet (6') shall count toward this requirement.
11. Front Landscaping:
- A. Front yard landscaping shall include sixteen (16) shrubs, eighteen (18) inches in height at the time of planting.
 - B. Front yard landscaping shall include at least 1 yard tree (2" minimum caliper outside planting bed)
12. Miscellaneous
- A. All new home, landscaping and exterior color plans must be approved by the ARB prior to beginning construction.
 - B. All driveways shall be concrete unless otherwise approved by the ARB.
 - C. Uniform mailboxes, as determined by the ARB, shall be required.
 - D. Dusk to dawn yard lights shall be required in a uniform location, as determined by the ARB.

Section 4. Binding on Successors

These Commitments are binding on the Developer, each other person acquiring an interest in the Real Estate, unless modified or terminated by the Commission. These Commitments may be modified or terminated only by a decision of the Plan Commission after a public hearing wherein notice as provided by the rules of the Plan Commission has been made. The provisions of this Section 4 notwithstanding, these Commitments shall terminate as to any part or parts of the Real Estate hereafter reclassified (rezoned) on the Town's Official Zone Map.

Section 5. Effective Date

The Commitments contained herein shall be effective upon the occurrence of all of the following events:

1. The adoption of an ordinance by the Town Council of Westfield, Indiana, assigning the requested SF2 Classification to the Real Estate; and
2. The commencement of the development of the Real Estate in accordance with the assignment of the requested SF2 classification.

Section 6. Recording

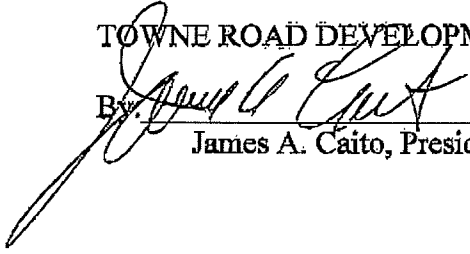
The undersigned hereby authorizes the Secretary of the Commission to record these Commitments in the Office of the Recorder of Hamilton County, Indiana.

Section 7. Enforcement

These Commitments may be enforced by the Town Council of Westfield, Indiana and any property owner within the Real Estate.

IN WITNESS WHEREOF, DEVELOPER has caused these Commitments to be executed as of the date first written above.

TOWNE ROAD DEVELOPMENT, INC.

By: 

James A. Caito, President

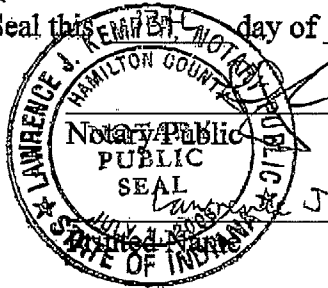
STATE OF INDIANA)
) SS:
COUNTY OF MARION)

Before me the undersigned, a Notary Public in and for said County and State, personally appeared James A. Caito, President of Towne Road Development, Inc., and having been duly sworn, acknowledged execution of the foregoing Commitments.

Witness my hand and Notarial Seal this 24th day of December, 2004.

My Commission Expires:

Residing in _____ County



Prepared By: Charles D. Frankenberger, Nelson & Frankenberger, 3105 East 98th Street, Suite 170, Indianapolis, Indiana 46280 (317) 844-0106.

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EXHIBIT "A" - Page 1 of 2

A part of the Northeast Quarter and the Southeast Quarter Section 8, Township 18 North, Range 3 East, Washington Township, Hamilton County, Indiana, more particularly described as follows:

Beginning at the Southwest corner of said Northeast Quarter Section; thence North 00 degrees 02 minutes 15 seconds East along the West line of said Quarter Section a distance of 1,308.29 feet to the Northwest corner of the Southwest Quarter of said Quarter Section; thence North 89 degrees 30 minutes 21 seconds East along the North line of said Quarter-Quarter Section a distance of 795.62 feet; thence South 00 degrees 02 minutes 15 seconds West parallel to the West line of said Quarter Section a distance of 2,408.31 feet to the centerline of 159th Street; thence North 89 degrees 46 minutes 19 seconds West along said centerline 797.10 feet to the West line of said Southeast Quarter Section; thence North 00 degrees 07 minutes 02 seconds East along said West line 1,089.99 feet to the place of beginning, containing 43.913 acres, more or less.

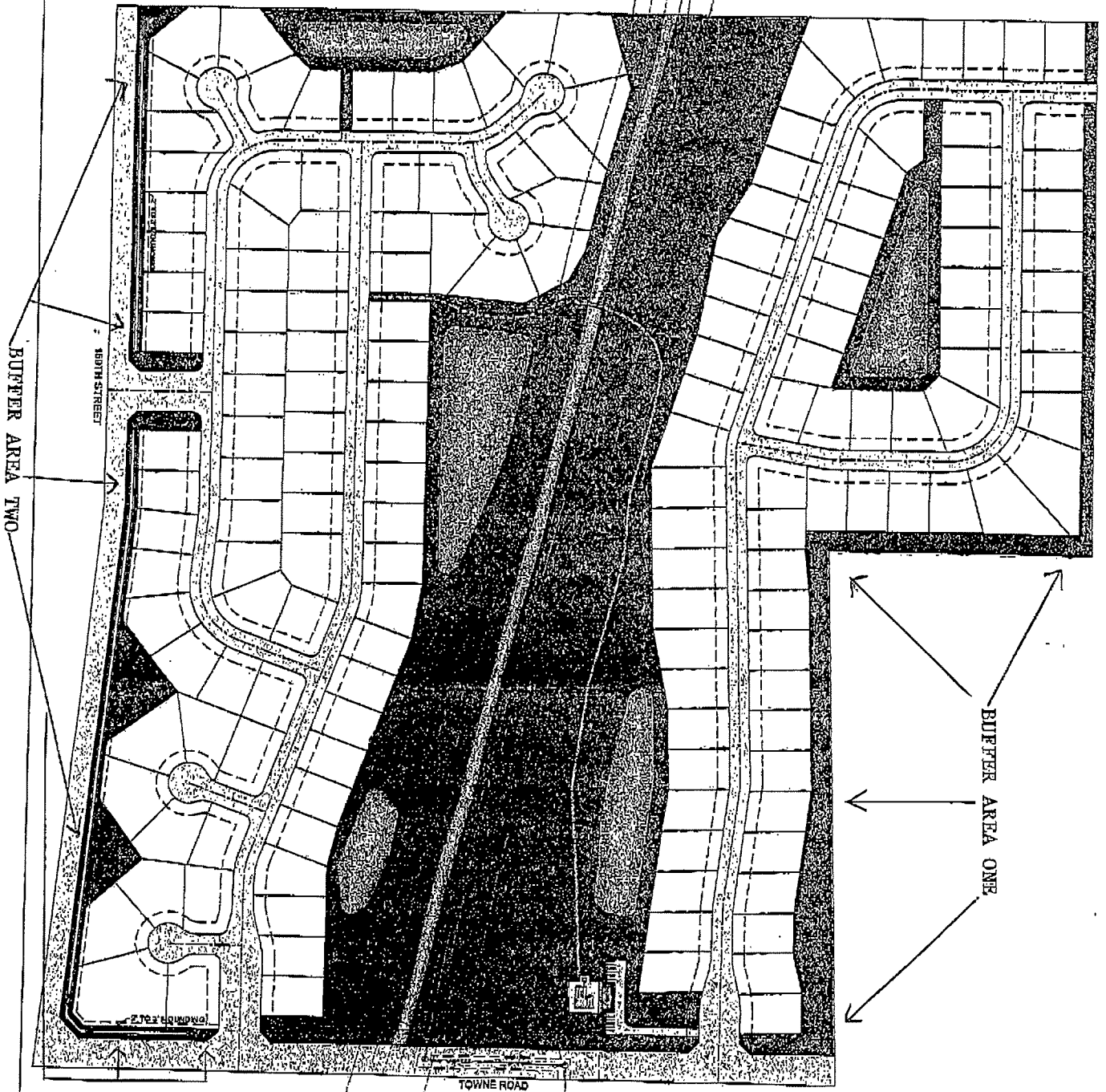
EXHIBIT "A" - Page 2 of 2

A part of the Northeast Quarter and the Southeast Quarter Section 8, Township 18 North, Range 3 East, Washington Township, Hamilton County, Indiana, more particularly described as follows:

Beginning at the Northeast corner of said Southeast Quarter Section; thence South 00 degrees 17 minutes 04 seconds West along the East line of said Quarter Section a distance of 1,253.47 feet to the centerline of 159th Street; thence along the centerline of 159th Street by the next two (2) courses; 1) North 84 degrees 08 minutes 56 seconds West 1,409.41 feet; 2) North 89 degrees 46 minutes 19 seconds West 440.65 feet to the Southeast corner of the real estate described in Instrument Number 98-10055 in the Office of the Recorder, Hamilton County, Indiana; thence North 00 degrees 02 minutes 15 seconds East along the East line of said real estate 2,408.31 feet to the North line of the Southwest Quarter of said Northeast Quarter Section; thence North 89 degrees 30 minutes 21 seconds East along said North line 528.21 feet to the Northeast corner of said Quarter-Quarter Section; thence along the westerly and southerly boundary lines of the real estate described in Instrument Number 98-39293 in said Recorder's Office by the next three (3) courses; 1) South 00 degrees 38 minutes 10 seconds West 292.77 feet; 2) South 00 degrees 03 minutes 47 seconds West 349.85 feet; 3) North 88 degrees 08 minutes 00 seconds East 1,325.98 feet to the East line of said Northeast Quarter Section; thence South 00 degrees 12 minutes 04 seconds West along said East line 705.44 feet to the place of beginning, containing 85.829 acres, more or less.

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EXHIBIT "B"



RESOLUTION 150-ZC-0

A RESOLUTION OF THE CITY OF WESTFIELD- WASHINGTON TOWNSHIP ADVISORY PLAN COMMISSION MODIFYING WRITTEN COMMITMENTS CONCERNING THE USE AND DEVELOPMENT OF REAL ESTATE

WHEREAS, the City of Westfield, Indiana (“City”) and the Township of Washington, both of Hamilton County, Indiana are subject to the Westfield-Washington Township Unified Development Ordinance (“Unified Development Ordinance”);

WHEREAS, on December 13, 2004, the Westfield Council (“Council”) enacted Ordinance 04-43, recorded as Instrument No. 200500009748 in the Office of the Recorder of Hamilton County, Indiana, which rezoned the subject real estate more particularly described in **Exhibit A** (“Real Estate”) from AG-SF1: Agriculture / Single Family Rural District to SF-2: Single-Family Low Density District;

WHEREAS, commitments concerning the use and development of the Real Estate, recorded as Instrument No. 200500009748 in the Office of the Recorder of Hamilton County, Indiana, were made to the Council effective upon the Council’s enactment of Ordinance 04-43 (“Previous Commitments”);

WHEREAS, Langston Residential Development, LLC (“Langston”) has filed a petition (Petition No. [REDACTED]), with the Westfield-Washington Advisory Plan Commission (“Plan Commission”) requesting modification of the Previous Commitments with regard to the Real Estate, attached hereto as **Exhibit B** (“Modified Commitments”);

WHEREAS, the Real Estate subject to the Modified Commitments is the real estate that was subject to Ordinance 04-43 and the Previous Commitments;

WHEREAS, in accordance with the Unified Development Ordinance (Article 10.6), an introductory presentation of the Modified Commitments was made to the Council on May 11, 2015;

WHEREAS, the Plan Commission held a public hearing regarding the Modified Commitments on February 15, 2016 (“Public Hearing”);

NOW THEREFORE BE IT RESOLVED BY THE WESTFIELD-WASHINGTON TOWNSHIP ADVISORY PLAN COMMISSION AS FOLLOWS:

SECTION I. The Modified Commitments pertaining to the Real Estate, which are attached hereto as **Exhibit B** and which modify the Previous Commitments, are hereby approved.

SECTION II. The Previous Commitments are hereby replaced and superseded in their entirety by the Modified Commitments with respect to the Real Estate.

SECTION III. In accordance with the Unified Development Ordinance (Article 10.6), the Modified Commitments are not effective until executed and notarized by the current property owner of the Real Estate and recorded in the Office of the Recorder of Hamilton County, Indiana.

PASSED THIS ____ DAY OF _____, 2016, BY THE WESTFIELD-WASHINGTON TOWNSHIP ADVISORY PLAN COMMISSION, HAMILTON COUNTY INDIANA.

Randall Graham, President
Westfield-Washington Township
Advisory Plan Commission

ATTEST:

Matthew S. Skelton, Secretary
Westfield-Washington Township
Advisory Plan Commission

Exhibit "A"

LEGAL DESCRIPTION

A part of the Northeast Quarter and the Southeast Quarter Section 8, Township 18 North, Range 3 East, Washington Township, Hamilton County, Indiana, more particularly described as follows:

Beginning at the Northeast corner of said Southeast Quarter Section; thence South 00 degrees 17 minutes 04 seconds West along the East line of said Quarter Section a distance of 1,253.47 feet to the centerline of 159th Street; thence along the centerline of 159th Street by the next two (2) courses; 1) North 84 degrees 08 minutes 56 seconds West 1,409.41 feet; 2) North 89 degrees 46 minutes 19 seconds West 1,237.76 feet to the West line of said Southeast Quarter Section; thence North 00 degrees 07 minutes 02 seconds East along said West line 1,089.99 feet to the Southwest corner of said Northeast Quarter Section; thence North 00 degrees 02 minutes 15 seconds East along the West line of said Quarter Section a distance of 1,308.29 feet to the Northwest corner of the Southwest Quarter of said Quarter Section; thence North 89 degrees 30 minutes 21 seconds East along the North line of said Quarter-Quarter Section a distance of 1,323.83 feet to the Northeast corner of said Quarter-Quarter Section; thence along the westerly and southerly boundary lines of the real estate described in Instrument Number 98-39293 in the Office of the Recorder of Hamilton County, Indiana by the next three (3) courses; 1) South 00 degrees 38 minutes 10 seconds West 292.77 feet; 2) South 00 degrees 03 minutes 47 seconds West 349.85 feet; 3) North 88 degrees 08 minutes 00 seconds East 1,325.98 feet to the East line of said Northeast Quarter Section; thence South 00 degrees 12 minutes 04 seconds West along said East line 705.44 feet to the place of beginning, **containing 129.742 acres, more or less.**



WESTFIELD-WASHINGTON
ADVISORY PLAN COMMISSION

March 21, 2016
1603-PUD-03
Exhibit 1

Docket Number: 1603-PUD-03 (Ordinance No. 16-05)

Petitioner: Paula Gartner, EMH&T on behalf of Kroger Limited Partnership

Request: An amendment to permit a Monument Sign on the Fuel Center Outlot.

Current Zoning: Spring Mill Station Northeast Quadrant PUD District (Ordinance 14-39)
Amendment to the Spring Mill Station Northeast Quadrant PUD District (Ordinance 15-24)

Current Land Use: Residential / Agricultural

Zoning History: 1405-PUD-06, Rezoning to Spring Mill Station Northeast Quadrant PUD
1409-DP-28 & 1409-SIT-13, Fuel Station Development Plan
1508-PUD-05, Amendment to the Spring Mill Station Northeast Quadrant PUD

Exhibits:

1. Staff Report
2. Location Map
3. Proposed Sign Location
4. Proposed Sign Elevations
5. Amendment Ordinance

Staff Reviewer: Pam Howard, Associate Planner

PETITION HISTORY

This petition was introduced at the February 8, 2016, City Council meeting. The petition will receive a public hearing at the March 7, 2016, Advisory Plan Commission (the "APC") meeting.

PROCEDURAL

Public Hearing:

Amendments to a Planned Unit Development District are required to be considered at a public hearing by the APC. The public hearing for this petition is scheduled for the March 7, 2015, APC meeting. Notice of the public hearing was provided in accordance with Indiana law.

Statutory Considerations:

Indiana Code 36-7-4-603 states that in the consideration of zoning ordinance amendments and zone map changes that reasonable regard shall be paid to:

1. The Comprehensive Plan.
2. Current conditions and the character of current structures and uses.
3. The most desirable use for which the land is adapted.
4. The conservation of property values throughout the jurisdiction.
5. Responsible growth and development.

PROJECT OVERVIEW

Project Location: The Petitioner is requesting an amendment to the Spring Mill Station Northeast Quadrant PUD (the “PUD Ordinance”), which is located at the northeast corner of 161st Street and Springmill Road (see **Exhibit 2**).

Amendment Request: The Petitioner is requesting an amendment to permit a Monument Sign on The Fuel Center Outlot.

1. **Sign Standards:** The PUD Ordinance currently contains signage standards for the Fuel Center, but does not address a Monument Sign. The proposed amendment permits a Monument Sign for the Fuel Center to be built in compliance with provided exhibits. Additionally, the proposed amendment requires that the existing digital price sign located on the fuel canopy be removed at the time the Monument Sign is installed.

DEPARTMENT COMMENTS

1. **Action:** Forward a recommendation to the City Council.
2. **Recommendation:** If the Plan Commission is otherwise satisfied with the proposed Amendment to the Spring Mill Station Northeast Quadrant PUD District Ordinance No. 16-05 (Docket No. 1603-PUD-03), then the Department recommends forwarding the ordinance to the City Council with a favorable recommendation.
3. If any Plan Commission member has questions prior to the meeting, then please contact Pam Howard at 317-531-3751 or poward@westfield.in.gov.



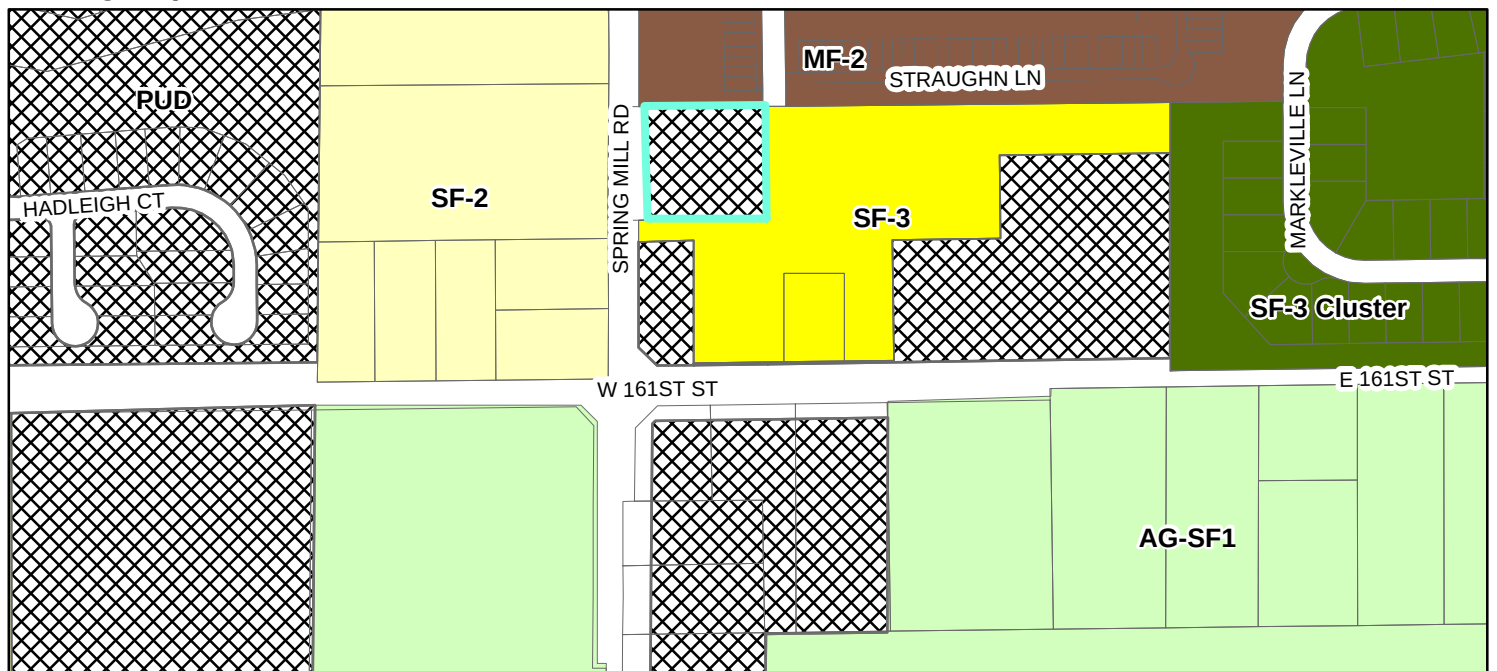
Location Map Spring Mill Station Northeast Quadrant PUD Amendment 1603-PUD-03



Aerial Location Map



Zoning Map



Zoning

- | | |
|---|--|
|  AG-SF1 (Agriculture - Single Family - 1) |  SF-2 (Single Family - 2) |
|  MF-2 (Multiple Family - 2) |  SF-3 (Single Family - 3) |
|  PUD (Planned Unit Development) |  SF-3 Cluster |



North

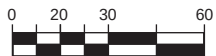


Exhibit 3: Proposed Depot and Fuel Center

Westfield, IN Kroger

March 11, 2016

EXHIBIT 4



Evans, Mechwart, Hambleton & Tilton, Inc.
Engineers • Surveyors • Planners • Scientists
7400 N. Shadeland Ave., Ste. 150, Indianapolis, IN 46250
Phone: 317.913.6930 Toll Free: 888.775.3648

emht.com

TOWN OF WESTFIELD, HAMILTON, INDIANA

EXHIBIT "4"

FOR

KROGER J970 FUEL CENTER

SITE SIGNAGE AND VISIBILITY

DATE: March 09, 2016

JOB NO. 20130506

SCALE: None

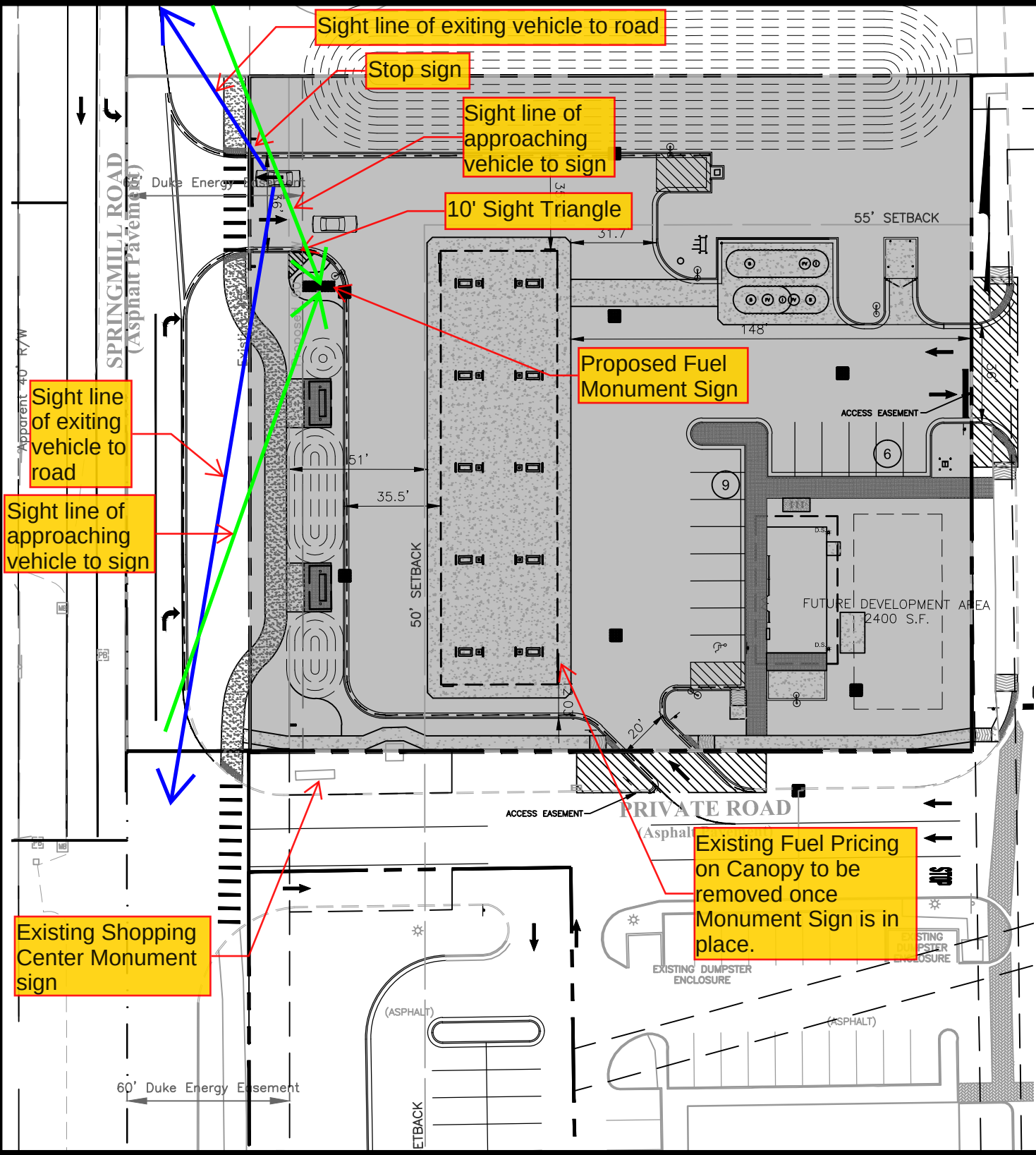


EXHIBIT 2: Fuel Monument Sign

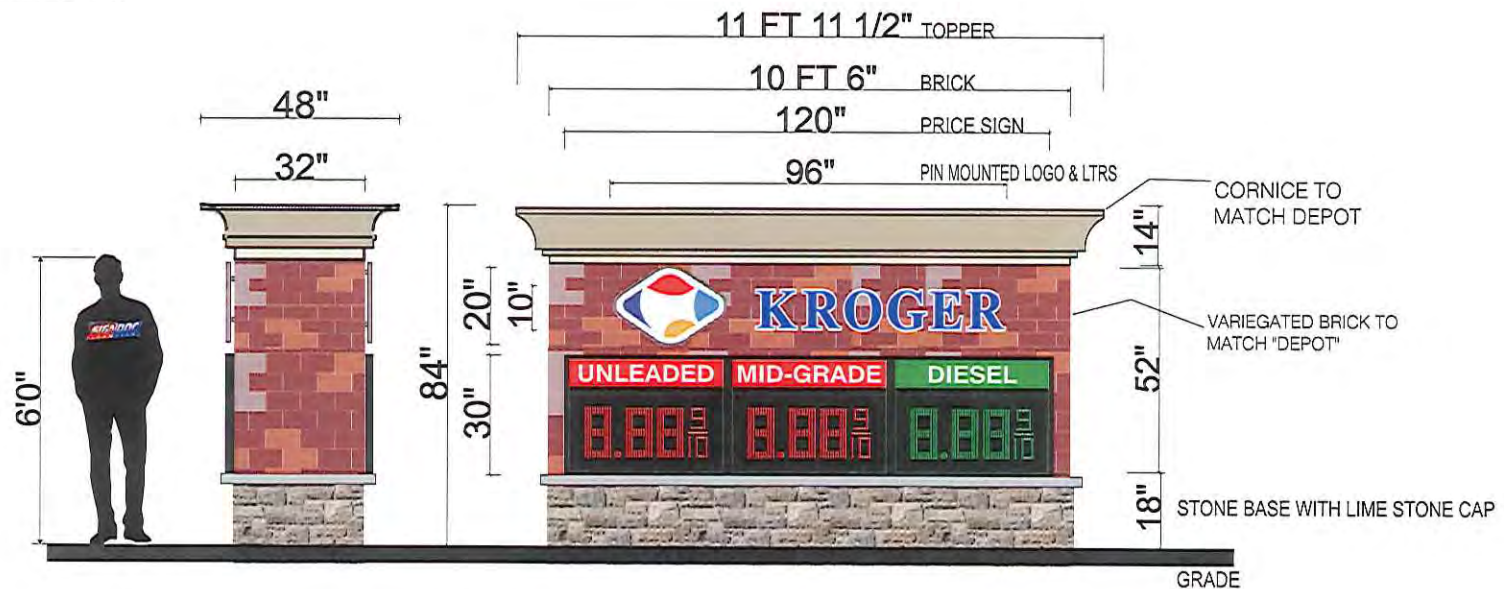
SIGN SPECIFICATIONS

MONUMENT SIGN
 STONE BASE
 BRICK FACE
 1/4" X 10" PIN MOUNTED LTRS
 READING KROGER
 LTRS BLUE W/ WHITE BOARDER
 20" FUEL LOGO PIN MOUNTED
 THREE PRODUCT FUEL SIGN
 LED ILLUMINATED
 Connect to provided 120v electrical feed

SIGN AREA

FUEL LOGO 2.8 sf
 KROGER 4 sf
 PRICER 25 sf

TOTAL EACH SIDE 31.8 sf



Approved x: _____

Date x: _____

NOTE: THERE WILL BE COLOR VARIATIONS FROM THIS PRINTED DRAWING TO THE FINAL PRODUCT, COLORS SPECIFIED WILL ALWAYS BE MATCHED AS CLOSE AS POSSIBLE.

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Customer
KROGER J-970

Sales Rep
DANNY GAYDE

Date
03/10/16

Job Number
0301016

Color Spec
A.
B.
C.

Office: 317-247-9670
Fax: 317-247-9673

Location
Indianapolis, IN

Designer
DG

Scale
Photo Elev. Not To Scale
1/4" = 1'-0"

3150 Rand Rd Ste. B
Indianapolis, IN 46241

SIGNDOC
IDENTITY



4 ENTRY VIEW (FROM NORTHWEST)
SCALE: NTS



5 PLAZA VIEW (FROM SOUTHWEST)
SCALE: NTS

Exhibit 2: Proposed Fuel Monument Sign

Seal

REVISIONS		
No.	DESCRIPTION	DATE
1	MEETING	05-28-2014
2	RESUBMITTAL	07-02-2014
3	ZONING APPROVAL	08-01-2014
4	CITY RESUBMITTAL	02-03-2016
5	CITY RESUBMITTAL	03-17-2016

Project No.:	014-00678-00
Project Manager:	KLEIN
Designed By:	KLEIN
Drawn By:	KLEIN
Checked By:	KLEIN
Store No.:	J 970
Address:	16201 SPRING MILL ROAD WESTFIELD, IN 46074

SITE
RENDERINGS

Drawing No.:
C2.4

ORDINANCE NUMBER 16-05

AN ORDINANCE OF THE CITY OF WESTFIELD AND WASHINGTON TOWNSHIP, HAMILTON COUNTY, INDIANA CONCERNING AN AMENDMENT TO THE UNIFIED DEVELOPMENT ORDINANCE AND THE SPRING MILL STATION NORTHEAST QUADRANT PLANNED UNIT DEVELOPMENT DISTRICT ORDINANCE

This is an Ordinance (this "Ordinance") to amend the Unified Development Ordinance of the City of Westfield and Washington Township, Hamilton County, Indiana (the "Unified Development Ordinance"), enacted by the City of Westfield pursuant to its authority under the laws of the State of Indiana, Ind. Code § 36-7-4 et seq., as amended;

WHEREAS, the City of Westfield, Indiana (the "City") and the Township of Washington, both of Hamilton County, Indiana are subject to the Unified Development Ordinance;

WHEREAS, the Council enacted Ordinance No. 14-39, the Spring Mill Station Northeast Quadrant Planned Unit Development District (the "Spring Mill Station Northeast Quadrant PUD Ordinance"), on September 8, 2014, as amended by Ordinance No. 15-24;

WHEREAS, the Westfield-Washington Advisory Plan Commission (the "Commission") considered a petition (**Petition No. 1603-PUD-03**), requesting an amendment to the Spring Mill Station Northeast Quadrant PUD Ordinance with regard to the subject real estate more particularly described in **Exhibit A** attached hereto (the "Real Estate");

WHEREAS, the Commission forwarded **Petition No. 1603-PUD-03** to the Common Council of the City of Westfield, Hamilton County, Indiana (the "Common Council") with a favorable recommendation in accordance with Indiana Code § 36-7-4-608, as required by Indiana Code § 36-7-4-1505;

WHEREAS, the Secretary of the Commission certified the action of the Commission to the Common Council on _____, 2015;

WHEREAS, the Common Council is subject to the provisions of the Indiana Code §36-7-4-1507 and Indiana Code § 36-7-4-1512 concerning any action on this request; and

NOW, THEREFORE, BE IT ORDAINED by the Common Council of the City of Westfield, Hamilton County, Indiana, meeting in regular session, that the Spring Mill Station Northeast Quadrant PUD Ordinance and the Unified Development Ordinance and are hereby amended as follows:

Section 1. **Applicability of Ordinance.**

- 1.1 This Ordinance shall amend the Spring Mill Station Northeast Quadrant PUD Ordinance, as applicable to the Real Estate. Development of the Real Estate shall be governed by (i) the Spring Mill Station Northeast Quadrant PUD Ordinance, as amended by this Ordinance and its exhibits, and (ii) the provisions of the Unified Development Ordinance, as amended and applicable to the Underlying Zoning District or a Planned Unit Development District, except as modified, revised, supplemented or expressly made inapplicable by the Spring Mill Station Northeast Quadrant PUD Ordinance, as amended.
- 1.2 All other provisions of the Spring Mill Station Northeast Quadrant PUD Ordinance shall remain in effect with the adoption of this Ordinance.
- 1.3 All provisions and representations of the Unified Development Ordinance that conflict with the provisions of this Ordinance are hereby made inapplicable to the Real Estate and shall be superseded by the terms of the Spring Mill Station Northeast Quadrant PUD Ordinance, as amended.

Section 2. **Sign Standards.** The standards of *Section 10: Sign Standards* of the Spring Mill Station Northeast Quadrant PUD Ordinance shall apply to the development of the District, except as otherwise modified below.

- 2.1 One Monument Sign with fuel pricing on the fuel center site shall be allowed. The maximum size of the monument sign shall be 125 square feet with a maximum of 65 square feet of sign area allowed on each side of the Monument Sign. The sign shall be constructed as shown in **Exhibit 2** at the location shown in **Exhibit 3**.
- 2.2 The price sign located on the rear of the fuel canopy, shown in **Exhibit 4**, shall be removed at the time the Monument Sign is installed.

**ALL OF WHICH IS HEREBY ADOPTED BY THE CITY COUNCIL OF WESTFIELD,
HAMILTON COUNTY, INDIANA THIS __ DAY OF _____, 2016.**

<u>Voting For</u>	<u>Voting Against</u>	<u>Abstain</u>
<u>Jim Ake</u>	<u>Jim Ake</u>	<u>Jim Ake</u>
<u>James J. Edwards</u>	<u>James J. Edwards</u>	<u>James J. Edwards</u>
<u>Steven Hoover</u>	<u>Steven Hoover</u>	<u>Steven Hoover</u>
<u>Robert L. Horkay</u>	<u>Robert L. Horkay</u>	<u>Robert L. Horkay</u>
<u>Mark F. Keen</u>	<u>Mark F. Keen</u>	<u>Mark F. Keen</u>
<u>Charles Lehman</u>	<u>Charles Lehman</u>	<u>Charles Lehman</u>
<u>Cindy L. Spoljaric</u>	<u>Cindy L. Spoljaric</u>	<u>Cindy L. Spoljaric</u>

ATTEST:

Cindy Gossard, Clerk Treasurer

I hereby certify that **ORDINANCE 16-05** was delivered to the Mayor of Westfield

on the _____ day of _____, 2016, at _____m.

Cindy Gossard, Clerk-Treasurer

I hereby APPROVE **ORDINANCE 16-05**

this _____ day of _____, 2016.

J. Andrew Cook, Mayor

I hereby VETO **ORDINANCE 16-05**

this _____ day of _____, 2016.

J. Andrew Cook, Mayor

EXHIBIT 1



Evans, Mechwart, Hambleton & Tilton, Inc.
Engineers • Surveyors • Planners • Scientists
7400 N. Shadeland Ave., Ste. 150, Indianapolis, IN 46250
Phone: 317.913.6930 Toll Free: 888.775.3648

emht.com

TOWN OF WESTFIELD, HAMILTON, INDIANA

EXHIBIT "1"

FOR

KROGER J970

FUEL CENTER EXPANSION AREA

LAND DESCRIPTION

DATE: **August 14, 2014**

JOB NO. **20130351**

SCALE: **None**

DESCRIPTION FOR FUEL CENTER EXPANSION AREA:

PART OF THE NORTHWEST QUARTER SECTION 11, TOWNSHIP 18 NORTH, RANGE 3 EAST, HAMILTON COUNTY, INDIANA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE ABOVE MENTIONED QUARTER, NORTH 00 DEGREES 00 MINUTES (ASSUMED BEARING) ALONG THE WEST LINE OF SAID QUARTER SECTION 361.38 FEET TO THE PLACE OF BEGINING TO THIS DESCRIPTION, THENCE CONTINUING ALONG SAID LINE 249.52 FEET TO A POINT; THENCE NORTH 90 DEGREES 00 MINUTES EAST 312.00 FEET TO A POINT; THENCE SOUTH 00 DEGREES 00 MINUTES EAST 249.52 FEET TO A POINT; THENCE SOUTH 90 DEGREES 00 MINUTES WEST 312.00 FEET TO A POINT WHICH IS THE BEGINNING POINT OF THIS DESCRIPTION; CONTAINING, EXCLUDING THE RIGHT-OF-WAY OF SPRING MILL ROAD, 1.527 ACRES, MORE OR LESS.

EXHIBIT 2: Fuel Monument Sign

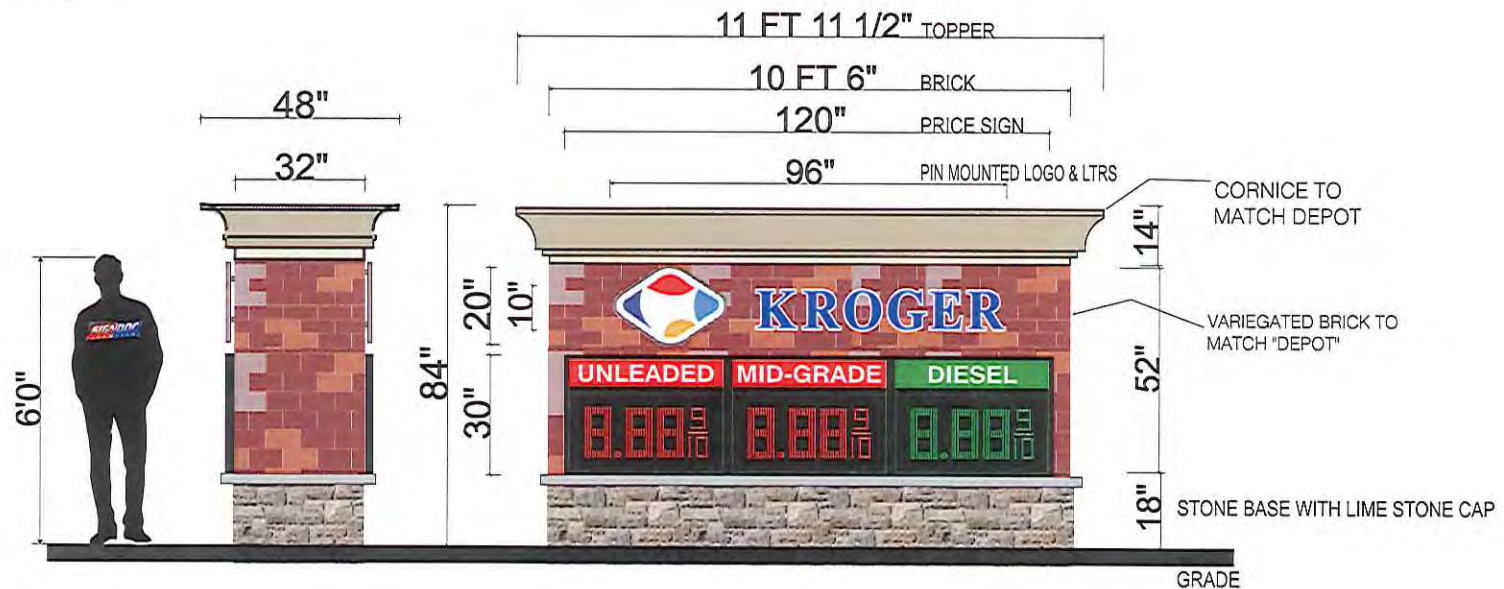
SIGN SPECIFICATIONS

MONUMENT SIGN
 STONE BASE
 BRICK FACE
 1/4" X 10" PIN MOUNTED LTRS
 READING KROGER
 LTRS BLUE W/ WHITE BOARDER
 20" FUEL LOGO PIN MOUNTED
 THREE PRODUCT FUEL SIGN
 LED ILLUMINATED
 Connect to provided 120v electrical feed

SIGN AREA

FUEL LOGO 2.8 sf
 KROGER 4 sf
 PRICER 25 sf

TOTAL EACH SIDE 31.8 sf



Approved x: _____

Date x: _____

NOTE: THERE WILL BE COLOR VARIATIONS FROM THIS PRINTED DRAWING TO THE FINAL PRODUCT, COLORS SPECIFIED WILL ALWAYS BE MATCHED AS CLOSE AS POSSIBLE.

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Customer
KROGER J-970

Sales Rep
DANNY GAYDE

Date
03/10/16

Job Number
0301016

Color Spec
A.
B.
C.

Office: 317-247-9670
Fax: 317-247-9673

Location
Indianapolis, IN

Designer
DG

Scale
Photo Elev. Not To Scale
1/4" = 1'-0"

3150 Rand Rd Ste. B
Indianapolis, IN 46241

SIGNDOC
IDENTITY



4 ENTRY VIEW (FROM NORTHWEST)
SCALE: NTS



5 PLAZA VIEW (FROM SOUTHWEST)
SCALE: NTS

Exhibit 2: Proposed Fuel Monument Sign

Seal

REVISIONS		
No.	DESCRIPTION	DATE
1	MEETING	05-28-2014
2	RESUBMITTAL	07-02-2014
3	ZONING APPROVAL	08-01-2014
4	CITY RESUBMITTAL	02-03-2016
5	CITY RESUBMITTAL	03-17-2016

Project No.:	014-00678-00
Project Manager:	KLEIN
Designed By:	KLEIN
Drawn By:	KLEIN
Checked By:	KLEIN
Store No.:	J 970
Address:	16201 SPRING MILL ROAD WESTFIELD, IN 46074

SITE
RENDERINGS

Drawing No.:
C2.4



Exhibit 3: Proposed Depot and Fuel Center

Westfield, IN Kroger

March 11, 2016

EXHIBIT 4



Evans, Mechwart, Hambleton & Tilton, Inc.
Engineers • Surveyors • Planners • Scientists
7400 N. Shadeland Ave., Ste. 150, Indianapolis, IN 46250
Phone: 317.913.6930 Toll Free: 888.775.3648

emht.com

TOWN OF WESTFIELD, HAMILTON, INDIANA

EXHIBIT "4"

FOR

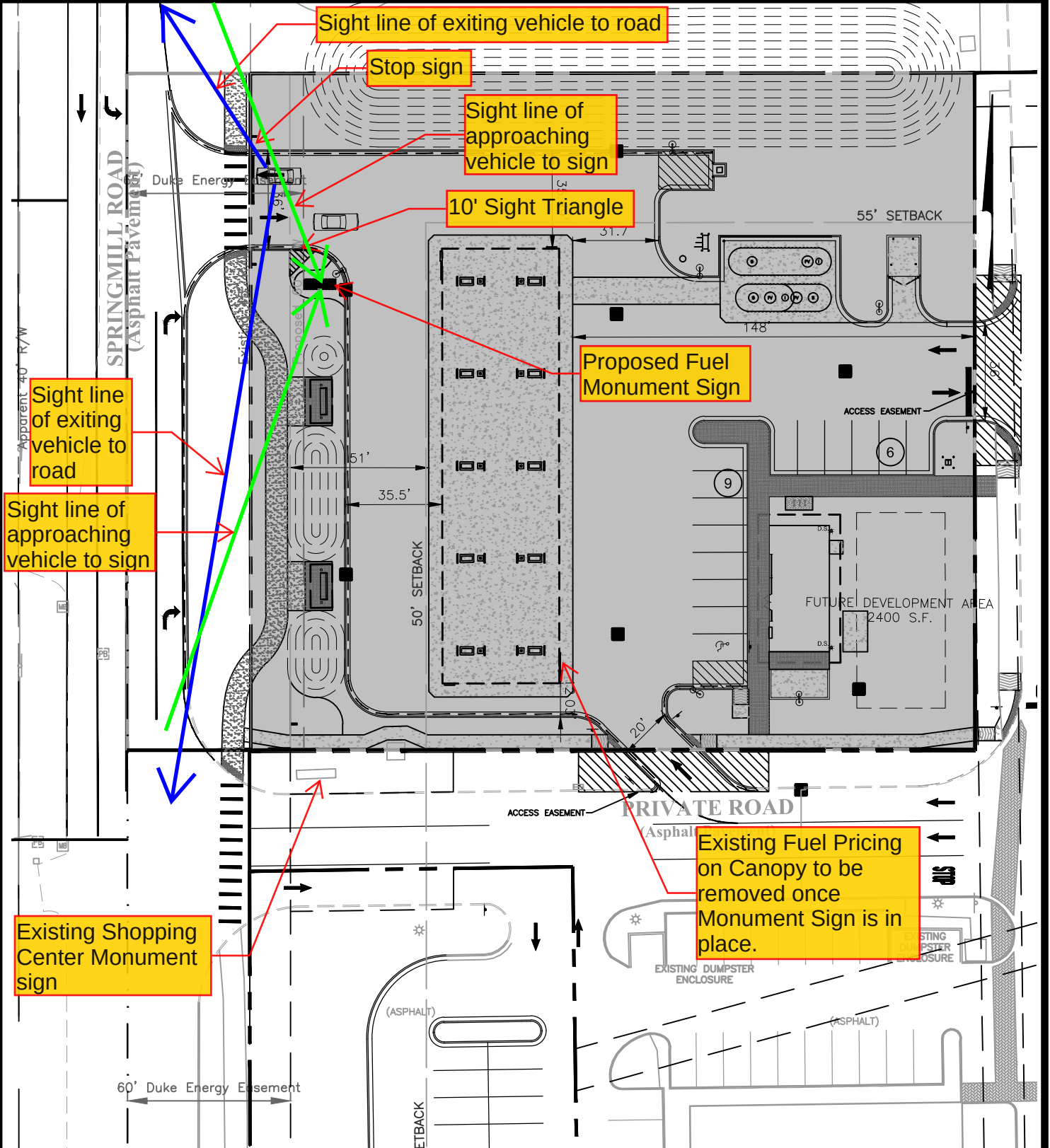
KROGER J970 FUEL CENTER

SITE SIGNAGE AND VISIBILITY

DATE: March 09, 2016

JOB NO. 20130506

SCALE: None



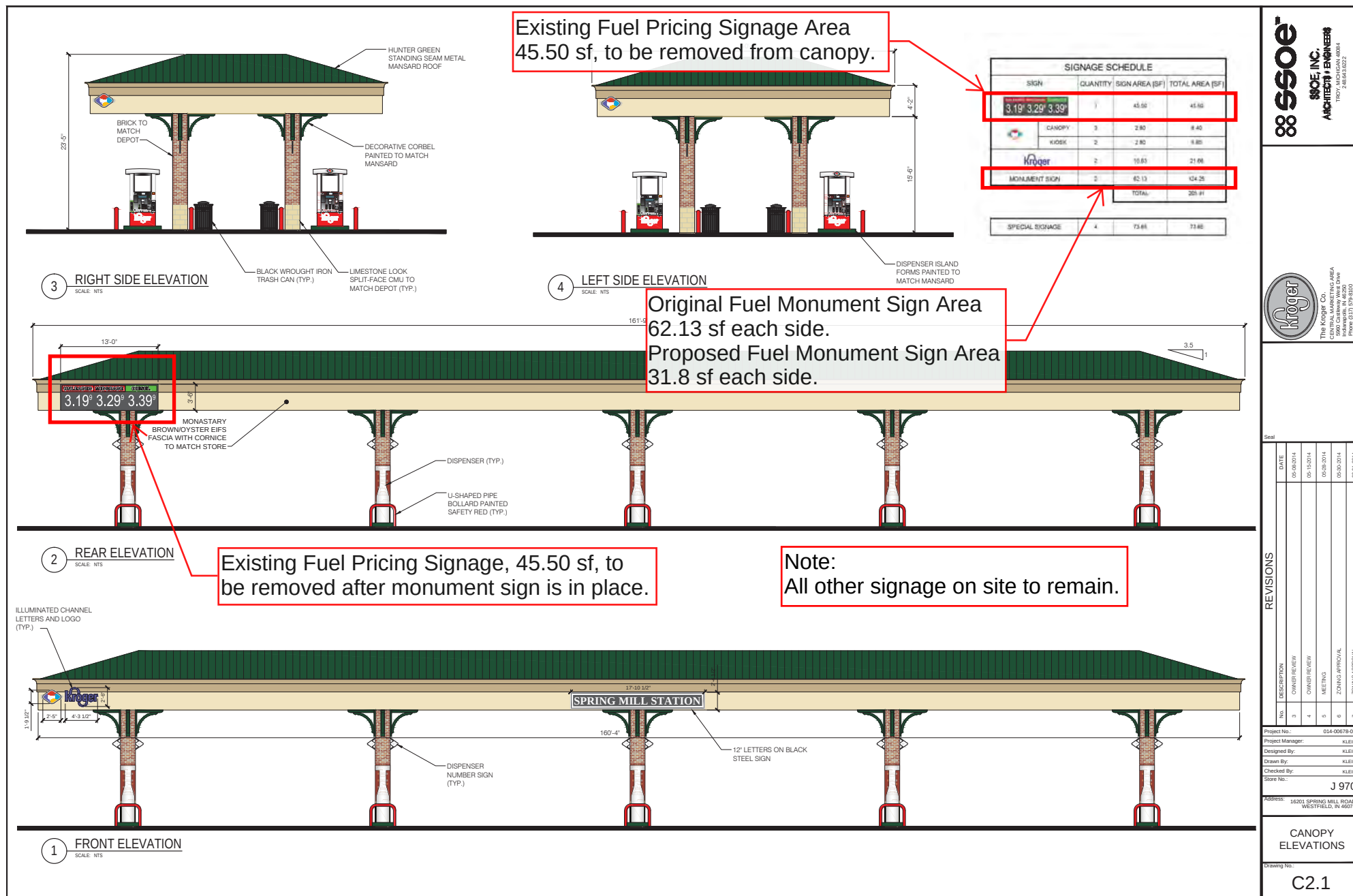


Exhibit 4: Fuel Price Signage



WESTFIELD-WASHINGTON
ADVISORY PLAN COMMISSION

March 21, 2016
1603-SPP-05, 1603-ODP-05 & 1603-DDP-06

Petition Number: 1603-SPP-05, 1603-ODP-05 & 1603-DDP-06

Subject Site Address: 17651 Sun Park Drive

Petitioner: Custard Kings by Weihe Engineers, Inc.

Request: Primary Plat, Overall Development Plan and Detailed Development Plan review for a 4,658 square-foot +/- restaurant.

Current Zoning: Culver's Sun Park PUD District

Current Land Use: Undeveloped

Approximate Acreage: 0.99 acre +/-

Property History: Culver's Sun Park PUD, Ordinance 15-44

Exhibits:

1. Staff Report
2. Location Map
3. Primary Plat
4. Development Plan
5. Site Plan
6. Landscaping Plan
7. Building Elevations

Staff Reviewer: Kevin M. Todd, AICP

PROCEDURAL:

Approval of a Development Plan must be granted if the submitted plan demonstrates compliance with the terms of the underlying zoning district, subdivision control ordinance and/or applicable PUD District Ordinance, any variances associated with the site, and any commitments associated with the site.

This petition received a public hearing at the March 7, 2016, Advisory Plan Commission (the "APC") meeting. Notice of the March 7, 2016 APC meeting was provided in accordance with Indiana law and the APC's Rules of Procedure.

PROJECT DESCRIPTION:

The applicable zoning district is the Culver's Sun Park PUD District (Ord. 15-44). The project is for the construction of a new 4,658 square-foot restaurant building and associated outdoor seating and parking. The proposal also includes the primary platting of the subject property for the creation of the State Highway 32 Trail Corridor.



PRIMARY PLAT REVIEW (1603-SPP-05):

Primary Plat Standards (Article 10.12(J) of UDO)

The plans comply with the following standards:

- 1) Proposed name of subdivision.
- 2) Names and addresses of the owner, owners, land surveyor or land planner.
- 3) Title, scale, north arrow and date.
- 4) Streets on and adjoining the site of the proposed subdivision, showing the names (which shall not duplicate other names of streets in the community, unless extensions of such streets) and including roadway widths, approximate gradients, types and widths of pavement, curbs, sidewalks, cross-walks, tree plantings and other pertinent data.
- 5) Easements (locations, widths and purposes). (Article 8.3)
- 6) Statement concerning the location and approximate size or capacity of utilities to be installed.
- 7) Layout of Lots (showing dimensions, numbers and square footage). (Article 4.5)
- 8) Parcels of land proposed to be dedicated or reserved for schools, parks, playgrounds or other public, semi-public or community purposes.
- 9) Contours at vertical intervals of two (2) feet if the general slope of the site is less than ten percent (10%) and at vertical intervals of five (5) feet if the general slope is greater than ten percent (10%).
- 10) Tract boundary lines showing dimensions, bearings, angles, and references to section, township and range lines or corners.
- 11) Building setback lines. (Article 5.16 (E) of UDO)
- 12) Legend and notes.
- 13) Drawing indicating the proposed method of drainage for storm sewers and other surface water drainage.
- 14) Other features or conditions which would affect the subdivision favorable or adversely.
- 15) A National Cooperative Soil Survey Map showing the soil limitations based upon the intended usage of the development land.
- 16) A statement from County departments, State highway departments, or the Public Works Department concerning rights-of-way, road improvements, roadside improvements, roadside drainage, entrances, culvert pipes, and other specifications deemed necessary.



- 17) If private sewage systems, then a statement from the County Health Officer whether private septic system can be used on the property.
- 18) If legal drain is involved, then a statement from the County Drainage Board or County Surveyor's Office concerning easements, right-of-way, permits, etc.
- 19) If floodplain is involved, then a statement from the Indiana Department of Natural Resources, Division of Water, concerning construction in floodway, including floodplain high water marks, etc.

District Standards (Article 4.16 of UDO)

The plans comply with Article 4.16 (GB District):

- 20) Permitted Uses (Chapter 13 of UDO)
- 21) Minimum Lot Area: No minimum
- 22) Minimum Lot Frontage: 80 feet
- 23) Minimum Building Setback Lines
 - a) Front Yard: 60 feet
 - b) Side Yard: 20 feet
 - c) Rear Yard: 20 feet
- 24) Minimum Lot Width: No minimum
- 25) Maximum Building Height: 60 feet
- 26) Minimum Building Size: No minimum

State Highway 32 Overlay Standards (Article 5.3 of UDO)

The plans comply with the following standards:

- 27) Access Control Requirements (Article 5.3 (F))
- 28) Setback Requirements (Article 5.3 (G))
- 29) Trail Corridor Requirements (Article 5.3 (L))

Development Standards (Chapter 6 of UDO)

The plans comply with the following standards:

- 30) Lot Standards (Article 6.10)
- 31) Setback Standards (Article 6.16)



32) Vision Clearance Standards (Article 6.19)

33) Yard Standards (Article 6.21)

Design Standards (Chapter 8 of UDO)

The plans comply with the following standards:

34) Block Standards (Article 8.1)

35) Easement Standards (Article 8.3)

36) Monument and Marker Standards (Article 8.5)

37) Pedestrian Network Standards (Article 8.7)

38) Storm Water Standards (Article 8.8)

39) Street and Right-of-Way Standards (Article 8.9)

40) Street Light Standards (Article 8.10)

41) Street Sign Standards (Article 8.11)

42) Surety Standards (Article 8.12)

43) Utility Standards (Article 8.13)

OVERALL AND DETAILED DEVELOPMENT PLAN REVIEW (1603-ODP-05 & 1603-DDP-06):

Development Plan Review Criteria (Article 10.7(E) of the UDO):

Development Plans shall comply with and be reviewed by the Plan Commission upon finding that the Development Plan is in compliance with the following requirements:

44) Compliance with all applicable development and design standards of the Zoning District in which the real estate is located.

45) Compliance with all applicable provisions of any Overlay District in which the real estate is located.

46) Management of traffic will be in a manner that creates conditions favorable to health, safety, convenience, and the harmonious development of the community such that:

- a) The design and location of proposed street and highway access points shall minimize safety hazards and congestion.
- b) The capacity of adjacent streets and highways is sufficient to safely and efficiently accept traffic that will be generated by the new development.



- c) The entrances, streets and internal traffic circulation facilities in the proposed development are compatible with existing and planned streets and adjacent development.
- 47) The applicable utilities have sufficient capacity to provide potable water, sanitary sewer facilities, electricity, telephone, natural gas, and cable service at a satisfactory level of service to meet the needs of the proposed development.

Development Plan Documentation (Article 10.7 (G) of UDO)

The plans comply with the following standards:

- 48) Title, scale, north arrow and date.
- 49) Proposed name of the development.
- 50) Area map insert showing the general location of the site referenced to Streets, section lines and alternative transportation plan system, as well as the Zoning District and use of adjacent property.
- 51) Address and legal description of the property.
- 52) Boundary lines of the property including all dimensions.
- 53) Location, name, centerline and width of all Streets, Private Streets, Alleys, access easements and alternative transportation plan system improvements that are existing or proposed to be located within or adjacent to the property.
- 54) Location, centerline and width (at the Lot Line) measurements of any proposed or existing Driveways within two hundred (200) feet of the property, and any connection to an Alley must be indicated.
- 55) Location and dimensions of primary vehicular ways in and around the proposed development, including depictions of all travel lanes, turning movements, vehicle storage areas and tapers.
- 56) All proposed Street and Driveway improvements, both on and offsite, including measurement of curb radius and/or taper.
- 57) Location and dimensions of existing and proposed sidewalks, pathways, trails or other alternate transportation plan improvements.
- 58) Layout, number, dimension and area (in square feet and acres) of all Lots and Outlots with Building Setback Lines.
- 59) Location and dimensions of all existing structures and paved areas.
- 60) Location and dimensions of all proposed structures and paved areas (indicated by cross-hatching).
- 61) Location of all Floodplain areas within the boundaries of the property.
- 62) Names of legal ditches and streams on or adjacent to the site.



- 63) Location and feasibility statement of all existing and proposed utility facilities and easements, including, but not limited to: sanitary sewer, water, storm water management, electric, gas, telephone and cable.
- 64) Identify buildings proposed for demolition.
- 65) Areas of the property reserved for Development Amenities, Open Space and other similar uses.
- 66) Use of each Lot and/or building by labeling, including approximate density or size of proposed uses and buildings (e.g., number of parking spaces, Dwelling Units, Gross Floor Area, Living Area).

District Standards (Article 4.16 of UDO)

Comment: See "District Standards" section under "Primary Plat Review" above (Page 3).

State Highway 32 Overlay Standards (Article 5.3 of UDO)

The plans comply with the following standards:

- 67) Permitted Uses: All uses permitted in the underlying Zoning District shall be permitted except as otherwise excluded and prohibited in the Use Table for the SR32 Overlay
- 68) Access and Control:
 - a) The purpose of this section is to make the closing of all private curb cuts along State Highway 32 possible by establishing a common access road to provide access to and through Lots abutting State Highway 32
 - b) New curb cuts shall not be permitted unless specifically approved by the Council and the Indiana Department of Transportation prior to installation
 - c) Access roads in substantial compliance with the design plan included in FIGURE 5.3(2) with the design plan included in FIGURE 5.3(2) ACCESS ROADS shall be provided for Lots along State Highway 32 unless the Council approves the development of a Lot without providing the normally required access road, and shall be dedicated as Right-of-way.
 - d) Approval of an illustrative concept plan showing vehicular drive cuts as part of zoning petition shall not constitute approval of curb cuts by the Council
 - e) In those cases where tracts can be accessed via a connection to an Arterial, Collector, Frontage Road or an adjoining Parking Area, new curb cuts shall not be permitted on State Highway 32
 - f) All developments shall provide for vehicular and pedestrian interconnectivity between neighboring uses, Parking Areas and developments in order to encourage and facilitate east/west vehicular movements without directly accessing State Highway 32. Cross access easements shall be provided to ensure continued access and connectivity between and through uses along the State Highway 32 corridor.



- g) Any existing curb cuts along State Highway 32 shall be vacated and eliminated as a condition of any discretionary approval for use or development of land on which such curb cuts are present, if an alternative vehicular access is available
- 69) Setback Requirements: The following setback requirements regulating the distance from State Highway 32 that buildings may be constructed shall supersede all other setback standards of this Ordinance
- a) Maximum Setback: The Established Front Yard on Lots abutting State Highway 32 or the Trail Corridor, as defined herein, shall be a maximum of one hundred and twenty (120) feet from the State Highway 32 right-of-way line or the edge of pavement, whichever results in a greater distance from the State Highway 32 centerline.
 - b) Minimum Setback: The Established Front Yard on Lots abutting State Highway 32 or the Trail Corridor, as defined herein, shall be a minimum of thirty (30) feet from the State Highway 32 right-of-way line or the edge of pavement, whichever results in a greater distance from the State Highway 32 centerline. Signs shall be located a minimum of thirty (30) feet from the State Highway 32 right-of-way line.
- 70) Accessory Buildings: No Accessory Building shall be erected in the Established Front Yard. For the purposes of this Article only, an Accessory Building shall not include the following: (i) if provided for public use and enjoyment: fountains, gazebos, picnic shelters, benches, public rest rooms, drinking fountains, utility installations, bike racks, decorative walls and fences (not to exceed an average height of four (4) feet), hard scape amenities, landscaping, pavement, curbs and other similar improvements; or (ii) Monument Signs.
- Comment: Superseded by PUD Ordinance (Ord. 15-44). Compliant.**
- 71) Building Height Requirements:
- a) Maximum Building Height: No Minimum
 - b) Minimum Building Height: Eighteen (18) feet
 - c) Multiple Stories: Multiple stories encourage, not required
- 72) Building Size Requirement: The Gross Floor Area requirements set forth below are intended to create a certain massing for buildings located within the corridor. Although it is contemplated some buildings may be acceptable with square footages below the minimum set forth herein, decisions to lower the requirement shall be considered on a case-by-case basis. In instances where the requirement set forth herein is lowered, enhanced architectural or site features (e.g., pergolas, outdoor seating, landscaped amenities) may be required.
- a) Minimum Gross Floor Area: Five Thousands (5,000) square feet
 - b) Maximum Gross Floor Area: No maximum
- Comment: Superseded by PUD Ordinance (Ord. 15-44). Compliant.**



Architectural Design Requirements:

73) General Design Theme Standards: Architectural variation is encouraged. These architectural requirements are intended to provide consistent architectural quality among buildings and other improvements within the corridor. All structures shall be thoughtfully designed in a manner that visually and functionally complements the existing topography.

74) Building Elevations:

- a) All Building Facades shall have a defined base or foundation, a middle or modulated wall, and a top formed by a pitched roof or articulated, three-dimensional cornice as illustrated in FIGURE 5.3(3): BUILDING MODULATION.
- b) Building Facades, which are ninety (90) feet or greater in length, shall be designed with offsets (projecting or recessed) at intervals of not greater than sixty (60) feet. Buildings less than ten thousand (10,000) square feet in Gross Floor Area shall be designed with offsets at interval of not greater than forty (40) feet. Offsets shall extend the entire vertical plane of the Building Facade and shall be a minimum depth of four (4) feet and a minimum aggregate length of twenty percent (20%) of the horizontal plane of the overall Building Facade. The offset may be met with setbacks of the Building Facade and/or with architectural elements (i.e. arcades, columns, ribs, piers, and pilasters), if such architectural elements meet the minimum offset requirements of this requirement.
- c) Buildings shall be constructed with the same building material quality and level of architectural detail on all Building Facades (e.g., 360 degree architecture).

75) Openings:

- (1) Design elements of the Building Facade shall be organized such that openings (including windows, doors, loading berths, faux windows and architectural or painted elements resembling openings) line up horizontally and vertically with other openings as illustrated in FIGURE 5.3(5): DESIGN BALANCE.
- (2) Openings in a Building Facade shall be arranged in a balanced, relatively uniform fashion (see FIGURE 5.3(6): BALANCE OF OPENINGS).
- (3) Exceptions may be permitted if openings are organized in an aesthetically pleasing manner and constitute an essential artistic design element appropriate for the building type, scale, orientation, location and site.

76) Gutters and Downspouts: Shall be visually integrated with the architectural style of the structure. The color of gutters and downspouts shall be selected to complement or to be consistent with the building materials.



Roofs:

77) Pitched Roofs:

- (a) Pitched roofs shall be simply and symmetrically pitched and only in the configuration of gables and hips, with pitches ranging from 4:12 to 14:12 (see FIGURE 5.3(7): ROOF PITCHES).
- (b) If standing seam panels are used then they shall be: (1) gray, black, dark blue, dark green, barn red or dark brown; and (2) made of a non-reflective material.
- (c) Modulation of the roofs and/or roof lines shall be required in order to eliminate the appearance of box-shaped buildings, as illustrated in FIGURE 5.3(8): PITCHED ROOF - ROOF LINE MODULATION.

78) Flat Roofs:

- (a) Flat roofs are permitted if edged by a parapet wall with an articulated, three-dimensional cornice as illustrated in FIGURE 5.3(9): ARTICULATED CORNICE.
- (b) Parapet walls shall be fully integrated into the architectural design of the building to create seamless design transitions between the main building mass and roof-mounted architectural elements (which may include screening elements for roof-mounted equipment).
- (c) Modulation or variation of the roofs and/or roof lines shall be required in order to eliminate the appearance of box-shaped buildings. Buildings shall comply with at least one of the following:
 - (i) A building with a flat roof shall have varying roof height sections, as illustrated in FIGURE 5.3(10): FLAT ROOF VARIATION. A varied roof section shall have a minimum roof height difference of five (5) feet from an adjacent roof section. The maximum horizontal roof line length without variation shall be sixty percent (60%) of the total length of the Building Facade's roof line.
 - (ii) A roof line modulation shall include a vertical change in the visible roof line of at least four (4) feet, with a minimum aggregate modulation length of forty percent (40%) of each Building Facade, as illustrated in FIGURE 5.3(11): FLAT ROOF - ROOF LINE MODULATION. The maximum horizontal roof line length without modulation shall be sixty (60) feet, or forty (40) feet for Buildings with a Gross Floor Area less than ten thousand (10,000) square feet.
 - (iii) Dormers and cupolas shall be designed with appropriate details, proportion and style consistent with the overall building composition and roofed with symmetrical gable, hip or barrel roofs (see FIGURE 5.3(12): DORMERS AND CUPOLAS).
 - (iv) All visible vents, attic ventilators, turbines, flues and other visible roof penetrations shall be: (a) painted to match the color of the roof or flat black; and (b) oriented to minimize their visibility from adjacent Lots and Streets.

79) Main Entrances:

- (1) All buildings shall be designed with a main entrance and at least two (2) window openings associated with the main entrance.
- (2) Building entrances shall be clearly defined and articulated by multiple architectural elements such as lintels, pediments, pilasters, columns, awnings, porticos and other design elements appropriate to the architectural style and details of the building as a whole.



- (3) The location, orientation, proportion and style of doors shall complement the style of the building.

80) Windows:

- (1) All window designs shall be compatible with the style, materials, color, details and proportion of the building. The number of window panes, the number of window openings, window trim and other architectural design elements designed to accent the windows shall be consistent with and complementary to the architectural style of the building (see FIGURE 5.3(14): WINDOW DESIGNS).
- (2) Window trim and other architectural design elements designed to accent the windows shall be required for all windows. Acceptable design elements include shutters, keystones, masonry arches, awnings, decorative stone frames, masonry rowlock frames, as illustrated in FIGURE 5.3(15): WINDOW ACCENTS, or other such trim or design elements as approved by the Plan Commission or Director (see FIGURE 5.3(15): WINDOW ACCENT

81) Awnings:

- (1) Fixed or retractable awnings are permitted if they complement the building's architectural style, material, colors and details, as illustrated in FIGURE 5.3(16): AWNINGS.
- (2) Awnings shall be made of a non-reflective material.
- (3) All awnings shall be kept in good repair.
- (4) Awnings used to comply with the architectural design requirements of this Article shall not be removed unless the Building Facade would otherwise comply with such architectural design requirements without such awnings.

82) Drive-thrus and Fueling Stations: This section shall apply to: (i) Lots adjacent to the State Highway 32 right-of-way line or the Trail Corridor, as defined herein; and (ii) Lots where the Lot Line may not abut the State Highway 32 right-of-way line or Trail Corridor, but where the Lot is located in a manner that no significant structures can reasonably be constructed between the Lot and the State Highway 32 right-of-way line or Trail Corridor.

- (1) Drive-thru windows and lanes shall not be permitted in between the State Highway 32 right-of-way line or the Trail Corridor and the Building Facade nearest to said right-of-way line (e.g., Established Front Yard) or Trail Corridor.
- (2) Vehicular fuel pumps and canopies shall be setback a minimum of thirty (30) feet farther from the State Highway 32 right-of-way line than the Established Front Yard of the Principal Building to which the fuel pumps or canopies are appurtenant or associated as illustrated in FIGURE 5.3(17): FUEL PUMP/CANOPY LOCATION.

83) Building Materials:

- (1) Masonry Materials shall be the preferred and primary exterior building material used on buildings within the corridor.
- (2) Masonry Materials shall be used to create a wainscot or brick wrap-effect around buildings.
- (3) A minimum of sixty percent (60%) of each Building Facade, exclusive of windows (including faux windows and glazing), doors and loading berths, shall be covered with Masonry Materials.



- (4) No more than twenty-five percent (25%) of each Building Facade, exclusive of windows (including faux windows and glazing), doors and loading berths, may be covered with metal, Fiber Cement Siding, Polymeric Cladding, E.I.F.S., stucco, or vinyl exterior building materials.
- (5) In order to create an aesthetically pleasing appearance and to create an appearance of high-quality, visually interesting architecture, increased and enhanced use of Masonry Material and other architectural ornamentation shall be required around building entrances and on Building Facades visible from State Highway 32.

84) Accessory Buildings: All Accessory Buildings shall be architecturally compatible with the Principal Building(s) with which they are associated.

85) Trail Corridor Requirement:

- a) Purpose: The purpose of this section is to establish an alternative transportation corridor along both sides of State Highway 32 by requiring an alternative transportation trail and various other amenities to be installed along State Highway 32 on all Lots abutting State Highway 32.
- b) Requirement: A linear green space (the "Trail Corridor") along each side of State Highway 32 that contains the alternative transportation trail mentioned herein shall be provided. The following improvements shall be prohibited within the Trail Corridor, unless otherwise approved by the City: Detention Areas, Retention Areas and Monument Signs.
- c) Public Property: It is the policy of the City that the Trail Corridor (as defined herein) and the improvements therein will be owned and maintained by the City. It is the policy of the City to have the real estate within the Trail Corridor acquired, pledged, contracted or granted prior to the development of adjacent Lots.
- d) Trail Corridor Design Standards:
 - i) Trail Corridor Width: The Trail Corridor shall be a minimum width of thirty (30) feet parallel and immediately abutting the State Highway 32 right-of-way line or the edge of pavement, whichever results in a greater distance from the State Highway 32 centerline.
 - ii) Alternative Transportation Trail Design: The trail improvements shall be installed in substantial compliance with FIGURE 5.3(18): TRAIL CORRIDOR DESIGN and shall be a minimum of eight (8) feet in width and constructed of asphalt material in compliance with the City's Construction Standards (see also *Article 7.3 Principles and Standards of Design*). Construction of the trail with a meandering design is encouraged.
 - iii) Inter-connectivity: All developments along State Highway 32 shall provide for alternative transportation inter-connectivity between neighboring uses, developments and the Trail Corridor in order to encourage and facilitate alternative transportation movements without directly accessing State Highway 32. Cross access easements and connections to the alternative transportation trail referenced above shall be appropriately provided to ensure continued alternative transportation access and connectivity between and through uses along the Trail Corridor (see also *Article 8.3 Easement Standards*).
 - iv) Trail Corridor Plantings: The primary landscaping materials used within the Trail Corridor shall be shade trees, ornamental trees, shrubs, Groundcover and grass.
 - (1) A minimum of three (3) shade trees and one (1) ornamental tree shall be provided per every one hundred (100) linear feet of Trail Corridor along State Highway 32. Installation of plantings on both sides of the alternative transportation trail referenced above is



encouraged. All trees shall be a minimum of two and one half (2.5) inches in Caliper at the time of planting.

200'	Required	Depicted	+/-
Shade Trees	6	7	+1
Ornamental Trees	2	5	+3

- (2) Shade trees planted within the Trail Corridor shall be spaced a minimum of fifteen (15) feet and no more than forty (40) feet apart.
- (3) Landscaping required within the Trail Corridor shall be counted toward meeting the requirements of *Article 6.8 Landscaping Standards*, as if the Trail Corridor were a part of the adjacent Lot being developed.
- v) Trail Corridor Mounds/Berms: The construction of intermittent, undulating mounds or berms within the Trail Corridor is encouraged, but not required. If mounds or berms are installed, then they should be designed in a manner that complements other improvements in the vicinity and in no event shall such mounds or berms be installed in a manner that unsafely inhibits vehicular line of sight (see also *Article 6.19 Vision Clearance Standards*) or use of the alternative transportation trail.

Miscellaneous Requirements:

86) Loading Berths:

- i) Loading berths shall be oriented in a manner so they are not visible from State Highway 32 and in a manner that minimizes their visibility from all other Rights-of-way and adjacent properties.
- ii) The use of loading berth enclosures shall be utilized where appropriate in order to accomplish the design objectives of this subsection.
- iii) All loading berths shall be adjacent to the Principal Building and located entirely within the Side or Rear Yard.
- iv) Loading berths shall be screened to the extent reasonably necessary by installing solid, opaque walls or fences (chain link fences or a variation thereof shall not be permitted). Mounds or berms may also be utilized, or utilized in combination with walls or fence enclosures, to provide screening. Special attention shall be given to accomplish the design objectives herein for visibility of loading berths from adjacent properties and Rights-of-way.
- v) Loading berth walls and fences shall be softened by installing the following adjacent to such screens, except no landscaping shall be required adjacent to access and delivery doors or gates:
 - (1) One (1) ornamental or evergreen tree every thirty (30) feet.
 - (2) Five (5) shrubs every thirty (30) feet.

87) Mechanical Equipment:

- i) Screening of mechanical equipment, satellite dishes and other similar improvements shall be completely and permanently screened from view of Rights-of-way and adjoining properties.
- ii) When attached to the ground, screening methods shall include a mound/berm or an opaque wall or fence enclosure of a material that matches or complements the Principal Building to which it is appurtenant.



- iii) When roof mounted, screening methods shall include parapet walls, enclosures or other similar architectural treatment that matches or complements the Principal Building to which it is appurtenant.

88) Walls and Fencing:

- i) The following wall and fence types are permitted within the 32 Overlay Zone: Masonry Material, decorative metal (wrought iron, or wrought iron in appearance) or finished wood (stained or painted). In areas requiring security, decorative metal fencing with a spiked or curved top profile or razor/concertina/barbed wire mounted inside a solid fence or wall is recommended. This type of fence shall only be permitted with the express written approval of the Director and may not be permitted in all cases based on the visibility of the fence.
- ii) The following wall and fence types are prohibited in areas visible from outside the Lot on which such walls or fences are installed: non-solid and/or unfinished wood, chain link (with or without slats), non-decorative corrugated metal, electrified fences and razor/concertina/barbed wire.
- iii) Walls and fencing shall not be located in an Established Front Yard.

Comment: Superseded by PUD Ordinance (Ord. 15-44). Compliant.

- iv) If walls or fencing consists of the same building materials as used on the Principal Building to which they are appurtenant, then they shall be permitted to extend into a Side Yard in a manner that is flush with the Front Building Facade of the Principal Building.

If walls or fencing do not consist of the same building materials as used on the Principal Building to which they are appurtenant, then they shall not be permitted to extend into a Side Yard in a manner that is flush with the Front Building Facade of the Principal Building. Instead such walls or fencing shall be setback a minimum of an additional eight (8) feet from the Established Front Yard.

Development Standards (Chapter 6 of UDO)

The plans comply with the following standards:

Accessory Use and Building Standards – Dumpster Enclosures (Article 6.1 (H))

- 89) Garbage containers, trash receptacles, pallet storage areas, trash compactors, recycling areas, loading areas and other similar facilities shall be completely and permanently screened from view of Rights-of-way and where possible, adjoining properties.

- 90) Enclosures shall not be located in an Established Front Yard or in any required Side or Rear Yard.

Comment: Superseded by PUD Ordinance (Ord. 15-44). Compliant.

- 91) Screening methods shall include a solid enclosure on all sides not less than six (6) feet in height



above grade or two (2) feet above the receptacle, whichever is greater. The solid enclosure shall be a Masonry Material that matches or complements the Principal Building.

- 92) Enclosures shall be constructed of a Masonry Material that matches or complements the Principal Building, as illustrated in FIGURE 6.1(2): DUMPSTER ENCLOSURES.
- 93) Enclosures shall be equipped with opaque gates, as illustrated in FIGURE 6.1(2): DUMPSTER ENCLOSURES, that shall not be oriented towards residential properties or the Right-of-way, where possible.
- 94) Enclosures shall have separate pedestrian access openings that are configured to conceal the dumpster from view for daily access to dumpsters for waste disposal. Pedestrian access openings shall be substantially similar to those illustrated in FIGURE 6.1(3): DUMPSTER MAN-DOORS.
- 95) Enclosures, which include swinging, moveable doors, shall be kept closed at all times when said doors are not in active use.
- 96) Landscaping shall be provided around enclosures in accordance with *Article 6.8 Landscaping Standards*.
- 97) Architectural Standards (Article 6.3)
- 98) Building Standards (Article 6.4)
- 99) Height Standards (Article 6.6)
- 100) Landscaping Standards (Article 6.8)

Minimum Lot Landscaping

Business Use (1 ac.)	Required	Depicted	+/-
Shade Trees	10	10	Compliant
Ornamental/Evergreen Trees	10	10	Compliant
Shrubs	25	214	Compliant



Foundation Plantings

West façade (100')	Required	Depicted	+/-
Shrub/Ornamental Tree	9	9	Compliant

East façade (100')	Required	Depicted	+/-
Shrub/Ornamental Tree	9	9	Compliant

External Street Frontage Landscaping

State Road 32 (200')	Required	Depicted	+/-
Shade/Evergreen Trees	6	7	Compliant
Ornamental Trees	4	5	Compliant
Shrubs	50	61	Compliant

Parking Area Landscaping

West (108')	Required	Depicted	+/-
Trees	4	4	Compliant
Shrubs	36	45	Compliant

Interior Parking Area Landscaping

Min. Aggregate Req.	Required	Depicted	+/-
Trees	5	5	Compliant
Shrubs	20	22	Compliant
Square Footage	900 SF	900 SF	Compliant

Comment: Planting and size requirement modified by PUD Ordinance.



101) Lighting Standards (Article 6.9)

Comment: Some of the proposed foot-candle measurements exceed the maximum of 1.0 foot-candles at the property line. Additionally, staff has requested to see fixture details to ensure proper down-lighting and shielding. These outstanding items are ministerial requirements, and it would be appropriate to delegate final lighting approval to staff.

102) Lot Standards (Article 6.10)

103) Outside Storage and Display (Article 6.12)

Outdoor Eating Areas (Article 6.13)

104) Lighting. Shall comply with Article 6.9 Lighting Standards. Festoon lighting shall not be permitted.

105) Audio. Music and other audio devices shall be maintained at a level: (i) not audible from forty (40) feet from the source; or (ii) ninety (90) decibels or less when measured six (6) feet from the source on a dB(A) meter.

Pedestrian Ways. Shall not impede pedestrian traffic or force pedestrians into vehicular travel lanes in accordance with the following:

A five (5) foot pedestrian access area on the perimeter of the outdoor café and eating area shall be maintained at all times. The pedestrian access area on the sidewalk shall not be interrupted with building, infrastructure, utility or landscaping elements such as but not limited to columns, supports, plantings or other such materials.

106) Permanent Areas. Outdoor cafes and eating areas that are utilized or set aside for use for a period longer than seven (7) days in a calendar year shall be deemed permanent in nature. Permanent outdoor cafes and eating areas shall require Development approval, in accordance with Article 10.7 Development Plan Review, to ensure compliance with this Ordinance and that its use and design is compatible with the surrounding area and Zoning District.

Parking and Loading Standards (Article 6.14)

Stacking Requirements for Drive-Through Facilities (Article 6.14 (E))

107) General Requirements: a. Drive-through lanes and required stacking spaces shall not interfere with parking space maneuvering aisles, parking drive aisles, loading spaces, internal site circulation, designated fire lanes or points of ingress and egress.

- a) Drive-through lanes and stacking spaces shall be designed to prevent vehicles from stacking in the Right-of-way.
- b) No stacking space may occupy any portion of a Right-of-way.
- c) A stacking space does not constitute a Parking Space.



- d) All drive-through and stacking lanes shall be delineated with pavement markings or otherwise distinctly delineated, as approved by the Department.
- 108) Minimum Size: A stacking space shall be a minimum of eight (8) feet by twenty (20) feet with direct forward access to a service window or station of a drive-through facility.
- 109) By-Pass Lane: A minimum eight (8) foot wide lane parallel to a drive-through lane shall be provided around the drive-through facility to allow vehicles to exit the drive-through lane and circumvent the stacking lane. This lane may be part of the site's overall circulation plan.
- 110) Minimum Number of Spaces: The minimum number of required stacking spaces shall be as follows, which shall exclude the position at the service window but may include spaces between the service window and any ordering position:
 - a) Fast Food Restaurant: 7 stacking spaces
 - b) Financial institutions, pharmacies, Takeout and Deli-style Restaurant with drive-through: 3 stacking spaces per service window
 - c) All other facilities: 2 stacking spaces per service window
- 111) Reduction in Number of Spaces: If an Applicant demonstrates that strict compliance with the minimum number of stacking spaces is impracticable or would result in a less desirable site design, then the Department may approve a reduction of the stacking requirement. If determined by the Director, then demonstration by a qualified traffic engineer that a reduction in the stacking requirements is appropriate for the proposed use given the use's proposed intensity or the site's context may be required.
- 112) Off-Street Parking (Article 6.14 (G))
- 113) Bicycle Parking (Article 6.14 (H))
- 114) Setback Standards (Article 6.16)
- 115) Sign Standards (Article 6.17)

Comment: Any signs shown on the Detailed Development Plan will not be reviewed for compliance. Approval of the Detailed Development Plan does not constitute approval of any depicted signage. Signage will be reviewed and approved through a separate sign permit process.
- 116) Vision Clearance Standards (Article 6.19)
- 117) Yard Standards (Article 6.21)



Design Standards (Chapter 8 of UDO)

Comment: See “Design Standards” section under “Primary Plat Review” above (Page 4).

Wellhead Protection (Article 5.7 of UDO)

Comment: The property falls within Zone 2 (5 year time of travel) of the City’s Wellhead Protection District. The proposal complies with all applicable requirements of the Wellhead Protection ordinance.

Culver’s Sun Park PUD Standards (Ord. 15-44):

118) Section 3: Temporary Concept Plan: In the event the adjacent segment of Tournament Trail is not available at the time of developing the Real Estate, the Temporary Concept Plan, attached hereto and incorporated as **Exhibit C**, may be used in lieu of the Concept Plan found in **Exhibit B**. However, at the time the adjacent segment of Tournament Trail segment is constructed and the parcel adjacent to and east of the Real Estate is substantially developed, as determined by the Director, the site layout, including but not limited to site access, shall be reconstructed/improved in a manner that is in substantial compliance with **Exhibit B**. All expenses associated with making these improvements shall be borne by the Property Owner. These improvements shall be installed at the same time as Tournament Trail construction, or if subsequent to construction, within six (6) months of formal notice by the Economic and Community Development Department.

119) Section 3: East Cross-Access: Vehicular cross-access easement(s) to the east (“East Cross-Access”) shall be provided. Such easement(s) shall be provided in accordance with the commitment agreement found in **Exhibit F** of this Ordinance and shall be developed in substantial compliance with Exhibit “2” of **Exhibit F**, as determined by the Director.

The East Cross-Access easements shall be provided in accordance with *Article 6.14, G9*. All expenses associated with making these improvements shall be borne by the Property Owner, unless otherwise agreed by the parties. These improvements shall be installed at the same time as the adjacent parking lot construction, or if subsequent to construction, within six (6) months of formal notice by the Economic and Community Development Department.

Comment: Note that the Secondary Plat will need to be amended in the future to add this cross-access easement, when triggered by the PUD.

Section 7. State Highway 32 Overlay District. The standards of Article 5.3: State Highway 32 Overlay District (the “SR32 Overlay District”) shall apply to the development of the Real Estate, except as otherwise modified below.



- 120) Article 5.3(J) Building Size Requirements: Shall apply; however, a minimum seven hundred (700) square foot outdoor seating area, as depicted in the Concept Plan, shall be credited toward this requirement.
- 121) Article 5.3(K) Architectural Design Requirements: Shall apply. In addition, the following shall apply:
- A. Character Exhibit. The Character Exhibit, attached hereto as **Exhibit D**, is hereby incorporated as a compilation of images designed to capture the intended quality of structures to be constructed in the District. Although the exhibits do not necessarily represent the final design or specify a required architectural style or element, they do hereby establish a benchmark for the quality and appearance of structures that are permitted to be constructed and that contribute to the District's intent and vision.
Comment: Cannot determine compliance. Please submit building elevations.

Section 8. Development Standards. The standards of Chapter 6: Development Standards shall apply to the development of the District, except as otherwise modified below.

- 122) Article 6.1, H. Dumpster Enclosure: Shall apply, except that the dumpster may be located within an Established Front Yard, Side Yard, or Rear Yard, as depicted in **Exhibit B** and **Exhibit C**.
- 123) Article 6.8 Landscaping Standards: Shall apply, except as otherwise modified below:
- A. Landscape Plan: The Landscaping Plan, attached hereto as **Exhibit E**, is hereby incorporated as the intended planting plan for the Real Estate.
- 124) Article 6.8 (N) Buffer Yard Requirements: Shall not apply to the north, west or east property lines.
- 125) Article 6.8(O)(1) Interior Parking Area Landscaping: Shall apply; however, the minimum Interior Parking Area Landscaping for the Real Estate shall be nine hundred (900) square feet, which shall be landscaped with a minimum aggregate of five (5) trees and twenty (20) shrubs.
- 126) Article 6.8(O)((2) Perimeter Parking Area Landscaping: Shall apply, except as otherwise modified below:
- a) In the event Tournament Trail is not available for the initial development of the site and **Exhibit C** is used, the perimeter parking lot landscaping required along the north property line shall not be required until the Tournament Trail extension is constructed. At that time, the Property Owner shall install perimeter parking area landscaping in the south unimproved right of way of Tournament Trail, in coordination with the City.



- b) Perimeter Parking Area Landscaping shall not apply to a parking lot(s) located within five (5) feet of the Real Estate's eastern lot line.
- 127) Section 9. Infrastructure Standards. The District's infrastructure shall comply with the Unified Development Ordinance and the City's Construction Standards (see *Chapter 7: Subdivision Regulations*), unless otherwise approved by the Plan Commission or Department of Public Works in consideration to the preservation of the natural topography and environment and in consideration to the unique design intent of the District.

Section 10. Design Standards. The standards of Chapter 8: Design Standards shall apply to the development of the District, except as otherwise modified below:

- A. Easements: Cross-access across the Real Estate to the eastern property line shall be established at the time of Secondary Plat approval, as set forth in the Rezoning Commitments attached hereto as **Exhibit F** and Section 3 above.

DEPARTMENT COMMENTS

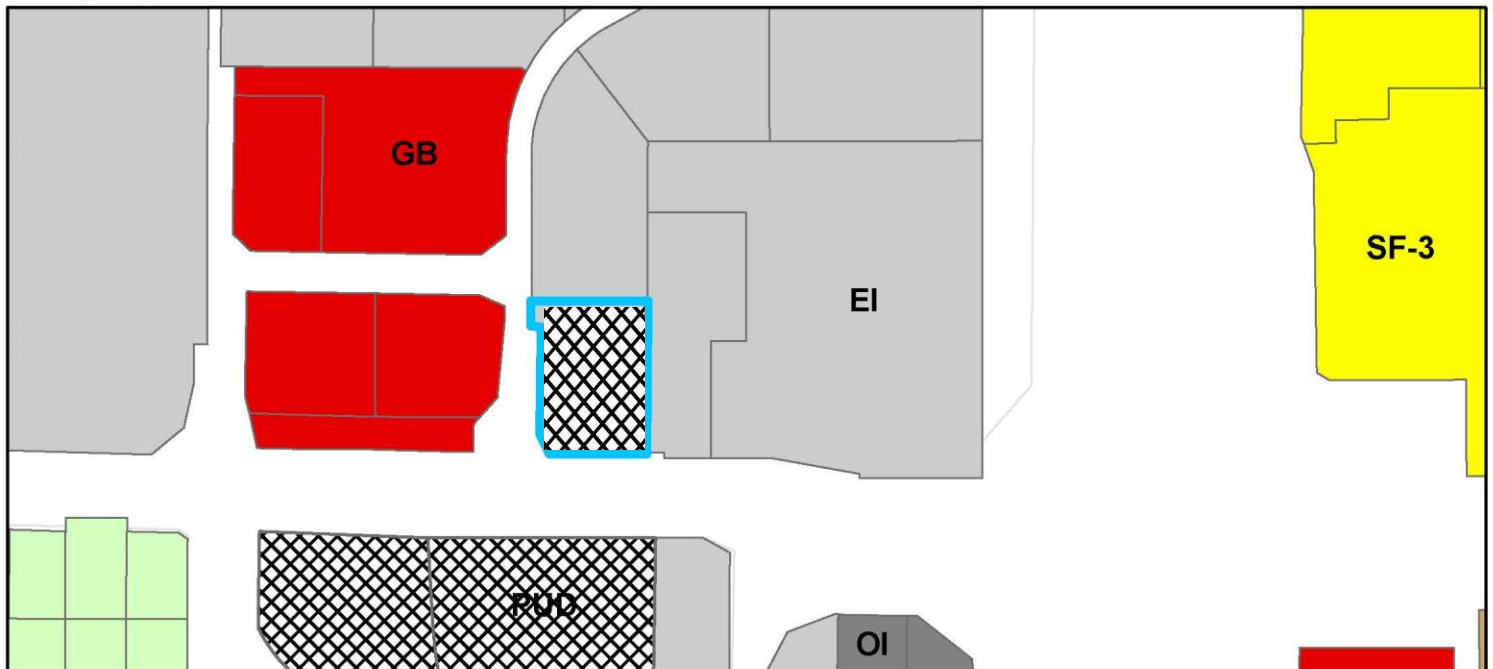
1. The Subdivision Primary Plat, Overall Development Plan, and Detailed Development Plan comply with the applicable PUD and zoning ordinances.
2. **Recommendation:** The Department recommends **approving the petition with the following conditions:**
 1. **Final approval of the lighting plan be delegated to staff; and,**
 2. **All necessary approvals be obtained from the Westfield Public Works Department, Westfield Fire Department and the Hamilton County Surveyor's Office prior to the issuance of an improvement location permit.**
3. If any APC member has questions prior to the public hearing, please contact Kevin Todd at ktodd@westfield.in.gov or 317.379.6467.

Aerial Location Map

Site



Zoning Map



Zoning

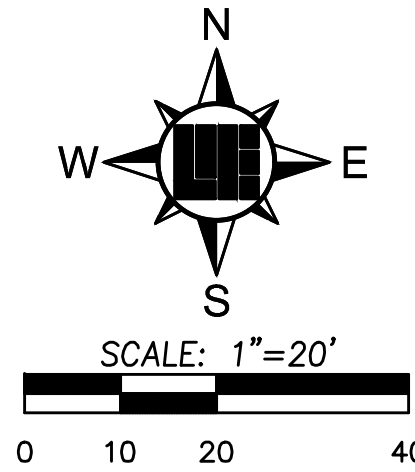
AG-SF1 (Agriculture - Single Family - 1)	GB (General Business)	PUD (Planned Unit Development)
EI (Enclosed Industrial)	MF-1 (Multiple Family - 1)	SF-3 (Single Family - 3)
	OI (Open Industrial)	

BENCHMARK DATA

PROJECT BM: A STANDARD DISK STAMPED HAM G11 SET IN THE TOP OF THE SOUTHWEST CONCRETE WING OF A CULVERT ALONG STATE ROAD 32 ABOUT 0.37 MILES EAST OF U.S. 31. ELEVATION=876.19 (NAVD 88)

SITE TBM: CUT "X" ON EAST BONNET BOLT OF FIRE HYDRANT AT THE NORTHWEST INTERSECTION OF STATE ROAD 32 AND SUN PARK DRIVE. ELEVATION=900.33 (NAVD 88)

CULVER'S SUN PARK
PRIMARY PLAT



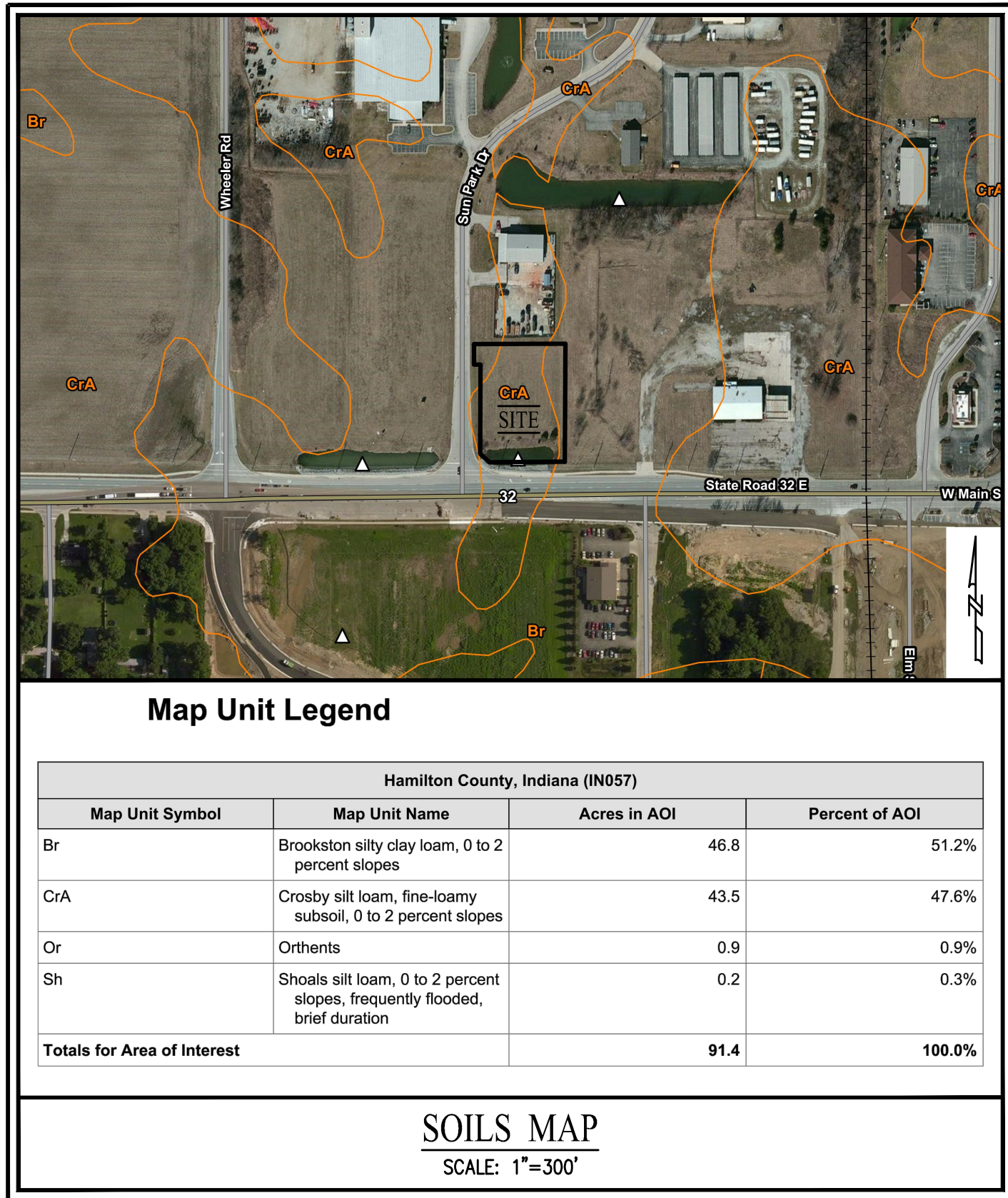
LEGEND

D.&U.E. R.D.E. V.W. B.S.L. ROW B	DRAINAGE & UTILITY EASEMENT REGULATED DRAIN EASEMENT VARIABLE WIDTH BUILDING SETBACK LINE RIGHT-OF-WAY 4"x4"x30" CONCRETE MONUMENT TO BE SET - EXISTING CONTOUR ELEVATION
910	
TELEPHONE JUNCTION BOX TELEPHONE MANHOLE TELEPHONE PEDESTAL TELEPHONE RISER STORM CLEANOUT BEEHIVE INLET CURB INLET ROUND INLET SQUARE INLET STORM JUNCTION BOX STORM MANHOLE SANITARY SEWER CLEANOUT LIFT STATION SANITARY SEWER MANHOLE SANITARY STUB MARKER CATV PEDESTAL CATV JUNCTION BOX CLEANOUT (OTHER)	TRAFFIC CONTROL JUNCTION BOX MANHOLE (OTHER OR UNIDENTIFIED) TRAFFIC CONTROL MANHOLE MONITORING WELL PETROLEUM PIPELINE MARKER FIBER OPTIC MARKER TRAFFIC SIGNAL POLE BOLLARD FLAG POLE MAIL BOX POST SIGN PARKING WHEEL STOP AIR CONDITIONER HANDICAPPED SPACE SOIL BORING GATE POST
RIGHT OF WAY LINE CHAIN LINK FENCE BOARD FENCE WROUGHT IRON FENCE FARM FENCE QUARD RAIL FLOW LINE	
VCP HDPE DIP	WTRIFIED CLAY PIPE HIGH DENSITY POLYETHYLENE PIPE DUCTILE IRON PIPE

BRASS OR ALUM. PLUG FOUND/SET CONC. MONUMENT FOUND/SET COPPERWELD FOUND/SET CUT "X" FOUND/SET HARRISON MONUMENT FOUND IRON PIN FOUND/SET IRON PIPE FOUND PK OR MAG NAIL FOUND/SET RR SPIKE FOUND/SET RIGHT OF WAY MONUMENT FOUND STONE FOUND BENCH MARK TEMPORARY BENCH MARK OTHER MONUMENT	FIRE HYDRANT WATER HAND HOLE INDICATOR POST & VALVE WATER MANHOLE SPRINKLER CONTROL BOX SPRINKLER CONTROL VALVE SPRINKLER STAND PIPE WELL HEAD WATER METER WATER VALVE GAS METER GAS VALVE GAS PIPELINE MARKER GAS MANHOLE	ELECTRIC CONTROL BOX ELECTRIC METER ELECTRIC PEDESTAL ELECTRICAL RISER FLOOD LIGHT GUY ANCHOR ELECTRIC JUNCTION BOX ORNAMENTAL LIGHT LIGHT POLE LIGHT STAND ELECTRIC MANHOLE UTILITY POLE UTILITY POLE W/ LIGHT UTILITY POLE W/ TRANSFORMER UTILITY POLE W/ LIGHT & TRANS. TRANSFORMER	UNDERGROUND GAS UNDERGROUND WATER AERIAL ELECTRIC UNDERGROUND ELECTRIC AERIAL TELEPHONE UNDERGROUND TELEPHONE AERIAL CABLE TELEVISION UNDERGROUND CABLE TELEVISION MIXED OR UNIDENTIFIED OVERHEAD UTILITY FORCE MAIN FIBER OPTIC CABLE CMP RCP PVC	CORRUGATED METAL PIPE REINFORCED CONCRETE PIPE POLYVINYL CHLORIDE PIPE
G W E(A) E(U) T(A) T(U) CATV(A) CATV(U) OHU FM FO	G W E(A) E(U) T(A) T(U) CATV(A) CATV(U) OHU FM FO	G W E(A) E(U) T(A) T(U) CATV(A) CATV(U) OHU FM FO		
(M) MEASURED DIMENSION (R) RECORD DIMENSION (P) PLATTED DIMENSION (C) CALCULATED DIMENSION				

WESTFIELD REQUIRED NOTES

- ALL STREET TREES ARE TO MATCH THE CURRENT CITY OF WESTFIELD MASTER TREE LIST.
- STREET TREES SHALL NOT BE WITHIN 4 FEET OF ANY PAVEMENT.
- THERE SHALL BE NO TREES WITHIN 10 FEET OF ANY STORM SEWER INCLUDING SSD.



CURRENT OWNER OF RECORD: JAMES W. SWAN
SPECIAL WARRANTY DEED NO. 2015049486

LAND DESCRIPTION

PART OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 36, TOWNSHIP 19 NORTH, RANGE 3 EAST IN HAMILTON COUNTY, INDIANA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID QUARTER QUARTER SECTION; THENCE ALONG THE SOUTH LINE THEREOF NORTH 89 DEGREES 42 MINUTES 22 SECONDS WEST 576.00 FEET; THENCE PARALLEL WITH THE EAST LINE OF SAID QUARTER QUARTER SECTION NORTH 00 DEGREES 46 MINUTES 41 SECONDS EAST 30.00 FEET TO THE POINT OF BEGINNING; THENCE PARALLEL WITH THE SOUTH LINE OF SAID QUARTER QUARTER SECTION NORTH 89 DEGREES 42 MINUTES 22 SECONDS WEST 180.01 FEET TO THE EASTERLY RIGHT OF WAY LINE OF AN ACCESS ROAD; THENCE ALONG SAID EASTERLY LINE NORTH 44 DEGREES 27 MINUTES 51 SECONDS WEST 28.16 FEET; THENCE NORTH 00 DEGREES 46 MINUTES 41 SECONDS EAST 295.01 FEET; THENCE SOUTH 89 DEGREES 42 MINUTES 22 SECONDS EAST 200.01 FEET; THENCE SOUTH 00 DEGREES 46 MINUTES 41 SECONDS WEST 315.01 FEET TO THE PLACE OF BEGINNING.

EXCEPT:

A PART OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 36, TOWNSHIP 19 NORTH, RANGE 3 EAST, HAMILTON COUNTY, INDIANA, DESCRIBED AS FOLLOWS:

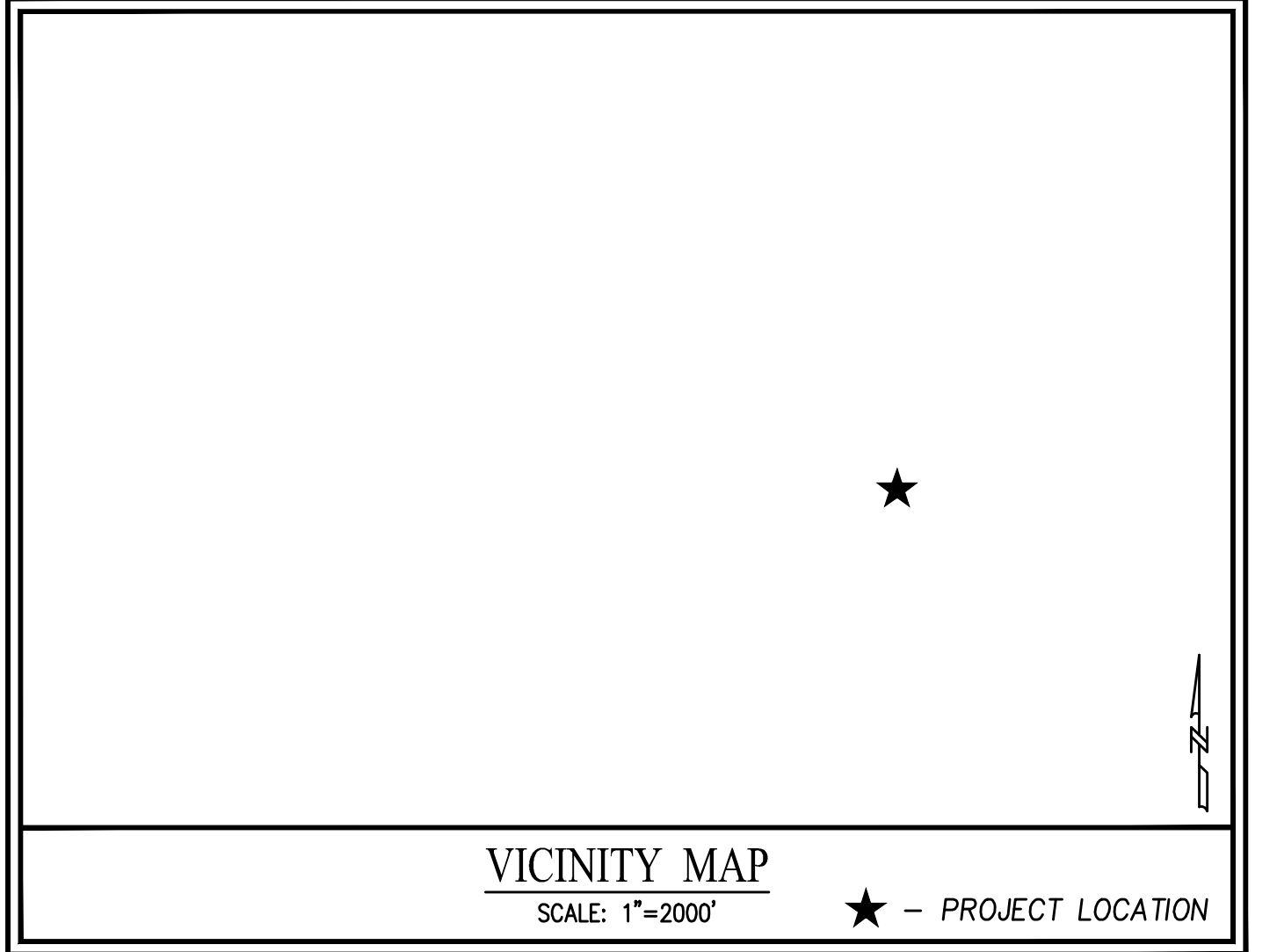
COMMENCING AT THE SOUTHEAST CORNER OF SAID QUARTER SECTION; THENCE SOUTH 88 DEGREES 48 MINUTES 00 SECONDS WEST 576.00 FEET ALONG THE SOUTH LINE OF SAID QUARTER-QUARTER SECTION; THENCE NORTH 00 DEGREES 42 MINUTES 57 SECONDS WEST 30.00 FEET TO THE NORTH BOUNDARY OF S.R. 32 AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE SOUTH 88 DEGREES 48 MINUTES 00 SECONDS WEST 180.01 FEET ALONG THE BOUNDARY OF SAID S.R. 32; THENCE NORTH 45 DEGREES 57 MINUTES 29 SECONDS WEST 14.08 FEET ALONG SAID BOUNDARY; THENCE NORTH 88 DEGREES 48 MINUTES 00 SECONDS EAST 190.01 FEET TO THE EAST LINE OF THE OWNERS' LAND; THENCE SOUTH 00 DEGREES 42 MINUTES 57 SECONDS EAST 10.00 FEET ALONG SAID EAST LINE OF THE OWNERS' LAND TO THE BOUNDARY OF S.R. 32 AND THE POINT OF BEGINNING AND CONTAINING 0.042 ACRES, MORE OR LESS.

TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS AS RECORDED IN INSTRUMENT NUMBER 8919077.

ALSO EXCEPT THAT PART CONVEYED TO THE STATE OF INDIANA BY WARRANTY DEED RECORDED JULY, 17, 2007 AS INSTRUMENT NO. 2007040165, DESCRIBED AS FOLLOWS:

A PART OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 36, TOWNSHIP 19 NORTH, RANGE 3 EAST, HAMILTON COUNTY, INDIANA, AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID QUARTER SECTION; THENCE NORTH 89 DEGREES 50 MINUTES 43 SECONDS WEST 576.07 FEET ALONG THE SOUTH LINE OF SAID SECTION TO THE PROLONGED EAST LINE OF THE GRANTOR'S LAND; THENCE NORTH 00 DEGREES 38 MINUTES 07 SECONDS EAST 40.00 FEET ALONG SAID EAST LINE PROLONGED TO THE NORTH BOUNDARY OF S.R. 32 AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE NORTH 89 DEGREES 50 MINUTES 43 SECONDS WEST 189.81 FEET (190.01) FEET BY INSTRUMENT NUMBER 9327322) ALONG THE BOUNDARY OF SAID S.R. 32 TO THE NORTHEASTERN BOUNDARY OF THE INTERSECTION OF SAID S.R. 32 AND SUNPARK DRIVE; THENCE NORTH 44 DEGREES 00 MINUTES 56 SECONDS WEST 14.22 FEET ALONG THE BOUNDARY OF THE INTERSECTION OF SAID S.R. 32 AND SAID SUNPARK DRIVE TO THE EAST BOUNDARY OF SAID SUNPARK DRIVE; THENCE NORTH 00 DEGREES 38 MINUTES 07 SECONDS EAST 249.58 FEET ALONG THE BOUNDARY OF SAID SUNPARK DRIVE; THENCE SOUTH 89 DEGREES 21 MINUTES 40 SECONDS EAST 14.13 FEET; THENCE SOUTH 00 DEGREES 28 MINUTES 20 SECONDS WEST 194.80 FEET; THENCE SOUTH 47 DEGREES 31 MINUTES 04 SECONDS EAST 27.80 FEET; THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS EAST 164.98 FEET TO THE EAST LINE OF GRANTOR'S LAND; THENCE SOUTH 00 DEGREES 38 MINUTES 07 SECONDS WEST 46.59 FEET ALONG SAID EAST LINE TO THE POINT OF BEGINNING AND CONTAINING 0.285 ACRES, MORE OR LESS.



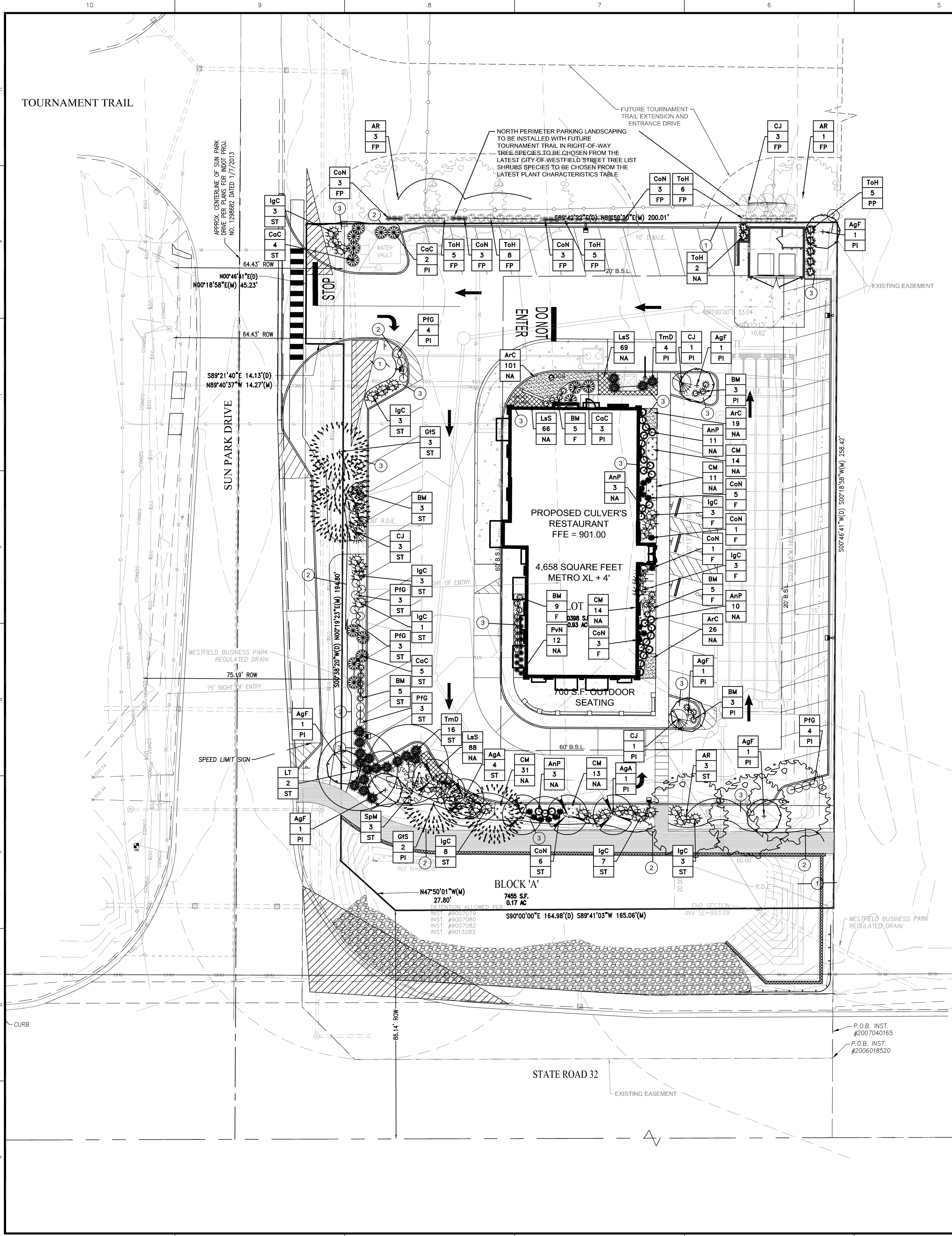
THIS PLAT PREPARED UNDER THE DIRECT SUPERVISION OF THE UNDERSIGNED.
DATED: JANUARY 27, 2016

JOSHUA DAVID WERNER, P.S.



This instrument prepared for:
CUSTARD KINGS
P.O. BOX 1478
MARION, INDIANA 46952
TELEPHONE: (765) 206-0050
CONTACT PERSON: MR. JIM SWAN
EMAIL: JIM.SWAN@MARIONSTEELFAB.COM

This instrument prepared by: Joshua David Werner, P.S.
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Landscape Architecture
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Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER



LANDSCAPE PLAN NOTES

- SOD- ALL SOD SHALL BE CERTIFIED GRADE CULTIVATED GRASS SOD OF "ADVENTURE BLEND" TURF TYPE TALL FESCUE (BY GENERAL CONTRACTOR)
- LANDSCAPE BED EDGE (TYP.)
- MULCH

WESTFIELD REQUIRED NOTES

- ALL STREET TREES ARE TO MATCH THE CURRENT CITY OF WESTFIELD MASTER TREE LIST.
- STREET TREES SHALL NOT BE WITHIN 4 FEET OF ANY PAVEMENT.
- THERE SHALL BE NO TREES WITHIN 10 FEET OF ANY STORM SEWER INCLUDING SSD.

LEGEND

- CLEAR SIGHT TRIANGLE
- SYMBOL
- QUANTITY
- PLANTING AREA
- F = FOUNDATION PLANTINGS
PI = INTERIOR PARKING LOT
PP = PERIMETER PARKING LOT
FP = FUTURE PERIMETER PARKING (NORTH)
NA = NOT REQUIRED BY ZONING
ST = STREET FRONTAGE PLANTINGS

GENERAL NOTES

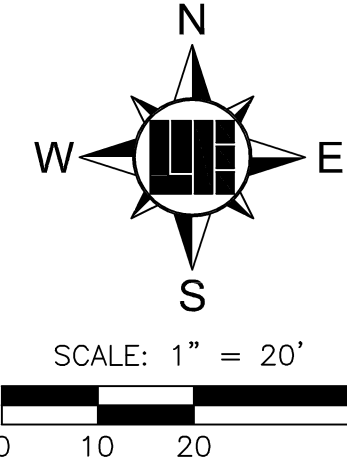
- IN CASE OF DISCREPANCIES BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE. IF IN QUESTION, CONTACT THE LANDSCAPE DESIGNER.
- ALL SHRUBS PLANTING AREAS TO BE COVERED WITH 4" THICK LAYER OF SHREDDED HARDWOOD BARK MULCH. ALL GROUND COVER BEDS SHALL BE COVERED WITH 1" SHREDDED HARDWOOD BARK MULCH. BARK MULCH SHALL BE APPROVED BY LANDSCAPE DESIGNER AND SHALL BE UNIFORM IN TEXTURE AND COLOR AND SHALL BE OBTAINED FROM SAWMILL OR LUMBERING OPERATIONS. NO UTILITY MULCH OR PROCESSED TREE TRIMMINGS WILL BE ALLOWED.
- AN APPROVED PRE-EMERGENT HERBICIDE SHALL BE APPLIED IN ALL PLANTING AND GROUND COVER BEDS AT RATES SPECIFIED BY MANUFACTURER FOR EACH VARIETY OF PLANT.
- FINAL PLACEMENT OF PLANT MATERIALS, ETC. SHALL BE APPROVED BY LANDSCAPE DESIGNER BEFORE PLANTING OPERATIONS ARE TO PROCEED. ALL TREE LOCATIONS SHALL BE MARKED WITH A WOODED STAKE INDICATING VARIETY AND SIZE OF TREE. ALL GROUND COVER AND MULCH BED LINES SHALL BE MARKED BY A HIGHLY VISIBLE PAINT LINE WITH OCCASIONAL WOOD STAKES FOR REFERENCE. ALL STAKES SHALL BE REMOVED FOLLOWING PLANTING OPERATIONS. LANDSCAPE DESIGNER RESERVES THE RIGHT TO ADJUST PLANT LOCATIONS ON SITE.
- NO SUBSTITUTIONS OF PLANT MATERIAL WILL BE ALLOWED. IF PLANTS ARE SHOWN TO BE UNAVAILABLE, THE CONTRACTOR SHALL NOTIFY LANDSCAPE DESIGNER PRIOR TO BID DATE IN WRITING. ALL PLANTS SHALL BE INSPECTED AND TAGGED WITH PROJECT IDENTIFICATION AT NURSERY OR CONTRACTORS OPERATION PRIOR TO MOVING TO JOB SITE. PLANTS MAY ALSO BE INSPECTED AND APPROVED OR REJECTED ON THE JOB SITE.
- ALL PLANTS ARE TO MEET OR EXCEED AMERICAN STANDARDS FOR NURSERY STOCK, LATEST EDITION, AS SET FORTH BY AMERICAN ASSOCIATION OF NURSERMEN.
- PLANTS AND ALL OTHER MATERIALS TO BE STORED ON SITE WILL BE PLACED WHERE THEY WILL NOT CONFLICT WITH CONSTRUCTION OPERATIONS AND AS DIRECTED BY OWNER.
- ALL NEW LANDSCAPE PLANTINGS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FOLLOWING FINAL INSPECTION BY LANDSCAPE DESIGNER. AT THE END OF THIS PERIOD, PLANT MATERIAL TERMINED DEAD OR UNSATISFACTORY BY LANDSCAPE DESIGNER SHALL BE REPLACED AT NO ADDITIONAL CHARGE BY THE LANDSCAPE CONTRACTOR.
- THE LANDSCAPE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES THAT MAY BE REQUIRED FOR HIS PORTION OF WORK.
- PEAT MOSS TO BE USED ON PROJECT SHALL BE A DOMESTIC OR IMPORTED MATERIAL, CHOCOLATE BROWN IN COLOR AND COMPOSED OF PARTIALLY DECOMPOSED VEGETABLE MATERIAL. PEAT MOSS TO ALSO BE MILDLY ACIDIC IN CHARACTER AND SHALL MEET APPROVAL OF LANDSCAPE DESIGNER.
- LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE DESIGNER IN WRITING PRIOR TO BID DATE OF ANY PLANTS THAT HE FEELS MAY NOT SURVIVE IN LOCATIONS NOTED.
- ALL LANDSCAPING PLANTING TO BE MAINTAINED FOR 1 YEAR FOLLOWING TURN-OVER. MAINTENANCE TO INCLUDE WATERING, WEEDING, CULTIVATION, MULCHING, MOWING AND ALL OTHER NECESSARY OPERATIONS REQUIRED FOR PROPER ESTABLISHMENT OF PLANTINGS. NOTE: AT END OF MAINTENANCE PERIOD, CONTRACTOR TO REMOVE GUYING AND STAKING FROM TREES.
- CONTRACTOR TO SUBMIT UNIT PRICES ON EVERY TYPE OF WORK AS REQUESTED BY LANDSCAPE DESIGNER.
- BACKFILL FOR TREE AND SHRUB PLANTING SHALL BE 75% APPROXIMATE TOPSOIL AND 25% APPROXIMATE BROWN IN COLOR AND COMPOSED OF PARTIALLY DECOMPOSED TOPSOIL. A 5-10-5 ANALYSIS SLOW RELEASE FERTILIZER SHALL BE INCORPORATED INTO BACKFILL AT APPROVED RATES.
- PROVIDE MINIMUM 4" PLANTING SOIL IN ALL GROUND COVER AND FLOWER AREAS WITH MIXTURE COMPRISING OF ONE PART COMMERCIAL GRADE POTTING SOIL, 5 PARTS TOPSOIL AND 4 PARTS PEAT MOSS. A FULL 4" LAYER OF APPROVED SHREDDED FIBROUS PEAT MOSS MAY BE USED IN LIEU OF PLANTING MIX.
- PLANTS SHALL BEAR A TAG SHOWING GENUS, SPECIES AND VARIETY.
- PLANTS SHALL BE CERTIFIED BY THE STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES AND FREE FROM DISEASE OR HAZARDOUS INSECTS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PERTAINING TO THEIR PORTION OF WORK. UTILITIES ARE SHOWN TO BE APPROXIMATE. CALL UTILITY LOCATE PRIOR TO ANY PLACEMENT OF PLANT MATERIAL OR OTHER LANDSCAPE MATERIAL.
- CONTRACTOR TO REVIEW AND VERIFY ALL STABILIZATION REQUIREMENTS AS SHOWN IN THE SWPPP PORTION OF THE CONSTRUCTION PLANS.

PLANT SCHEDULE									
PLAN KEY	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	ROOT CONDITION	CENTER TO CENTER SPACING	SPECIAL INSTRUCTIONS	MATURE SIZE	
CANOPY DECIDUOUS TREES									
AR	ACER RUBRUM	RED MAPLE	2 1/2"	3	X	SEE PLAN	X	50'T x 40'W	
GIS	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'	SKYLINE HONEYLOCUST	2 1/2"	5	X	SEE PLAN	X	40'T x 30'W	
LT	LIRODENDRON TULIPIFERA	TULIP TREE	2 1/2"	2	X	SEE PLAN	X	70'T x 40'W	
ORNAMENTAL UNDERSTORY TREES									
AgF	ACER GINNALA 'FLAME'	AMUR MAPLE	1 1/2"	6	X	SEE PLAN	MULTI BRANCH	17'T x 17'W	
AgA	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	1 1/2"	5	X	SEE PLAN	X	20'T x 20'W	
DECIDUOUS SHRUBS									
CaC	CLETHRA ALNIFOLIA 'CRYSTALLINA'	SUGARTINA SUMMERSWEET	#3	14	X	SEE PLAN	MIN 18"	5'T x 5'W	
CJ	CALLICARPA JAPONICA	JAPANESE BEAUTYBERRY	#3	5	X	SEE PLAN	MIN 18"	7'T x 7'W	
PIG	POTENTILLA FRUTICOSA 'GOLDFINGER'	GOLDFINGER POTENTILLA	#2	17	X	SEE PLAN	MIN 18"	3'T x 3'W	
SpM	SYRINGA PATULA 'MISS KIM'	MISS KIM LILAC	#2	3	X	SEE PLAN	MIN 18"	8'T x 8'W	
EVERGREEN SHRUBS									
BM	BUXUS MICROPHYLLA	LITTLELEAF BOXWOOD	18"	33	X	SEE PLAN	MIN 18"	3'T x 3'W	
CoN	CHAMAECYPARIS OBTUSA 'NANA'	HINOKI CYPRESS	18"	16	X	SEE PLAN	MIN 18"	2'5'T x 2'5'W	
IgC	ILEX GLABRA 'COMPACTA'	COMPACT HOLLY	18"	34	X	SEE PLAN	MIN 18"	3'T x 5'W	
TmD	TAXUS X MEDIA 'DENSIFORMIS'	DENSE YEW	18"	20	X	SEE PLAN	MIN 18"	3'5'T x 5'W	
ToH	THUJA OCCIDENTALIS 'HOLMSTRUP'	HOLMSTRUP ARBORVITAE	18"	7	X	SEE PLAN	MIN 18"	5'T x 4'W	
ORNAMENTAL GRASSES									
LSs	LIRIOPE SPICATA 'SILVER DRAGON'	SILVER DRAGON LILYTURF	#1	223	X	12" OC	X	1'T x 1'W	
PvN	PANICUM VIRGATUM 'NORTHWIND'	NORTHWIND SWITCHGRASS	#1	12	X	SEE PLAN	X	5'T x 2'W	
PERENNIALS									
ArC	AJUGA REPTANS 'CHOCOLATE CHIP'	BUGLEWEED	2'25" SDCS	146	X	16" OC	X	4'T x 16'W	
AnP	ASTER NOVI-ANGIAE 'PURPLE DOME'	PURPLE DOME NEW ENGLAND ASTER	#1	27	X	2'5" OC	X	2'T x 3'W	
CM	COREOPSIS 'MOONBEAM'	MOONBEAM TICKSEED	#1	83	X	18" OC	X	18'T x 2'W	

LANDSCAPE ORDINANCE REQUIREMENTS

MUNICIPALITY REQUIREMENTS	REQUIRED	PROVIDED
CHAPTER 6.3. SR 32 OVERLAY - 30' WIDE TRAIL CORRIDOR ALONG SR 32 - 3 SHADE TREES AND 1 ORNAMENTAL TREE PER 100 LINEAR FEET - LANDSCAPING SHALL BE COUNTED TOWARD MEETING LANDSCAPING STANDARDS AS IF THE TRAIL CORRIDOR WERE PART OF THE ADJACENT LOT BEING DEVELOPED.	(165' ±) - 5 SHADE TREES - 2 ORNAMENTAL TREES	- 5 SHADE TREES - 2 ORNAMENTAL TREES
CHAPTER 6.8.K. LOT LANDSCAPING REQUIREMENTS - 10 SHADE TREES, 10 ORNAMENTAL OR EVERGREEN TREES, AND 25 SHRUBS PER ACRE. - ALL OTHER REQUIRED PLANTINGS FOR THIS LOT MAY BE COUNTED TOWARD THE LOT LANDSCAPING REQUIREMENT.	(1.11 AC ±) - 11 SHADE TREES - 11 ORNAMENTAL OR EVERGREEN TREES - 25 SHRUBS	- 11 SHADE TREES (INCLUDES FUTURE PLANTINGS ALONG TOURNAMENT TRAIL) - 7 ORNAMENTAL TREES (REDUCED PER PUD) - 25 SHRUBS
CHAPTER 6.8.L. FOUNDATION PLANTINGS - 1 SHRUB OR ORNAMENTAL TREE PER 12 LINEAL FEET ALONG FRONT BUILDING FACADE. - PLANTINGS REQUIRED INTERMITTENTLY AGAINST EXPANSES OVER 80' OF BUILDING FACADES OR FENCES. - MUST BE PLANTED WITHIN 15' OF BUILDING FACADE AND PLANTED IN BEDS AT LEAST 8' IN WIDTH.	(144' ±) - 12 SHRUBS OR ORNAMENTAL TREES	- 21 SHRUBS
CHAPTER 6.8.M. EXTERNAL STREET FRONTAGE - 3 SHADE OR EVERGREEN TREES, 2 ORNAMENTAL TREES, AND 25 SHRUBS PER 100 LINEAR FEET - MAY BE CREDITED TOWARD PARKING AREA LANDSCAPING IF PARKING AREA LANDSCAPING IS WITHIN 20' OF THE RIGHT-OF-WAY.	SUN PARK DR. (240' ±) - 7 SHADE OR EVERGREEN TREES - 5 ORNAMENTAL TREES - 60 SHRUBS SR 32 (165' ±) - 5 SHADE TREES - 4 ORNAMENTAL TREES - 42 SHRUBS	SUN PARK DR. - NO TREES PER PUD - 60 SHRUBS SR 32 - 5 SHADE TREES - 4 ORNAMENTAL TREES - 42 SHRUBS
CHAPTER 6.8.O. PARKING AREA LANDSCAPING - INTERIOR (PER PUD) - 900 SQUARE FEET OF PARKING SURFACE AREA TO BE LANDSCAPED ISLANDS - ISLANDS TO BE A MINIMUM OF 120 SF AND 7' IN WIDTH - AN AGGREGATE OF 5 TREES AND 20 SHRUBS MUST BE PLANTED - PERIMETER (PER PUD) - APPLIES ONLY WHEN A PARKING LOT IS LOCATED WITHIN AN ESTABLISHED YARD OR IS WITHIN 20' OF A LOT LINE OR RIGHT-OF-WAY LINE - 1 TREE PER 30 LINEAR FEET - 1 SHRUB PER 30 LINEAR FEET - REQUIRED PLANTINGS ALONG THE NORTH PROPERTY LINE ARE NOT TO BE INSTALLED UNTIL THE TOURNAMENT TRAIL EXTENSION IS CONSTRUCTED.	INTERIOR (29,542 SF ±) - 2,798 SF ISLANDS REQUIRED - 1 TREE & 4 SHRUBS PER ISLAND FRONTAGE PERIMETER (135' ±) - 5 TREES - 45 SHRUBS EAST PERIMETER (199' ±) - 7 TREES - 66 SHRUBS NORTH PERIMETER (118' ±) - 4 TREES - 39 SHRUBS	INTERIOR - 914 SF ISLANDS - 5 TREES - 25 SHRUBS FRONTAGE PERIMETER - MET BY EXTERNAL STREET FRONTAGE PLANTINGS EAST PERIMETER - NO TREES PER PUD - 66 SHRUBS NORTH PERIMETER - TO BE INSTALLED WITH FUTURE TOURNAMENT TRAIL IN ROW

FUTURE PERIMETER PARKING (NORTH) PLANT SCHEDULE (TO BE INSTALLED WITH TOURNAMENT TRAIL)									
PLAN KEY	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	ROOT CONDITION	CENTER TO CENTER SPACING	SPECIAL INSTRUCTIONS	MATURE SIZE	
CANOPY DECIDUOUS TREES									
AR	ACER RUBRUM	RED MAPLE	2 1/2"	4	X	SEE PLAN	X	50'T x 40'W	
DECIDUOUS SHRUBS									
CJ	CALLICARPA JAPONICA	JAPANESE BEAUTYBERRY	#3	3	X	SEE PLAN	MIN 18"	7'T x 7'W	
EVERGREEN SHRUBS									
CoN	CHAMAECYPARIS OBTUSA 'NANA'	HINOKI CYPRESS	18"	12	X	SEE PLAN	MIN 18"	2'5'T x 2'5'W	
ToH	THUJA OCCIDENTALIS 'HOLMSTRUP'	HOLMSTRUP ARBORVITAE	18"	24	X	SEE PLAN	MIN 18"	5'T x 4'W	



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WEIHE ENGINEERS
Land Surveying/Civil Engineering
Landscape Architecture

PROJECT NO.: W15.0316
DWG NAME: 150316-L101 Landscape.dwg
DATE: 03.17.2016
BY: B.S.
CHECKED BY: B.S.
DATE: 03.11.2016

REVISIONS AND ISSUES
SUBMITTED FOR COUNTY SURVEYOR REVIEW
ISSUED FOR ZAC REVIEW
SUBMITTED FOR ZAC REVISIONS (PLANNING)
ISSUED FOR ZAC REVISIONS (PLANNING)

ROBERT A. MEZKOWSKI
REGISTERED PROFESSIONAL LAND SURVEYOR
No. 80050080
STATE OF INDIANA
NOTARY PUBLIC ARCHITECTURAL SEAL

PREPARED FOR:
City of Westfield
17651 SUN PARK DRIVE, WESTFIELD, IN 46074
LANDSCAPE PLAN
Part of S.W.M. Section 36, Township 15 North, Range 3 East, Washington Township, Hamilton County, Indiana

SHEET NO.
L100
PROJECT NO.
W15.0316

DOOR SCHEDULE

DOOR:					FRAME:		HARDWARE GROUP	NOTES
NO.	WIDTH	HGT.	MAT'L	TYPE	MATERIAL	TYPE		
1	2 @ 36"	84"	ALUM	A	ALUM	A	1	
2	2 @ 36"	84"	ALUM	A	ALUM	B	2	
3	34"	60"	WD	E	HM	E, 3'-2"	7	HM FRAME PAINT TO MATCH LAMINATE 2: WILSONART FONTHILL PEAR
4	36"	84"	ALUM	A	ALUM	C	1	
5	42"	84"	HM	B	HM	D	3	
6	36"	84"	WD	C	HM	E	4	HM FRAME PAINT TO MATCH LAMINATE 2: WILSONART FONTHILL PEAR
7	36"	84"	WD	C	HM	E	4	HM FRAME PAINT TO MATCH LAMINATE 2: WILSONART FONTHILL PEAR
8	34"	84"	WD	C	HM	E	6	OPTIONAL - CONFIRM IF EMPLOYEE TOILET IS SELECTED
9	-	-	-	-	HM	E	-	HM FRAME WITH 36x84" OPENING. WD DOOR OPTIONAL.
10	36"	84"	WD	D	HM	E	5	HM FRAME PAINT TO MATCH LAMINATE 2: WILSONART FONTHILL PEAR
11	28"	60"	WD	E	HM	E, 2'-8"	7	HM FRAME PAINT TO MATCH LAMINATE 2: WILSONART FONTHILL PEAR
12	34"	60"	WD	E	HM	E, 3'-2"	7	HM FRAME PAINT TO MATCH LAMINATE 2: WILSONART FONTHILL PEAR

HARDWARE GROUPS:

HARDWARE GROUP 1: (Doors 1 & 4)
This hardware group to be provided as part of the aluminum entrance package and shall be manufacturer's best quality system.

Hinges: Roton continuous hinges with heavy duty hardware
Lock: Touchbar exit device (Van Duprin Series 9B or approved equal)
Bolts: Manufacturer's standard flush bolts
Closers: LCN 4000 series with heavy duty hardware
Threshold: Aluminum - Meets ADA requirements
Sweep: Milar's standard sweep
Weatherstripping: Milar's premium package
Wall stops

HARDWARE GROUP 2: (Door 2)
This hardware group to be provided as part of the aluminum entrance package and shall be manufacturer's best quality system.

Hinges: Roton continuous hinges with heavy duty hardware
Lock: None
Bolts: None
Closers: LCN 4000 Series with heavy duty hardware
Threshold: None
Sweep: None
Weatherstripping: None

HARDWARE GROUP 3: (Door 5)

Hinges: Roton continuous hinge
Lock: Schlage D series "Rhodes" in 626 finish
Lock Protection: Glyn-Johnson US52D - Coord. w/ lock
Closers: LCN 4000 H Cush w/ Integral stop
Threshold: Pemko 254 Series
Weatherstripping: Full - Pemko or equal
Kick Plate: 12" high x door width @ both sides of door. 626 finish - Rockwood or equal.

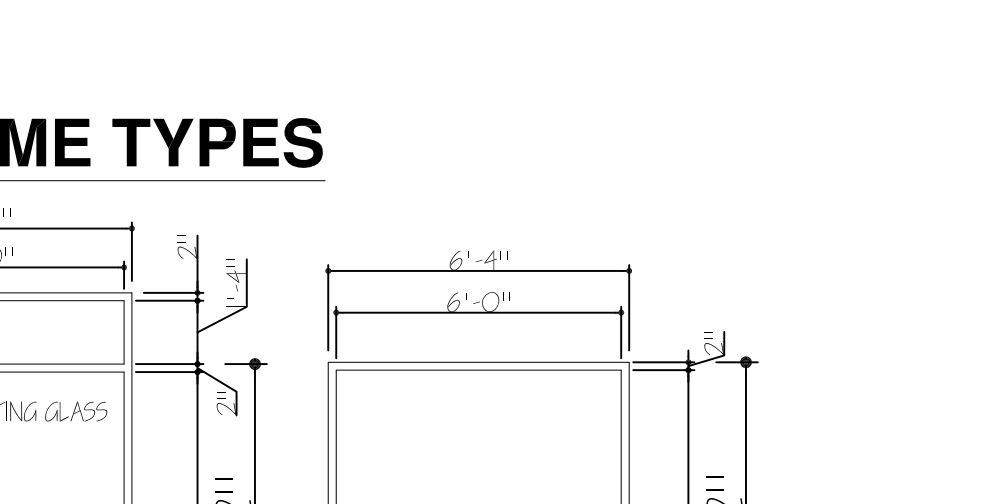
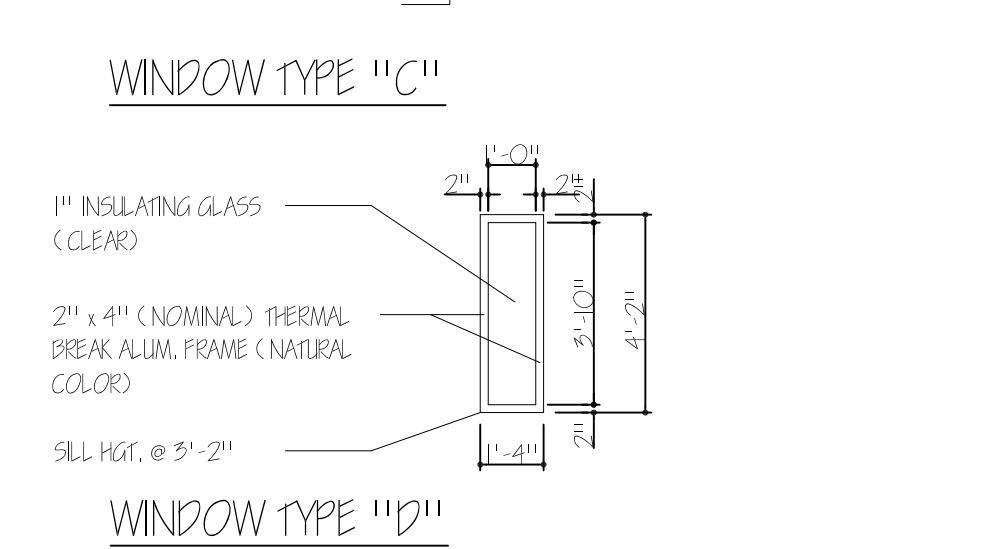
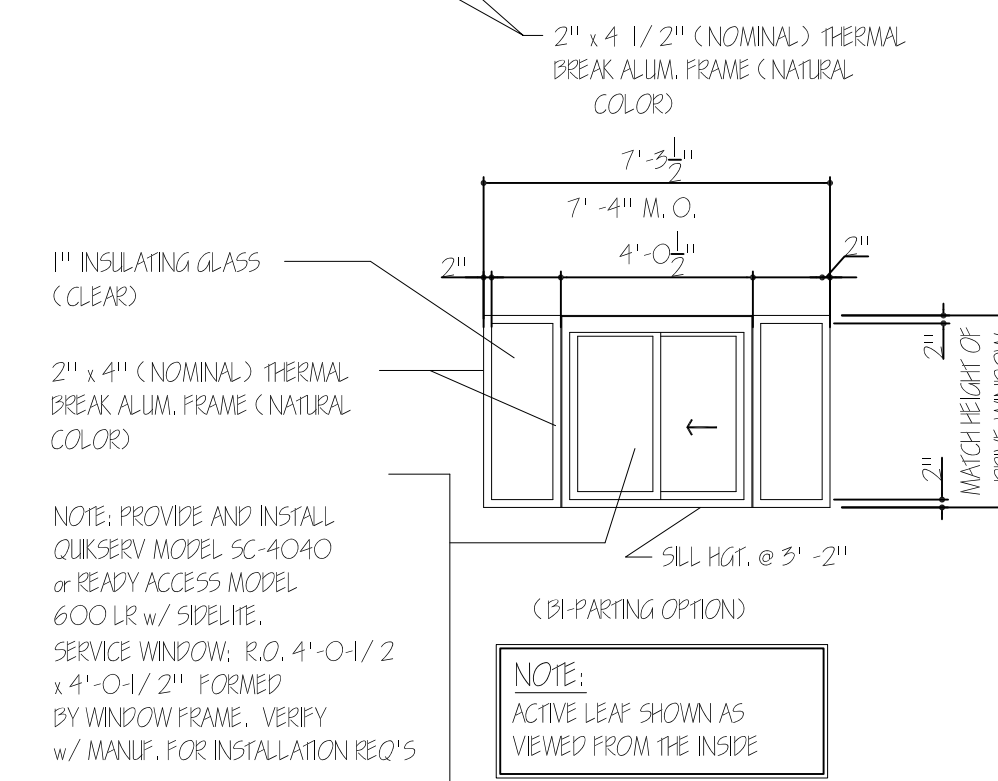
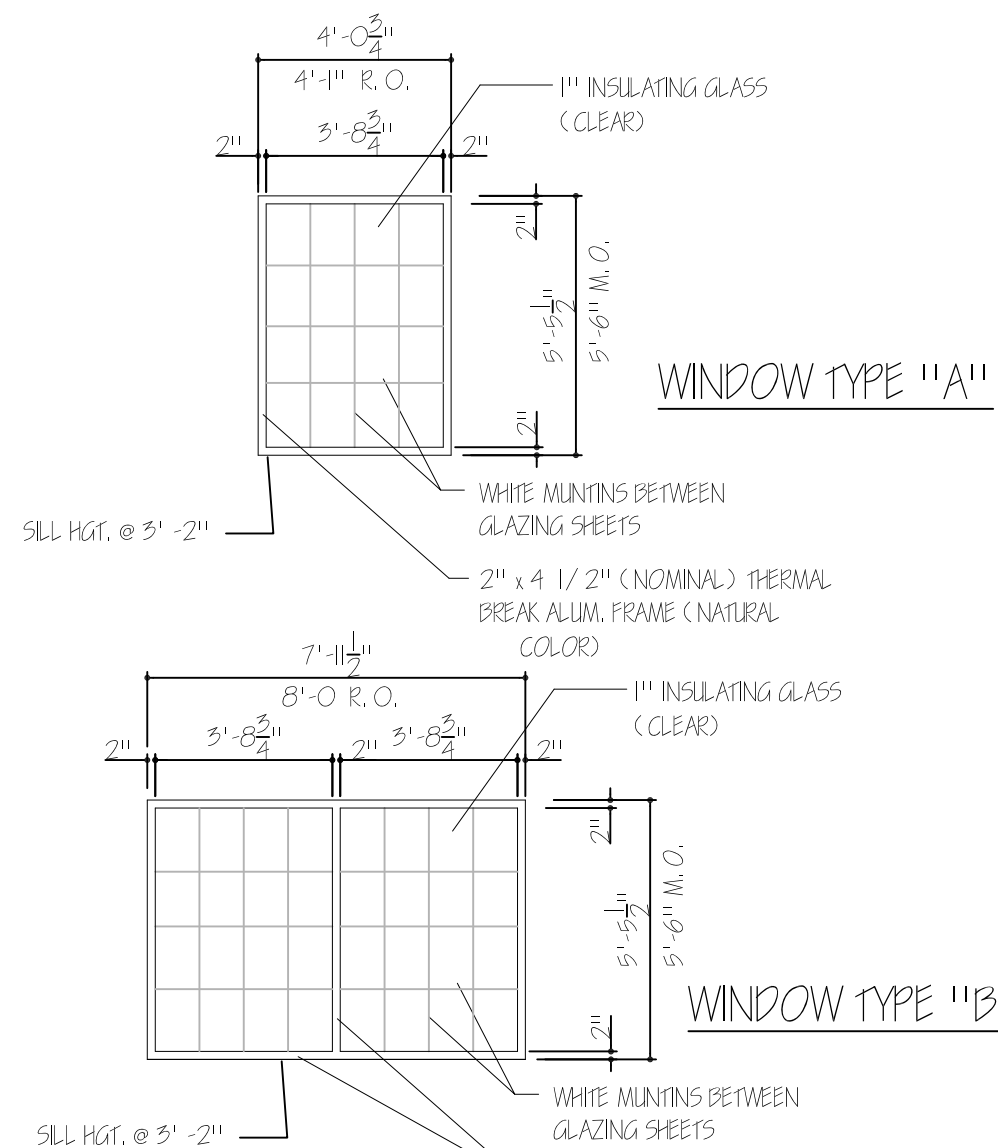
HARDWARE GROUP 4: (Doors 6 & 7)
Hinges: 1-1/2 pair butts - Soss 450 NRP (or Stanley or Hager equal)
Push/Pull: Brookline 50C x 626 and Brookline 50 x 626
Stop: Ives 436 or Ives 407 - 1/2 x 626
Closers: LCN 4000 series with heavy duty hardware
Kick Plate: 8" high x door width @ both sides 626 finish - Brookline or equal

HARDWARE GROUP 5: (Doors 9 & 10)
Hinges: 1-1/2 pair butts - Soss 450 TBP (or Stanley or Hager equal)
Lock: Schlage AL series "Satum" in 626 finish
Stop: Ives 436 or Ives 407 - 1/2 x 626
Kick Plate: 8" high x door width @ kitchen side 626 finish - Brookline or equal

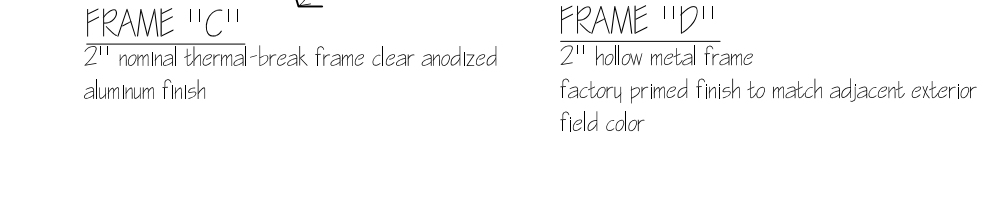
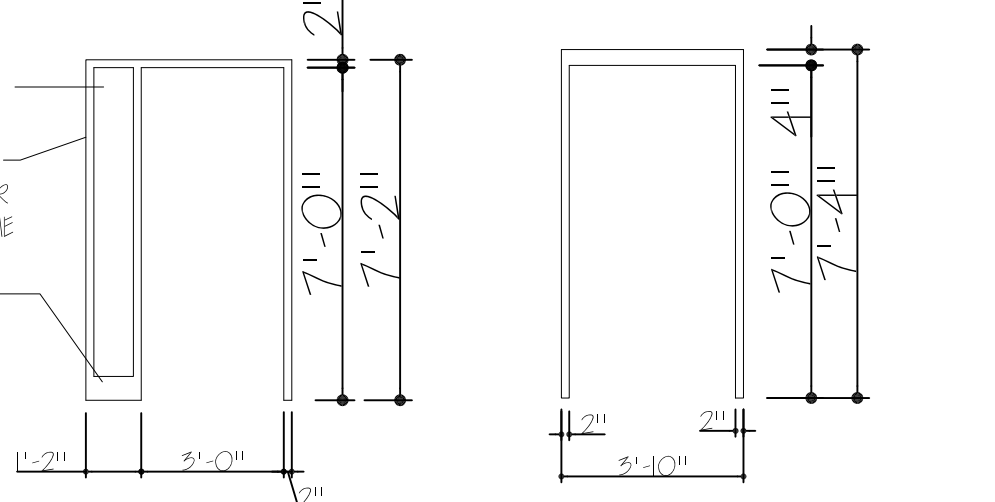
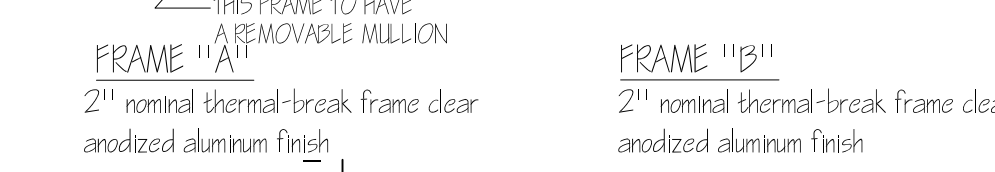
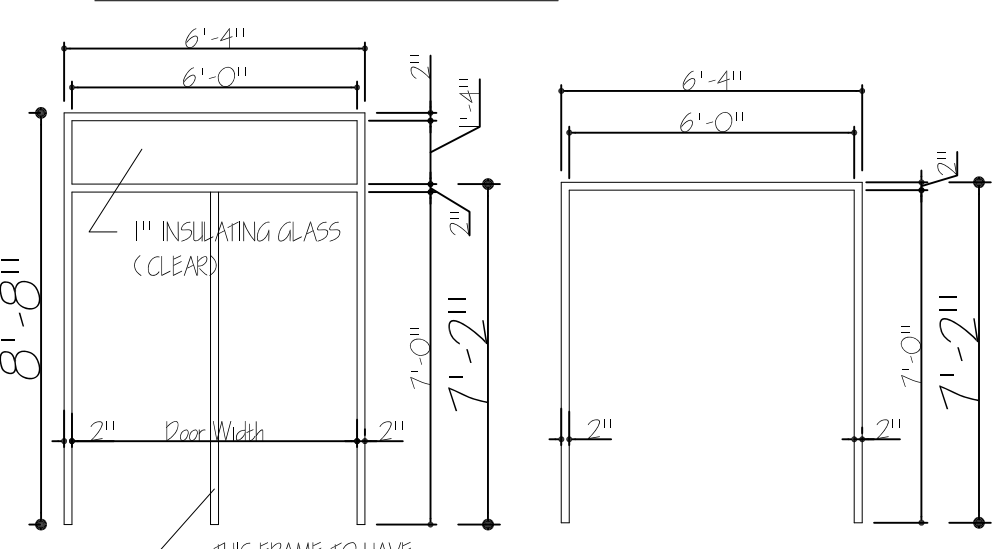
HARDWARE GROUP 6: (Door 8) (OPTIONAL Employee Bathroom)
Hinges: 1-1/2 pair butts - Soss 450 TBP (or Stanley or Hager equal)
Push/Pull: Brookline 50C x 626 and Brookline 50x626
Lock: Schlage B660 - 626 finish (Bolt With Accessible Th.
Stop: Ives 436 or Ives 407 - 1/2 x 626
Closure: LCN 4000 Series with heavy duty hardware
Kick Plate: 8" high x door width @ kitchen side 626 finish - Brookline or equal

HARDWARE GROUP 7: (Doors 3, 11 & 12)
Hinges: 1-1/2 pair butts - Soss 450 TBP (or Stanley or Hager equal)
Lock: Schlage AL series "Satum" in 626 finish
Bath/ Bedroom Privacy Lock
Stop: Ives 436 or Ives 407 - 1/2 x 626

WINDOW TYPES:

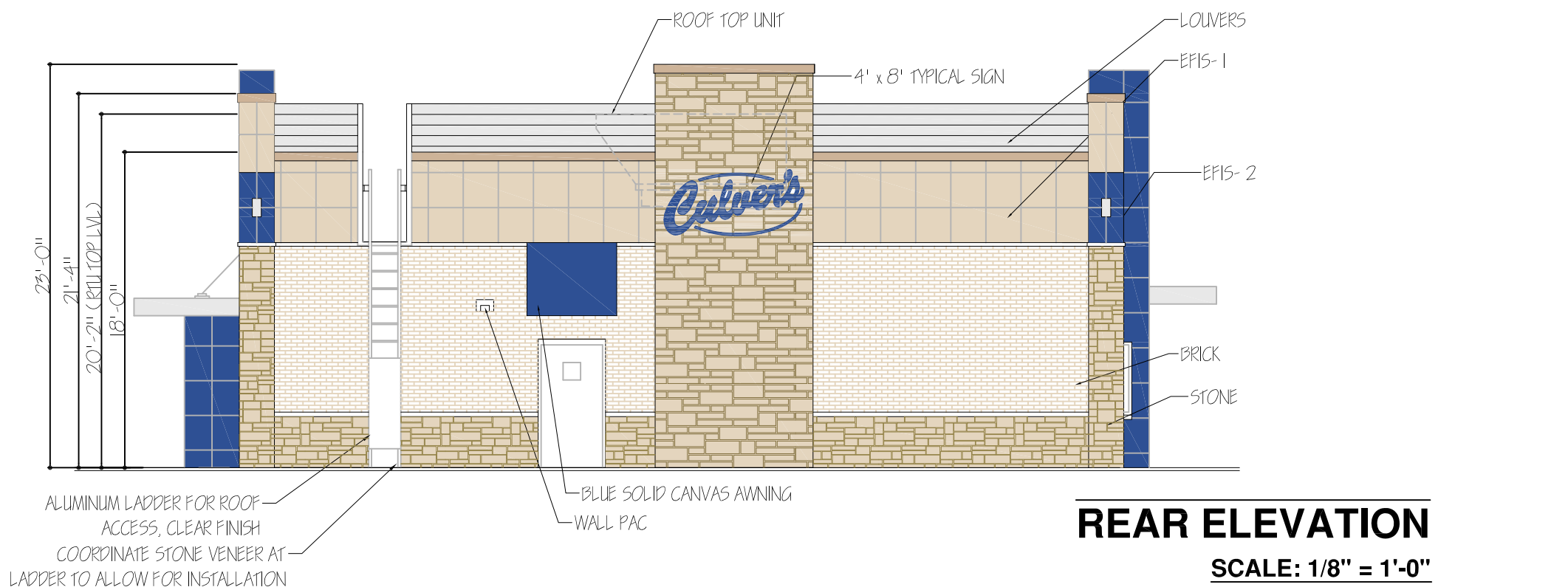
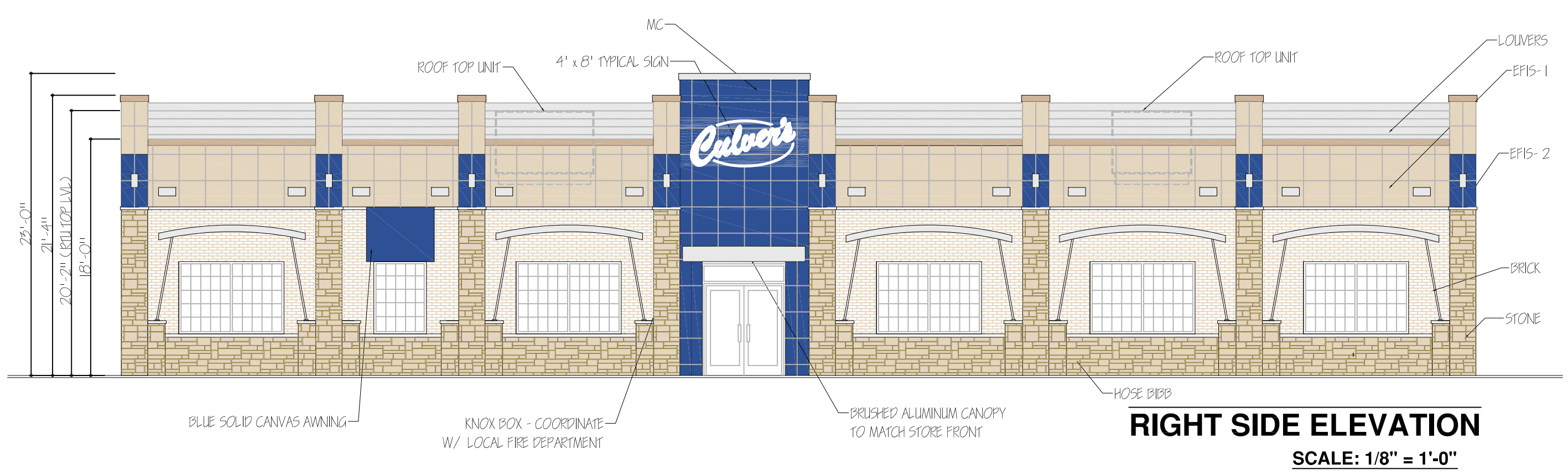
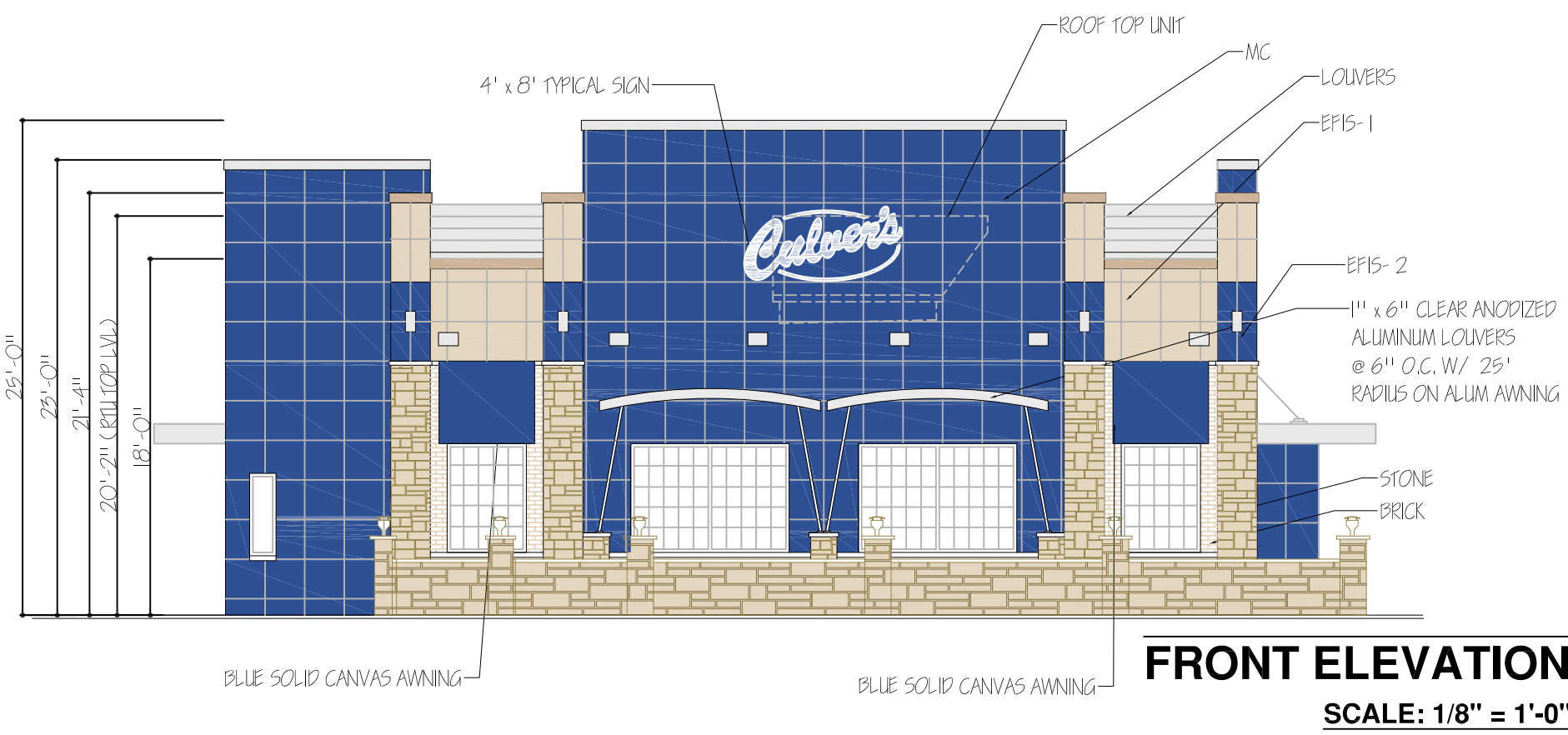


FRAME TYPES

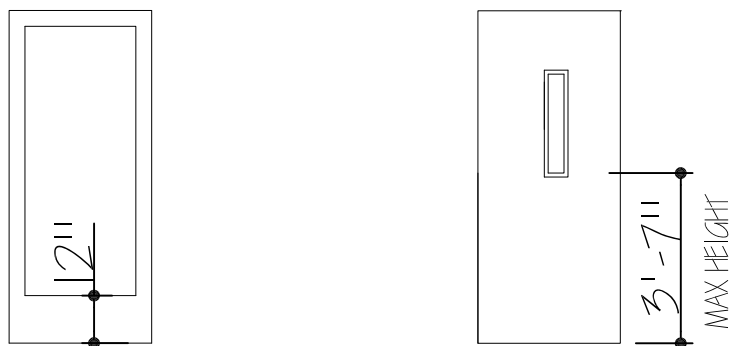


FINISH MATERIALS-BUILDING EXTERIOR MATERIALS	
NO.	DESCRIPTION
1	2'-0" x 4'-0" x 1/2" R.O. (NOMINAL) THERMAL BREAK ALUM. FRAME (NATURAL COLOR)
2	2'-0" x 4'-0" x 1/2" R.O. (NOMINAL) THERMAL BREAK ALUM. FRAME (NATURAL COLOR)
3	2'-0" x 4'-0" x 1/2" R.O. (NOMINAL) THERMAL BREAK ALUM. FRAME (NATURAL COLOR)
4	2'-0" x 4'-0" x 1/2" R.O. (NOMINAL) THERMAL BREAK ALUM. FRAME (NATURAL COLOR)
5	2'-0" x 4'-0" x 1/2" R.O. (NOMINAL) THERMAL BREAK ALUM. FRAME (NATURAL COLOR)
6	2'-0" x 4'-0" x 1/2" R.O. (NOMINAL) THERMAL BREAK ALUM. FRAME (NATURAL COLOR)
7	2'-0" x 4'-0" x 1/2" R.O. (NOMINAL) THERMAL BREAK ALUM. FRAME (NATURAL COLOR)
8	2'-0" x 4'-0" x 1/2" R.O. (NOMINAL) THERMAL BREAK ALUM. FRAME (NATURAL COLOR)
9	2'-0" x 4'-0" x 1/2" R.O. (NOMINAL) THERMAL BREAK ALUM. FRAME (NATURAL COLOR)
10	2'-0" x 4'-0" x 1/2" R.O. (NOMINAL) THERMAL BREAK ALUM. FRAME (NATURAL COLOR)
11	2'-0" x 4'-0" x 1/2" R.O. (NOMINAL) THERMAL BREAK ALUM. FRAME (NATURAL COLOR)
12	2'-0" x 4'-0" x 1/2" R.O. (NOMINAL) THERMAL BREAK ALUM. FRAME (NATURAL COLOR)

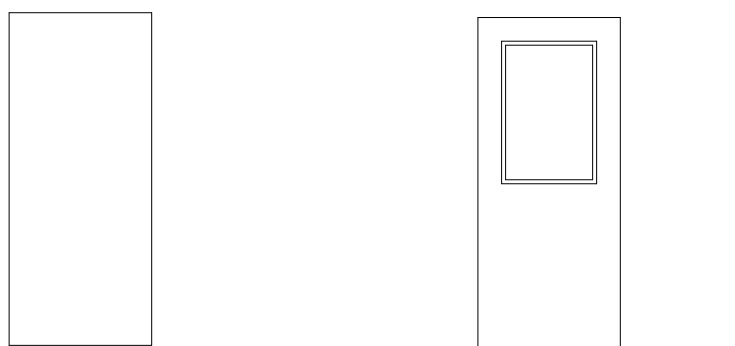
TOTAL ELEVATION AREA = 9520 sq.ft.
EPIS AREA = 1261 sq.ft. (13.3%)



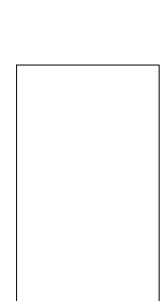
DOOR TYPES



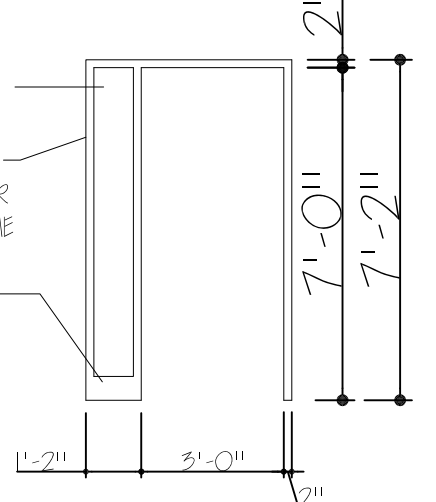
TYPE "A"
36" x 84" clear anodized aluminum finish, glass is 5/8" tempered insulating glass pair @ door 1 single leaf @ door 2



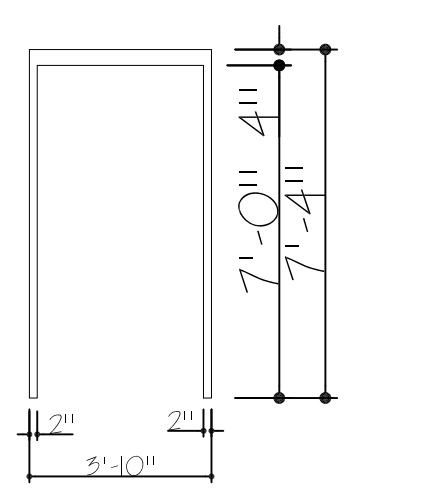
TYPE "B"
42" x 84" insulated hm door w/ 4 x 28" tempered glass lite (ADA compliant) w/ 5/8" insulating glass finish to match adjacent exterior field color



TYPE "C"
36" x 84" x 1-3/4" flush panel solid core w/ maple veneer, finish to match laminate 2 alternative: marlite pre finished door



TYPE "D"
36" x 84" insulated hm door w/ single pane 1/4" tempered lite



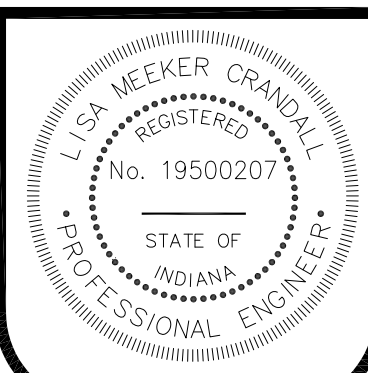
TYPE "E"
See Door Schedule for width. 60H" x 1-3/4" flush panel solid core w/ maple veneer, finish to match laminate 2 alternative: marlite pre finished door

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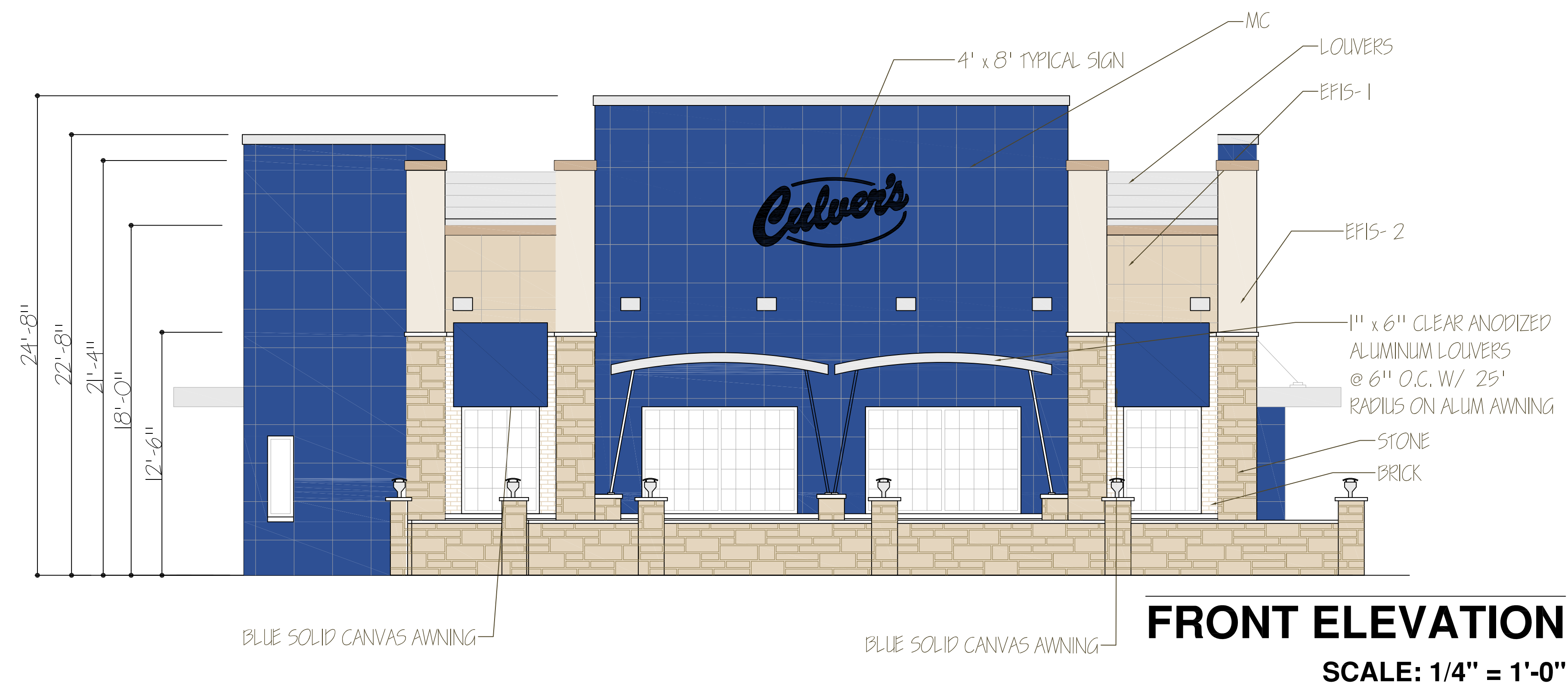
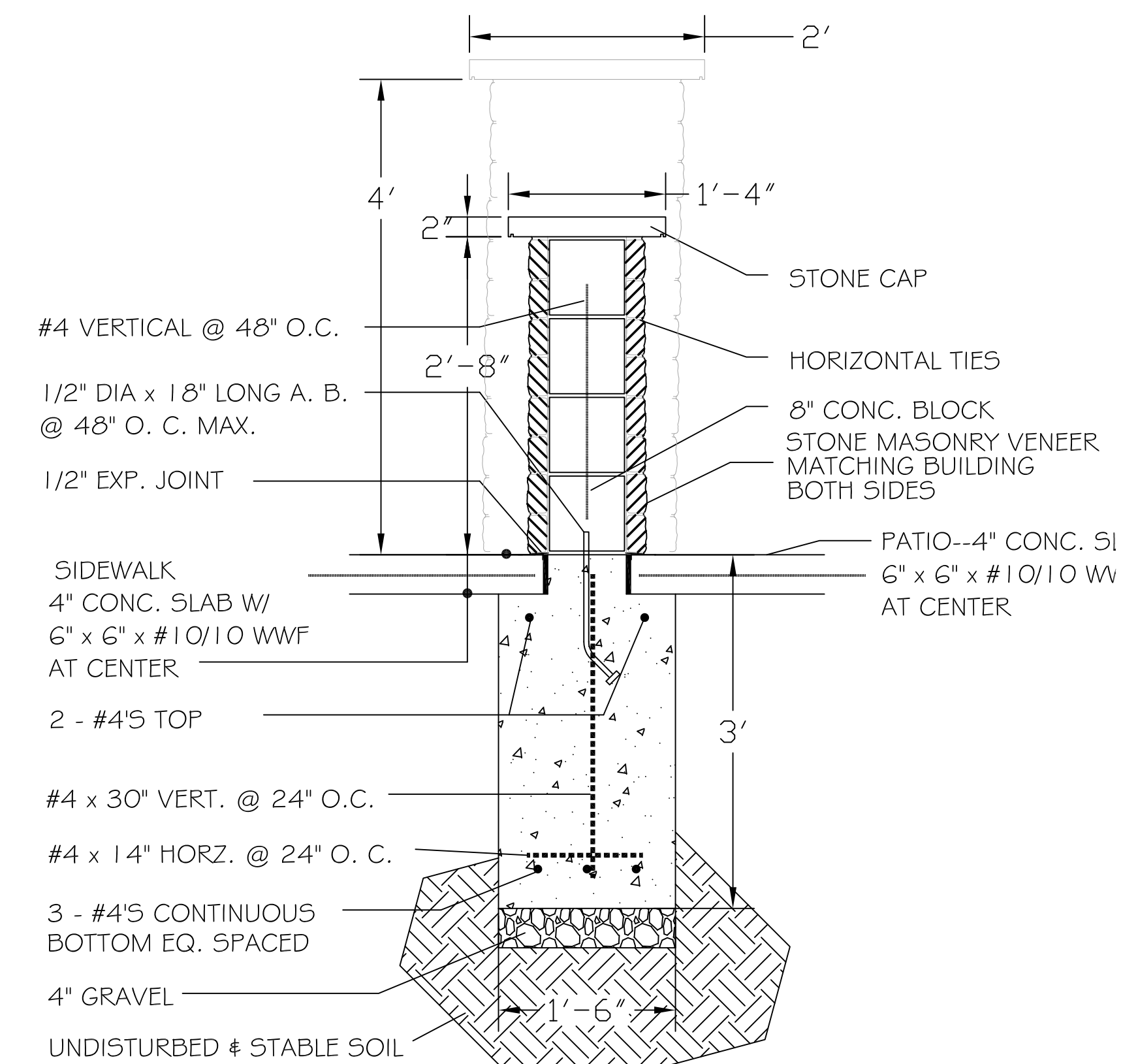
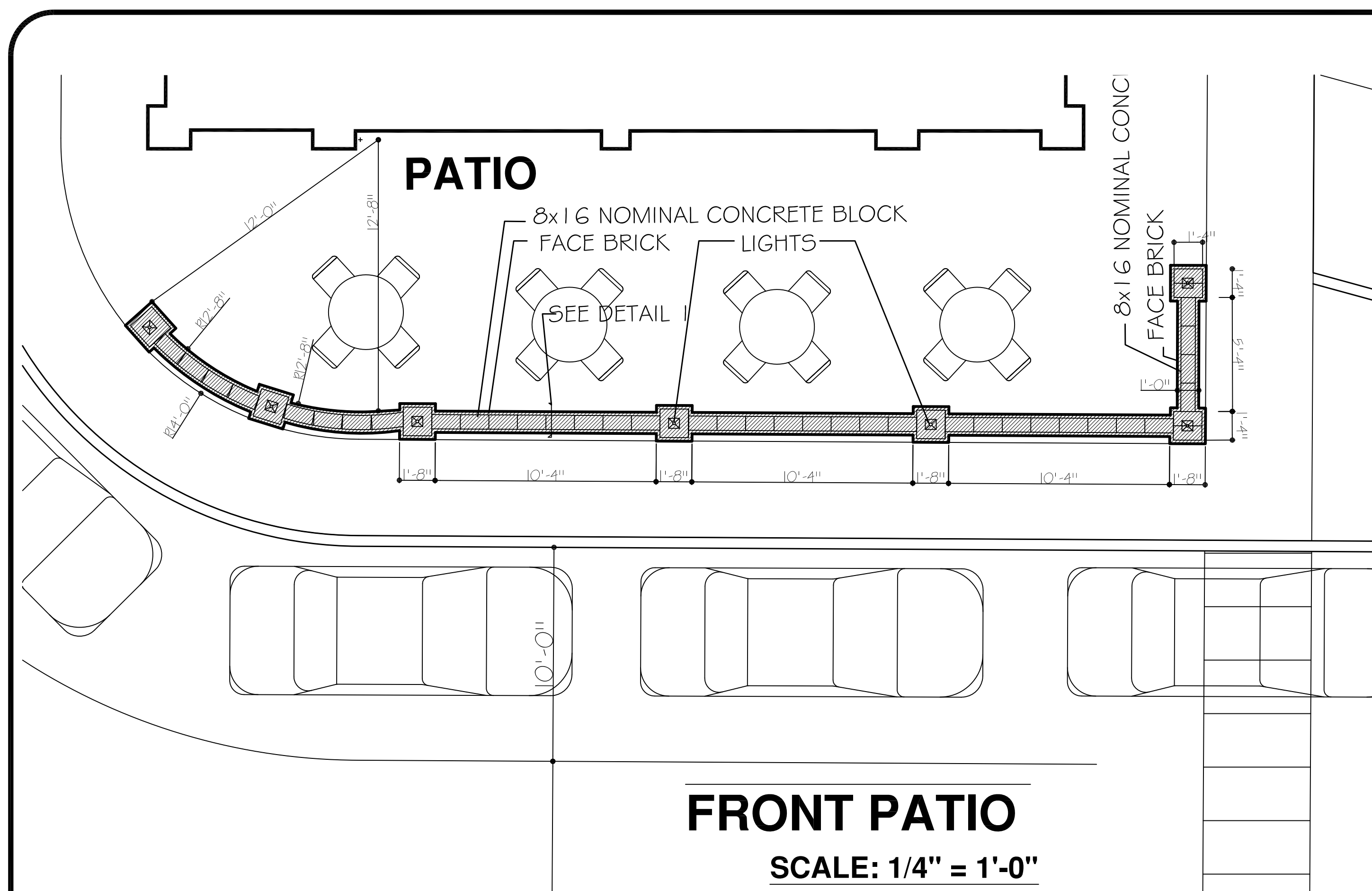
CUSTARD KINGS, INC.
333 W 4th STREET, MARION, IN 46952
NEW CULVER'S
0 SUN PARK DRIVE, WESTFIELD, IN 46952



12/31/2015

Sheet Contents:
EXT. ELEV'S & D/W DETAIL
Project No. Metro XL + 2' - 2016
Drawn By: S. Datka
Date: Dec. 31, 2015

Sheet
A-3



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[illegible]

**Culver Franchising
System, Inc.**
1240 Water Street
Prairie du Sac, WI 53578
608-643-7980



NEW CULVER'S
0 SUN PARK DRIVE, WESTFIELD, IN 46952

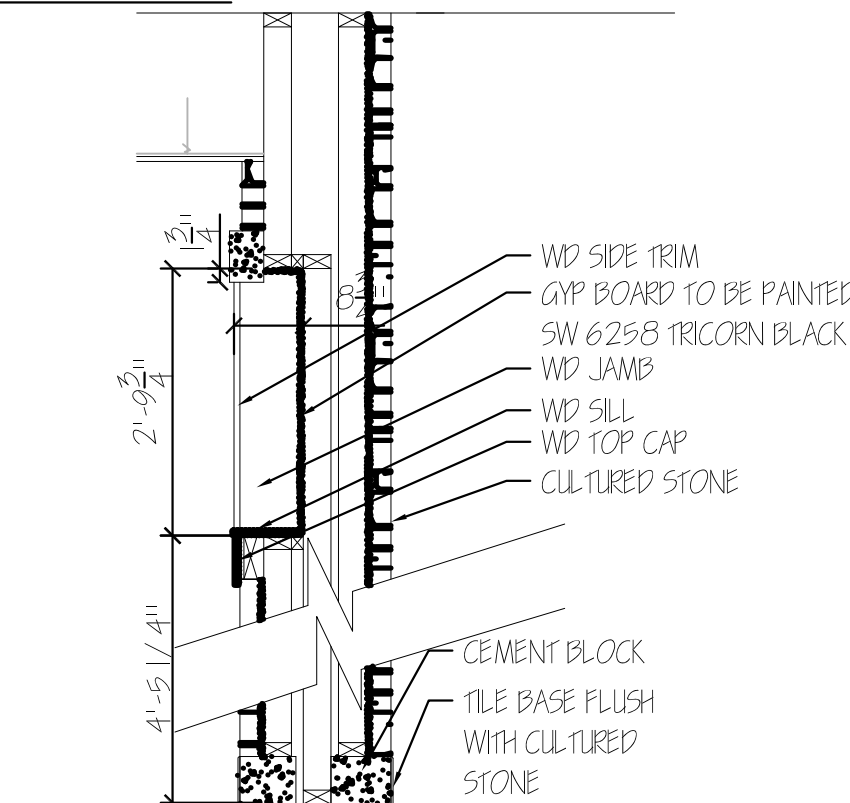
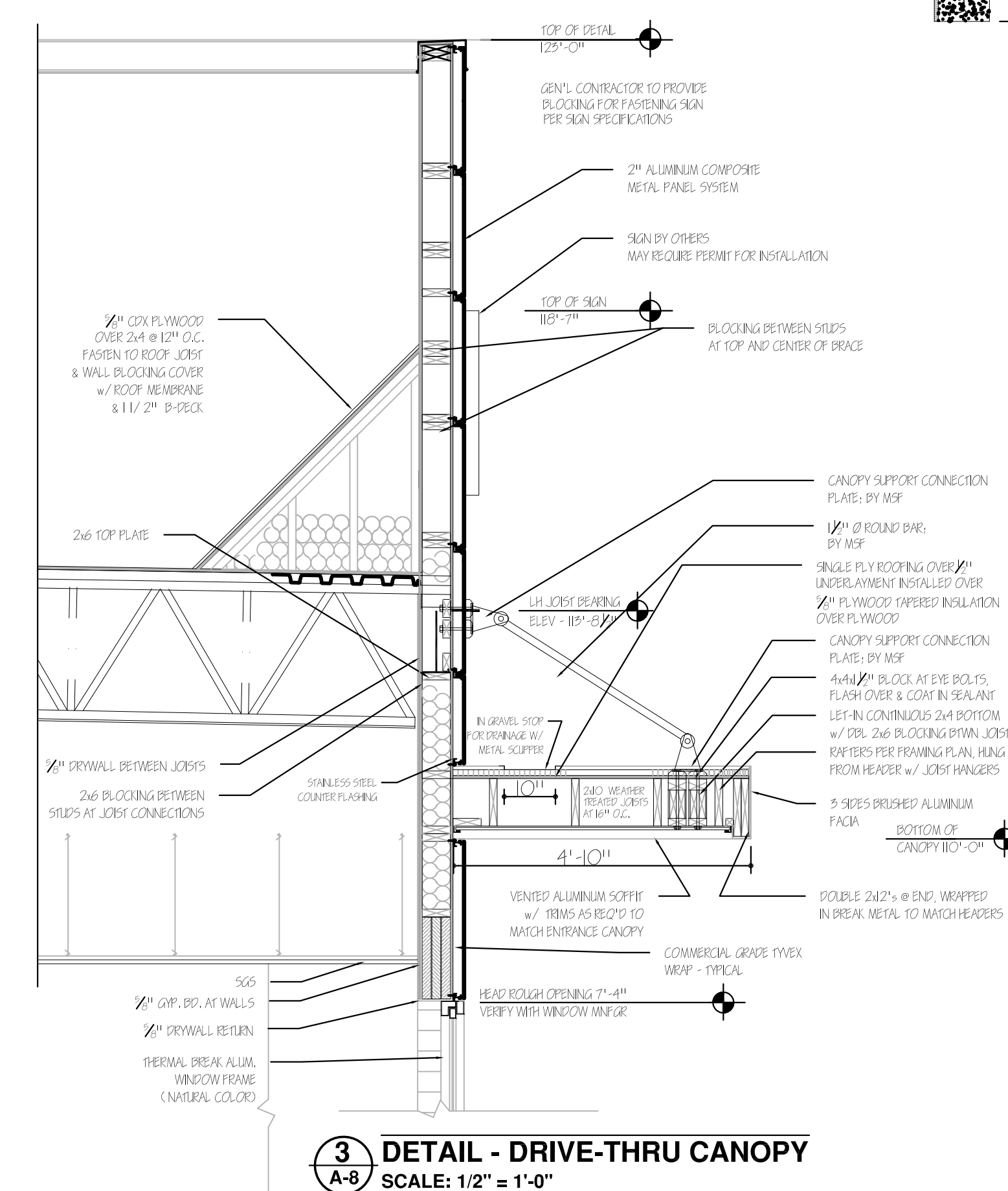
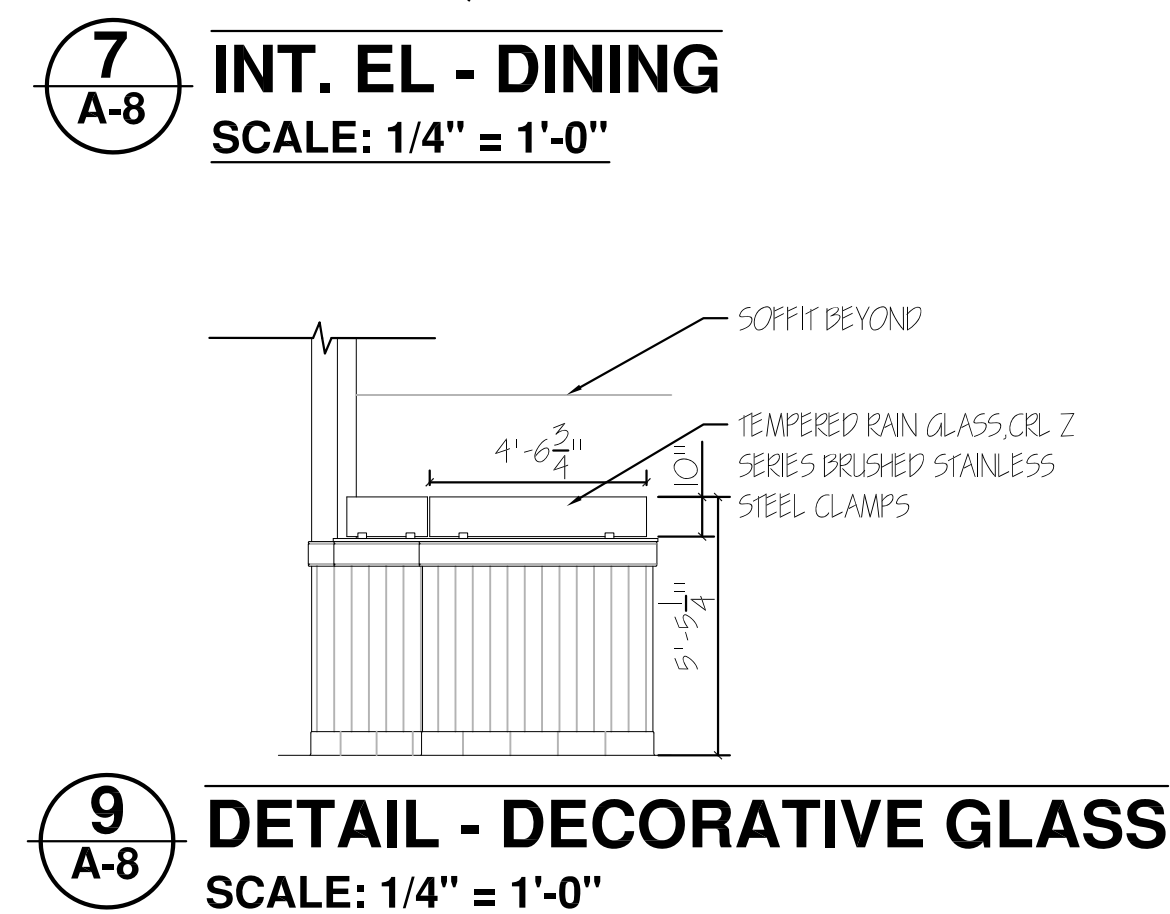
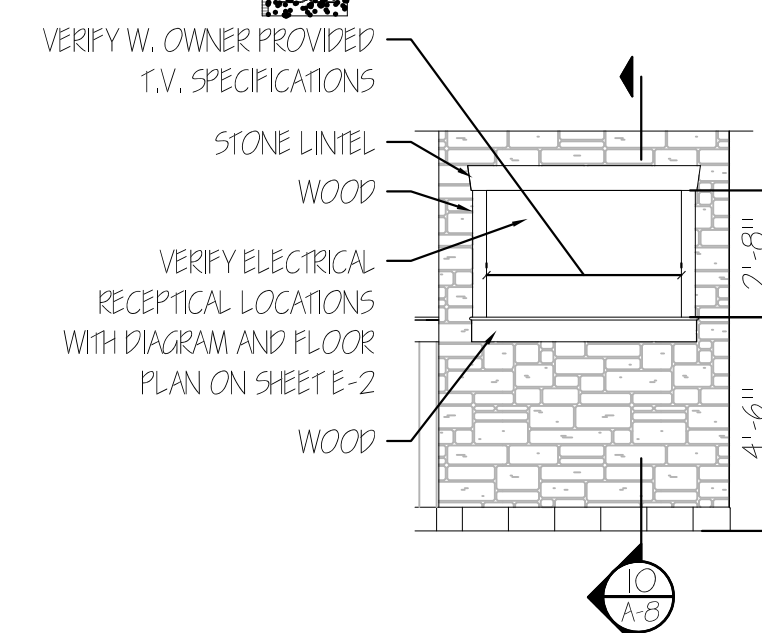
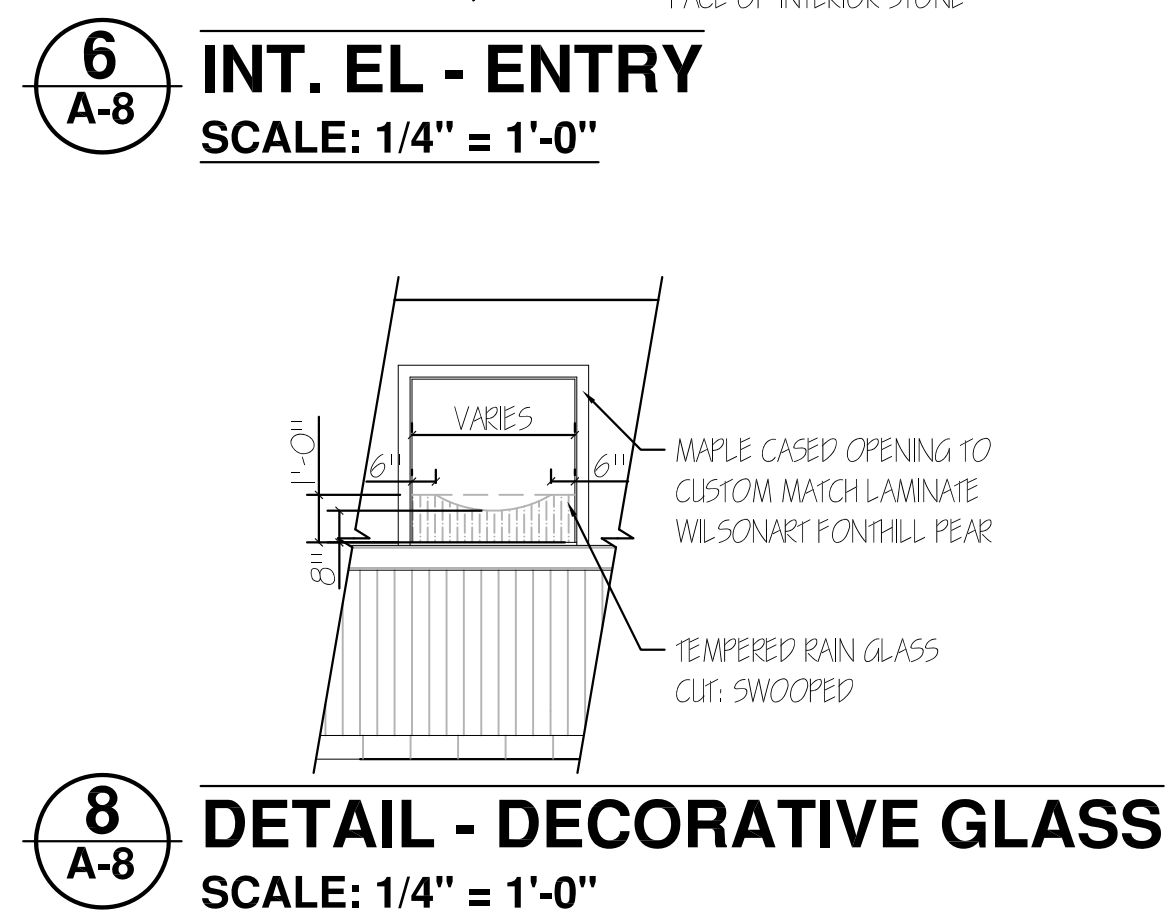
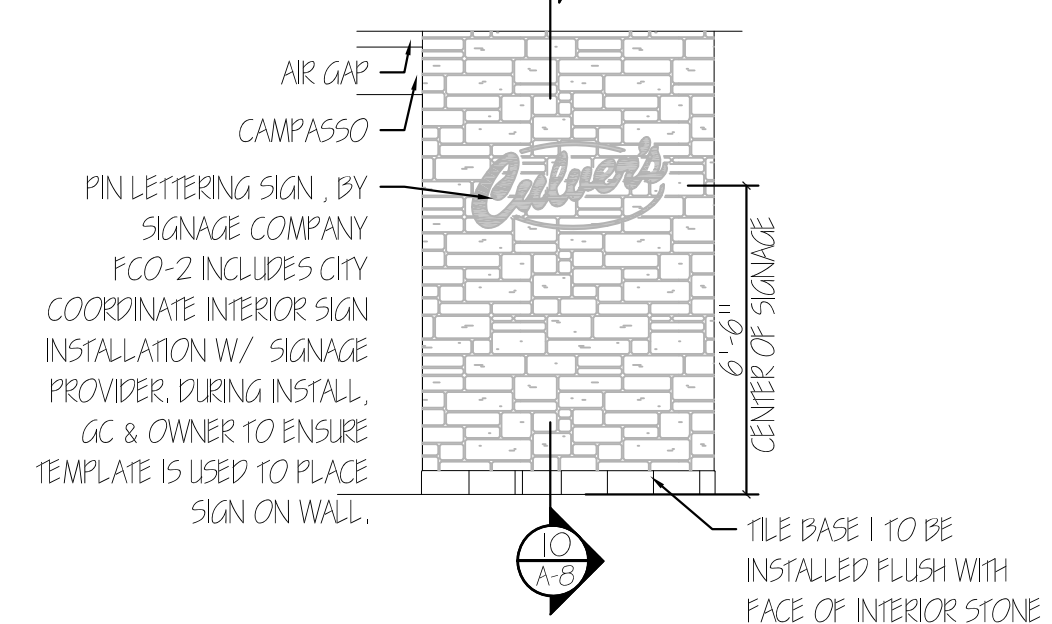
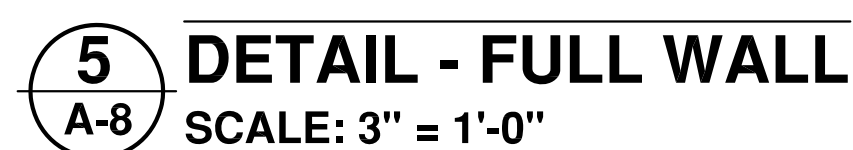
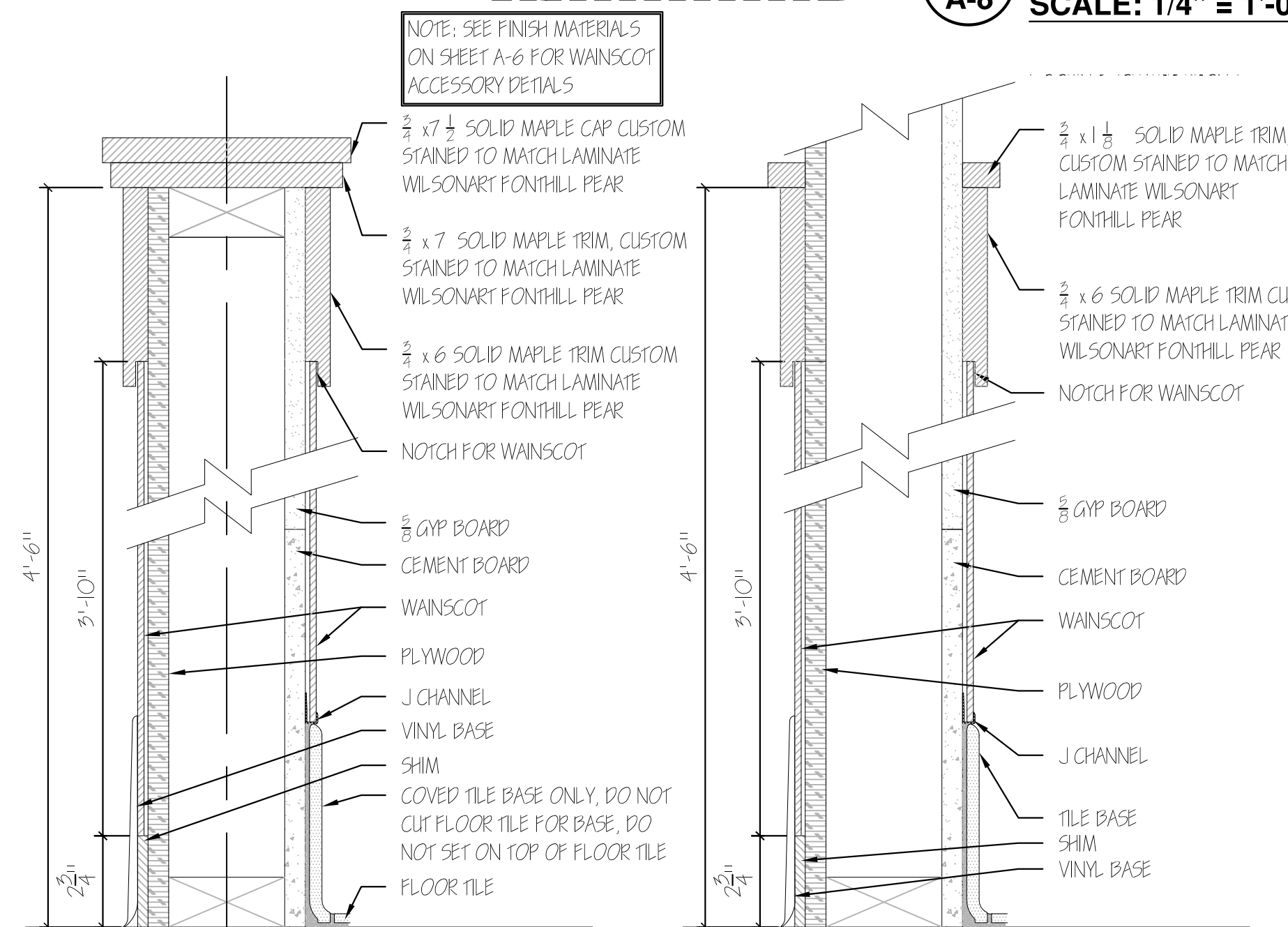
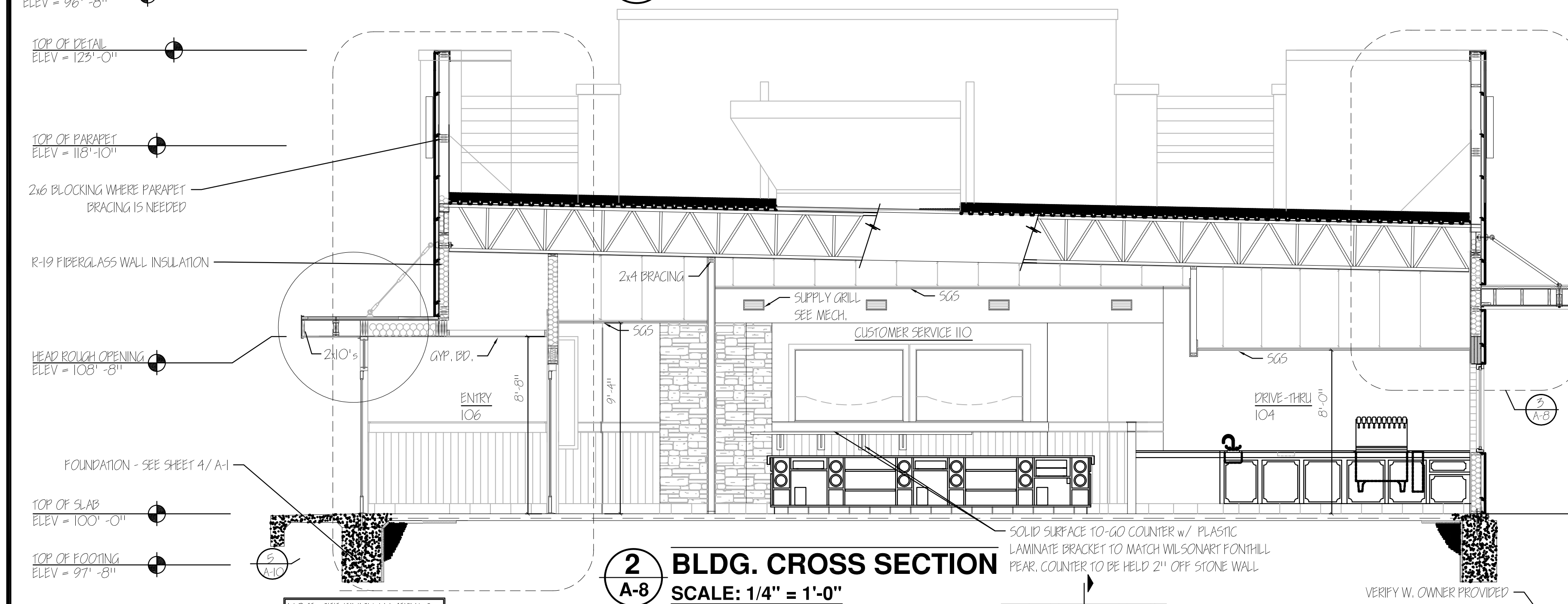
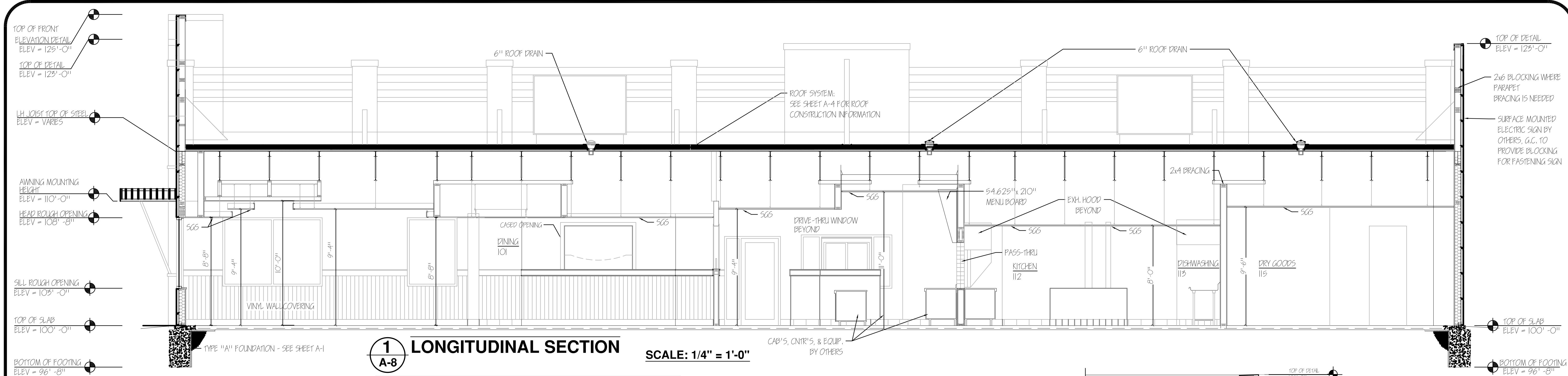
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PATIO DETAIL

Subject No.	Metro XL - 2016
Drawn By:	S. Datka
Date:	Dec 01, 2015

meet

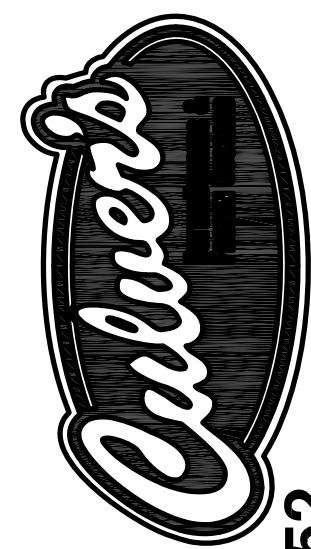
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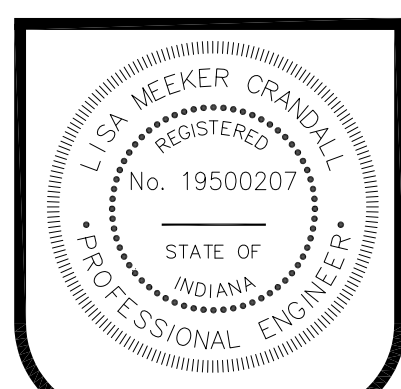
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**Culver Franchising
System, Inc.**
540 Water Street
Prairie du Sac, WI 53578
608-643-7980



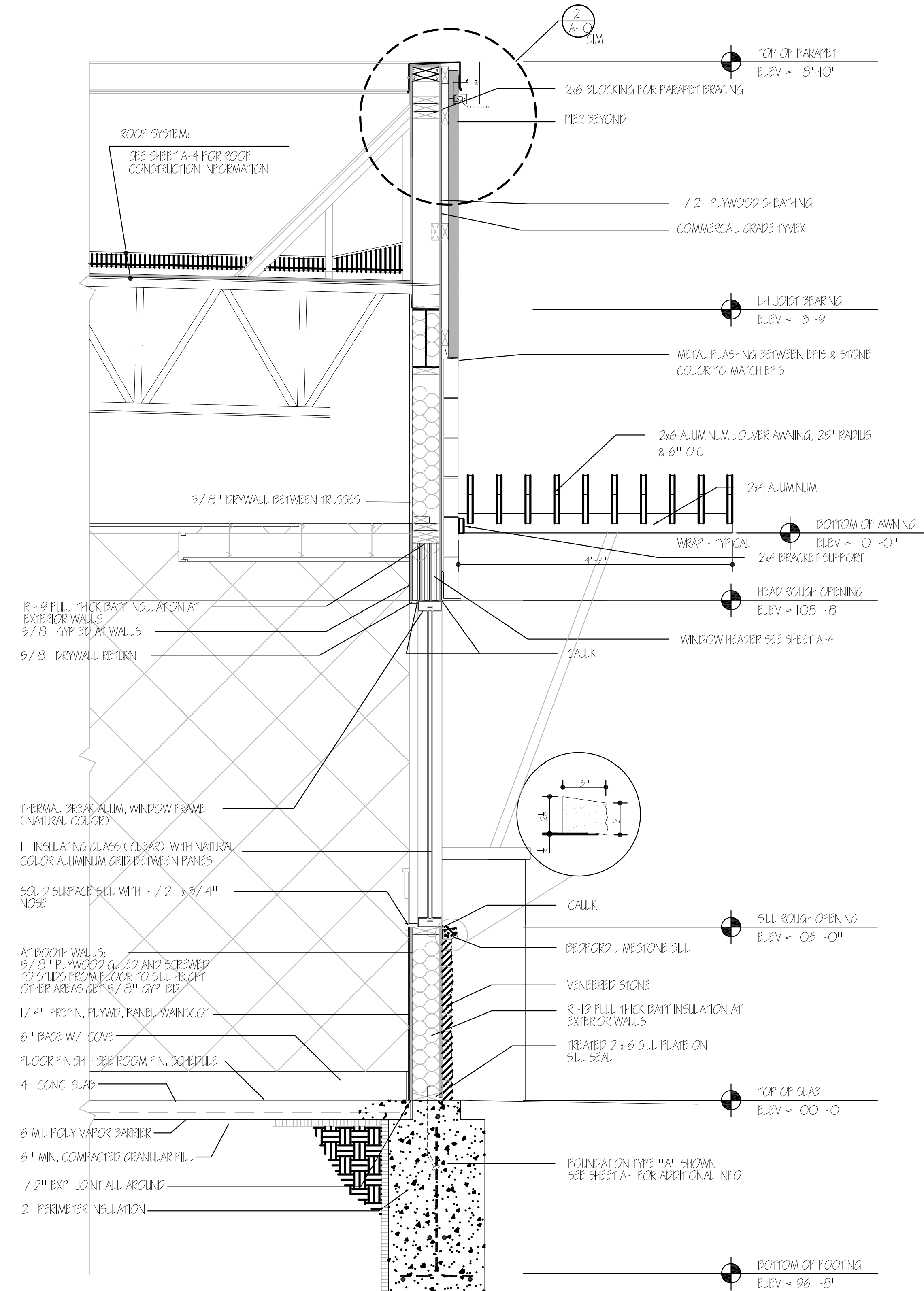
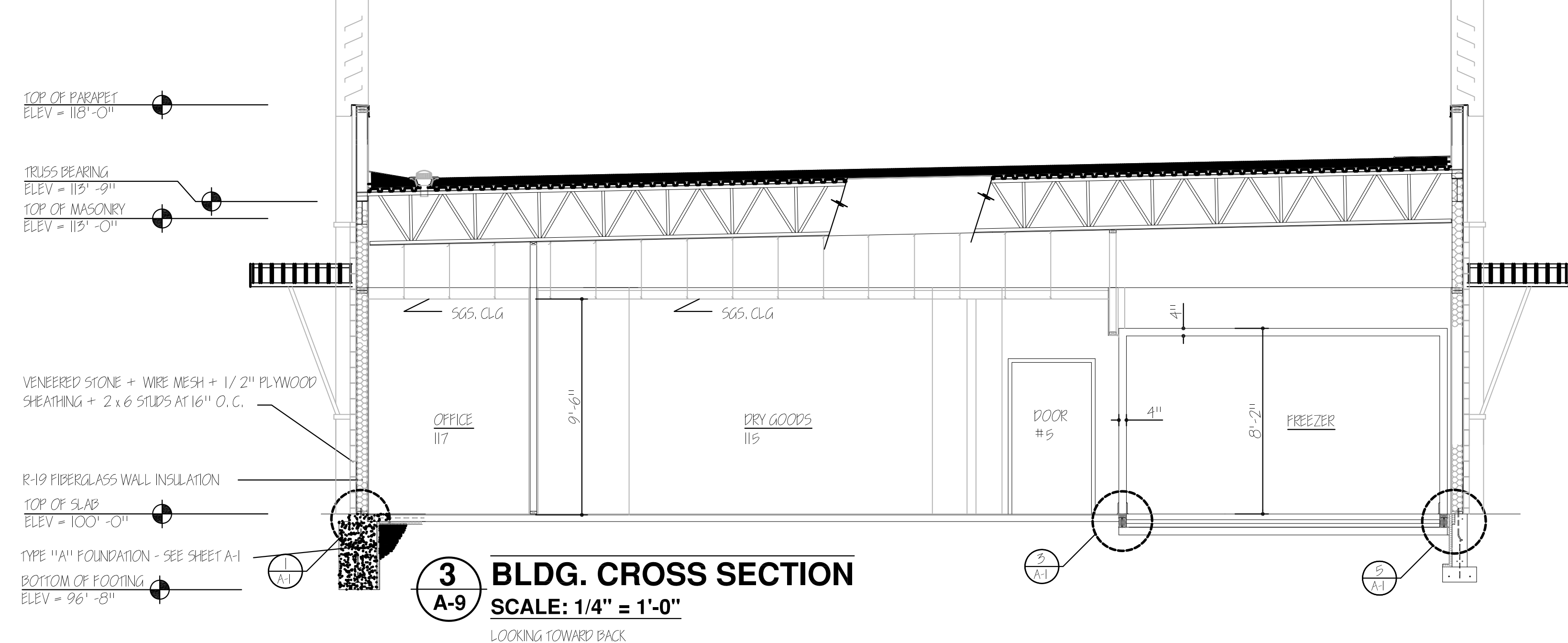
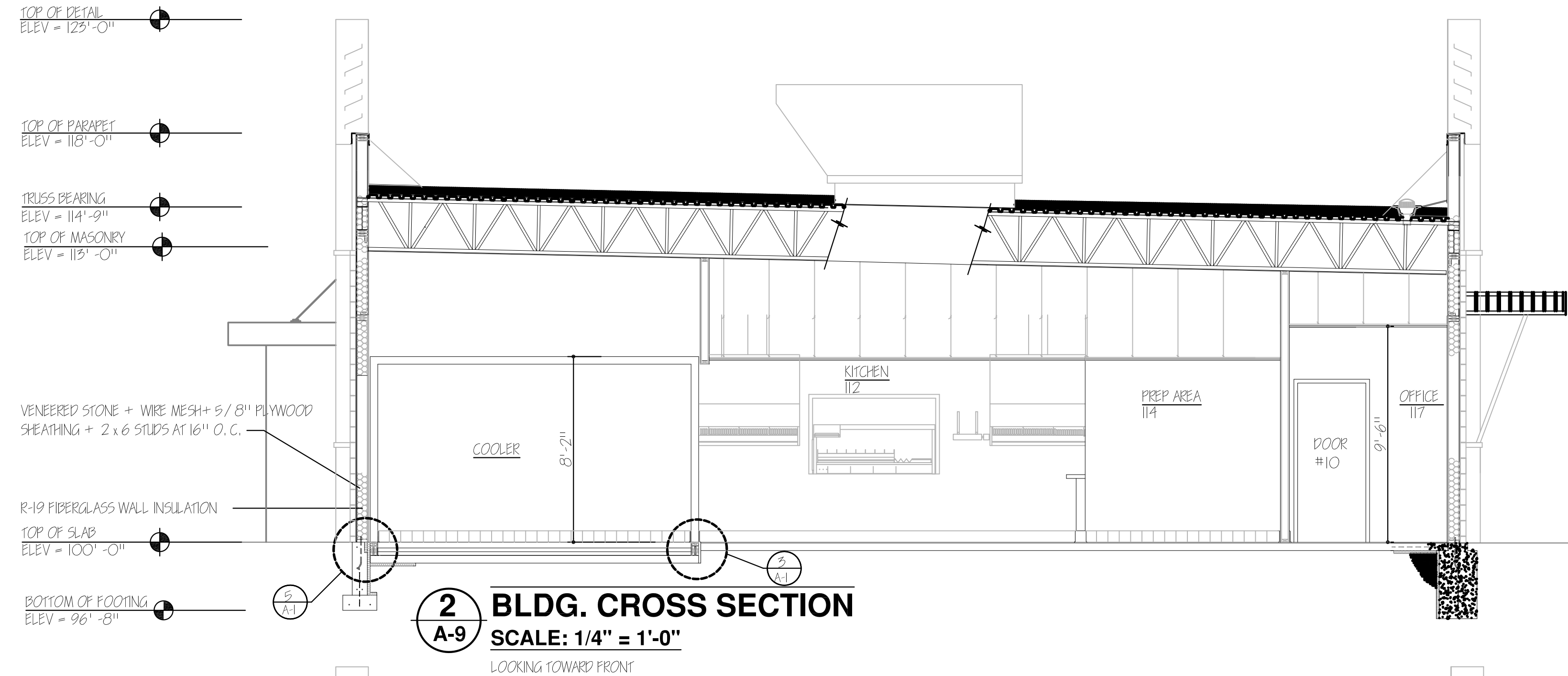
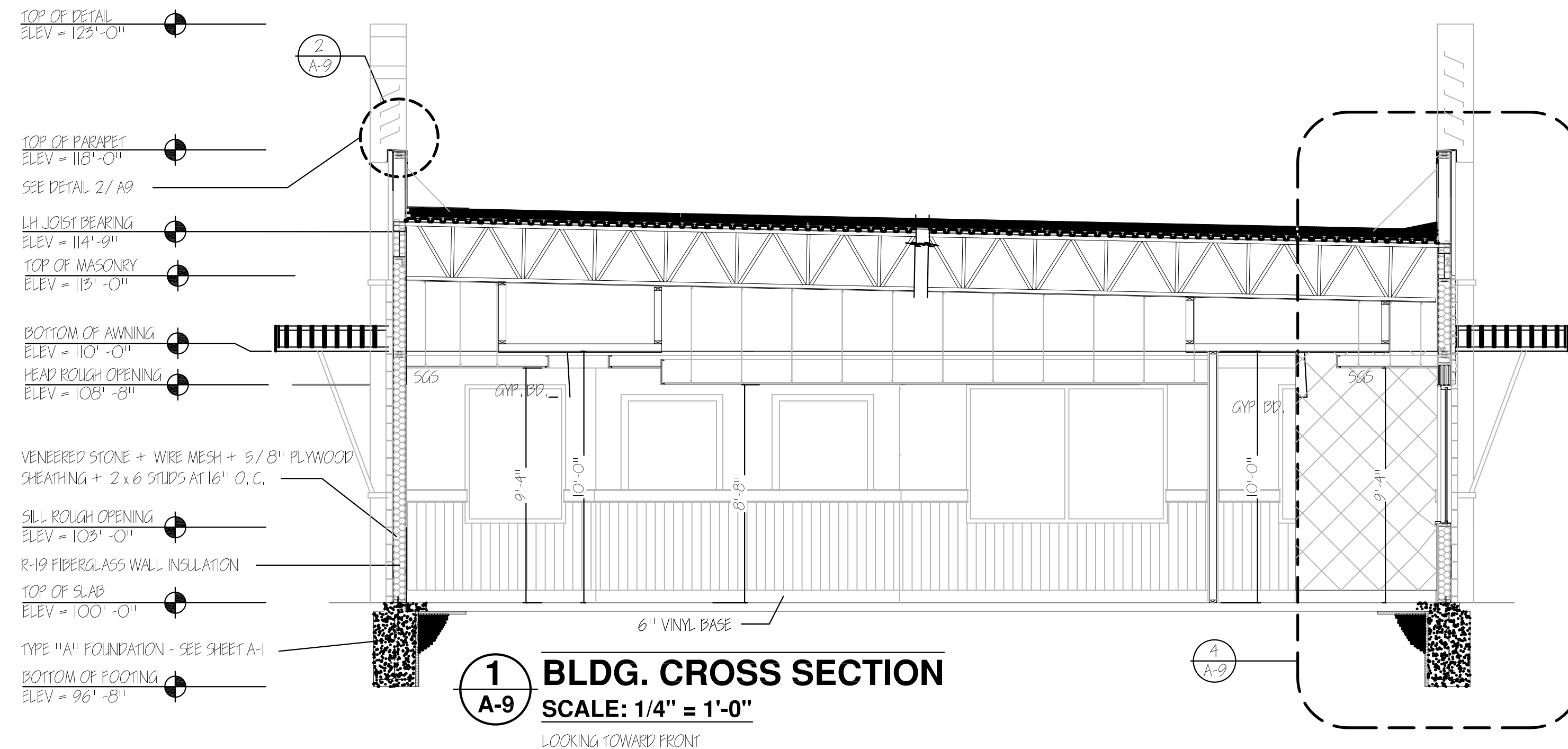
CUSTARD KINGS, INC.
3333 W 4th STREET, MARION, IN 46952
NEW CULVER'S
0 SUN PARK DRIVE, WESTFIELD, IN 46074



CRANDALL ENGINEERING, INC. 236 EAST MAIN STREET, GAS CITY, IN 46933 765.677.0996 LCRANDALL@CRANDALLENG.COM

Mrs. Crawhall 12/31/2015

Sheet
A-8



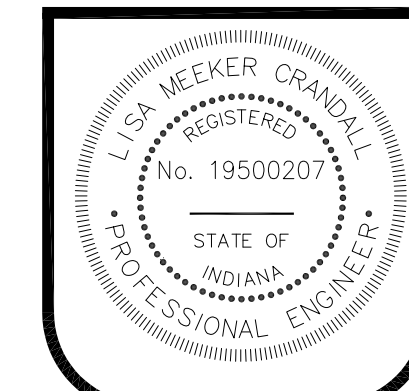
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By	Revision	Date

Culver Franchising System, Inc.
540 Water Street
Prairie du Sac, WI 53578
608-643-7980



CUSTARD KINGS, INC.
333 W 4th STREET, MARION, IN 46952
NEW CULVER'S
0 SUN PARK DRIVE, WESTFIELD, IN 46952



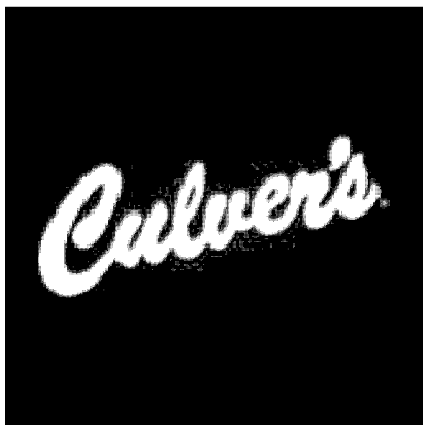
12/31/2015

Sheet Contents:
X-SCTN'S DETAILS
Project No. Metro XL + 2' - 2016
Drawn By: S. Datka
Date: Dec. 31, 2015

Sheet
A-9

LOCATION: I:\2015\W150316\Engineering\Design\Consent\W150316-C001 Title.dwg
DATE/TIME: January 24, 2016 - 2:45pm
PLOTTER: b7r_tchouf6

CONSTRUCTION PLANS FOR



17651 SUN PARK ROAD WESTFIELD, IN 46074

PLANS PREPARED FOR

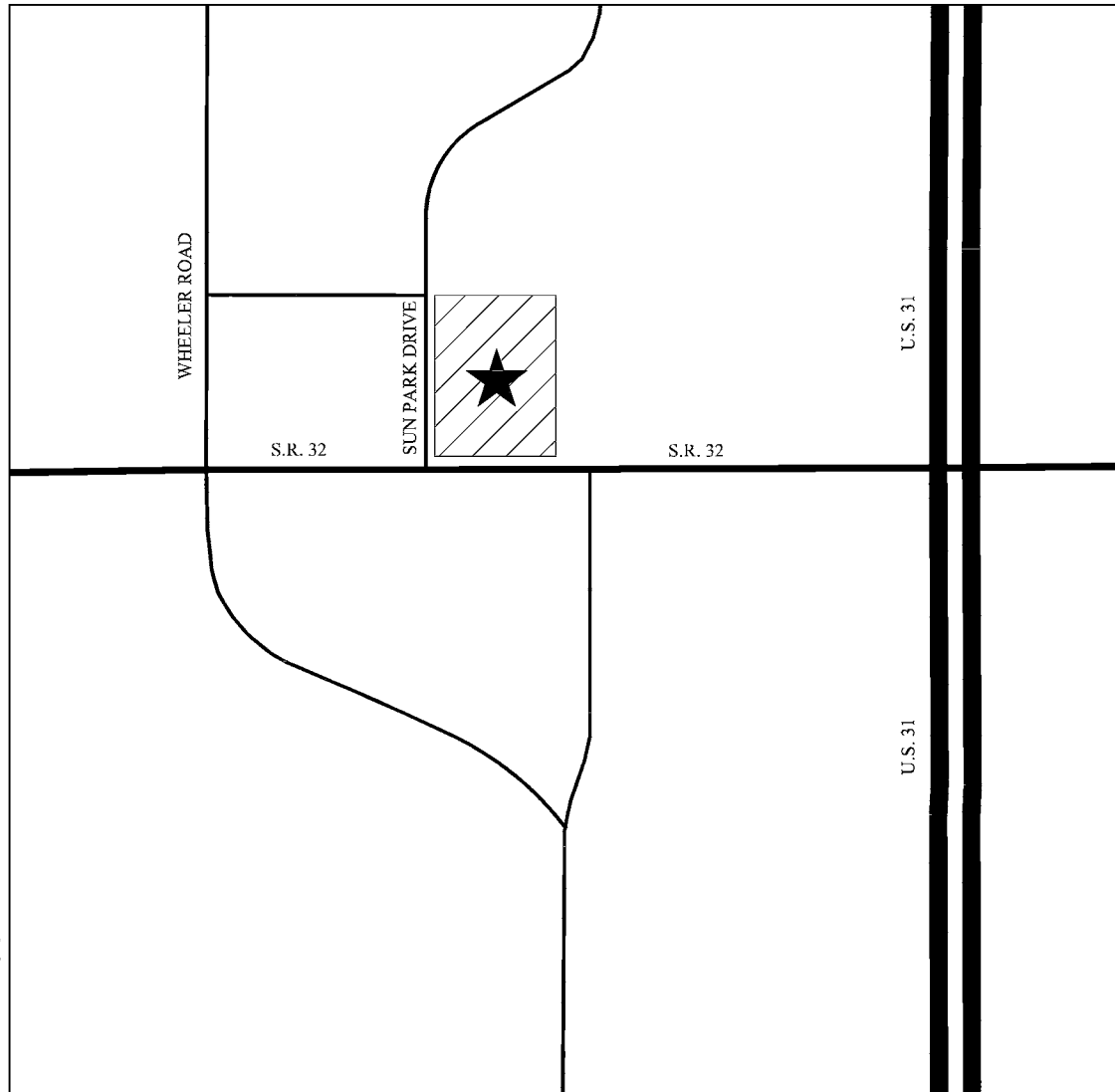
CUSTARD KINGS
P.O. BOX 1478
MARION, INDIANA 46952
TELEPHONE: (765) 206-0050
CONTACT PERSON: MR. JIM SWAN
EMAIL: JIM.SWAN@MARIONSTEELFAB.COM

PLANS PREPARED BY

WEIHE ENGINEERS, INC.
10505 N. COLLEGE AVE.
INDIANAPOLIS, INDIANA 46280
TELEPHONE: 317.846.6611
FAX: 317.843.0546
CONTACT PERSON: BRAD SCHOEFF
EMAIL: SCHOEFFB@WEIHE.NET



★ PROJECT LOCATION
LOCATION MAP



★ PROJECT LOCATION
VICINITY MAP

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, OR VERIFYING THAT ALL PERMITS AND APPROVALS ARE OBTAINED FROM THE RESPECTIVE CITY, COUNTY, AND STATE AGENCIES PRIOR TO STARTING CONSTRUCTION.
2. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES IN THE VICINITY OF THE CONSTRUCTION AREA PRIOR TO STARTING CONSTRUCTION
3. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY AND COORDINATE CONSTRUCTION WITH ALL RESPECTIVE UTILITIES.
4. ALL QUANTITIES GIVEN ON THESE PRINTS, VERBALLY OR IN THE SCOPE OF WORK SECTION ARE ESTIMATES AND SHALL BE CONFIRMED BY THE BIDDING CONTRACTORS.
5. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29 CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH.
6. IN ADDITION, EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRE THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.
7. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND CONTRACTOR TO MAINTAIN QUALITY CONTROL THROUGHOUT THIS PROJECT.
8. TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL STANDARDS.
9. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
10. ANY FIELD TILES ENCOUNTERED DURING EXCAVATION SHALL BE REPAIRED AND CONNECTED TO NEW STORM SEWERS AND POSITIVE DRAINAGE PRESERVED.
11. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER THAT ALL LANDSCAPE REQUIREMENTS ARE MET AND CONFORM TO APPLICABLE LOCAL STANDARDS.
12. THE SITE DOES NOT LIE IN A SPECIAL FLOOD HAZARD AREA AS ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY - NATIONAL FLOOD INSURANCE PROGRAM, WHEN PLOTTED BY SCALE ON FLOOD INSURANCE RATE MAP #18057C0120 G, DATED NOVEMBER 19, 2014.
13. BEARINGS, DIMENSIONS AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. SEE RECORD SURVEYS & PLAT FOR EXACT INFORMATION.
14. THIS SITE DOES CONTAIN A WETLAND AS SHOWN ON THE U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE, WESTFIELD, INDIANA, NATIONAL WETLANDS INVENTORY MAP DATED 2000.

LAND DESCRIPTION

PART OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 36, TOWNSHIP 19 NORTH, RANGE 3 EAST IN HAMILTON COUNTY, INDIANA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID QUARTER QUARTER SECTION; THENCE ALONG THE SOUTH LINE THEREOF NORTH 89 DEGREES 42 MINUTES 22 SECONDS WEST 576.00 FEET; THENCE PARALLEL WITH THE EAST LINE OF SAID QUARTER QUARTER SECTION NORTH 00 DEGREES 46 MINUTES 41 SECONDS EAST 30.00 FEET TO THE POINT OF BEGINNING; THENCE PARALLEL WITH THE SOUTH LINE OF SAID QUARTER QUARTER SECTION NORTH 89 DEGREES 42 MINUTES 22 SECONDS WEST 180.01 FEET TO THE EASTERLY RIGHT OF WAY LINE OF AN ACCESS ROAD; THENCE ALONG SAID EASTERLY LINE NORTH 44 DEGREES 27 MINUTES 51 SECONDS WEST 28.16 FEET; THENCE NORTH 00 DEGREES 46 MINUTES 41 SECONDS EAST 295.01 FEET; THENCE SOUTH 89 DEGREES 42 MINUTES 22 SECONDS EAST 200.01 FEET; THENCE SOUTH 00 DEGREES 46 MINUTES 41 SECONDS WEST 315.01 FEET TO THE PLACE OF BEGINNING.

EXCEPT:

A PART OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 36, TOWNSHIP 19 NORTH, RANGE 3 EAST, HAMILTON COUNTY, INDIANA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID QUARTER SECTION; THENCE SOUTH 88 DEGREES 48 MINUTES 00 SECONDS WEST 576.07 FEET ALONG THE SOUTH LINE OF SAID QUARTER-QUARTER SECTION; THENCE NORTH 00 DEGREES 42 MINUTES 57 SECONDS WEST 30.00 FEET TO THE NORTH BOUNDARY OF S.R. 32 AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE SOUTH 88 DEGREES 48 MINUTES 00 SECONDS WEST 180.01 FEET ALONG THE BOUNDARY OF SAID S.R. 32; THENCE NORTH 45 DEGREES 57 MINUTES 28 SECONDS WEST 14.08 FEET ALONG SAID BOUNDARY; THENCE NORTH 88 DEGREES 48 MINUTES 00 SECONDS EAST 190.01 FEET TO THE EAST LINE OF THE OWNERS' LAND; THENCE SOUTH 00 DEGREES 42 MINUTES 57 SECONDS EAST 10.00 FEET ALONG SAID EAST LINE OF THE OWNERS' LAND TO THE BOUNDARY OF S.R. 32 AND THE POINT OF BEGINNING AND CONTAINING 0.042 ACRES, MORE OR LESS.

TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS AS RECORDED IN INSTRUMENT NUMBER 8919077.

ALSO EXCEPT THAT PART CONVEYED TO THE STATE OF INDIANA BY WARRANTY DEED RECORDED JULY 17, 2007 AS INSTRUMENT NO. 2007040165, DESCRIBED AS FOLLOWS:

A PART OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 36, TOWNSHIP 19 NORTH, RANGE 3 EAST, HAMILTON COUNTY, INDIANA, AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID QUARTER SECTION; THENCE NORTH 89 DEGREES 50 MINUTES 43 SECONDS WEST 576.07 FEET ALONG THE SOUTH LINE OF SAID SECTION TO THE PROLONGED EAST LINE OF THE GRANTOR'S LAND; THENCE NORTH 00 DEGREES 38 MINUTES 07 SECONDS EAST 40.00 FEET ALONG SAID EAST LINE PROLONGED TO THE NORTH BOUNDARY OF S.R. 32 AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE NORTH 89 DEGREES 50 MINUTES 43 SECONDS WEST 189.81 FEET (190.01) FEET BY INSTRUMENT NUMBER 9327322) ALONG THE BOUNDARY OF SAID S.R. 32 TO THE NORTHEASTERN BOUNDARY OF THE INTERSECTION OF SAID S.R. 32 AND SUNPARK DRIVE; THENCE NORTH 44 DEGREES 00 MINUTES 56 SECONDS WEST 14.22 FEET ALONG THE BOUNDARY OF THE INTERSECTION OF SAID S.R. 32 AND SAID SUNPARK DRIVE TO THE EAST BOUNDARY OF SAID SUNPARK DRIVE; THENCE NORTH 00 DEGREES 38 MINUTES 07 SECONDS EAST 249.58 FEET ALONG THE BOUNDARY OF SAID SUNPARK DRIVE; THENCE SOUTH 89 DEGREES 21 MINUTES 40 SECONDS EAST 14.13 FEET; THENCE SOUTH 00 DEGREES 28 MINUTES 20 SECONDS WEST 194.80 FEET; THENCE SOUTH 47 DEGREES 31 MINUTES 04 SECONDS EAST 27.80 FEET; THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS EAST 164.98 FEET TO THE EAST LINE OF GRANTOR'S LAND; THENCE SOUTH 00 DEGREES 38 MINUTES 07 SECONDS WEST 46.59 FEET ALONG SAID EAST LINE TO THE POINT OF BEGINNING AND CONTAINING 0.285 ACRES, MORE OR LESS.

OPERATING AUTHORITIES

VECTREN (GAS)
ATTENTION: BRIAN HARGER
P.O. BOX 1700
NOBLESVILLE, IN 46061
317.776.5560

AMERITECH (TELEPHONE)
ATTENTION: STEVE KREBS
5859 NORTH COLLEGE AVENUE
INDIANAPOLIS, IN 46220
317.252.4275

DUKE ENERGY (ELECTRIC)
ATTENTION: VINCENT LITERAL
100 SOUTH M.L. CREEK ROAD
NOBLESVILLE, IN 46062
317.776.5336

CITIZENS WESTFIELD
(WATER AND WASTEWATER)
MITCH HOUSE
MHOUSE@WNTS.COM
317-917-5294

CITIZENS WESTFIELD
(GAS)
RYAN BASCORE
RBASORE@CITIZENSENERGYGROUP.COM
317-927-6415

WESTFIELD DEPT. OF PUBLIC WORKS
ATTENTION: JOHN RANKIN
2708 EAST 171ST STREET
WESTFIELD, IN 46074
317.804.3100

CITY OF WESTFIELD - COMM. DEVEL.
ATTENTION: MATT SKELTON
2728 EAST 171ST STREET
WESTFIELD, IN 46074
317.804.3172

WESTFIELD FIRE DEPARTMENT
ATTENTION: GARRY HARLING
17539 DARTOWN ROAD
WESTFIELD IN 46074
317.896.2704

HAMILTON COUNTY SURVEYOR'S OFFICE
ATTENTION: GREG HOYES
1 HAMILTON COUNTY SQUARE, STE. 146
NOBLESVILLE, IN 46060
317.776.9626

INDOT
ATTENTION: SHELLEY HANEY
32 SOUTH BROADWAY
GREENFIELD, IN 46140
317.467.3492

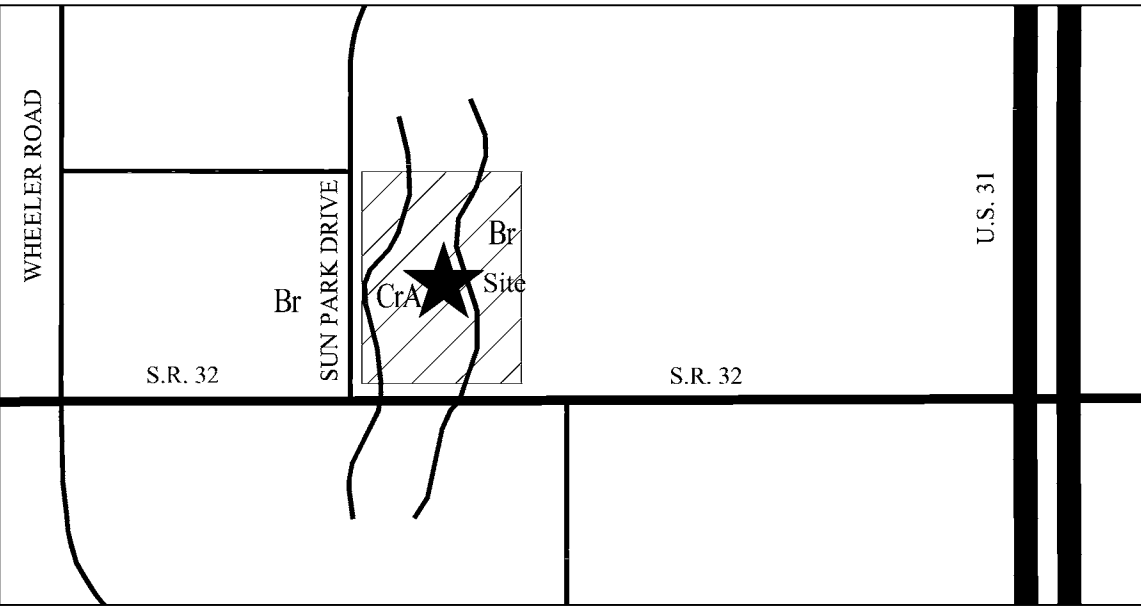
HAMILTON COUNTY HIGHWAY DEPT.
ATTENTION: DAVE LUCAS
1700 SOUTH 10TH STREET
NOBLESVILLE, IN 46060
317.773.7770

ORIGINATING BENCHMARK

A STANDARD DISK STAMPED HAM G11 SET IN THE TOP OF THE SOUTHWEST CONCRETE WING OF A CULVERT ALONG STATE ROAD 32 ABOUT 0.37 MILES EAST OF U.S. 31
ELEVATION=876.19 (NAVD 88)

TBM:
CUT "X" ON EAST BON BOLT OF FIRE HYDRANT AT THE NORTHWEST INTERSECTION OF STATE ROAD 32 AND SUN PARK DRIVE.
ELEVATION=900.33 (NAVD 88)

Sheet Set	
Sheet Number	Sheet Title
C001	TITLE SHEET
I	AUTA ACSM LAND TITLE SURVEY
C100	STORMWATER POLLUTION PREVENTION PLAN PHASE 1
C101	STORMWATER POLLUTION PREVENTION PLAN PHASE 2
C102	SWPPP SPECIFICATIONS
C103	SWPPP DETAILS
C104	SWPPP DETAILS
C200	SITE PLAN
C201	SITE DETAILS
C202	SITE DETAILS
C300	GRADING PLAN
C600	DRAINAGE PLAN
C601	DRAINAGE DETAILS
C602	DRAINAGE DETAILS
C603	DRAINAGE DETAILS
C604	DRAINAGE DETAILS
C605	STORM SEWER PLAN AND PROFILE
C606	STORM SEWER PLAN AND PROFILE
C800	UTILITY PLAN
C801	UTILITY DETAILS
C802	UTILITY DETAILS
C803	UTILITY DETAILS
C900	WESTFIELD GENERAL SPECIFICATIONS
C901	WESTFIELD STORM SEWER SPECIFICATIONS
C902	CITIZENS - WATER SPECIFICATIONS
C903	CITIZENS - WATER SPECIFICATIONS
C904	CITIZENS - SANITARY SEWER SPECIFICATIONS
C905	CITIZENS - SANITARY SEWER SPECIFICATIONS
C906	CITIZENS - SANITARY SEWER SPECIFICATIONS
C907	CITIZENS - SANITARY SEWER SPECIFICATIONS
C908	CITIZENS - SANITARY SEWER SPECIFICATIONS
C909	CITIZENS - SANITARY SEWER SPECIFICATIONS
C910	CITIZENS - SANITARY SEWER SPECIFICATIONS
L100	LANDSCAPE PLAN
L200	LANDSCAPE DETAILS



★ PROJECT LOCATION
SOILS MAP

SOILS TYPE LEGEND

Br BROOKSTON SILTY CLAY LOAM
THE MAIN SOIL FEATURES THAT ADVERSELY AFFECT ENGINEERING USES OF THIS SOIL ARE A SEASONAL HIGH WATER TABLE, HIGH POTENTIAL FROST ACTION, MODERATE SHRINK-SWELL POTENTIAL, AND MODERATE PERMEABILITY. THIS SOIL HAS SEVERE LIMITATIONS FOR BUILDING SITES. THE SITES NEED TO BE ARTIFICIALLY DRAINED AND PROTECTED FROM FLOODING. DWELLINGS AND SMALL BUILDINGS WITH BASEMENTS SHOULD NOT BE CONSTRUCTED ON THIS SOIL. USING PROPERLY DESIGNED FOUNDATIONS AND FOOTINGS HELPS TO PREVENT STRUCTURAL DAMAGE FROM FROST ACTION AND SHRINKING AND SWELLING OF THE SOIL. THIS SOIL HAS SEVERE LIMITATIONS FOR LOCAL ROADS AND STREETS BECAUSE OF SEASONAL HIGH WATER TABLE AND HIGH POTENTIAL FROST ACTION. INSTALLATION OF DRAINAGE DITCHES ALONG ROADS HELPS TO LOWER THE WATER TABLE AND PREVENT DAMAGE FROM FROST ACTION. THE BASE MATERIAL FOR ROADS AND STREETS SHOULD BE REPLACED OR STRENGTHENED WITH SUITABLE MATERIAL.

Cra CROSBY SILT LOAM
0 TO 2 PERCENT SLOPES. THE MAIN SOIL FEATURES THAT ADVERSELY AFFECT THE ENGINEERING USES OF THIS SOIL ARE A SEASONAL HIGH WATER TABLE, MODERATE SHRINK-SWELL POTENTIAL, HIGH POTENTIAL FROST ACTION, AND SLOW PERMEABILITY. THIS SOIL HAS SOME SEVERE LIMITATIONS FOR BUILDING SITES. THE SITES NEED TO BE ARTIFICIALLY DRAINED TO PREVENT WETNESS FROM BECOMING A PROBLEM. DWELLINGS AND SMALL BUILDINGS WITH BASEMENTS SHOULD NOT BE CONSTRUCTED ON THIS SOIL. USING PROPERLY DRAINED FOUNDATIONS AND FOOTINGS HELPS TO PREVENT STRUCTURAL DAMAGE FROM LOW STRENGTH AND SHRINKING AND SWELLING OF THE SOIL. THIS SOIL HAS SEVERE LIMITATIONS FOR LOCAL ROADS AND STREETS. THE BASE MATERIAL FOR ROADS NEEDS TO BE STRENGTHENED OR REPLACED WITH SUITABLE MATERIAL.

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 846 - 6611
800 452 - 6408
317 843 - 0546 /ax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE
ENGINEERS
Land Surveying / Civil Engineering
Landscape Architecture

PROJECT NO.: W15.0316
DWG NAME: w150316-C001-Title.dwg
DESIGNED BY: RLW
DRAWN BY: RLW
CHECKED BY: BUS
DATE: 01-28-2016

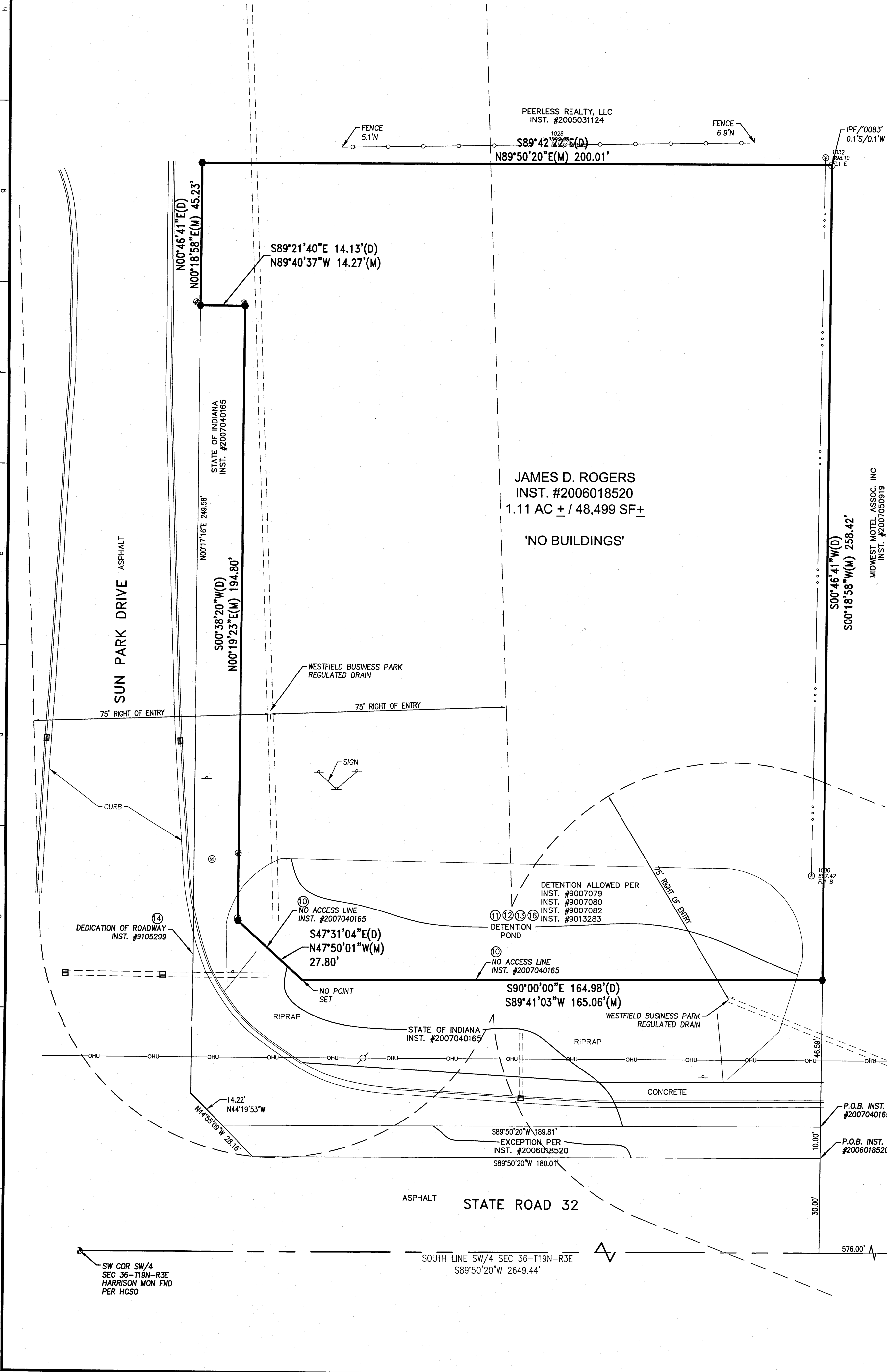
DATE: 01-28-2016
BY: BUS
SUBMITTED FOR COUNTY SURVEYOR REVIEW: 01-28-2016
ISSUED FOR TAC REVIEW: 01-28-2016

REVISIONS AND ISSUES:
SUBMITTED FOR COUNTY SURVEYOR REVIEW: 01-28-2016
ISSUED FOR TAC REVIEW: 01-28-2016

STEVEN SCOTT RUCKER, P.E. (1390279)

PREPARED FOR:
Custard Kings
17651 SUN PARK DRIVE, WESTFIELD, IN 46074
TITLE SHEET
Part of SWAC Section 36, Township 19 North, Range 3 East, Washington Township, Hamilton County, Indiana

SHEET NO.
C001
PROJECT NO.
W15.0316



SURVEYOR'S REPORT

CLIENT: HENKE DEVELOPMENT GROUP, LLC

JOB NUMBER: W140219

TYPE OF SURVEY: RETRACEMENT SURVEY MEETING THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS

CLASS OF SURVEY: URBAN SURVEY (865 IAC 1-12)

FIELD WORK COMPLETED: JUNE 16, 2014

LOCATION OF SURVEY: SUN PARK DRIVE AND SR 32, WESTFIELD, INDIANA

IN ACCORDANCE WITH TITLE 865, ARTICLE 1, CHAPTER 12 (RULE 12) OF THE INDIANA ADMINISTRATIVE CODE (IAC), THE FOLLOWING OBSERVATIONS AND OPINIONS ARE SUBMITTED REGARDING THE UNCERTAINTY IN THE POSITION OF THE LINES AND CORNERS ESTABLISHED AND/OR REESTABLISHED ON THIS SURVEY AS A RESULT OF:

- 1) AVAILABILITY AND CONDITION OF REFERENCE MONUMENTS;
- 2) CLARITY AND/OR AMBIGUITY OF THE RECORD DESCRIPTION(S) USED AND/OR THE ADJOINER'S DESCRIPTIONS; AND
- 3) OCCUPATION OR POSSESSION LINES.
- 4) MEASUREMENTS (RELATIVE POSITIONAL ACCURACY)

NOTE: THERE MAY EXIST UNWRITTEN RIGHTS ASSOCIATED WITH THESE UNCERTAINTIES.

1) AVAILABILITY AND CONDITION OF REFERENCE MONUMENTS

NE COR SW/4 SEC 36-T19N-R3E-IRON PIN FOUND PER HCSD
SE COR SW/4 SEC 36-T19N-R3E-BRASS PLUG FOUND PER HCSD
SW COR SW/4 SEC 36-T19N-R3E-HARRISON MONUMENT FOUND PER HCSD

IT IS THIS SURVEYOR'S PROFESSIONAL OPINION THAT THERE IS NO UNCERTAINTY IN THE LINES OF THE SURVEYED TRACT DUE TO VARIANCES IN REFERENCE MONUMENTS.

2) CLARITY AND/OR AMBIGUITY OF THE RECORD DESCRIPTION(S)

THE RECORD DESCRIPTIONS FOR THE ADJOINING REAL ESTATE WERE OBTAINED FROM THE HAMILTON COUNTY RECORDER'S OFFICE AND MATHEMATICALLY RETRACED IN AN EFFORT TO DISCLOSE POSSIBLE GAPS AND/OR OVERLAPS BETWEEN THE LINES OF THE SURVEYED TRACT AND THOSE OF THE ADJOINERS. IT IS THIS SURVEYOR'S PROFESSIONAL OPINION THAT THERE ARE NO UNCERTAINTIES IN THE LINES OF THE SURVEYED REAL ESTATE AND THOSE OF THE ADJOINERS DUE TO DISCREPANCIES IN THE RECORD DESCRIPTIONS.

3) OCCUPATION OR POSSESSION LINES

AT THE TIME THE FIELD WORK WAS COMPLETED, PHYSICAL EVIDENCE OF THE LINES AND/OR INCONSISTENCIES IN THE LINES OF OCCUPATION OF THE SURVEYED TRACT CONSISTED OF THE FOLLOWING:
THE POSSESSION TO THE WEST IS TO THE IMPROVEMENTS OF SUN PARK DRIVE. THERE IS FENCE 5.1 FEET NORTH OF THE NORTH BOUNDARY LINE.

4) MEASUREMENTS (RELATIVE POSITIONAL ACCURACY)

THE RELATIVE POSITIONAL ACCURACY OF THE CORNERS OF THE SUBJECT TRACT ESTABLISHED FOR THIS SURVEY IS WITHIN THE SPECIFICATIONS FOR AN URBAN SURVEY (+/- 0.07 FOOT PLUS 50 PARTS PER MILLION) AS DEFINED IN 865 IAC 1-12-8, EFFECTIVE MAY 4, 2006. ('RELATIVE POSITIONAL ACCURACY' MEANS THE VALUE EXPRESSED IN FEET OR METERS THAT REPRESENTS THE UNCERTAINTY DUE TO RANDOM ERRORS IN MEASUREMENTS IN THE LOCATION OF ANY POINT ON A SURVEY RELATIVE TO ANY OTHER POINT ON THE SAME SURVEY AT THE 95 PERCENT CONFIDENCE LEVEL).

THEORY OF LOCATION

THE SURVEYED BOUNDARY WAS ESTABLISHED BY HONORING CONTROLLING CALLS IN INSTRUMENT #2006018520 AND #2007040165. THE DESCRIPTIONS REFERENCE SECTION CORNERS AND LINES ESTABLISHED BY THE MONUMENTS LISTED ABOVE. AFTER THE ESTABLISHMENT OF SAID SECTION LINES, SAID CALLS WERE USED TO RETRACE THE SURVEYED BOUNDARY.

I AFFIRM, UNDER THE PENALTIES FOR PERJURY, THAT I HAVE TAKEN REASONABLE CARE TO REDACT EACH SOCIAL SECURITY NUMBER IN THIS DOCUMENT, UNLESS REQUIRED BY LAW. (TODD BORGMAN)

THIS INSTRUMENT WAS PREPARED BY: TODD BORGMAN, WEIHE ENGINEERS, INC.

SURVEYOR'S CERTIFICATE

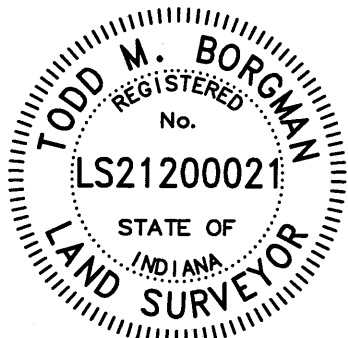
TO: HENKE DEVELOPMENT GROUP, LLC, AN INDIANA LIMITED LIABILITY COMPANY;
CHICAGO TITLE INSURANCE COMPANY;

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1-4, 7(a)(b1), 8, 9, 11(a) AND 13 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON JUNE 16, 2014.

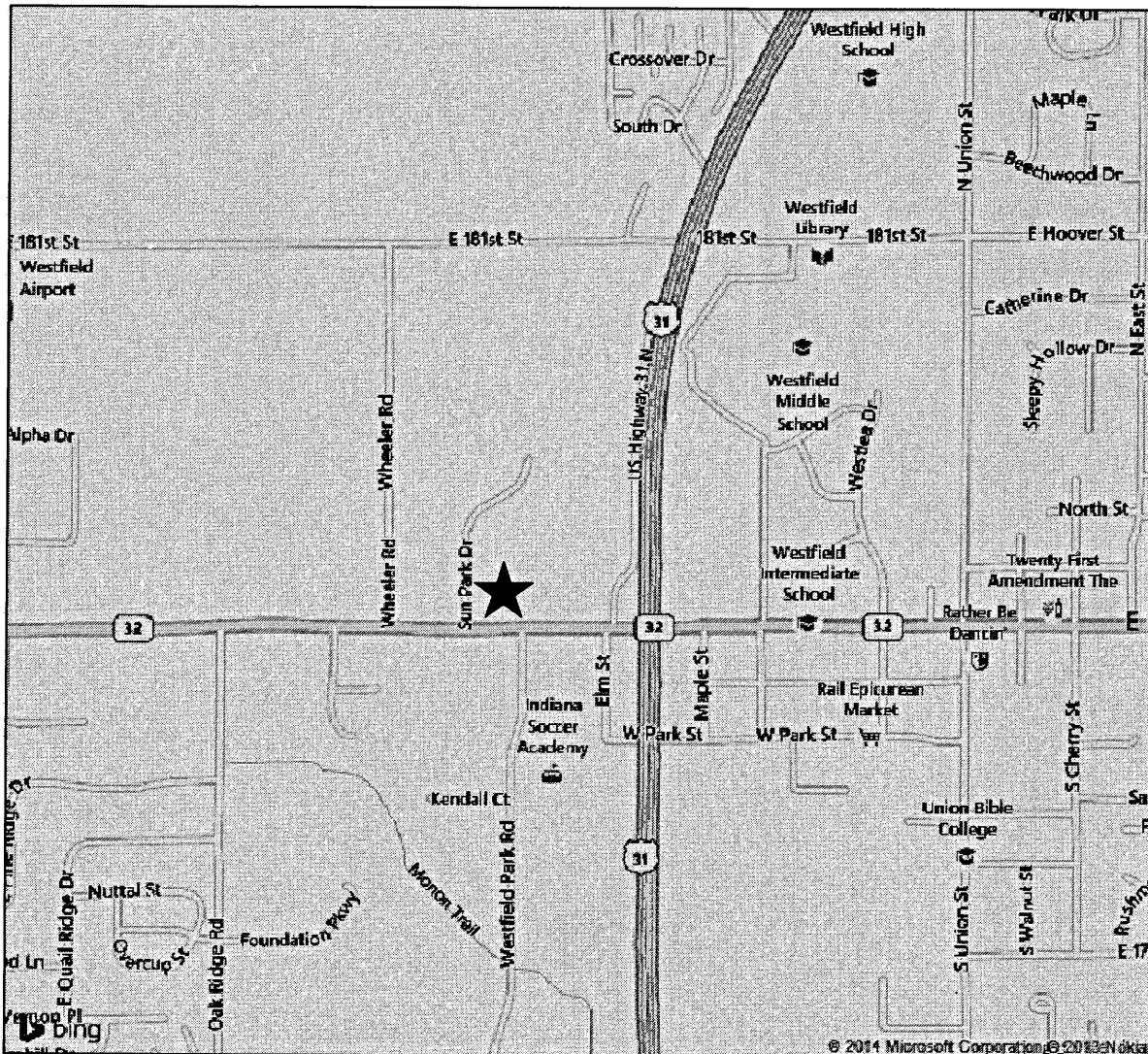
THIS SURVEY WAS PERFORMED UNDER THE DIRECTION OF THE UNDERSIGNED, AND TO THE BEST OF THIS SURVEYOR'S KNOWLEDGE AND BELIEF WAS EXECUTED ACCORDING TO SURVEY REQUIREMENTS IN 865 IAC 1-12 FOR THE STATE OF INDIANA.

DATED JUNE 24, 2014

TODD M. BORGMAN
REGISTERED LAND SURVEYOR NO. 21200021
STATE OF INDIANA



VICINITY MAP



★ PROJECT LOCATION

LEGAL DESCRIPTION-PER TITLE COMMITMENT

PART OF THE SOUTH-EAST QUARTER OF THE SOUTH-WEST QUARTER OF SECTION 36, TOWNSHIP 19 NORTH, RANGE 3 EAST IN HAMILTON COUNTY, INDIANA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID QUARTER QUARTER SECTION; THENCE ALONG THE SOUTH LINE THEREOF NORTH 89 DEGREES 42 MINUTES 22 SECONDS WEST 576.00 FEET; THENCE PARALLEL WITH THE EAST LINE OF SAID QUARTER QUARTER SECTION NORTH 00 DEGREES 46 MINUTES 41 SECONDS EAST 30.00 FEET TO THE POINT OF BEGINNING; THENCE PARALLEL WITH THE SOUTH LINE OF SAID QUARTER QUARTER SECTION NORTH 89 DEGREES 42 MINUTES 22 SECONDS WEST 180.01 FEET TO THE EASTERLY RIGHT OF WAY LINE OF AN ACCESS ROAD; THENCE ALONG SAID EASTERLY LINE NORTH 44 DEGREES 27 MINUTES 51 SECONDS WEST 28.16 FEET; THENCE NORTH 00 DEGREES 46 MINUTES 41 SECONDS EAST 295.01 FEET; THENCE SOUTH 89 DEGREES 42 MINUTES 22 SECONDS EAST 200.01 FEET; THENCE SOUTH 00 DEGREES 46 MINUTES 41 SECONDS WEST 315.01 FEET TO THE PLACE OF BEGINNING.

EXCEPT:

A PART OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 36, TOWNSHIP 19 NORTH, RANGE 3 EAST, HAMILTON COUNTY, INDIANA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID QUARTER SECTION; THENCE SOUTH 88 DEGREES 48 MINUTES 00 SECONDS WEST 576.00 FEET ALONG THE SOUTH LINE OF SAID QUARTER-QUARTER SECTION; THENCE NORTH 00 DEGREES 42 MINUTES 57 SECONDS WEST 30.00 FEET TO THE NORTH BOUNDARY OF S.R. 32 AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE SOUTH 88 DEGREES 48 MINUTES 00 SECONDS WEST 180.01 FEET ALONG THE BOUNDARY OF SAID S.R. 32; THENCE NORTH 45 DEGREES 57 MINUTES 29 SECONDS WEST 14.08 FEET ALONG SAID BOUNDARY; THENCE NORTH 88 DEGREES 48 MINUTES 00 SECONDS EAST 190.01 FEET TO THE EAST LINE OF THE OWNERS' LAND; THENCE SOUTH 00 DEGREES 42 MINUTES 57 SECONDS EAST 10.00 FEET ALONG SAID EAST LINE OF THE OWNERS' LAND TO THE BOUNDARY OF S.R. 32 AND THE POINT OF BEGINNING AND CONTAINING 0.042 ACRES, MORE OR LESS.

TOGETHER WITH AN EASEMENT FOR INGRESS AND EGRESS AS RECORDED IN INSTRUMENT NUMBER 8919077.

ALSO EXCEPT THAT PART CONVEYED TO THE STATE OF INDIANA BY WARRANTY DEED RECORDED JULY, 17, 2007 AS INSTRUMENT NO. 2007040165, DESCRIBED AS FOLLOWS:

A PART OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 36, TOWNSHIP 19 NORTH, RANGE 3 EAST, HAMILTON COUNTY, INDIANA, AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID QUARTER SECTION; THENCE NORTH 89 DEGREES 50 MINUTES 43 SECONDS WEST 576.07 FEET ALONG THE SOUTH LINE OF SAID SECTION TO THE PROLONGED EAST LINE OF THE GRANTOR'S LAND; THENCE NORTH 00 DEGREES 38 MINUTES 07 SECONDS EAST 40.00 FEET ALONG SAID EAST LINE PROLONGED TO THE NORTH BOUNDARY OF S.R. 32 AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE NORTH 89 DEGREES 50 MINUTES 43 SECONDS WEST 180.01 FEET (180.01 FEET BY INSTRUMENT NUMBER 9327322) ALONG THE BOUNDARY OF SAID S.R. 32 TO THE NORTHEASTERN BOUNDARY OF THE INTERSECTION OF SAID S.R. 32 AND SUNPARK DRIVE; THENCE NORTH 44 DEGREES 00 MINUTES 16 SECONDS WEST 14.22 FEET ALONG THE BOUNDARY OF SAID S.R. 32 AND SAID SUNPARK DRIVE TO THE EAST BOUNDARY OF SAID SUNPARK DRIVE; THENCE NORTH 00 DEGREES 38 MINUTES 07 SECONDS EAST 248.59 FEET ALONG THE BOUNDARY OF SAID SUNPARK DRIVE; THENCE SOUTH 89 DEGREES 21 MINUTES 40 SECONDS EAST 14.13 FEET; THENCE SOUTH 00 DEGREES 38 MINUTES 20 SECONDS WEST 194.80 FEET; THENCE SOUTH 47 DEGREES 51 MINUTES 04 SECONDS EAST 27.80 FEET; THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS EAST 164.98 FEET TO THE EAST LINE OF GRANTOR'S LAND; THENCE SOUTH 00 DEGREES 38 MINUTES 07 SECONDS WEST 46.59 FEET ALONG SAID EAST LINE TO THE POINT OF BEGINNING AND CONTAINING 0.285 ACRES, MORE OR LESS.

GENERAL NOTES

1.) BASED UPON A SCALED INTERPRETATION OF THE FLOOD INSURANCE RATE MAP (18057C0120F) FOR HAMILTON COUNTY, INDIANA, DATED FEBRUARY 19, 2003, THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA, AS ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE NATIONAL FLOOD INSURANCE PROGRAM. THE SUBJECT PROPERTY IS LOCATED WITHIN (UNSHADED) ZONE X (AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN). FLOOD PLAIN CERTIFICATION IS RESTRICTED TO A REVIEW OF THE FLOOD INSURANCE RATE MAPS (FIRM), AND SHALL NOT BE CONSTRUED AS A CONFIRMATION OR DENIAL OF FLOODING POTENTIAL.

3.) UNDERGROUND UTILITIES WERE LOCATED FROM ABOVE GROUND OBSERVATIONS ONLY AND SHOULD NOT BE CONSIDERED COMPLETE. TO HAVE UNDERGROUND UTILITIES LOCATED, CONTACT THE INDIAN UNDERGROUND PLANT PROTECTION SERVICE AT 1-800-382-5544.

4.) THE SUBJECT PROPERTY CONTAINS 0 MARKED PARKING SPACES.

5.) PER THE HAMILTON COUNTY GIS WEBSITE, THE WESTFIELD BUSINESS PARK REGULATED (LEGAL) DRAIN IS WITHIN 75 FEET OF THE SUBJECT PROPERTY.

6.) ALL MONUMENTS FOUND IN PERFORMANCE OF THIS SURVEY WERE FOUND FLUSH WITH THE EXISTING GROUND UNLESS OTHERWISE NOTED, AND THE AGE AND ORIGIN OF SAID FOUND MONUMENTS ARE UNKNOWN UNLESS OTHERWISE NOTED.

7.) AS USED IN THIS SURVEY, CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION OF CONDITIONS REGARDING THOSE FACTS OR FINDING WHICH ARE THE SUBJECT OF THE CERTIFICATION AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESS OR IMPLIED.

8.) NO WARRANTY, EITHER EXPRESS OR IMPLIED, IS MADE AS TO THE ACCURACY OR COMPLETENESS OF INFORMATION PROVIDED BY GOVERNMENTAL AUTHORITIES AND / OR THIRD PARTIES, OR AS TO ITS FITNESS FOR ANY PARTICULAR PURPOSE OR USE, INCLUDING BUT NOT LIMITED TO INFORMATION PRESENTED ON UNDERGROUND UTILITIES, FLOOD HAZARD ZONES, FLOODWAY ZONES, WETLANDS, RECORDING INFORMATION, ZONING, AND REGULATED DRAINS. IN NO EVENT WILL WEIHE ENGINEERS, INC., ITS EMPLOYEES, AGENTS, AND / OR ASSIGNS BE LIABLE FOR ANY DAMAGES ARISING OUT OF THE FURNISHING AND / OR USE OF SUCH INFORMATION.

SCHEDULE B SURVEY ITEMS

THIS SURVEY WAS PREPARED UTILIZING INFORMATION CONTAINED IN CHICAGO TITLE INSURANCE COMPANY TITLE FILE NO. 201428771, DATED JUNE 3, 2014.

10 PERMANENT EXTINGUISHMENT OF ALL RIGHTS AND EASEMENTS OF INGRESS AND EGRESS TO, FROM AND ACROSS S.R. 32. SHOWN HEREON.

11 COVENANTS FOR HAMILTON WEST INVESTMENTS, SUN PARK, PER INSTRUMENT NO. 9007079. AFFECTS SUBJECT PROPERTY, NOT PLOTTABLE

12 EASEMENT FOR PUBLIC DRAINAGE PER INSTRUMENT NO. 9007080. AFFECTS SUBJECT PROPERTY, NOT PLOTTABLE

13 RECIPROCAL EASEMENT AGREEMENT PER INSTRUMENT NO. 9007082. AFFECTS SUBJECT PROPERTY, NOT PLOTTABLE

14 DEDICATION OF ROADWAY PER INSTRUMENT NO. 9105299. SHOWN HEREON

15 DEDICATION OF ROADWAY PER INSTRUMENT NO. 9121823. DEDICATION IS NORTH OF SUBJECT PROPERTY

16 COVENANT FOR RESERVATION OF ACCESS AND USE BY HAMILTON WEST INVESTMENTS PER INSTRUMENT NO. 9013283. AFFECTS SUBJECT PROPERTY, NOT PLOTTABLE

LEGEND

- ✕ CUT 'X' FOUND/SET
- HARRISON MONUMENT FOUND
- IRON PIN FOUND/SET
- ⊕ WATER METER
- ⊕ WATER VALVE
- ⊕ GAS METER
- ⊕ GAS VALVE
- ⊕ SIGN
- ⊕ HANDICAPPED SPACE
- ⊕ BRASS PLUG FOUND/SET
- ⊕ MONUMENT
- ⊕ ELECTRIC CONTROL BOX
- ⊕ ELECTRIC METER
- ⊕ LIGHT STAND
- ⊕ TRANSFORMER
- ⊕ TELEPHONE JUNCTION BOX
- ⊕ SQUARE INLET
- ⊕ SANITARY SEWER MANHOLE
- ⊕ CLEANOUT
- ⊕ TELEPHONE PEDESTAL
- ⊕ CURB INLET
- CHAIN LINK FENCE
- UNDERGROUND GAS
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- OVERHEAD UTILITY
- FLOW LINE
- HCSD HAMILTON COUNTY SURVEYOR'S OFFICE
- (M) MEASURED DIMENSION
- (D) DEED DIMENSION

PROJECT NO.	DATE	BY	REVISIONS AND ISSUES
W140219			
DWG NAME:	W140219SV		
FIELD BY:	ES		
DRAWN BY:	ES		
CHECKED BY:	TB		
DATE:	6-24-14		

DATE

BY

REVISIONS AND ISSUES

DATE

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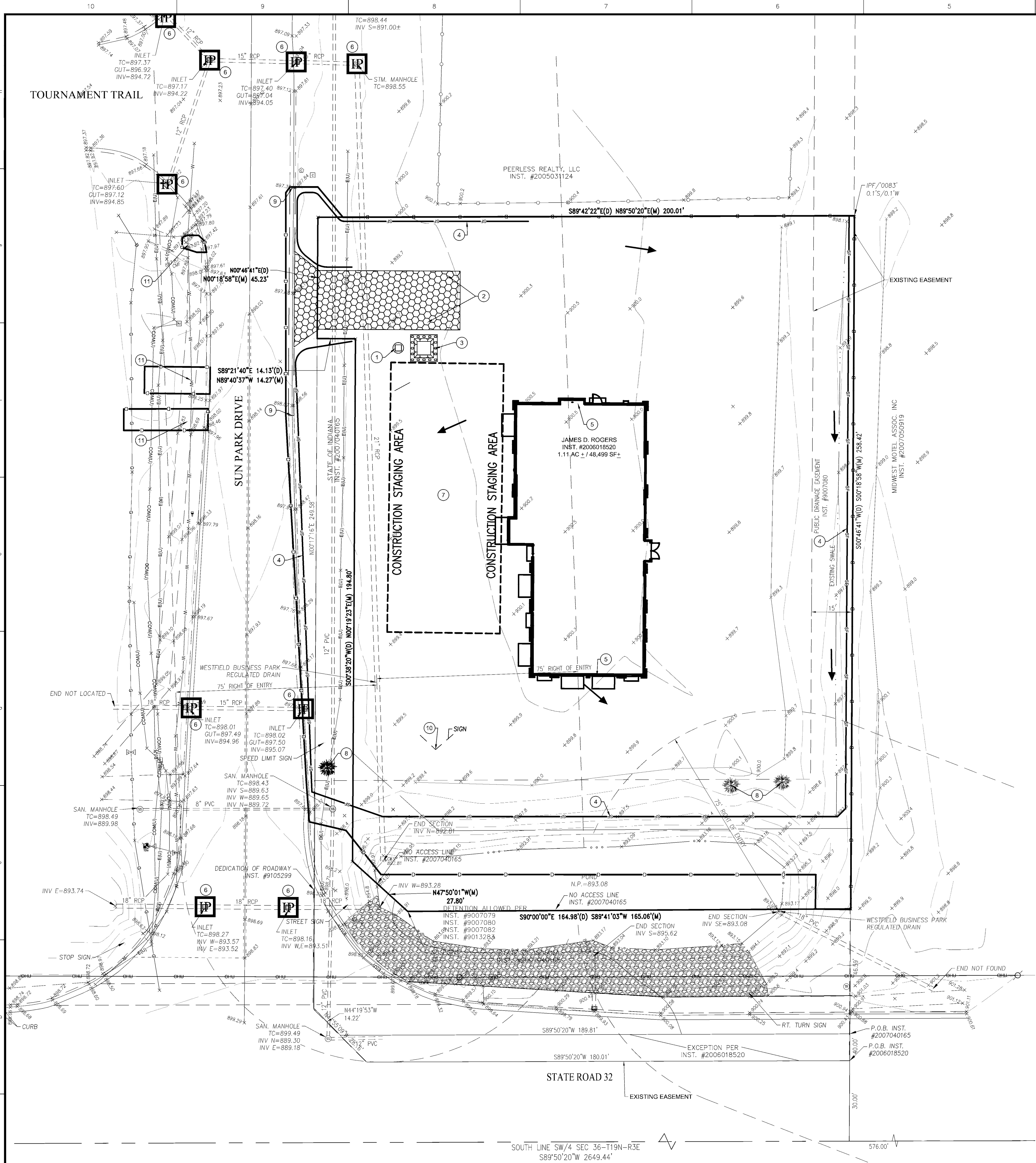
BY

REVISIONS AND ISSUES

DATE

BY

REVISIONS AND ISSUES



SITE PREPARATION / SWPPP PHASE 1 NOTES

1. INSTALL PERMIT POSTING AREA. 4" PVC TUBE WITH END CAPS ATTACHED TO PROJECT CONSTRUCTION SIGN TO CONTAIN APPROVED CONSTRUCTION DRAWINGS AND PERMITS FOR INSPECTORS.
2. INSTALL CONSTRUCTION ENTRANCE. REFER TO DETAIL ON SHEET C103
3. INSTALL CONCRETE WASHOUT. REFER TO DETAIL ON SHEET C104
4. INSTALL SILT FENCE. REFER TO DETAIL ON SHEET C104
5. LIMITS OF PROPOSED BUILDING
6. INSTALL DROP INLET PROTECTION ON ALL INLETS LOCATED WITHIN THE RIGHT OF WAY.
7. CONSTRUCTION DUMPSTER, FUELING AREA, FUEL TANK AND PORT-O-LET TO BE LOCATED AND NOTED ONSITE BY CONTRACTOR
8. REMOVE TREE
9. SAWCUT AND REMOVE CURB FOR ENTRY DRIVES
10. REMOVE EXISTING SIGN
11. DEMOLISH SIDEWALK TO NEAREST JOINT AS NEEDED FOR INSTALLATION OF UTILITIES PROPOSED ON SHEET C800. CONSTRUCT SIDEWALK BACK TO ORIGINAL OR BETTER CONDITION WHERE NEEDED. COORDINATE WITH UTILITY COMPANY INSTALLING PROPOSED UTILITY.

EROSION CONTROL SPECIFICATIONS

1. THIS PLAN IS DESIGNED AS AN ATTEMPT TO PREVENT ANY AND ALL SEDIMENT FROM LEAVING THE CONSTRUCTION SITE BY WAY OF EROSION. IF EROSION OF SEDIMENT FROM THE SITE IS TAKING PLACE, THE CONTRACTOR AND/OR OWNER SHALL TAKE PREVENTATIVE ACTION IMMEDIATELY. THE ENGINEER SHALL BE CONSULTED IN THE EVENT THIS HAPPENS.
2. TEMPORARY SEEDING IS TO BE APPLIED TO ANY DISTURBED AREA THAT WILL REMAIN UNALTERED IN EXCESS OF 15 DAYS.
3. PERMANENT SEEDING IS TO BE APPLIED IMMEDIATELY TO AREAS THAT HAVE ACHIEVED FINAL AND FINISHED GRADE.
4. PRESERVE EXISTING VEGETATION ON THE SITE WHENEVER AND WHEREVER POSSIBLE TO PREVENT TOPSOIL EROSION.
5. ALL SEDIMENT CAPTURING MEASURES SHALL BE IMPLEMENTED PRIOR TO THE DISTURBANCE OF THE CONSTRUCTION AREA THEY ARE INTENDED TO SERVICE. ALL EROSION CONTROL MEASURES PROPOSED ARE TO BE PROPERLY MAINTAINED TO CONTINUE THEIR EFFECTIVENESS.
6. IF GRADING OCCURS DURING THE MONTHS OF DECEMBER, JANUARY OR FEBRUARY DORMANT SEEDING PROCEDURES SHALL BE USED.
7. DURING DRY WEATHER, KEEP LAWNS WATERED WITH SPRINKLERS OR OTHER APPROVED METHODS. RESEED ANY AREAS NOT GERMINATING OR DAMAGED AT INTERVALS AS MAY BE REQUIRED ACCORDING TO SEASONAL CONDITION AND/OR CONSTRUCTION ACTIVITY. WATER GRASS AND EXECUTE NECESSARY WEEDING UNTIL FULL STAND OF GRASS HAS BEEN OBTAINED.
8. THE IMPLEMENTATION AND MAINTENANCE OF THE EROSION CONTROL IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER.
9. IT SHALL BE THE CONTRACTOR'S AND/OR OWNER'S RESPONSIBILITY TO MINIMIZE SEDIMENTATION FROM ON-SITE CONSTRUCTION ACTIVITIES FROM BEING DEPOSITED ONTO ADJACENT PROPERTIES AND RECEIVING STREAMS/DITCHES IN STRICT COMPLIANCE WITH "RULE 5" (327 IAC 15-5, CONSTRUCTION ACTIVITY STORM WATER RUNOFF CONTROL). IT SHALL ALSO BE THE CONTRACTOR'S AND/OR OWNER'S RESPONSIBILITY TO OBTAIN ANY APPROVALS REQUIRED FROM THE LOCAL AUTHORITY AND TO SUBMIT A COMPLETE NOTICE OF INTENT LETTER TO THE OFFICE OF WATER MANAGEMENT, INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT PRIOR TO ANY CONSTRUCTION ACTIVITY.
10. FOR SEASONAL VARIATIONS - SEE SEASONAL SOIL PROTECTION CHART IN THESE PLANS.

GENERAL NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH THE OWNER DURING BIDDING AND DURING CONSTRUCTION ACTIVITIES ALL ITEMS TO BE REMOVED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ANY MATERIALS AND/OR STRUCTURES NOT LOCATED ON THIS SURVEY FOR THE INSTALLATION OF THE NEW WORK.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PERTAINING TO THEIR PHASE OF WORK, AND TO VERIFY WHICH UTILITIES WILL BE REMOVED BY UTILITY COMPANY. ANY AND ALL UTILITIES NOT REMOVED BY THE UTILITY COMPANY SHALL BE REMOVED BY THE CONTRACTOR.
3. UTILITIES ARE SHOWN TO BE APPROXIMATE AND SHALL BE RELOCATED AND/OR CAPPED AND ABANDONED BEFORE CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
4. ALL DEMOLITION MATERIAL AND SALVAGEABLE MATERIAL IS THE PROPERTY OF THE DEMOLITION CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF THE SITE.
5. SLABS ON GRADE MUST BE REMOVED COMPLETELY AND TAKEN OFF THE SITE.
6. ALL UTILITIES MUST REMAIN ACTIVE FOR AREA TENANTS THAT ARE REMAINING. NO UTILITY SERVICE SHALL BE INTERRUPTED DURING THE CONSTRUCTION PROCESS.
7. BEARINGS, DIMENSIONS, AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. SEE RECORD SURVEYS AND PLATS FOR EXACT INFORMATION.
8. IF THERE ARE ANY QUESTIONS CONCERNING THIS DEMOLITION PLAN, PLEASE CONTACT THE ENGINEER BEFORE CONTINUING WORK.
9. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED IN THE FIELD BY CITY OF WESTFIELD INSPECTOR.

EROSION CONTROL NOTES

1. ALL DISTURBED AREAS SHALL BE SOODED OR SEEDED, EXCEPT BUILDING PAD AND LANDSCAPE BEDS. SEE LANDSCAPE PLANS FOR LOCATION OF LANDSCAPE BEDS.
2. INSTALL SILT FENCE ALONG ALL DOWNSTREAM SLOPES. SILT FENCE TO FOLLOW CONTOUR.
3. THERE SHALL BE NO DIRT, DEBRIS OR STORAGE OF MATERIAL IN THE STREET.

EXISTING AREAS

TOTAL SITE	= 1.11 AC.
DISTURBED	= 1.11 AC.
PERVIOUS	= 1.11 AC.
IMPERVIOUS	= 0.00 AC.

ORIGINATING BENCHMARK

A STANDARD DISK STAMPED HAM G11 SET IN THE TOP OF THE SOUTHWEST CONCRETE WING OF A CULVERT ALONG STATE ROAD 32 ABOUT 0.37 MILES EAST OF U.S. 31. ELEVATION=876.19 (NAVD 88)

TBM:
CUT "X" ON EAST BON BOLT OF FIRE HYDRANT AT THE NORTHWEST INTERSECTION OF STATE ROAD 32 AND SUN PARK DRIVE. ELEVATION=900.33 (NAVD 88)

CONTACT PERSON FOR EROSION CONTROL & SEDIMENT PRACTICES

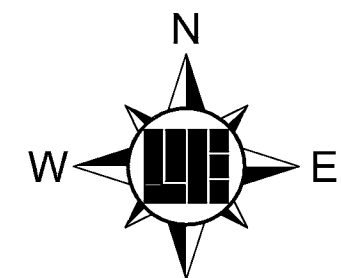
WEIHE ENGINEERS, INC.
10505 N. COLLEGE AVE.
INDIANAPOLIS, IN 46268
TELEPHONE: (317) 846-6611
FAX: (317) 843-0546
EMAIL: PARKER@WEIHE.NET
CONTACT PERSON: FRED PARKER, CPESC

LINE TYPES

G	G	G	UNDERGROUND GAS
W	W	W	UNDERGROUND WATER
E(A)	E(A)	E(A)	AERIAL ELECTRIC
E	E	E	UNDERGROUND ELECTRIC
C	C	C	UNDERGROUND COMMUNICATIONS
C(A)	C(A)	C(A)	AERIAL COMMUNICATIONS
FO	FO	FO	UNDERGROUND FIBER OPTIC
FO(A)	FO(A)	FO(A)	AERIAL FIBER OPTIC CABLE
OHU	OHU	OHU	OVERHEAD UTILITY
FM	FM	FM	FORCE MAIN
			SANITARY SEWER
			STORM SEWER
			RIGHT OF WAY LINE
			CHAIN LINK FENCE
			BOARD FENCE
			WROUGHT IRON FENCE
X	X	X	FARM FENCE
T	T	T	GUARD RAIL
*	*	*	HAND RAIL
SF	SF	SF	SILT FENCE
			BUILDING SETBACK LINE
			BOUNDARY LINE
			FLOW LINE
			SECTION LINE
			INDEX CONTOUR
			INTERMEDIATE CONTOUR

SWPPP 1 LEGEND

- INLET PROTECTION - USE SUBSURFACE FRAME AND BASKET INLET PROTECTION WITH OVERFLOW CAPABILITY, UNLESS OTHERWISE NOTED
- CONSTRUCTION ENTRANCE
- STAGING AREA
- POSTING AREA - 4" PVC TUBE WITH END CAPS ATTACHED TO PROJECT CONSTRUCTION SIGN TO CONTAIN APPROVED CONSTRUCTION DRAWINGS AND PERMITS FOR INSPECTORS.
- CONCRETE WASHOUT
- SILT FENCE
- LIMITS OF DISTURBANCE
- DIRECTION OF OVERLAND FLOW



SCALE: 1" = 20'

0 10 20 40

10505 N. College Avenue
Indianapolis, Indiana 46268
weihe.net
317 846 - 6611
800 452 - 6408
317 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying / Civil Engineering
Landscape Architecture

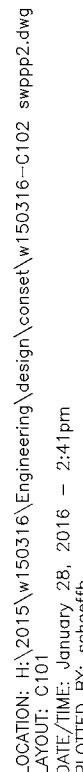
PROJECT NO.	W15.0316
DWG NAME	W150316.mxd
DESIGNED BY	RLW
DRAWN BY	RLW
CHECKED BY	BJS
DATE	01-26-2016

STEVEN SCOTT RUCKER, P.E. (1390279)

of WESTFIELD
17651 SUN PARK DRIVE, WESTFIELD, IN 46074
STORMWATER POLLUTION PREVENTION PLAN PHASE 1
Part of SWM Section 36, Township 19 North, Range 3 East, Washington Township, Hamilton County, Indiana

PREPARED FOR:

SHEET NO.
C100
PROJECT NO.
W15.0316



1. THIS PLAN IS DESIGNED AS AN ATTEMPT TO PREVENT ANY AND ALL SEDIMENT FROM LEAVING THE CONSTRUCTION SITE BY WAY OF EROSION. IF EROSION OF SEDIMENT FROM THE SITE IS TAKING PLACE, THE CONTRACTOR AND/OR OWNER SHALL TAKE PREVENTATIVE ACTION IMMEDIATELY. THE ENGINEER SHALL BE CONSULTED IN THE EVENT THIS HAPPENS.
2. TEMPORARY SEEDING IS TO BE APPLIED TO ANY DISTURBED AREA THAT WILL REMAIN UNALTERED IN EXCESS OF 15 DAYS.
3. PERMANENT SEEDING IS TO BE APPLIED IMMEDIATELY TO AREAS THAT HAVE ACHIEVED FINAL AND FINISHED GRADE.
4. PRESERVE EXISTING VEGETATION ON THE SITE WHENEVER AND WHEREVER POSSIBLE TO PREVENT TOPSOIL EROSION.
5. ALL SEDIMENT CAPTURING MEASURES SHALL BE IMPLEMENTED PRIOR TO THE DISTURBANCE OF THE CONSTRUCTION AREA THEY ARE INTENDED TO SERVICE. ALL EROSION CONTROL MEASURES PROPOSED ARE TO BE PROPERLY MAINTAINED TO CONTINUE THEIR EFFECTIVENESS.
6. IF GRADING OCCURS DURING THE MONTHS OF DECEMBER, JANUARY OR FEBRUARY DORMANT SEEDING PROCEDURES SHALL BE USED.
7. DURING DRY WEATHER, KEEP LAWNS WATERED WITH SPRINKLERS OR OTHER APPROVED METHODS. RESEED ANY AREAS NOT GERMINATING OR DAMAGED AT INTERVALS AS MAY BE REQUIRED ACCORDING TO SEASONAL CONDITION AND/OR CONSTRUCTION ACTIVITY. WATER GRASS AND EXECUTE NECESSARY WEEDING UNTIL FULL STAND OF GRASS HAS BEEN OBTAINED.
8. THE IMPLEMENTATION AND MAINTENANCE OF THE EROSION CONTROL IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER.
9. IT SHALL BE THE CONTRACTOR'S AND/OR OWNER'S RESPONSIBILITY TO MINIMIZE SEDIMENTATION (FROM ON-SITE CONSTRUCTION ACTIVITIES) FROM BEING DEPOSITED ON ADJACENT PROPERTIES AND RECEIVING STREAMS/DITCHES IN STRICT COMPLIANCE WITH "RULE E" (327 IAC 15.5, CONSTRUCTION ACTIVITY STORM WATER RUNOFF CONTROL). IT SHALL ALSO BE THE CONTRACTOR'S AND/OR OWNER'S RESPONSIBILITY TO OBTAIN ANY APPROVALS REQUIRED FROM THE LOCAL AUTHORITY AND TO SUBMIT A COMPLETE NOTICE OF INTENT LETTER TO THE OFFICE OF WATER MANAGEMENT, INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT PRIOR TO ANY CONSTRUCTION ACTIVITY.
10. FOR SEASONAL VARIATIONS - SEE SEASONAL SOIL PROTECTION CHART IN THESE PLANS.
11. PORTABLE TOILETS MUST BE ANCHORED.
12. THIS PLAN IS TO BE USED FOR EROSION CONTROL PURPOSES ONLY. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED IN THE FIELD BY THE INSPECTOR.
13. THIS PLAN INDICATES EROSION CONTROL MEASURES REQUIRED AFTER SOIL STRIPPING AND PAD BUILDING HAS TAKEN PLACE. COORDINATE WITH DEVELOPER FOR MEASURES REQUIRED UNTIL PROPER FURNISH OVER FOR DEVELOPMENT. COORDINATE WITH SOIL CONSERVATION DISTRICT REPRESENTATIVE FOR ANY OTHER MEASURES REQUIRED DUE TO SITE CONDITIONS.

1. ALL DISTURBED AREAS SHALL BE SODDED OR SEEDDED, EXCEPT BUILDING PAD AND LANDSCAPE BEDS. SEE LANDSCAPE PLANS FOR LOCATION OF LANDSCAPE BEDS.
2. INSTALL SILT FENCE ALONG ALL DOWNSTREAM SLOPES. SILT FENCE TO FOLLOW CONTOUR.
3. THERE SHALL BE NO DIRT, DEBRIS OR STORAGE OF MATERIAL IN THE STREET.

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH THE OWNER DURING BIDDING AND DURING CONSTRUCTION ACTIVITIES ALL ITEMS TO BE REMOVED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ANY MATERIALS AND/OR STRUCTURES NOT LOCATED ON THIS SURVEY FOR THE INSTALLATION OF THE NEW WORK.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PERTAINING TO THEIR PHASE OF WORK, AND TO VERIFY WHICH UTILITIES WILL BE REMOVED BY UTILITY COMPANY. ANY AND ALL UTILITIES NOT REMOVED BY THE UTILITY COMPANY SHALL BE REMOVED BY THE CONTRACTOR.
3. UTILITIES ARE SHOWN TO BE APPROXIMATE AND SHALL BE RELOCATED AND/OR CAPPED AND ABANDONED BEFORE CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
4. ALL DEMOLITION MATERIAL AND SALVAGEABLE MATERIAL IS THE PROPERTY OF THE DEMOLITION CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF THE SITE.
5. SLABS ON GRADE MUST BE REMOVED COMPLETELY AND TAKEN OFF THE SITE.
6. ALL UTILITIES MUST REMAIN ACTIVE FOR AREA TENANTS THAT ARE REMAINING. NO UTILITY SERVICE SHALL BE INTERRUPTED DURING THE CONSTRUCTION PROCESS.
7. BEARINGS, DIMENSIONS, AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. SEE RECORD SURVEYS AND PLATS FOR EXACT INFORMATION.
8. IF THERE ARE ANY QUESTIONS CONCERNING THIS DEMOLITION PLAN, PLEASE CONTACT THE ENGINEER BEFORE CONTINUING WORK.

WEIHE ENGINEERS, INC.
10505 NORTH COLLEGE AVENUE
INDIANAPOLIS, INDIANA 42880
(317) 846-6611 OR
TOLL FREE 1-800-452-6408
9. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED IN THE FIELD BY CITY OF WESTFIELD INSPECTOR.

COMMENCING AT THE SOUTHEAST CORNER OF SAID NARTER QUARTER SECTION; THENCE ALONG THE SOUTH LINE THEREOF NORTH 89 DEGREES 42 MINUTES 22 SECONDS WEST 576.00 FEET; THENCE PARALLEL WITH THE EAST LINE OF SAID QUARTER SECTION NORTH 00 DEGREES 46 MINUTES 41 SECONDS EAST 30.00 FEET TO THE POINT OF BEGINNING; THENCE PARALLEL WITH THE SOUTH LINE OF SAID QUARTER SECTION NORTH 89 DEGREES 42 MINUTES 22 SECONDS WEST 180.01 FEET TO THE EASTERLY RIGHT OF WAY LINE OF AN ACCESS ROAD; THENCE ALONG SAID EASTERLY Y LINE NORTH 44 DEGREES 27 MINUTES 58 SECONDS WEST 100.00 FEET TO THE POINT OF BEGINNING; OR ALTERNATELY, THENCE SOUTH 89 DEGREES 41 MINUTES 41 SECONDS EAST 295.01 FEET; THENCE SOUTH 89 DEGREES 42 MINUTES 22 SECONDS WEST 200.01 FEET; THENCE SOUTH 00 DEGREES 46 MINUTES 41 SECONDS WEST 351.01 FEET TO THE PLACE OF BEGINNING.

COMMENCING AT THE SOUTHEAST CORNER OF SAID QUARTER SECTION; THENCE SOUTH 88 DEGREES 48 MINUTES 00 SECONDS WEST 576.00 FEET ALONG THE SOUTH LINE OF SAID QUARTER-QUARTER SECTION; THENCE NORTH 00 DEGREES 42 MINUTES 57 SECONDS WEST 30.00 FEET TO THE NORTH BOUNDARY OF S.R. 32 AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE SOUTH 88 DEGREES 48 MINUTES 00 SECONDS WEST 180.01 FEET ALONG THE BOUNDARY OF SAID S.R. 32; THENCE NORTH 45 DEGREES 47 MINUTES 29 SECONDS WEST 14.08 FEET ALONG SAID BOUNDARY; THENCE SOUTH 88 DEGREES 48 MINUTES 00 SECONDS WEST 180.01 FEET ALONG THE EAST LINE OF SAID QUARTER-QUARTER SECTION; THENCE SOUTH 00 DEGREES 42 MINUTES 57 SECONDS WEST 10.00 FEET ALONG THE EAST LINE OF THE OWNERS LAND TO THE BOUNDARY OF S.R. 32 AND THE POINT OF BEGINNING AND CONTAINING 0.042 ACRES, MORE OR LESS.

ALSO EXCEPT THAT PART CONVEYED TO THE STATE OF INDIANA BY WARRANTY DEED RECORDED JULY, 17, 2007 AS INSTRUMENT NO. 2007040165, DESCRIBED AS FOLLOWS:

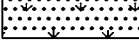
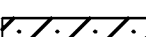
COMMENCING AT THE SOUTHEAST CORNER OF SAID QUARTER SECTION; THENCE NORTH 89 DEGREES 50 MINUTES 43 SECONDS WEST 576.07 FEET ALONG THE SOUTH LINE OF SAID SECTION TO THE PROLONGED EAST LINE OF THE GRANTOR'S LAND; THENCE NORTH 00 DEGREES 38 MINUTES 07 SECONDS EAST 40.00 FEET ALONG SAID EAST LINE PROLONGED TO THE NORTH BOUNDARY OF S.R. 32 AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE NORTH 89 DEGREES 50 MINUTES 43 SECONDS WEST 189.81 FEET (190.01 FEET BY INSTRUMENT NUMBER 9327322) ALONG THE BOUNDARY OF SAID S.R. 32 TO THE NORTHEASTERN BOUNDARY OF THE INTERSECTION OF SAID S.R. 32 AND SUNPARK DRIVE; THENCE NORTH 44 DEGREES 00 MINUTES 56 SECONDS WEST 14.22 FEET ALONG THE BOUNDARY OF THE INTERSECTION OF SAID S.R. 32 AND SAID SUNPARK DRIVE TO THE EAST BOUNDARY OF SAID SUNPARK DRIVE; THENCE NORTH 00 DEGREES 38 MINUTES 07 SECONDS EAST 245.58 FEET ALONG THE BOUNDARY OF SAID SUNPARK DRIVE; THENCE SOUTH 89 DEGREES 21 MINUTES 40 SECONDS EAST 14.13 FEET; THENCE SOUTH 00 DEGREES 28 MINUTES 20 SECONDS WEST 194.80 FEET; THENCE SOUTH 47 DEGREES 31 MINUTES 04 SECONDS EAST 27.80 FEET; THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS EAST 164.98 FEET TO THE EAST LINE OF GRANTOR'S LAND; THENCE SOUTH 00 DEGREES 38 MINUTES 07 SECONDS WEST 46.59 FEET ALONG SAID EAST LINE TO THE POINT OF BEGINNING AND CONTAINING 0.285 ACRES, MORE OR LESS.

	UNDERGROUND GAS
	UNDERGROUND WATER
	AERIAL ELECTRIC
	UNDERGROUND ELECTRIC
	UNDERGROUND COMMUNICATIONS
	AERIAL COMMUNICATIONS
	UNDERGROUND FIBER OPTIC
	AERIAL FIBER OPTIC CABLE
	OVERHEAD UTILITY
	FORCE MAIN
	SANITARY SEWER
	STORM SEWER
	RIGHT OF WAY LINE
	CHAIN LINK FENCE
	BOARD FENCE
	WROUGHT IRON FENCE
	FARM FENCE
	BUILDING SETBACK LINE
	BOUNDARY LINE
	FLOW LINE
	SECTION LINE
	INDEX CONTOUR
	INTERMEDIATE CONTOUR

WEIHE ENGINEERS, INC.
10505 N. COLLEGE AVE.
INDIANAPOLIS, IN 46268
TELEPHONE: (317) 846-6611
FAX: (317) 843-0546
EMAIL: PARKER@WEIHE.NET
CONTACT PERSON: FRED PARKER, CPESC

A STANDARD DISK STAMPED HAM G11 SET IN THE TOP OF THE
SOUTHWEST CONCRETE WING OF A CULVERT ALONG STATE ROAD 32
ABOUT 0.37 MILES EAST OF U.S. 31.
ELEVATION=876.19 (NAVD 88)

TBM:
CUT "X" ON EAST BON BOLT OF FIRE HYDRANT AT THE NORTHWEST
INTERSECTION OF STATE ROAD 32 AND SUN PARK DRIVE.
ELEVATION=900.33 (NAVD 88)

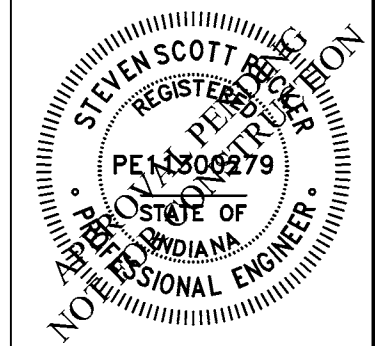
- 
 - INLET PROTECTION - USE SUBSURFACE INLET PROTECTION WITH OVERFLOW CAPABILITY
- 
 - PERMANENT/TEMPORARY SEEDING USE PLANTING CHART
- 
 - EROSION CONTROL BLANKET - USE \$150BN BIO-NET AS SUPPLIED BY NORTH AMERICAN GREEN OR APPROVED EQUAL
- 
 - LIMITS OF DISTURBANCE (CONSTRUCTION LIMITS)
- 
 - SITE DISCHARGE POINT
- 
 - MULCH AREA
- 
 - RIPRAP



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REVISIONS AND ISSUES	DATE	BY	PROJECT NO.
SUBMITTED FOR COUNTY SURVEYOR REVIEW	10/18/2015	BJS	W15-0316
ISSUED FOR TAG REVIEW	01/29/2016	BJS	DWG NAME:
			DESIGNED BY:
			DRAWN BY:
			CHECKED BY:
			DATE:
			01/29/2016



STEVEN SCOTT RUCKER P.E. 11300279

PREPARED FOR: **Calver's**
of WESTFIELD
17651 SUN PARK DRIVE, WESTFIELD, IN 46074
STORMWATER POLLUTION PREVENTION PLAN PHASE 2
Part of SWM, Section 36, Townships: 19 North, Range 3 East, Washington Township, Hamilton County, Indiana

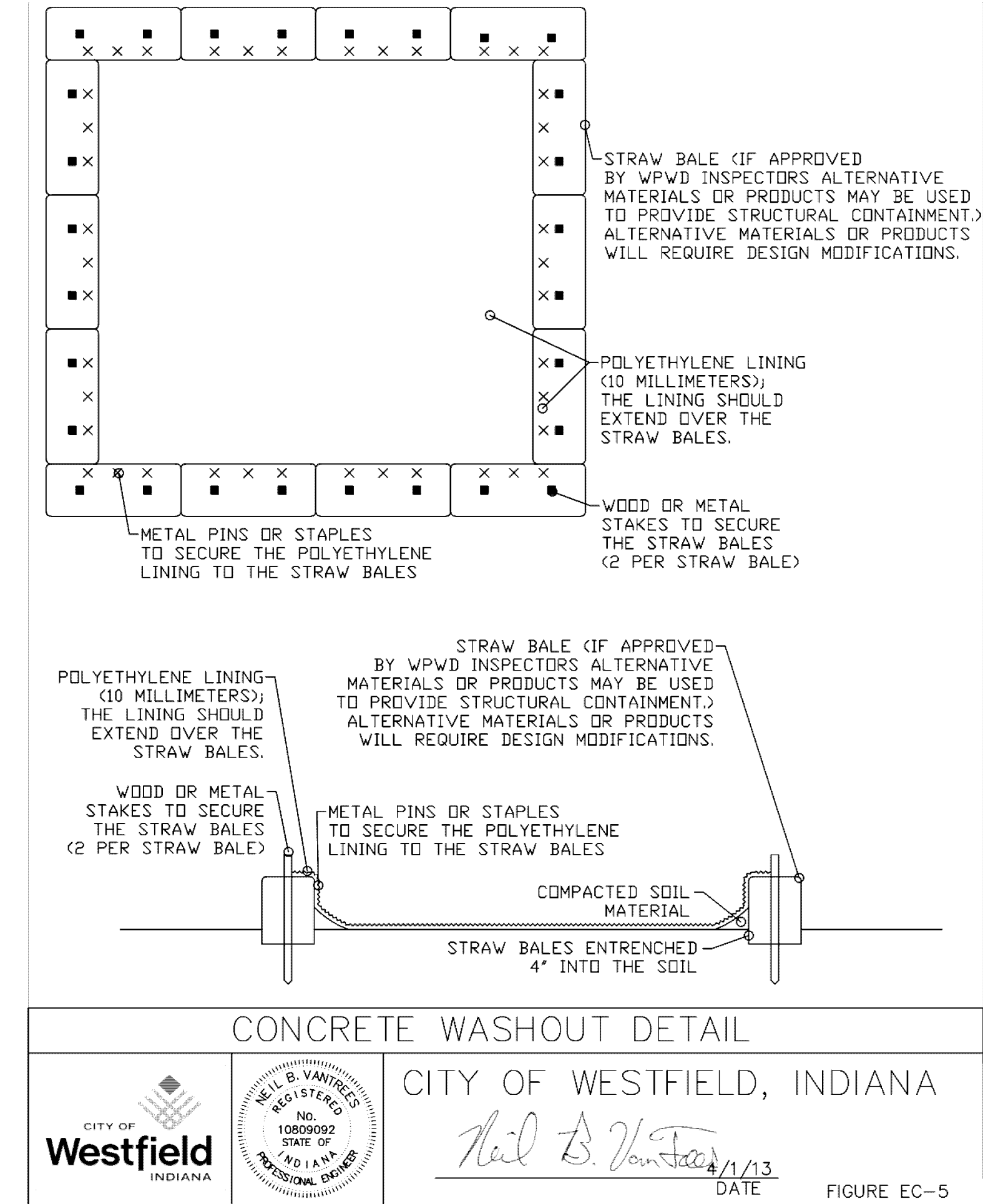
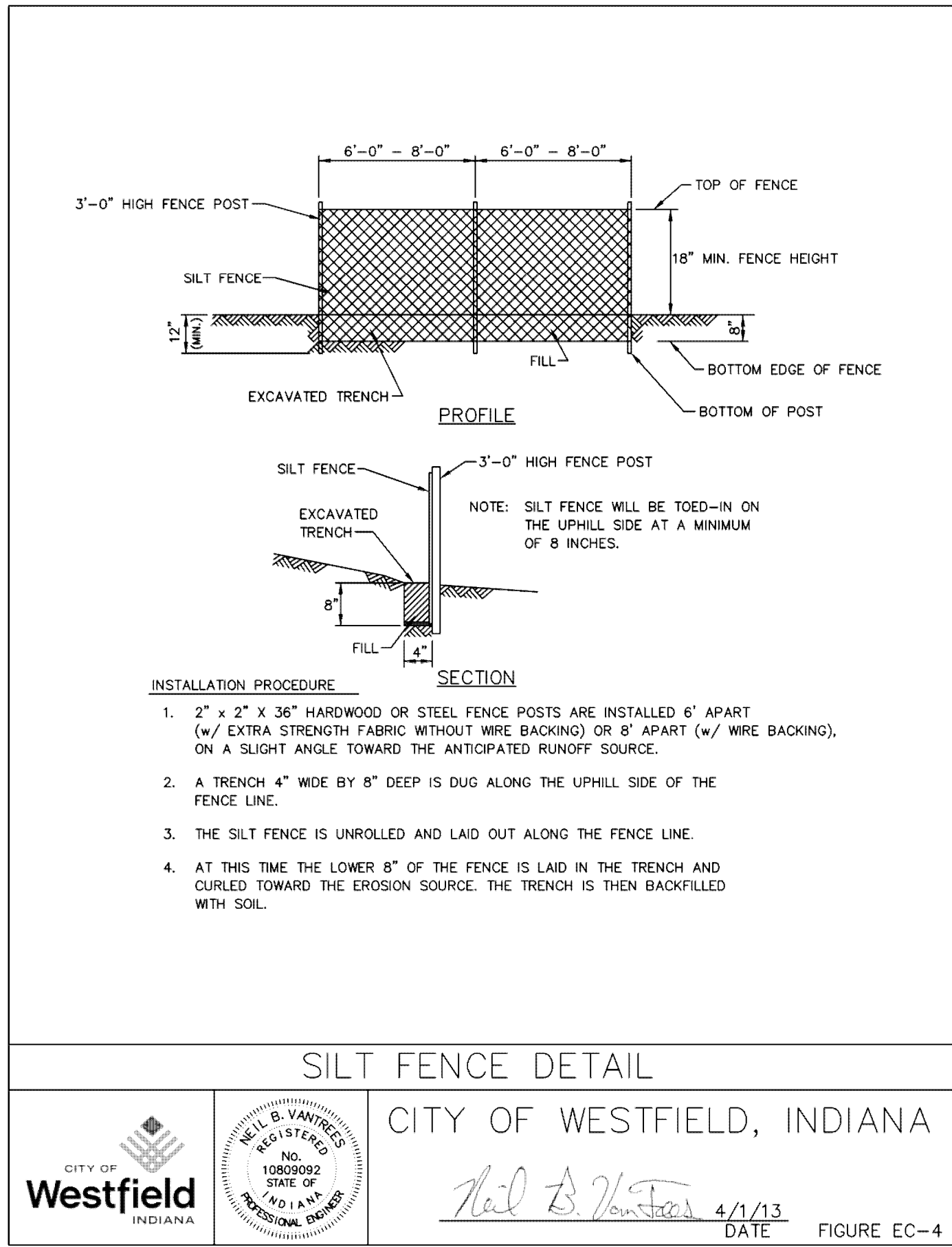
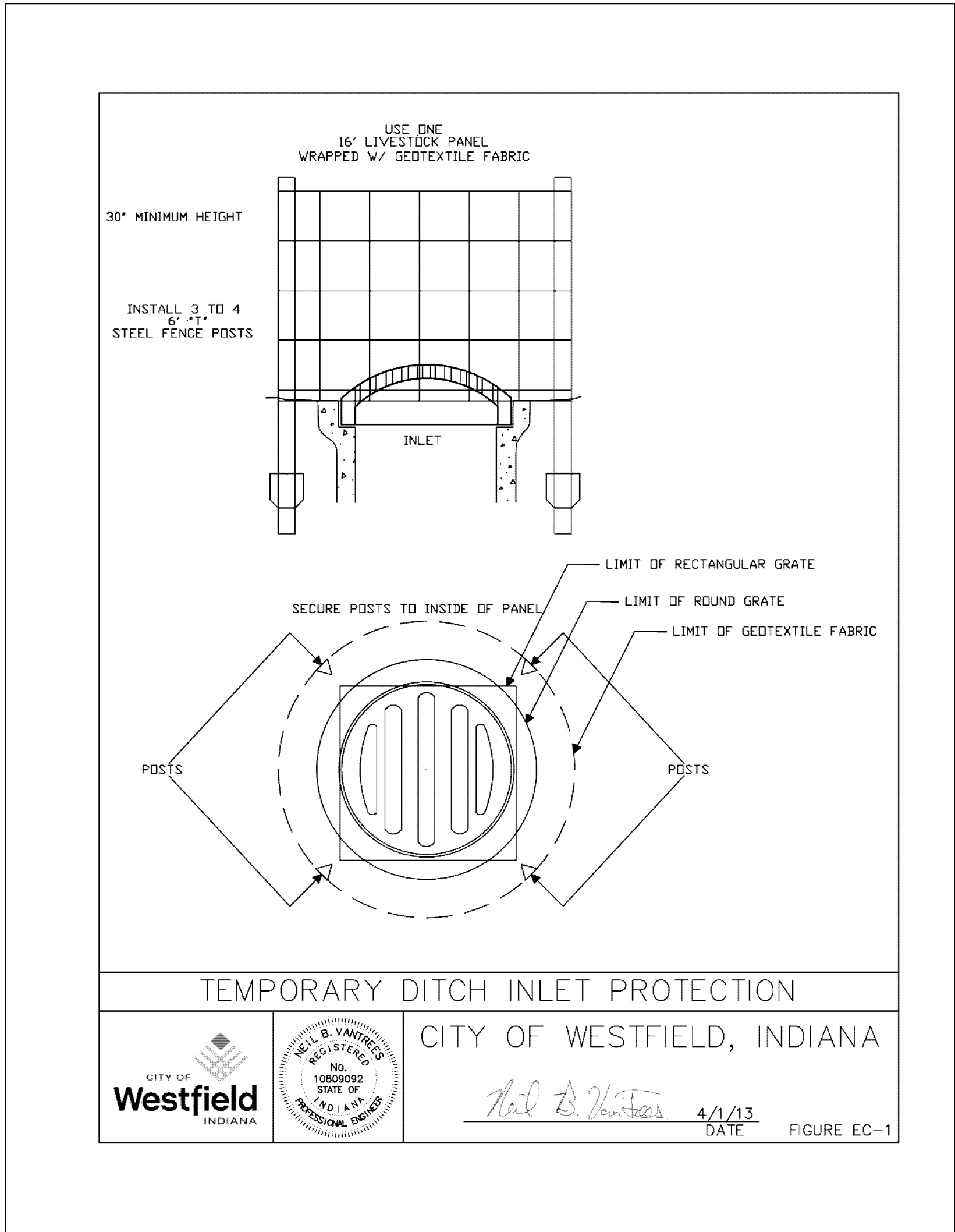
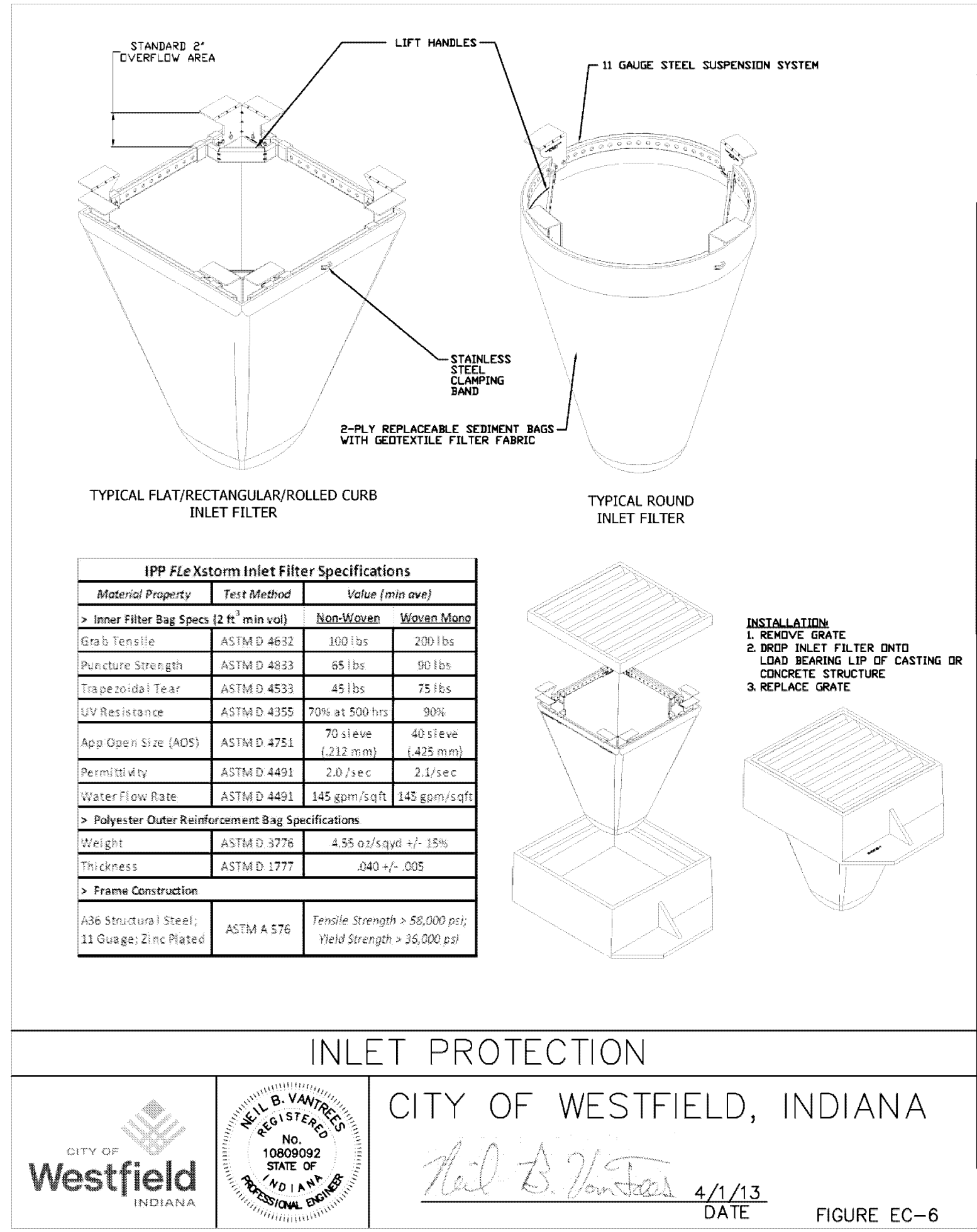
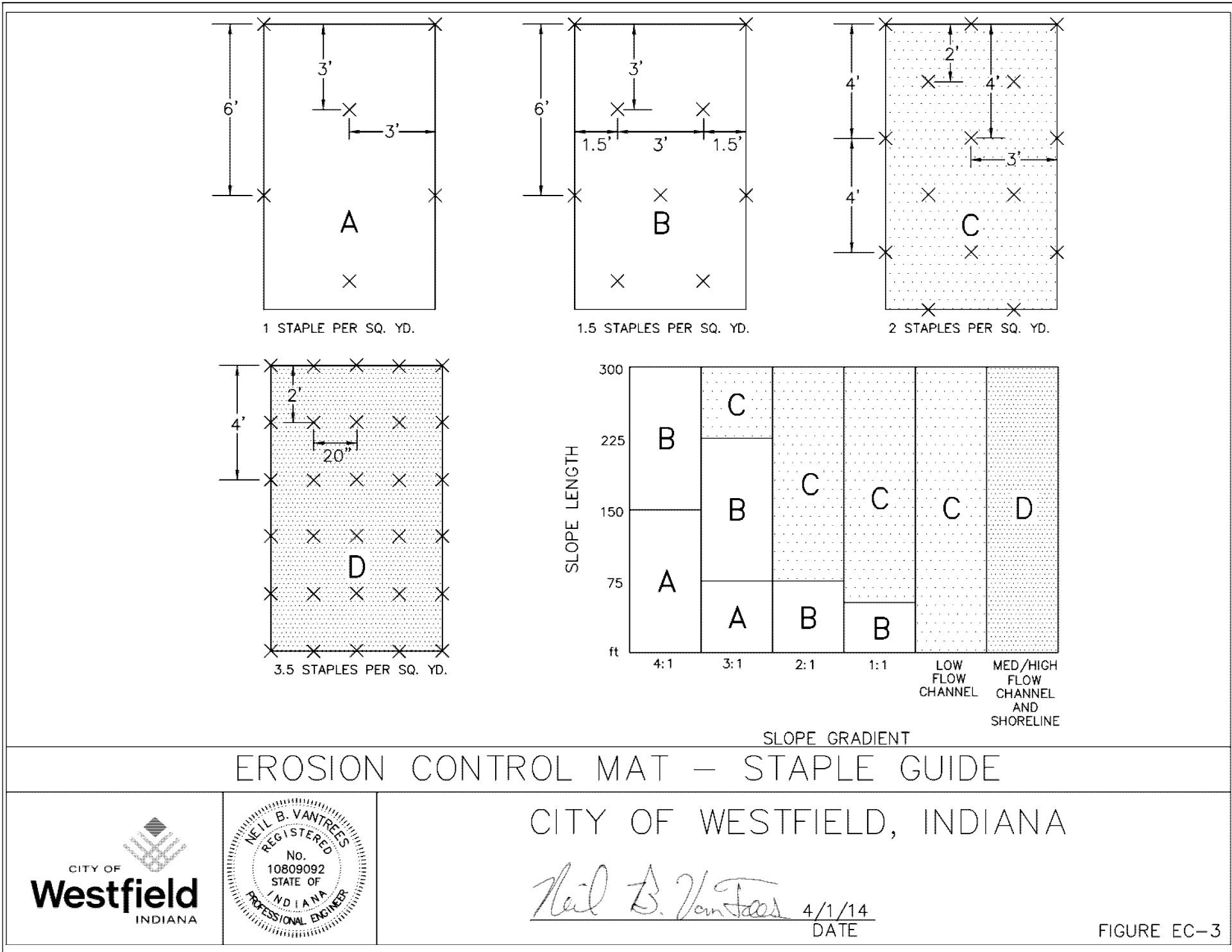
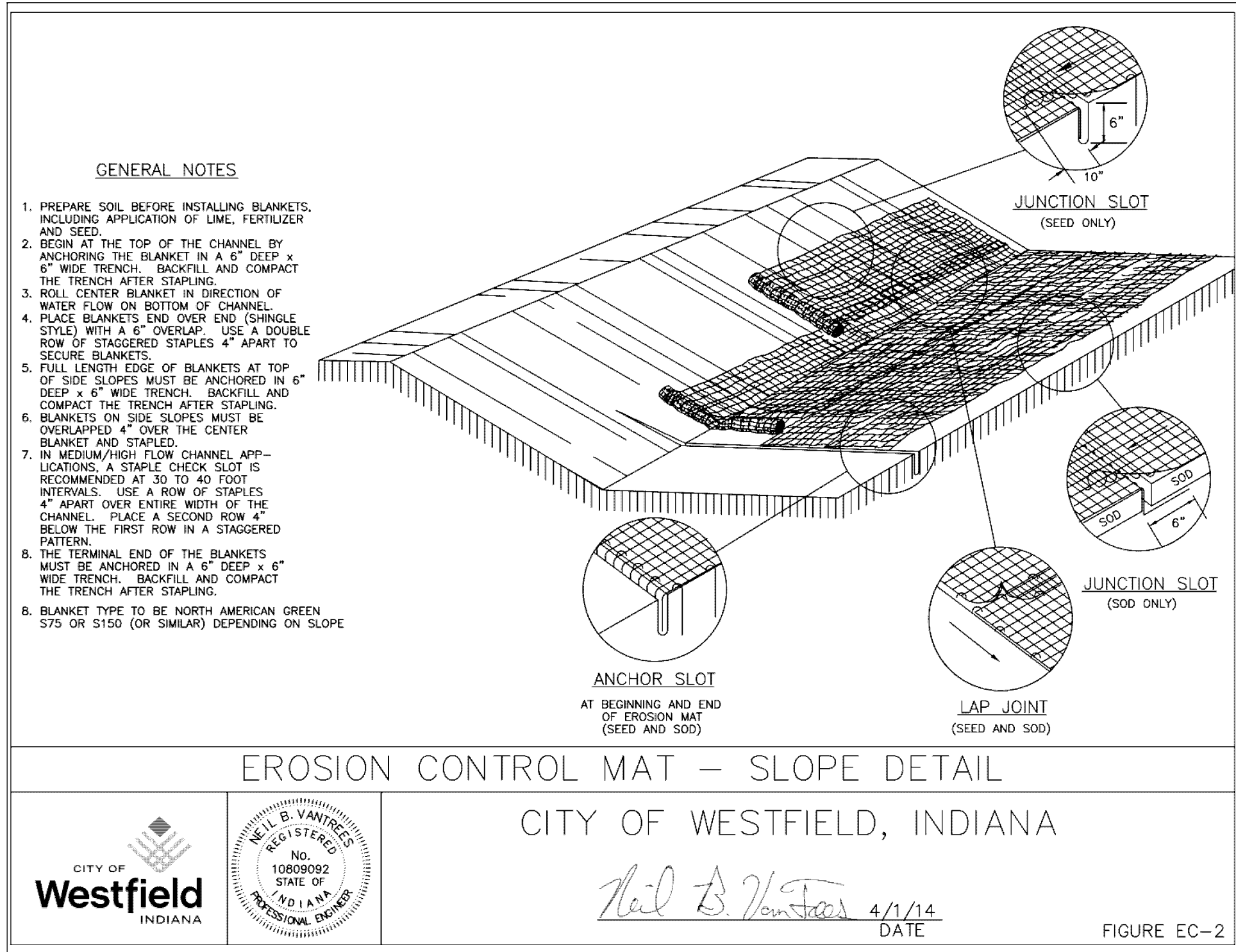
SHEET NO.
C101
PROJECT NO.
W15.0316

(NO SCALE)

PERMANENT SEED

OUTLET EROSION CONTROL PROTECTION





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Indianapolis, Indiana 46280
weihe.net
317 846 - 6611
800 452 - 6408
317 843 - 0546 fax

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Landscape Architecture

PROJECT NO.: W15.0316
DWG NAME: W150316-C104 swppp det.dwg
DESIGNED BY: RLW
DRAWN BY: RLW
CHECKED BY: BUS
DATE: 01-28-2016

REVISIONS AND ISSUES
SUBMITTED FOR COUNTY SURVEYOR REVIEW
ISSUED FOR TAC REVIEW

STEVEN SCOTT RUCKER P.E. 11390279
REGISTERED PROFESSIONAL ENGINEER
STATE OF INDIANA

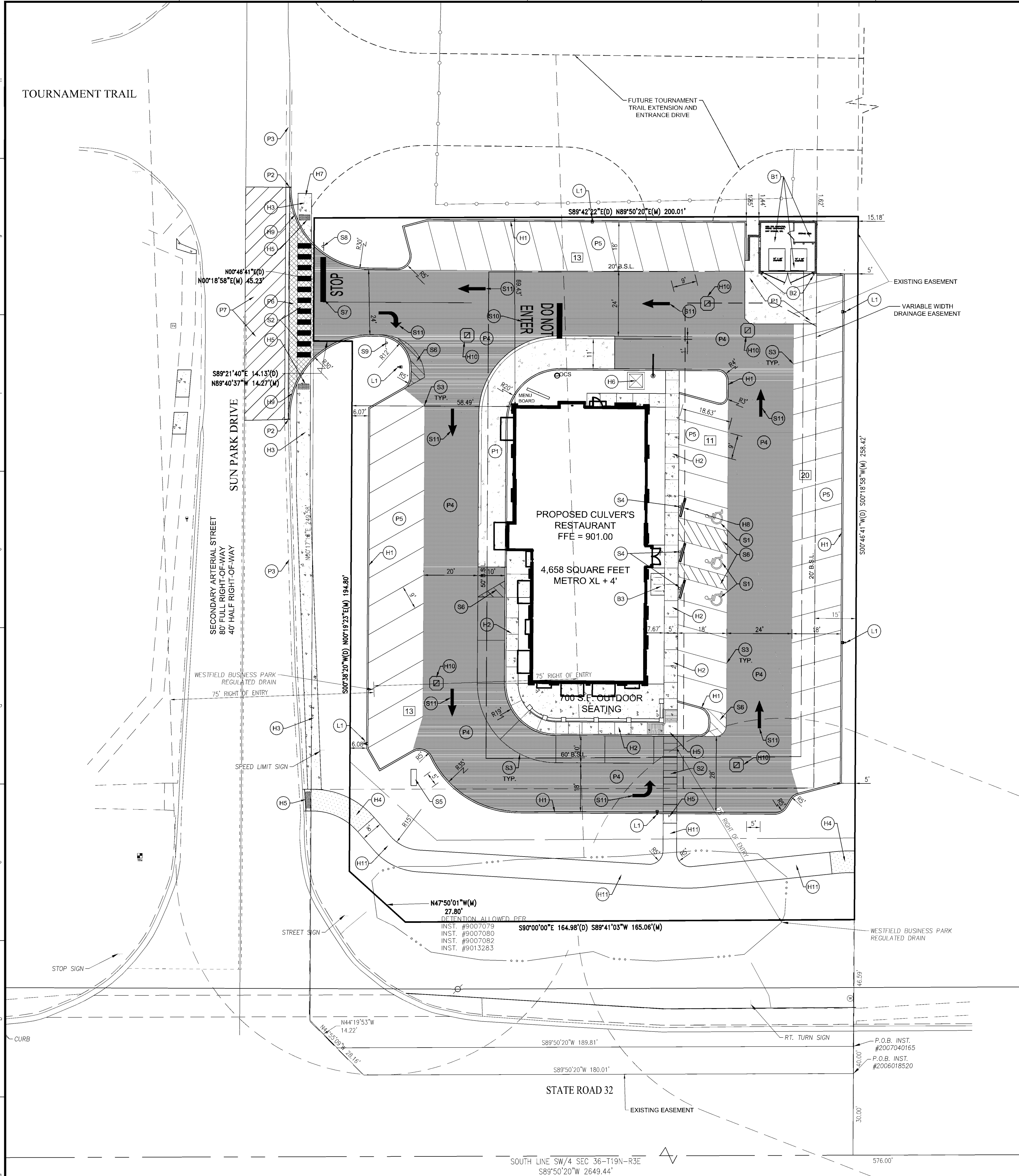
STEVEN SCOTT RUCKER P.E. 11390279

of WESTFIELD
17651 SUN PARK DRIVE, WESTFIELD, IN 46074
SWPPP DETAILS
Part of SWM Section 36, Township 19 North, Range 3 East, Washington Township, Hamilton County, Indiana

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IT IS AGAINST THE LAW TO EXCAVATE
WITHOUT NOTIFYING THE UNDERGROUND
LOCATION SERVICE TWO (2) WORKING
DAYS BEFORE COMMENCING WORK.

PREPARED FOR:
SHEET NO.
PROJECT NO.
W15.0316

LOCATION: J:\2015\150316\Engineering\Design\Connect\150316-C200 -Site.dwg
DATE/TIME: January 24, 2016 - 2:42pm
PLOTTER: ehofb



SITE PLAN NOTES

PAVEMENT

- P1 HEAVY DUTY CONCRETE PAVEMENT
- P2 MATCH EXISTING CURB LINE
- P3 EXISTING RIGHT OF WAY CURB
- P4 HEAVY DUTY ASPHALT
- P5 STANDARD DUTY ASPHALT
- P6 R.O.W. PAVEMENT PER DETAIL P-3 IN CITY STANDARDS.
- P7 MILL AND RESURFACE SUN PARK DRIVE 1 1/2" OR AS DIRECTED BY WESTFIELD DPW. CONFIRM LIMITS WITH WESTFIELD DPW PRIOR TO COMMENCING.

HARDSCAPE

- H1 6" CURB
- H2 INTEGRAL WALK AND CURB
- H3 CONCRETE SIDEWALK
- H4 8" ASPHALT WALKING PATH ACCORDING TO DETAIL P-16 OF CITY STANDARDS. EXTEND PATH WHERE SHOWN FOR CONNECTION TO THE NEXT PARCEL. IF NEXT PARCEL PLACES PATH FIRST, CONNECT TO THEIR TERMINUS LOCATION.
- H5 ADA ACCESSIBLE RAMP WITH DETECTABLE WARNING.
 - * PRIVATE WARNINGS TO BE GROOVED CONCRETE
 - * RIGHT OF WAY WARNINGS TO BE TRUNCATED DOMES
- H6 TRANSFORMER PAD LOCATION
- H7 EXTEND SIDEWALK WHERE SHOWN FOR CONNECTION TO THE NEXT PARCEL. IF NEXT PARCEL PLACES SIDEWALK FIRST, CONNECT TO THEIR TERMINUS LOCATION.
- H8 CONCRETE PARKING BARRIER
- H9 TRANSITION STANDING CURB INTO RIGHT OF WAY CURB AND MAINTAIN A 1" FLOWLINE ACROSS THE ENTRY DRIVES.
- H10 PROVIDE CONCRETE COLLAR FOR INLET
- H11 RAISED 8" WIDE METAL WALKWAY TO BE CONSTRUCTED THROUGH THE EXISTING DETENTION. DETAILED PLANS TO BE PROVIDED BY THE OWNER.

BUILDING ACCESSORIES

- B1 DUMPSTER ENCLOSURE PER ARCHITECTURAL PLANS
- B2 PIPE BOLLARDS
- B3 BIKE RACK

SIGNAGE & MARKINGS

- S1 ADA PARKING SPACE
- S2 PEDESTRIAN CROSSWALK
- S3 4" PAINTED WHITE SOLID LINES (TYP)
- S4 ADA PARKING SIGN
- S5 GROUND MOUNTED SIGN
- S6 PAINTED ISLAND
- S7 PAINTED 24" STOP BAR
- S8 STOP SIGN
- S9 "RIGHT TURN ONLY" SIGN
- S10 PAINTED "DO NOT ENTER" STRIPING
- S11 PAINTED DIRECTIONAL MARKING

ACCESSORIES

- L1 LIGHT POLE AND BASE
 - * REFER TO THE ELECTRICAL PLANS FOR CIRCUITRY AND LIGHT POLE BASE DETAIL.

SITE PLAN GENERAL NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, OR VERIFYING THAT ALL PERMITS AND APPROVALS ARE OBTAINED FROM THE RESPECTIVE CITY, COUNTY, AND STATE AGENCIES PRIOR TO STARTING CONSTRUCTION.
- ALL QUANTITIES GIVEN ON THESE PRINTS, VERBALLY OR IN THE SCOPE OF WORK SECTION ARE ESTIMATES AND SHALL BE CONFIRMED BY THE BIDDING CONTRACTORS.
- OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29 CFR PART 1926, SUBPART PP APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH. IN ADDITION, EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRE THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.
- IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND CONTRACTOR TO MAINTAIN QUALITY CONTROL THROUGHOUT THIS PROJECT.
- TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL STANDARDS.
- BEARINGS, DIMENSIONS, AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. SEE RECORD SURVEYS AND PLATS FOR EXACT INFORMATION.
- THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT.
- ALL DIMENSIONS ARE BASED ON FACE OF CURB OR BACK OF ROLL CURB OR FACE OF BUILDING.
- SEE ARCHITECTURAL PLANS FOR DETAILS OF BUILDING, BUILDING DIMENSIONS, ATM RELATED DETAILS, AND SIGNAGE SPECIFICATIONS. DO NOT STAKE BUILDING FROM THESE PLANS.
- COORDINATE CONSTRUCTION ACTIVITIES WITH ADJOINING WORK IF APPLICABLE. VERIFY EXTENT OF ADJOINING WORK AND COORDINATE AS REQUIRED.
- FIELD VERIFY EXISTING CURBS AND TAPER PROPOSED VERTICAL CURBS TO MATCH WITHIN A MIN. OF THREE (3) FEET.
- ± DIMENSIONS INDICATE FIELD DIMENSION ADJUSTMENT AREA BASED ON ACTUAL FIELD LAYOUT COORDINATES.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- PROVIDE SMOOTH TRANSITION FROM NEWLY PAVED AREAS TO EXISTING AREAS AS NECESSARY. ALL AREAS WHERE PROPOSED PAVEMENT MEETS EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE FREE OF ALL LOOSE DEBRIS. THE EDGE OF EXISTING ASPHALT PAVEMENT SHALL BE PROPERLY SEALED WITH A TACK COAT MATERIAL IN ALL AREAS WHERE NEW ASPHALT PAVEMENT IS INDICATED TO JOIN EXISTING.
- RESURFACE OR RECONSTRUCT AT LEAST TO ORIGINAL CONDITIONS ALL AREAS WHERE THE EXISTING PAVEMENT OR LAWNS ARE DAMAGED DURING CONSTRUCTION FROM TRAFFIC BY CONTRACTORS, SUBCONTRACTORS, OR SUPPLIERS AFTER CONSTRUCTION WORK IS COMPLETE.
- THE CONTRACTOR SHALL PROTECT AND NOT DESTROY THE PROPERTY CORNER MONUMENTS DURING CONSTRUCTION.
- REFER TO ARCHITECTURAL PLANS FOR BUILDING ACCESSORY DETAILS.
- REFER TO SHEETS C201 AND C202 FOR SITE PLAN DETAILS UNLESS OTHERWISE NOTED.

SITE DATA

SITE AREA = 1.11 AC
BUILDING AREA = 4658 S.F.

ZONING = GB
FRONT YARD BSL REQUIRED (SR 32) = 60 FT
FRONT YARD BSL REQUIRED (S.P.D.) = 50 FT
REAR YARD BSL REQUIRED = 20 FT
EAST SIDE YARD BSL REQUIRED = 20 FT

PARKING REQUIRED:
PARKING REQUIREMENT: ONE (1) SPACE FOR EACH THREE (3) SEATS OF SERVING AREA, PLUS ONE (1) SPACE FOR EACH EMPLOYEE ON PRIMARY SHIFT
PARKING REQUIRED = 50 SPACES
PARKING DIMENSIONS = 9' x 18'

PARKING PROVIDED:
54 - STANDARD SPACES
3 - ADA SPACES
57 - TOTAL SPACES

BICYCLE PARKING:
1 BIKE PER 30 VEHICULAR SPACES
1 REQUIRED FOR SITE. INSTALL 3 LOOP BIKE RACK WHERE SHOWN

OPEN SPACE:
20.0% REQUIRED
29% PROVIDED (BEFORE 30' GREENBELT DEDICATION)

SITE PLAN LEGEND

UTILITIES

- FIRE HYDRANT
- CHILLED WATER MANHOLE
- WATER MANHOLE
- SPRINKLER CONTROL BOX
- SPRINKLER CONTROL VALVE
- WATER METER
- GAS METER
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC RISER
- TRANSFORMER
- GUY ANCHOR
- ELECTRIC JUNCTION BOX
- GENERATOR
- UTILITY POLE
- UTILITY POLE W/ TRANSFORMER
- MONITORING WELL
- ORNAMENTAL LIGHT
- STREET LIGHT
- PARKING LOT LIGHT (1 HEAD)
- COMMUNICATIONS JUNCTION BOX
- COMMUNICATIONS MANHOLE
- COMMUNICATIONS PEDESTAL
- COMMUNICATIONS RISER
- TRAFFIC SIGNAL POLE
- STORM MANHOLE
- DOWN SPOUT

OTHER

- FLAG POLE
- SIGN
- POST
- GATE POST
- BOLLARD
- PARKING METER
- PARKING WHEEL STOP
- HANDICAPPED SPACE
- PARKING COUNT

LINE TYPES

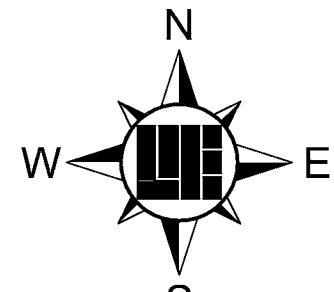
- RIGHT OF WAY LINE
- FENCE
- GUARD RAIL
- BUILDING SETBACK LINE
- BOUNDARY LINE
- SECTION LINE

PAVEMENT

- STANDARD DUTY ASPHALT
- HEAVY DUTY ASPHALT
- CONCRETE PAVEMENT
- RIGHT OF WAY PAVEMENT

ABBREVIATIONS

- ROW RIGHT OF WAY
- BSL BUILDING SETBACK LINE
- EASEMENT
- D.&U.E. DRAINAGE AND UTILITY EASEMENT
- FFE FINISH FLOOR ELEVATION



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ALLAN H. WEIHE, P.E., L.S. - FOUNDER

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REVISIONS AND ISSUES	DATE	BY	DESCRIPTION
SUBMITTED FOR COUNTY SURVEYOR REVIEW	10/16/2015	BJS	
ISSUED FOR TAC REVIEW	01/29/2016	BJS	



STEVEN SCOTT RUCKER P.E. 11390279

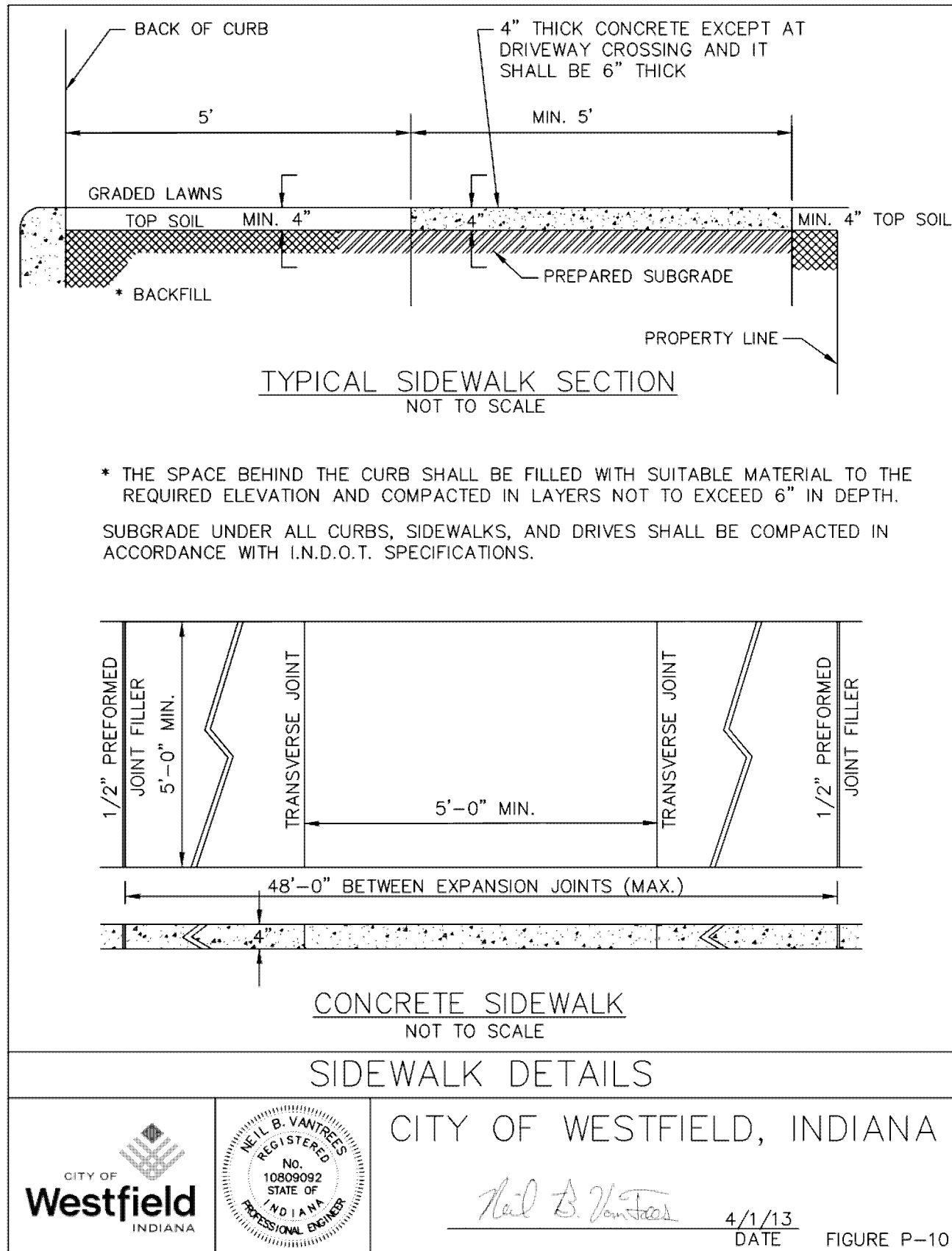
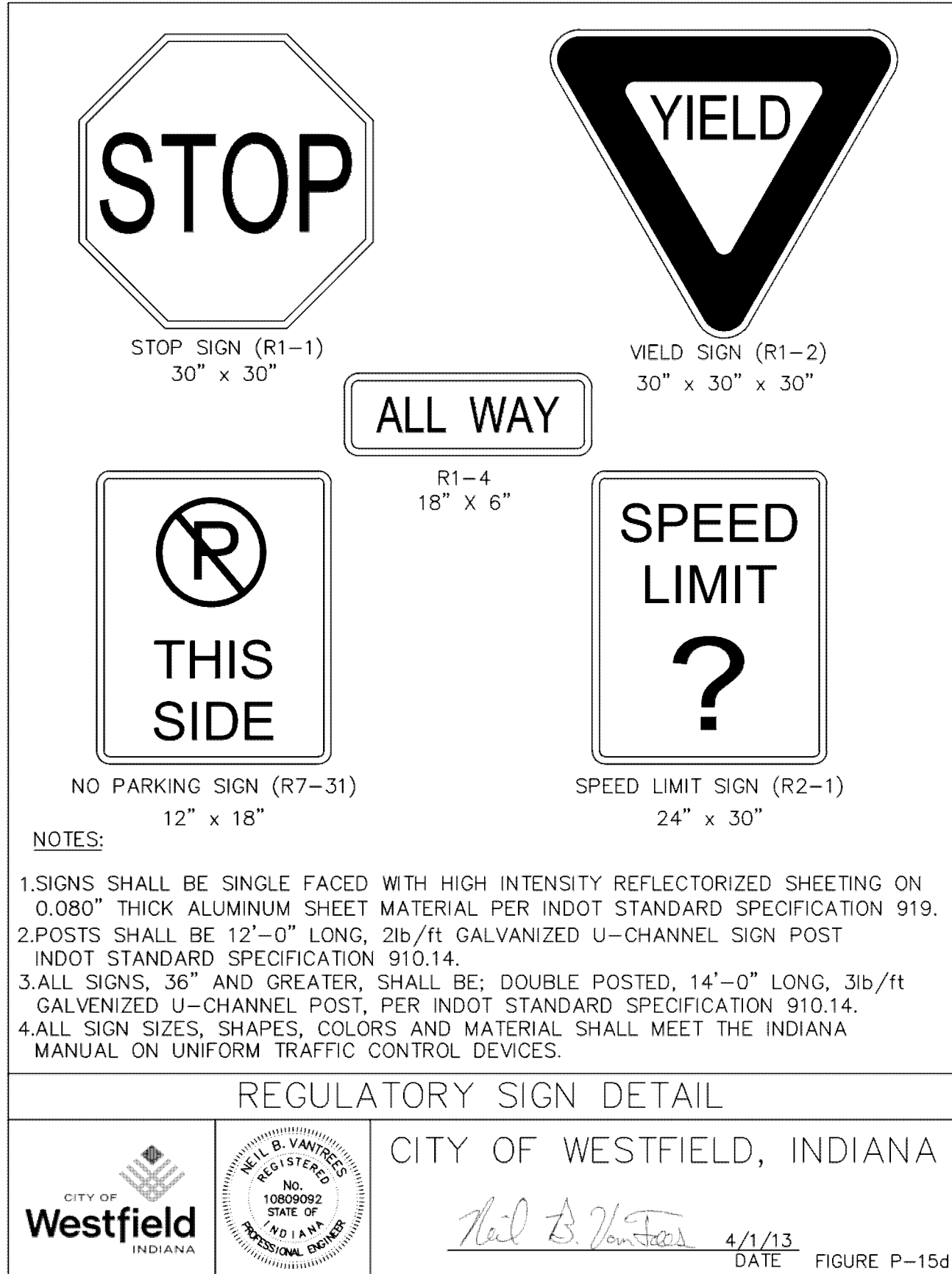
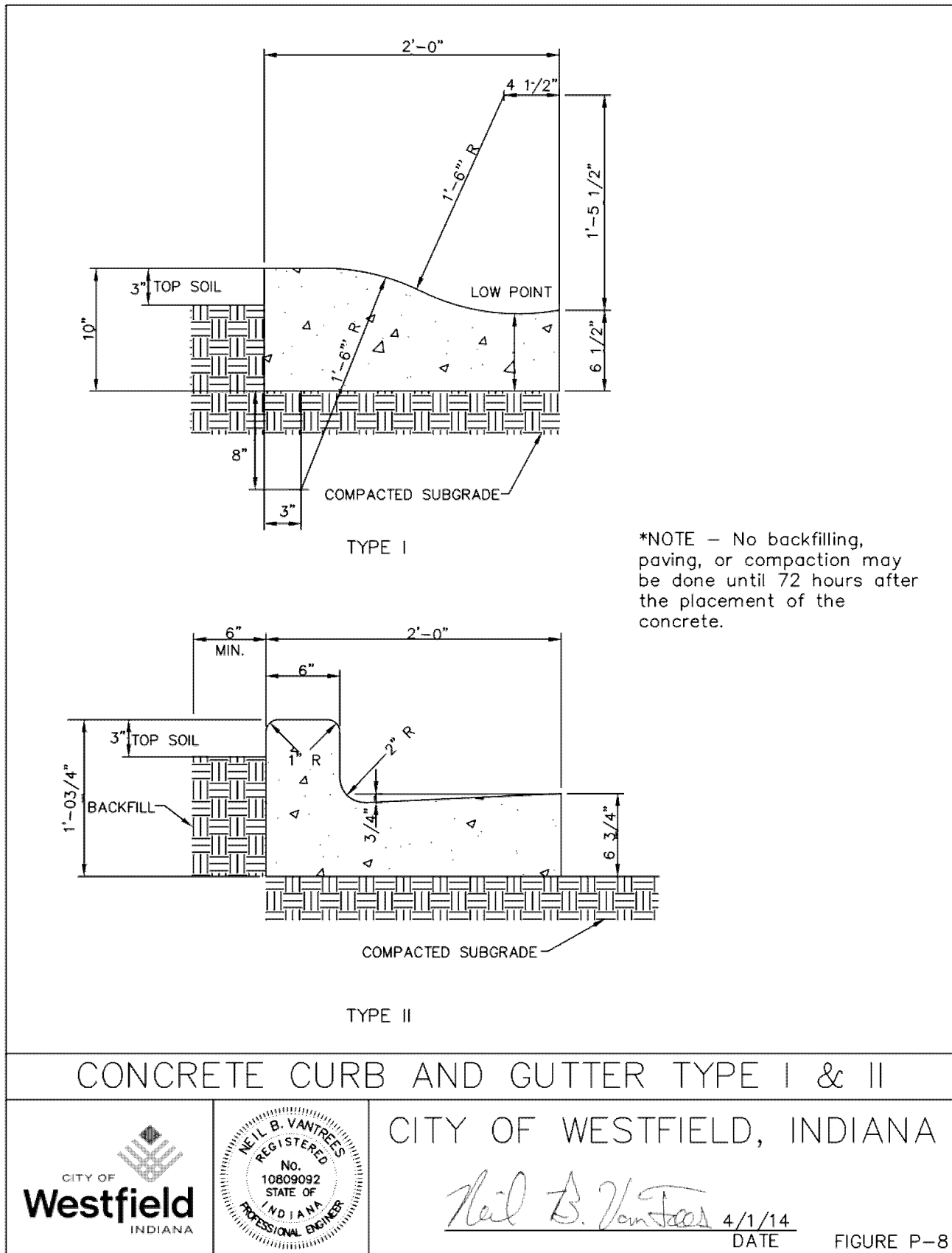
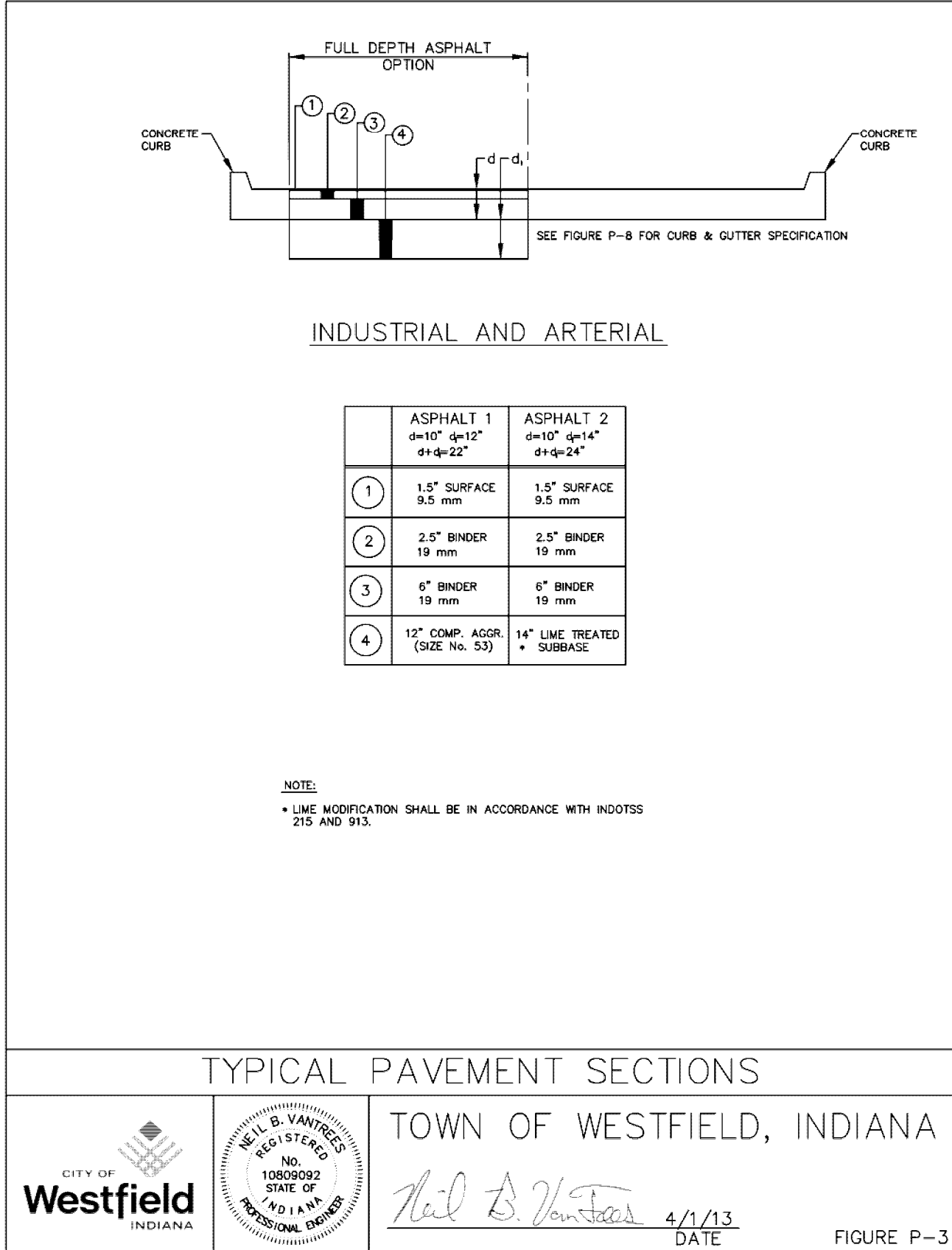
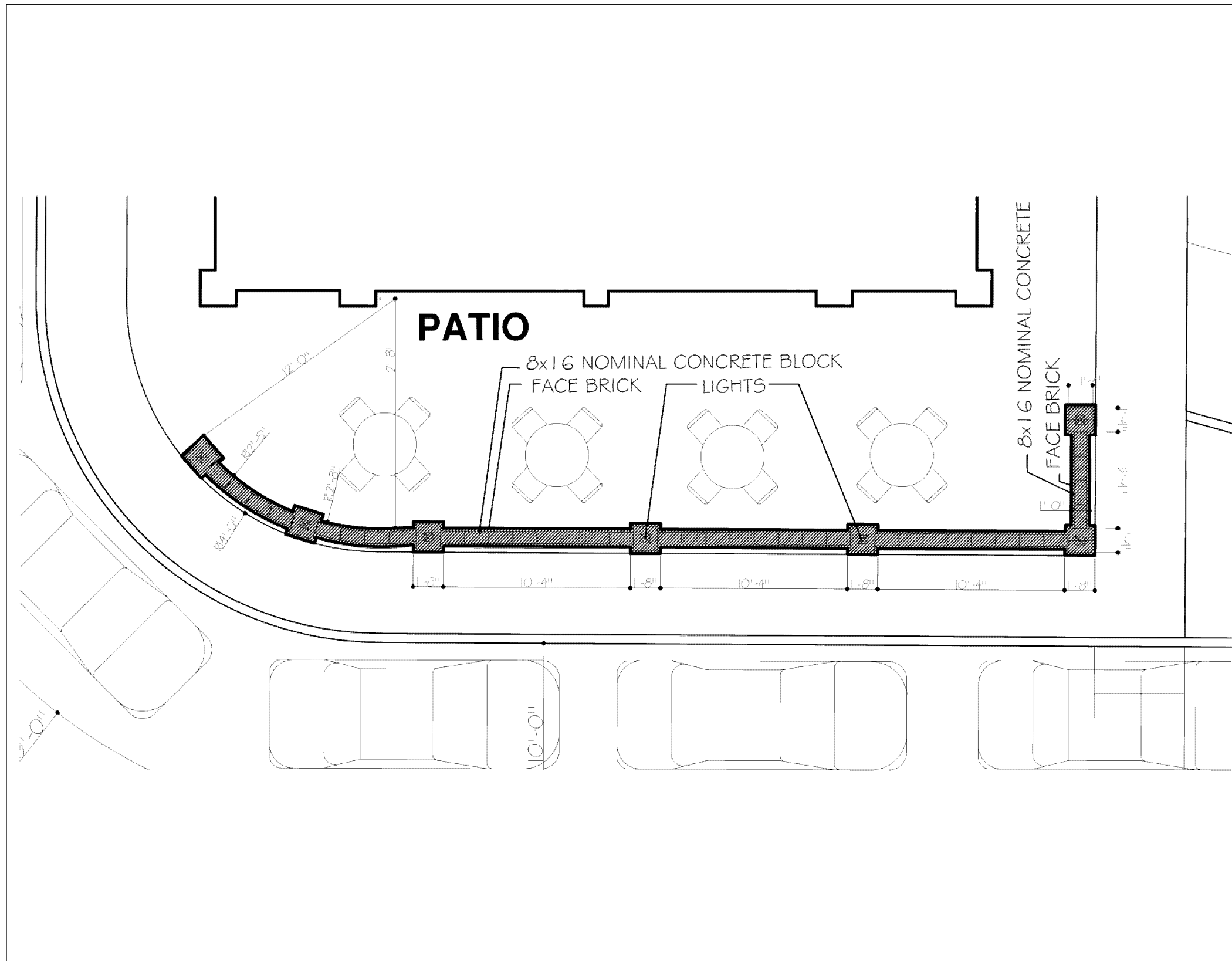
PREPARED FOR:
City of Westfield
17651 SUN PARK DRIVE, WESTFIELD, IN 46074

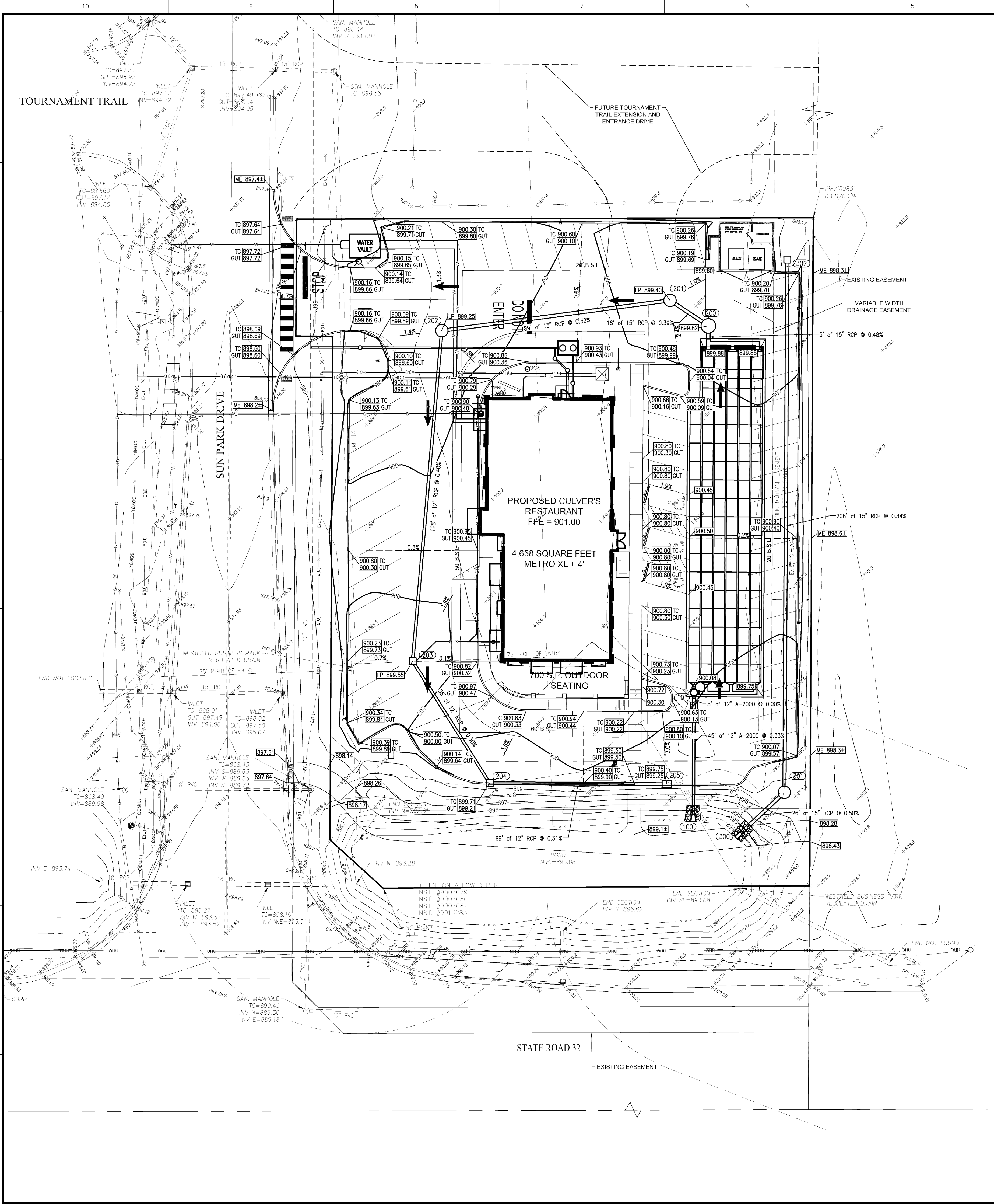
SHEET NO.

C200

PROJECT NO.

W15.0316





DRAINAGE DESIGN DATA

POST DEVELOPMENT RELEASE RATES
0.64 ACRES CONTROLLED DRAINAGE AREA
2YR THROUGH 10YR = 1.40 CFS
10YR, 25YR & 100YR = 1.76 CFS

UNDERGROUND STORAGE BLOCK
10YR = 895.45
100YR = 896.70

*NOTE: MINIMUM REQUIRED GROUND SURFACE ELEVATION =
898.24 PER DEPTH REQUIREMENTS OF STORMTECH PRODUCT.

EXISTING AREAS

PERVIOUS = 1.10 AC.
IMPERVIOUS = 0.000 AC.

PROPOSED AREAS

PERVIOUS = 0.287 AC.
IMPERVIOUS = 0.813 AC.

ORIGINATING BENCHMARK

SOURCE BENCHMARK:

A STANDARD DISK STAMPED B112 1946 SET IN THE TOP OF A CONCRETE POST ALONG STATE ROAD 32 ABOUT 2.25 MILES WEST OF WASHINGTON HIGH SCHOOL AT WESTFIELD AND ABOUT 1 MILE EAST OF THE CROSS ROAD AT EAGLETOWN. ELEVATION=924.24 (NAVD 88)

TBM:

MAG NAIL IN NORTH FACE OF POWER POLE AT THE NORTHEAST INTERSECTION OF STATE ROAD 32 AND WHEELER ROAD. ELEVATION=900.18 (NAVD 88)

NOTE:

NO NEW MONUMENTS WERE SET DUE TO PLANNED DEVELOPMENTS IN THE VICINITY.

GENERAL GRADING NOTES

- REFER TO THE INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) STANDARD SPECIFICATIONS, 1995 EDITION, FOR BASIC MATERIALS AND CONSTRUCTION METHODS. THE SECTIONS BELOW FOR VARIOUS ITEMS ARE TO CLARIFY THE INTENT OF THE REQUIREMENTS FOR THIS PROJECT. PLEASE NOTE THAT OTHER SECTIONS OF THE INDOT STANDARD SPECIFICATIONS MAY ALSO BE APPLICABLE.
- FILL MATERIAL SHALL CONSIST OF EARTH OBTAINED FROM CUT AREAS, BORROW PITS OR OTHER APPROVED SOURCES. EARTH SHALL BE FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES AND LARGE ROCKS. THE FILL MATERIAL SHALL BE PLACED IN LAYERS NOT TO EXCEED SIX INCHES FOLLOWING COMPACTION. PROPER MOISTURE CONTENT OF FILL MATERIAL WILL BE SUCH TO ACHIEVE SPECIFIED COMPACTION DENSITY. ALL FILL BENEATH PAVED AREAS, FLOOR SLABS AND FUTURE BUILDINGS SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY PER ASTM D-1557. FIELD COMPACTING TEST SHALL BE RUN ON EACH LIFT. IN FILL SECTIONS, AND THE REQUIRED COMPACTION ON EACH LIFT SHALL BE IN ACCORDANCE WITH INDOT SECTION 211.
- MAXIMUM LAWN SLOPE IS 3:1.
- THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO LOCATE MAINS, CONDUITS, SERVICE LINES, ETC. IN THE AFFECTED CONSTRUCTION AREA. EXISTING UTILITY STRUCTURES ARE SHOWN HERE IN ACCORDANCE WITH AVAILABLE INFORMATION. THE LOCATION AND PROTECTION OF UTILITY STRUCTURES, THEIR SUPPORT AND MAINTENANCE DURING CONSTRUCTION (IN COOPERATION WITH APPLICABLE UTILITY COMPANY) IS THE EXPRESSED RESPONSIBILITY OF THE CONTRACTOR.
- ALL SPOT ELEVATIONS ARE TO FINISHED GRADE.
- COMPACTED "B" BORROW BACK FILL REQD. OVER ALL UTILITIES IN PAVED AREAS.
- ALL GRADES AT BOUNDARY SHALL MEET EXISTING.
- ANY PART OF SANITARY OR STORM SEWER TRENCHES RUNNING UNDER OR WITHIN 5' OF PAVEMENT TO BE BACKFILLED WITH GRANULAR MATERIAL.
- ALL CONSTRUCTION ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH O.S.H.A. STANDARDS FOR WORKER SAFETY.
- THE CONTRACTOR SHALL CONFIRM ALL EARTHWORK QUANTITIES PRIOR TO THE START OF CONSTRUCTION. IF AN EXCESS OR SHORTAGE OF EARTH IS ENCOUNTERED, THE CONTRACTOR SHALL CONFORM WITH THE OWNER AND ENGINEER THE REQUIREMENTS FOR STOCKPILING, REMOVAL OR IMPORTING OF EARTH.
- PROVIDE POSITIVE DRAINAGE WITHOUT PONDING IN ALL AREAS AFTER INSTALLATION. CONTRACTOR TO TEST FOR AND CORRECT ANY PONDING CONDITIONS. ANY AREAS THAT HOLD WATER MORE THAN 18" DEEP SHALL BE CUT OUT AND CORRECTED TO POSITIVE DRAINAGE AT NO COST TO THE OWNER/ DEVELOPER/ OR ENGINEER.
- VERTICAL CURVES, WITH A MINIMUM LENGTH OF 50', SHALL BE USED WHERE POSSIBLE BETWEEN VERTICAL CHANGES IN DIRECTION (SLOPE) TO ALLOW FOR POSITIVE DRAINAGE AND SMOOTH TRANSITIONS.
- CONTRACTOR TO INSTALL CONCRETE CRADLES WHEN THE VERTICAL SEPARATION (AS MEASURED FROM THE EXTERIOR OF THE PIPES) BETWEEN SANITARY SEWER FACILITIES, WATER MAIN, AND STORM SEWERS IS 18" OR LESS.
- THE SITE DOES NOT LIE IN A SPECIAL FLOOD HAZARD AREA AS ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY - NATIONAL FLOOD INSURANCE PROGRAM, WHEN PLOTTED BY SCALE ON FLOOD INSURANCE RATE MAP #18057C0120 F, DATED FEBRUARY 19, 2003.
- SIDEWALK NOTE FOR ALL STREETS:**
THE SIDEWALK IS NOT TO EXCEED A 4% SLOPE FROM THE TOP OF CURB TO THE EDGE OF THE SIDEWALK ALONG ALL STREETS WITHIN THE CONSTRUCTION LIMITS. ALL SIDEWALKS ALONG DAY STREET, LAKE VILLAGE DRIVE, AND CAROUSEL LANE ARE TO COMPLY WITH WESTFIELD DETAIL G-01, WHICH SUPERCEDES ALL ELEVATIONS SHOWN WITHIN THESE CONSTRUCTION DRAWINGS. CONTRACTOR TO VERIFY ALL GRADES WITH THE WESTFIELD INSPECTOR PRIOR TO INSTALLING THE SIDEWALK.
- NO EARTH DISTURBING ACTIVITY MAY TAKE PLACE WITHOUT AN APPROVED STORM WATER MANAGEMENT PERMIT

GENERAL NOTES

- ALL HDPE PIPE SHALL BE DUAL WALLED, HANGOR HQ, ADS N-12 PIPE OR APPROVED EQUAL
- ALL FITTINGS AND ACCESSORIES INCLUDING BUT NOT LIMITED TO END CAPS, CLEANOUTS, REDUCERS, ETC., SHALL BE OF HDPE MATERIAL COMPARABLE WITH STORAGE PIPES
- PROVIDE BACKFILL WITH A MINIMUM OF 4" BEDDING MATERIAL OF #6 AGGREGATE COMPACTED IN 8" LIFTS TO 95% MAXIMUM DRY DENSITY
- VERIFY EXISTING STORM INVERT ELEVATIONS PRIOR TO STARTING NEW STORM SEWER CONNECTION
- THE SITE DOES NOT LIE IN A SPECIAL FLOOD HAZARD AREA AS ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY - NATIONAL FLOOD INSURANCE PROGRAM, WHEN PLOTTED BY SCALE ON FLOOD INSURANCE RATE MAP #18057C0120 G, DATED NOVEMBER 19, 2014.

GRADING PLAN LEGEND

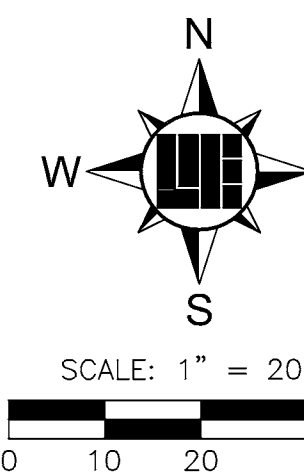
- UTILITIES**
- FIRE DEPT HOODUP
 - FIRE HYDRANT
 - POST INDICATOR VALVE
 - CHILLED WATER MANHOLE
 - WATER MANHOLE
 - WATER METER
 - WATER VALVE
 - GAS METER
 - GAS VALVE
 - ELECTRIC MANHOLE
 - ELECTRIC OUTLET
 - ELECTRIC METER
 - ELECTRIC RISER
 - TRANSFORMER
 - GUY ANCHOR
 - ELECTRIC JUNCTION BOX
 - UTILITY POLE
 - UTILITY POLE W/ TRANSFORMER
 - PARKING LOT LIGHT (1 HEAD)
 - PARKING LOT LIGHT (2 HEAD)

OTHER

- SIGN
- BOLLARD
- PARKING WHEEL STOP
- HANDICAPPED SPACE
- CURB & GUTTER ELEVATION
- SPOT ELEVATION
- SPOT ELEVATION
- SPOT ELEVATION
- EMERGENCY FLOOD ROUTE

LINE TYPES

- RIGHT OF WAY LINE
- FENCE
- GUARD RAIL
- BOUNDARY LINE
- FLOW LINE
- INDEX CONTOUR
- INTERMEDIATE CONTOUR
- UNDERGROUND GAS
- UNDERGROUND WATER
- AERIAL ELECTRIC
- UNDERGROUND ELECTRIC
- UNDERGROUND COMMUNICATIONS
- AERIAL COMMUNICATIONS
- UNDERGROUND FIBER OPTIC
- OVERHEAD UTILITY
- FORCE MAIN
- SANITARY SEWER
- STORM SEWER



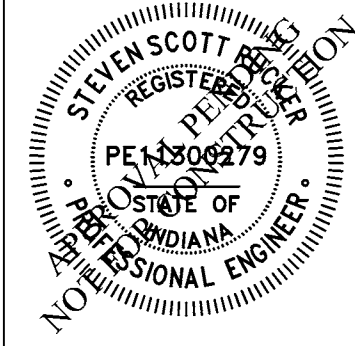
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24 Hours a Day, 7 Days a Week.
PER INDIANA STATE LAW 6-1-26,
IT IS AGAINST THE LAW TO EXCAVATE
WITHOUT NOTIFYING THE UNDERGROUND
LOCATION SERVICE TWO (2) WORKING
DAYS BEFORE COMMENCING WORK.

15055 N. College Avenue
Indianapolis, Indiana 46280
weihe.net

WEIHE
ENGINEERS
Land Surveying/Civil Engineering
Landscape Architecture

PROJECT NO.: W15.0316
DWG NAME: 150316-C300_grad.dwg
DESIGNER: J. WEIHE
DRAWN BY: J. WEIHE
CHECKED BY: J. WEIHE
DATE: 01-26-2016

DATE	BY	REVISIONS AND ISSUES
10-18-2015	BJS	SUBMITTED FOR COUNTY SURVEYOR REVIEW
01-29-2016	BJS	ISSUED FOR TAC REVIEW



STEVEN SCOTT RUCKER P.E. 11390279

of WESTFIELD
17651 SUN PARK DRIVE, WESTFIELD, IN 46074
GRADING PLAN
Part of S.W.M. Section 36, Township 19 North, Range 3 East, Washington Township, Hamilton County, Indiana

PREPARED FOR:

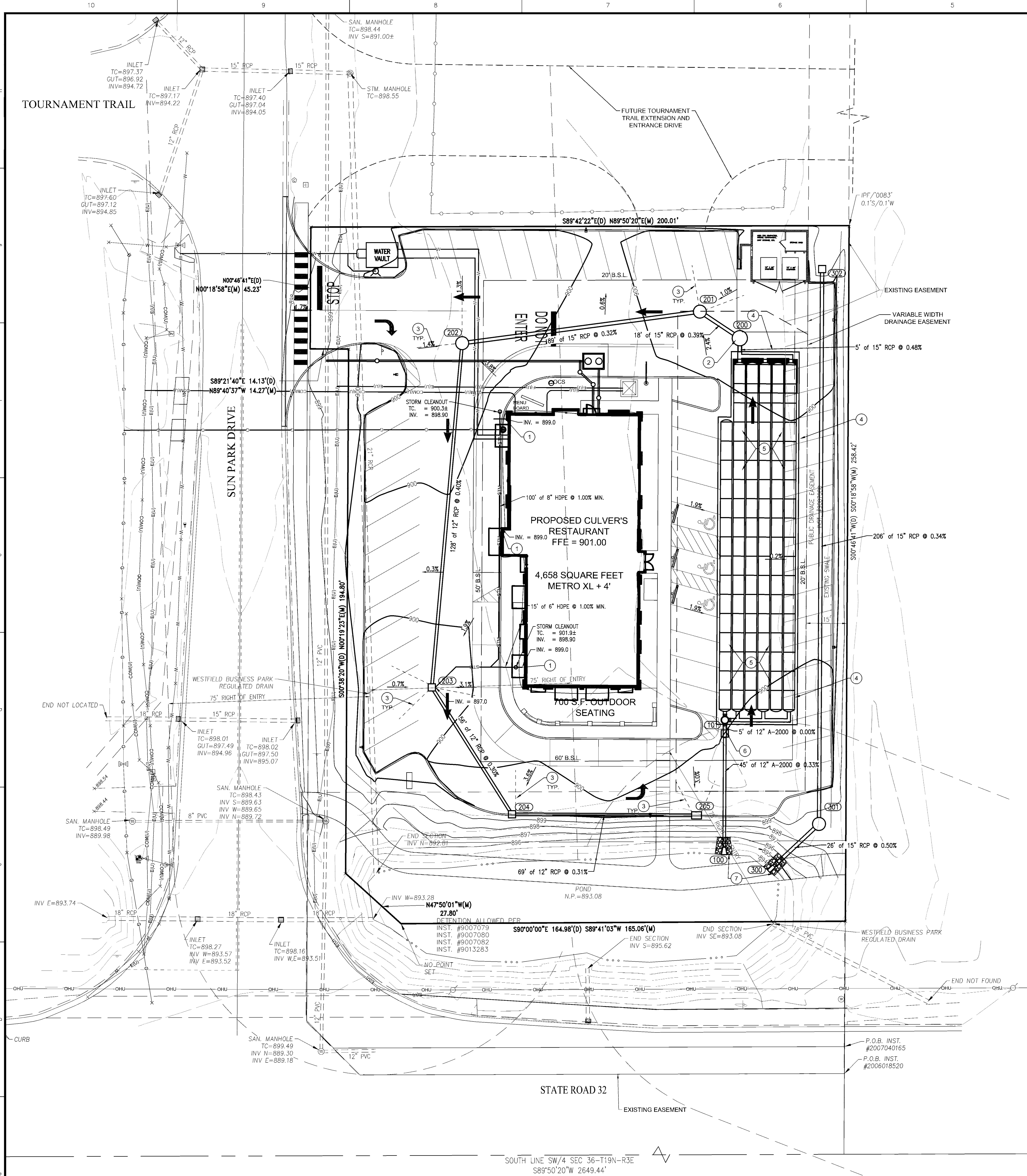
SHEET NO.

C300

PROJECT NO.

W15.0316

LOCATION: I:\2015\150316\Engineering\Design\Connect\150316-C600.dwg
DATE/PLT: 01/24/2016 10:24:35m
PLOTTER: HP DesignJet 5000



DRAINAGE PLAN NOTES

- APPROXIMATE DOWN SPOUT LOCATION SEE ARCHITECTURAL PLANS FOR FINAL LOCATION TYP. INV. = 889.0 ±. CONNECT ROOF DRAIN DOWNSPOUT WITH 6" HDPE TO 8" SUBSURFACE HDPE DRAIN AND ROUTE TO STORM SEWER STRUCTURE.
- INSTALL 6" DIAMETER FIRST DEFENSE WATER QUALITY UNIT (OR APPROVED EQUAL)***. SEE C604 FOR DETAILS.
- INSTALL 15 FEET OF 4" HDPE PERFORATED UNDERDRAINS.
- INSTALL 6" PERIMETER TILE AND CONNECT TO THE CONTROL STRUCTURE.
- INSTALL SC-740 STORM CHAMBERS***. SEE DETAILS ON SHEET C603 AND C604.
CHAMBER MANFOLD INVERT (ELEVATIONS VARY. SEE DETAIL ON SHEET C603) = 893.85
BOTTOM OF STONE = 893.15
CHAMBER INVERT = 893.65
- CONTROL STRUCTURE. SEE DETAIL ON SHEET C602.
- RIPRAP PAD ON GEOTEXTILE FABRIC.

***SUBSTITUTION DESIGN AND APPROVAL COSTS SHALL BE BORNE BY THE CONTRACTOR.

GRADING PLAN LEGEND

UTILITIES

- FIRE HYDRANT
- CHILLED WATER MANHOLE
- WATER MANHOLE
- WATER METER
- WATER VALVE
- GAS METER
- GAS VALVE
- ELECTRIC MANHOLE
- ELECTRIC OUTLET
- ELECTRIC METER
- ELECTRIC RISER
- TRANSFORMER
- GU Y ANCHOR
- ELECTRIC JUNCTION BOX
- UTILITY POLE
- UTILITY POLE W/ TRANSFORMER
- PARKING LOT LIGHT (1 HEAD)
- PARKING LOT LIGHT (2 HEAD)

OTHER

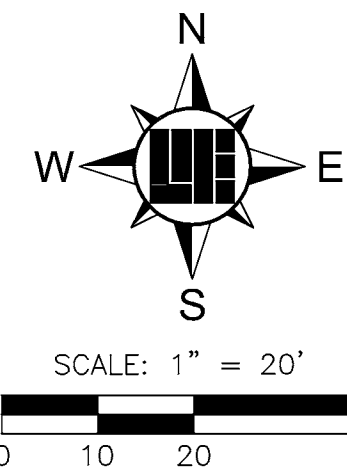
- SIGN
- BOLLARD
- PARKING WHEEL STOP
- HANDICAPPED SPACE
- CURB & GUTTER ELEVATION
- SPOT ELEVATION
- SPOT ELEVATION
- SPOT ELEVATION
- EMERGENCY FLOOD ROUTE

LINE TYPES

- RIGHT OF WAY LINE
- FENCE
- BOUNDARY LINE
- FLOW LINE
- INDEX CONTOUR
- INTERMEDIATE CONTOUR
- UNDERGROUND GAS
- UNDERGROUND WATER
- AERIAL ELECTRIC
- UNDERGROUND ELECTRIC
- UNDERGROUND COMMUNICATIONS
- AERIAL COMMUNICATIONS
- UNDERGROUND FIBER OPTIC
- OVERHEAD UTILITY
- FORCE MAIN
- SANITARY SEWER
- STORM SEWER

UTILITIES

- COMMUNICATIONS JUNCTION BOX
- COMMUNICATIONS MANHOLE
- COMMUNICATIONS PEDESTAL
- COMMUNICATIONS RISER
- TRAFFIC SIGNAL POLE
- TRAFFIC SIGNAL
- STORM CLEANOUT
- BEEHIVE INLET
- CURB INLET
- FLOOR DRAIN
- ROUND INLET
- SQUARE INLET
- STORM MANHOLE
- DOWNSPOUT
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- DISTRIBUTION BOX



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DAYS BEFORE COMMENCING WORK.

10505 N. College Avenue
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317 846 - 6611
800 452 - 6408
317 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

PROJECT NO.: W15.0316
DWG NAME: 150316-C600.dwg
DESIGNED BY: RLW
DRAWN BY: RLW
CHECKED BY: BUS
DATE: 01.28.2016

DATE: 01.28.2016
BY: BUS
SUBMITTED FOR COUNTY SURVEYOR REVIEW: 01.29.2016
ISSUED FOR TAC REVIEW

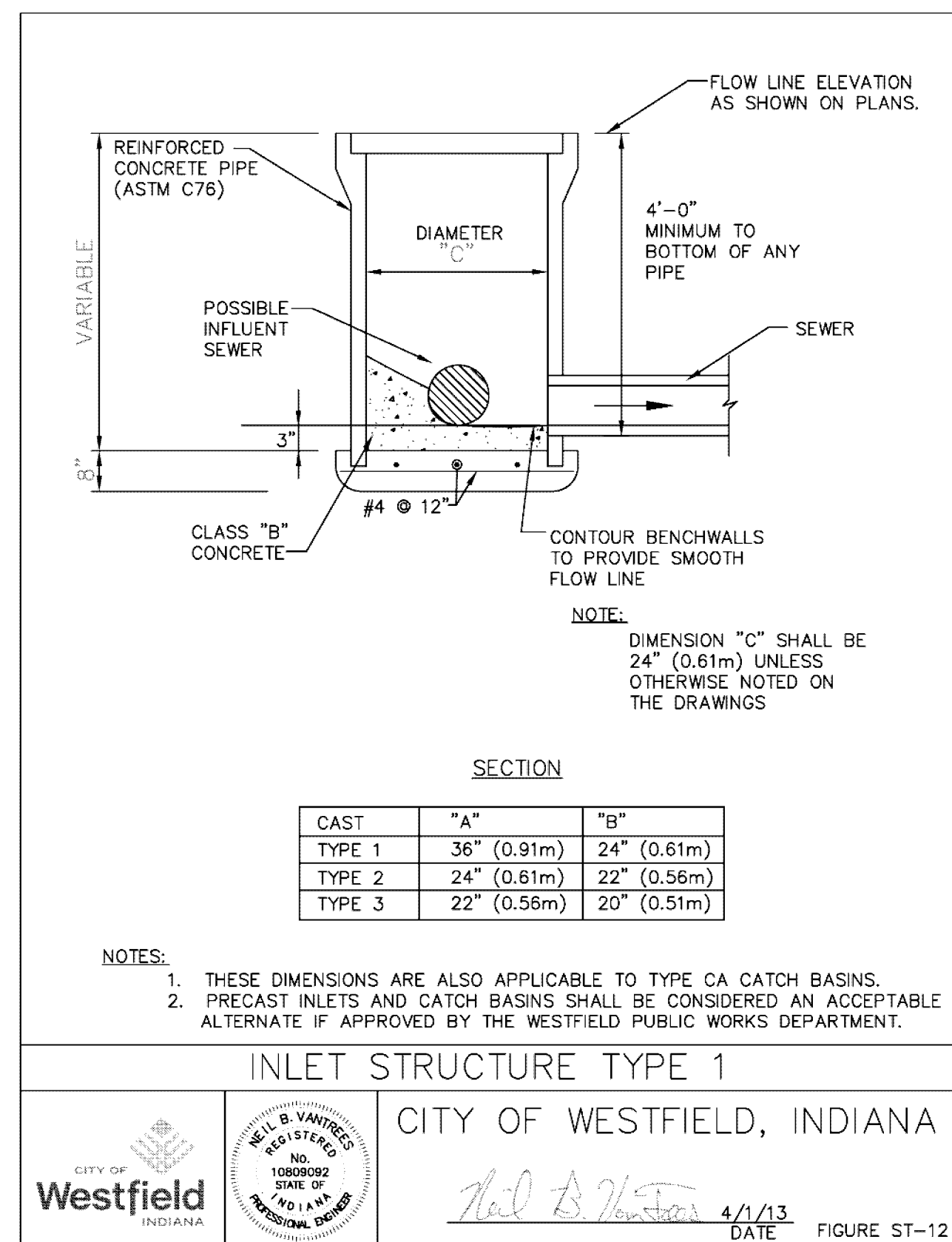
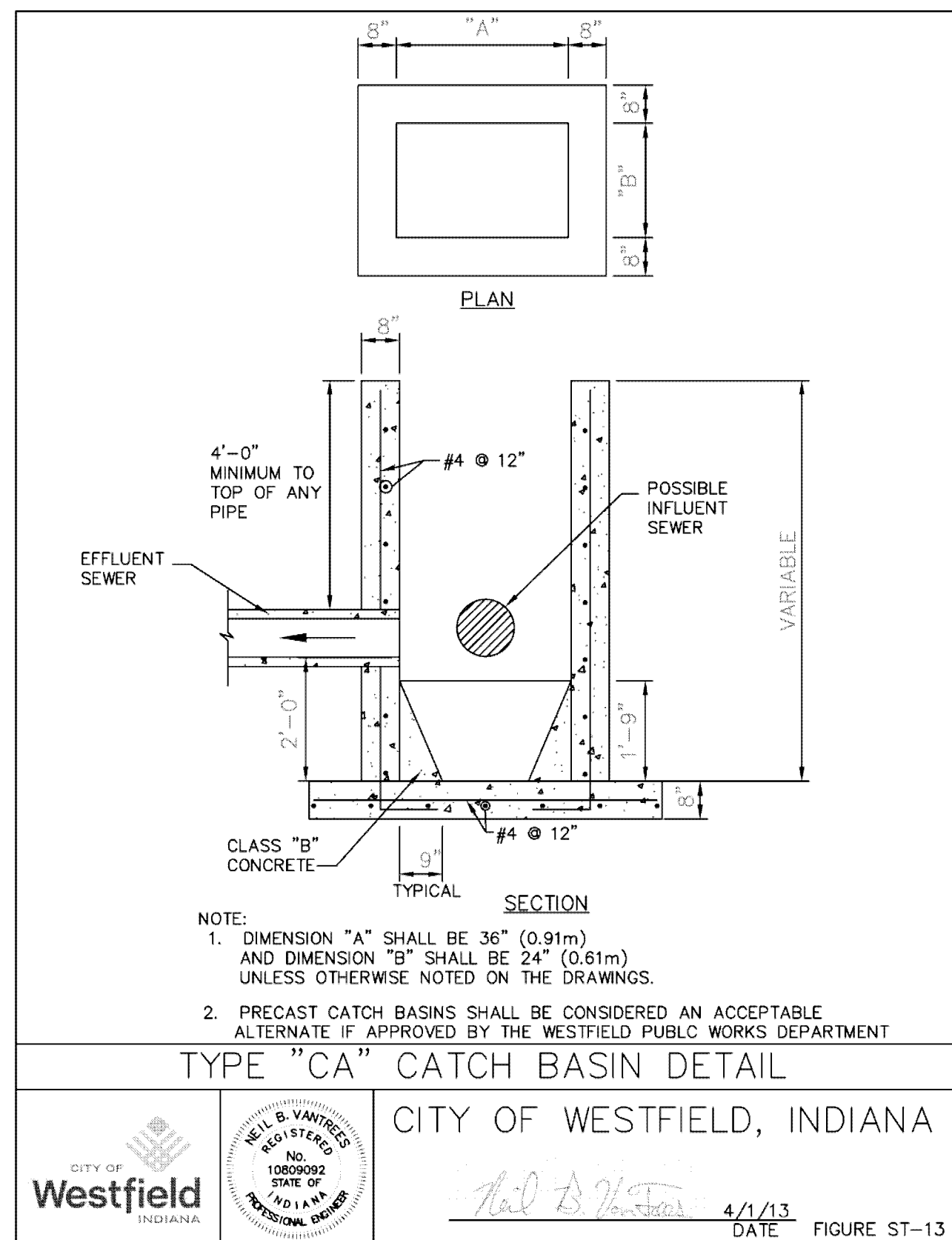
REVISIONS AND ISSUES:
SUBMITTED FOR COUNTY SURVEYOR REVIEW: 01.29.2016
ISSUED FOR TAC REVIEW

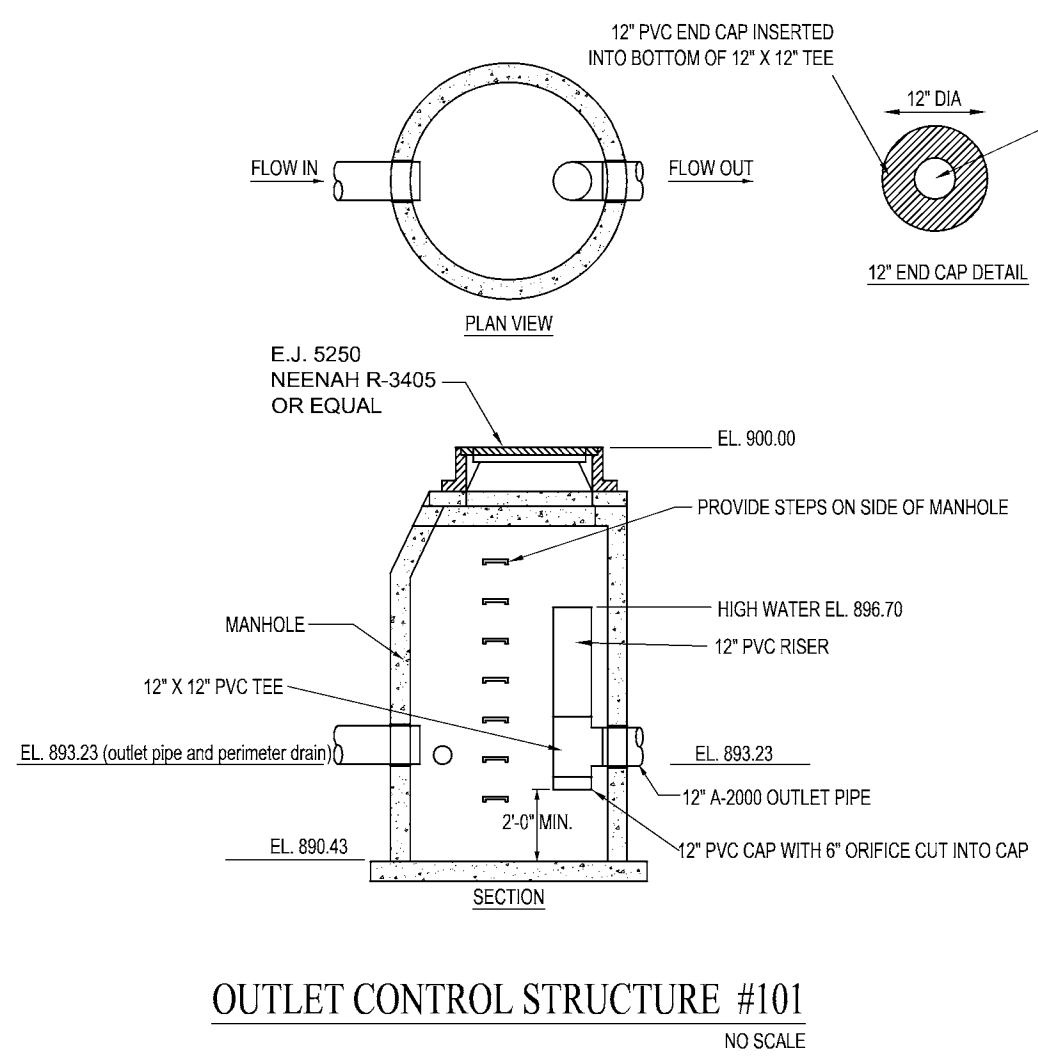
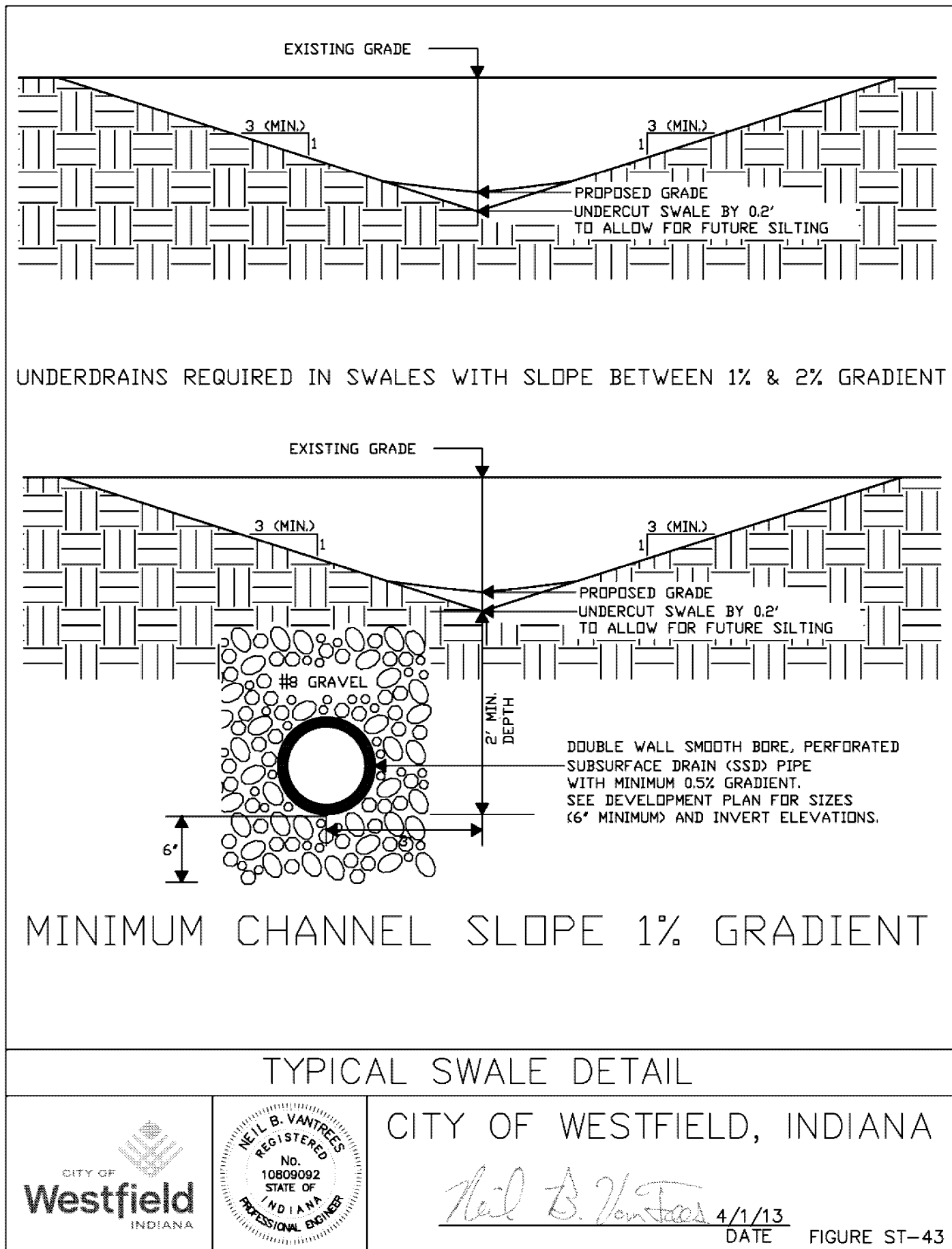
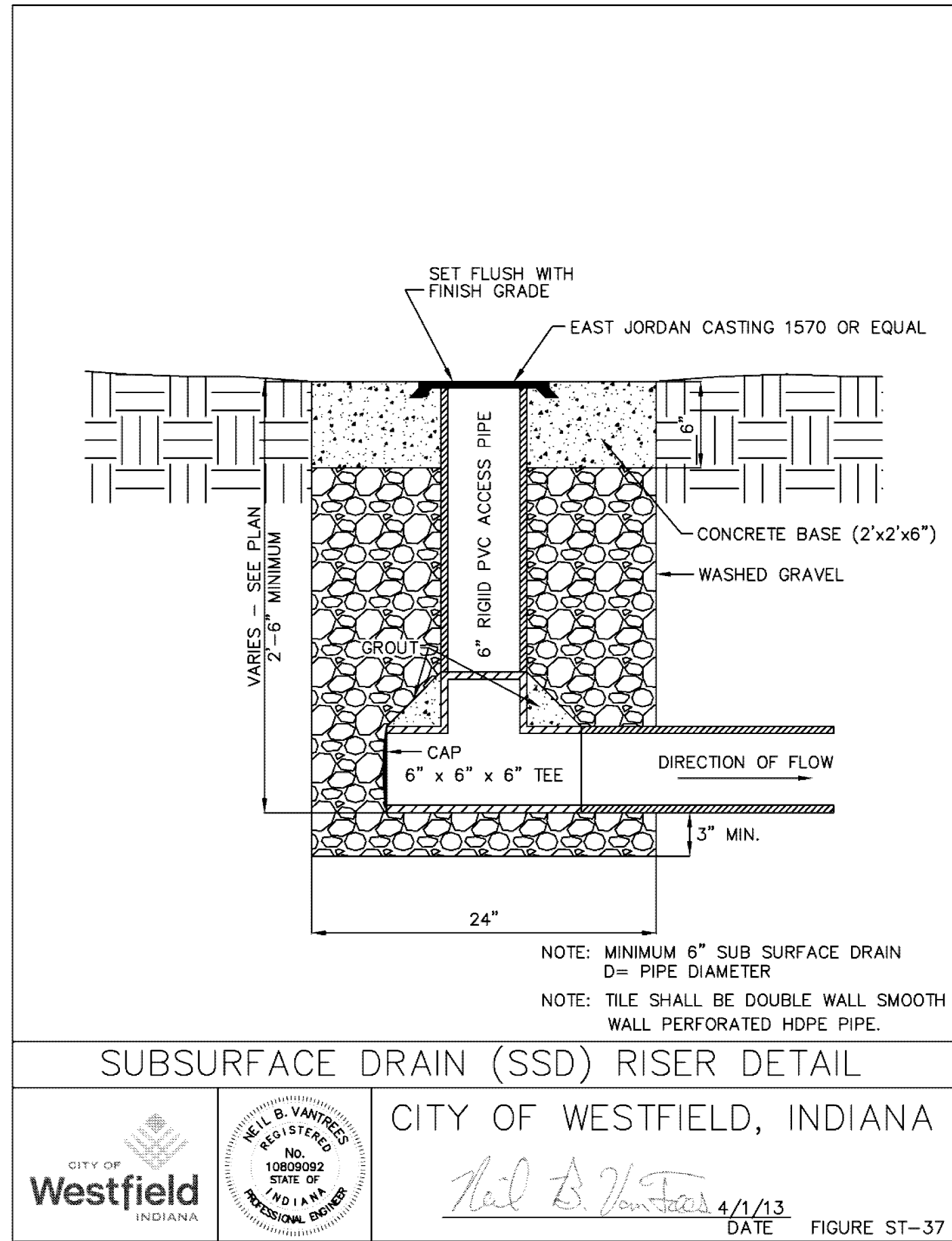
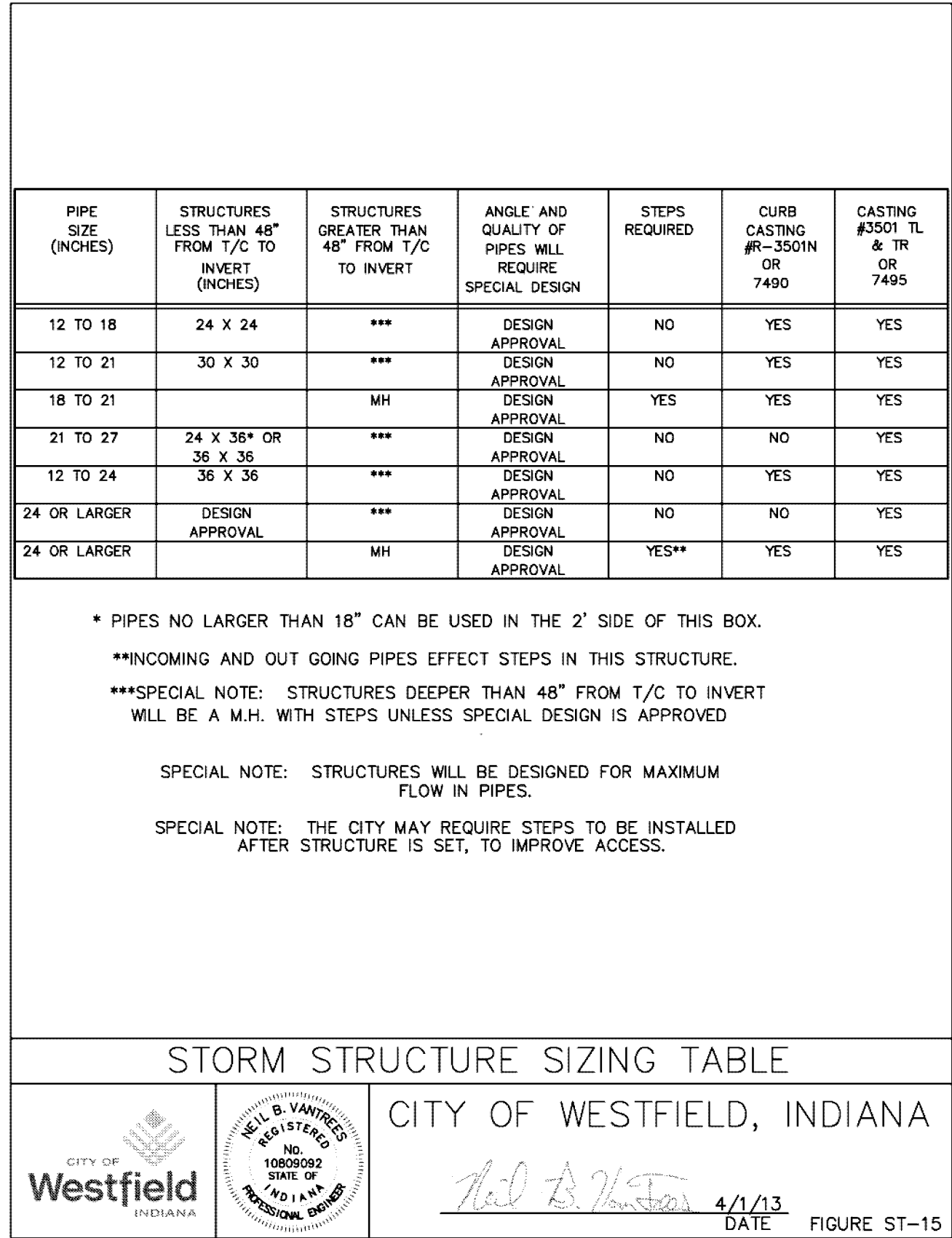
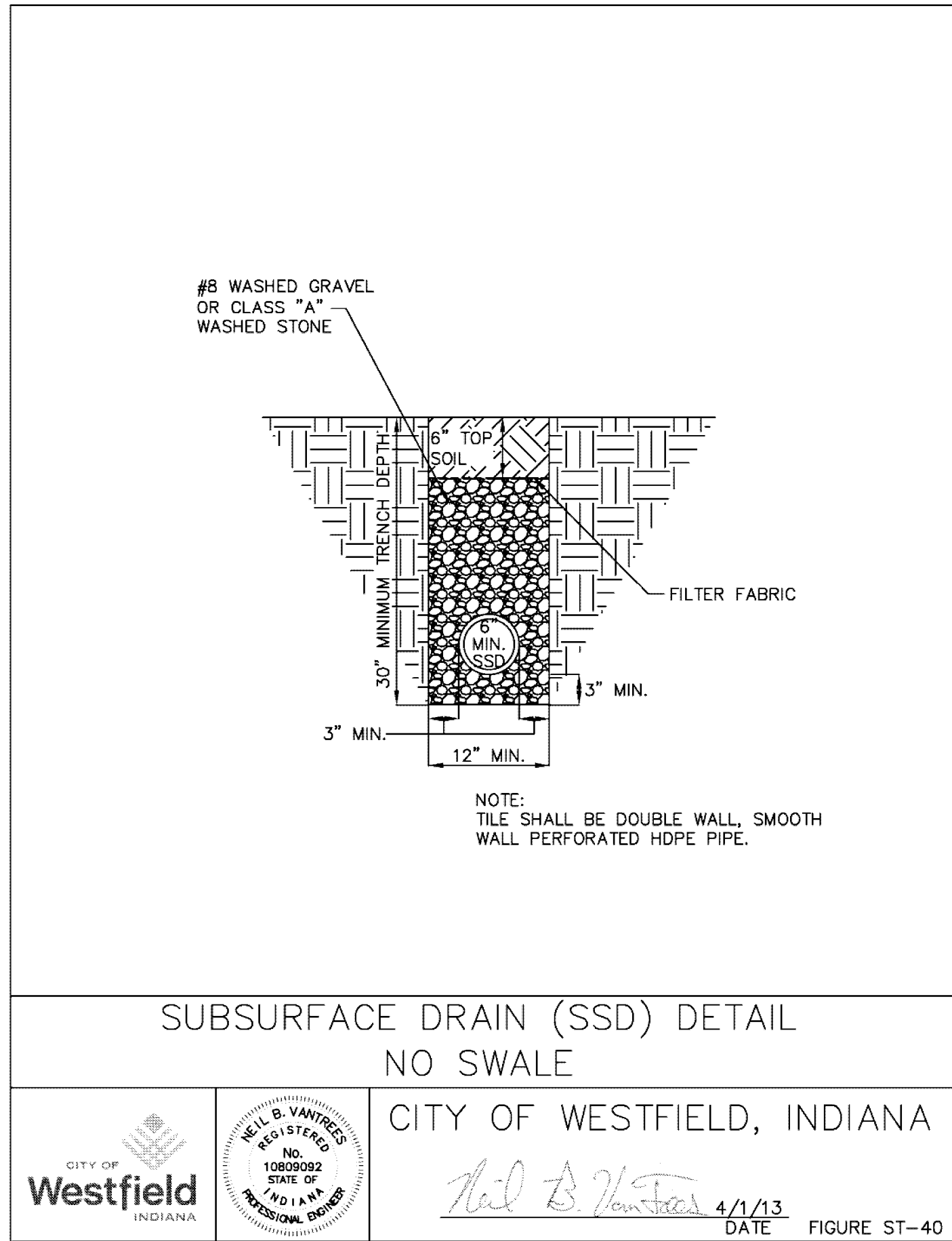
STEVEN SCOTT RUCKER, P.E.
REGISTERED PROFESSIONAL ENGINEER
PE #0006279
STATE OF INDIANA
NO. 11300270

STEVEN SCOTT RUCKER, P.E. 11300270

PREPARED FOR: **of WESTFIELD**
17651 SUN PARK DRIVE, WESTFIELD, IN 46074
DRAINAGE PLAN
Part of S.W.M. Section 36, Township 19 North, Range 3 East, Washington Township, Hamilton County, Indiana

SHEET NO.: **C600**
PROJECT NO.: **W15.0316**





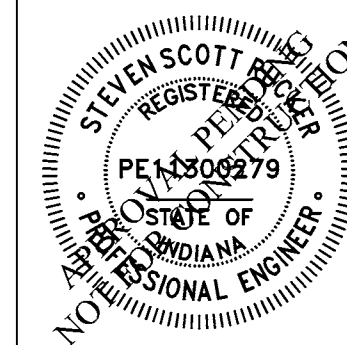
- NOTES
1. 6" CONCRETE PRECAST OR POURED IN PLACE.
 2. REFER TO BEDDING DETAIL AS REQUIRED
- * SEE STANDARD MANHOLE DETAIL FOR REQUIRED CONSTRUCTION SPECIFICATIONS



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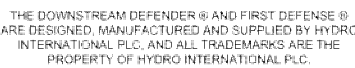
PROJECT NO.: W15.0316
DWG NAME: 150316-C602 drainage details
DESIGNED BY: RLW
DRAWN BY: RLW
CHECKED BY: BUS
DATE: 01-28-2016

REVISIONS AND ISSUES
SUBMITTED FOR COUNTY SURVEYOR REVIEW
ISSUED FOR TAC REVIEW



STEVEN SCOTT RUCKER P.E. 11390279

PREPARED FOR: City of Westfield
SHEET NO. C602
PROJECT NO. W15.0316
17651 SUN PARK DRIVE, WESTFIELD, IN 46074
Part of SWM Section 36, Township 19 North, Range 3 East, Washington Township, Hamilton County, Indiana

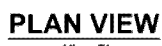
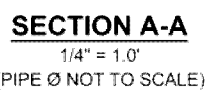


CULVERS
WESTFIELD, IN

*ACTUAL DATE REQUIRED, ASAP IS NOT ACCEPTABLE AND A MINIMUM OF 4 WEEKS MUST BE PROVIDED UNLESS OTHERWISE DISCUSSED WITH A SALES REPRESENTATIVE

DIRECTIONS TO JOB SITE FROM NEAREST INTERSTATE:
(PLEASE NO MAPS)

NOTES:
ENGINEER / CONTRACTOR TO CONFIRM PIPE MATERIAL



ADDITIONAL DESIGN INFORMATION

1. MAXIMUM INLET/OUTLET PIPE DIAMETERS: 24"
2. MAXIMUM NUMBER OF INLET PIPES: 2
3. MINIMUM ANGLE BETWEEN PIPES: 90°

 Hydro ADS 4640 TRIEMAN BLVD HILLIARD OH 43026 1-800-733-7473	AS NOTED		REV: ☐ NEW ☐ CHG DESCRIPTION: FORMERLY USED FOR STORAGE OF FERTILIZER FERTILIZER STORAGE TANK WWW.HYDRO-ADS.COM	CULVERS WESTFIELD, IN
	DATE: 10-06-15 DRAWN: CA PROJECT #: 11894 CHECKED: BL			

PREPARED FOR:

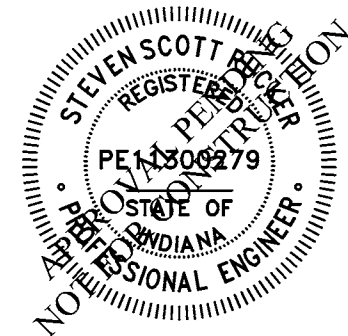
Culver's

of WESTFIELD

17651 SUN PARK DR

VE, WESTFIELD, IN 46074

STEVEN SCOTT RUCKER P.E. 1130027



REVISIONS AND ISSUES		BY:	PROJECT NO.:
SUBMITTED FOR SURVEY REVIEW		D. S. 2016	W-15 0316
SUBMITTED FOR IAC REVIEW		D. S. 2016	
		B.S.	
		DATE	ISSUED BY: PROJECT MANAGER
			DESIGNED BY: R/L/W
			DRAWN BY: R/L/W
			CHECKED BY: B/S
		DATE:	DATE: 01.09.2016

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net

317	846 - 6611
800	452 - 6408
317	843 - 0546 _{fax}

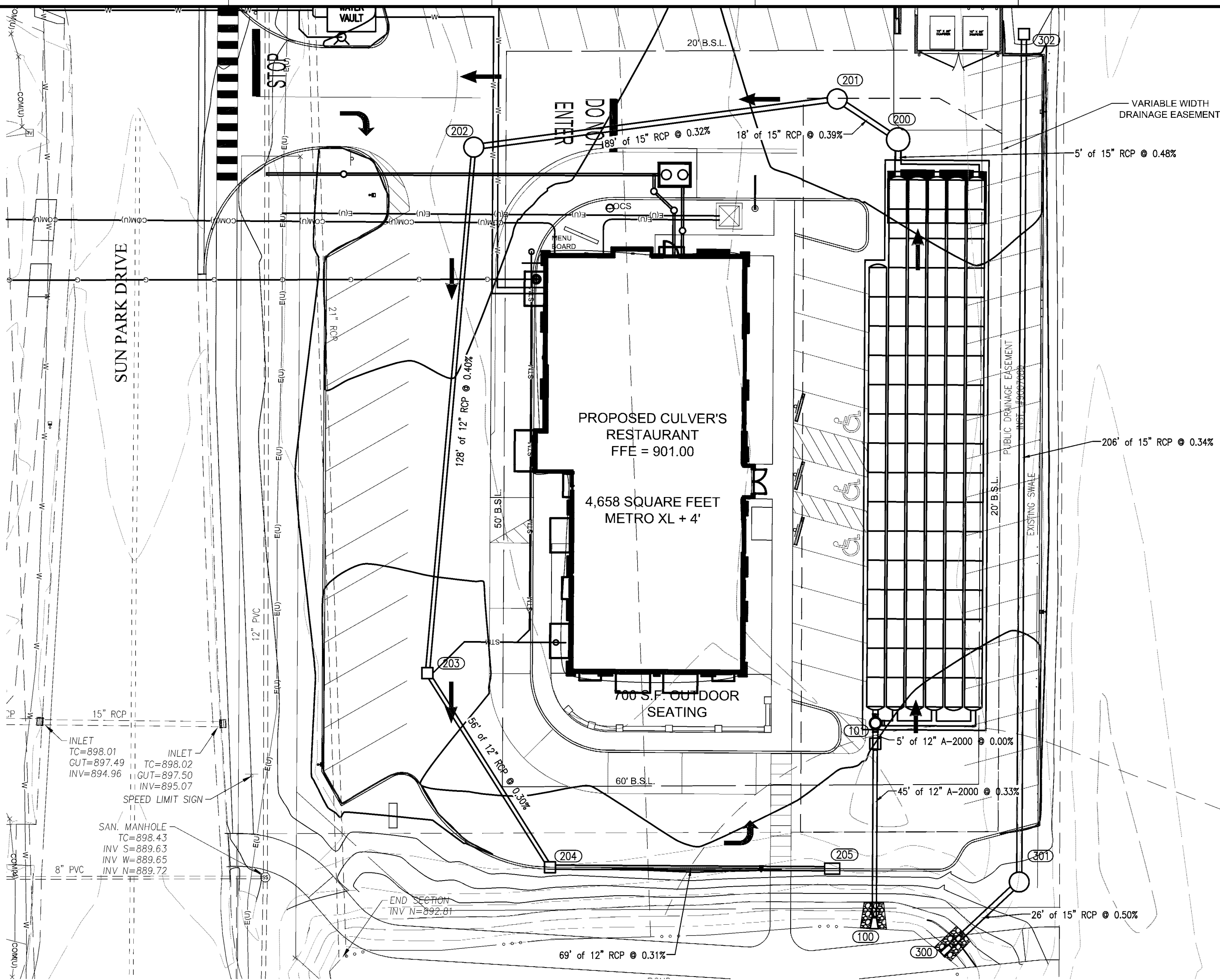
ALLAN H. WEIHE, P.E., I.S. - FOUNDER

WEIHE
ENGINEERS

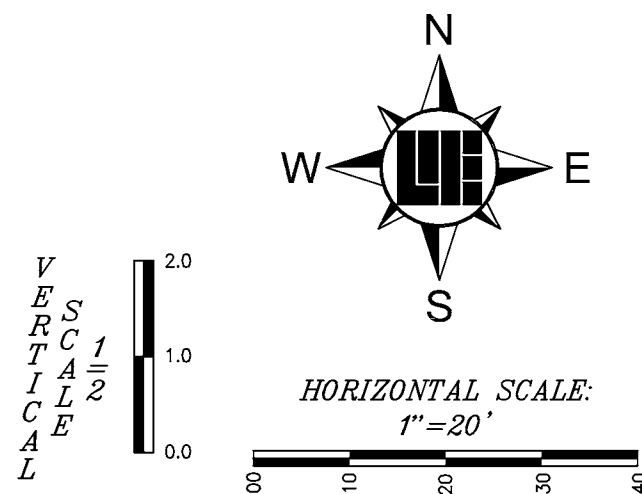
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* ALL PRODUCT DETAILS SHOWN ON THIS SHEET
CAN BE TREATED AS AN "OR EQUAL" UPON
ACCEPTANCE BY THE CITY OF WESTFIELD.

LOCATION: I:\2015\W150316\Engineering\Design\Connect\W150316-C601 -pre.dwg
DATE/TIME: January 28, 2016 - 2:44pm
PLOTTER: HP: ecb000f6



-NOTE-
RUN WATER LINE A MINIMUM OF 5' DEEP.
PROVIDE MINIMUM OF 10' HORIZONTAL & 2' VERTICAL CLEARANCE
BETWEEN WATER & SANITARY LINE. SANITARY SEWER LINE IN
PROXIMITY OF WATER LINE SHALL BE C900 WATER MAIN GRADE PVC.

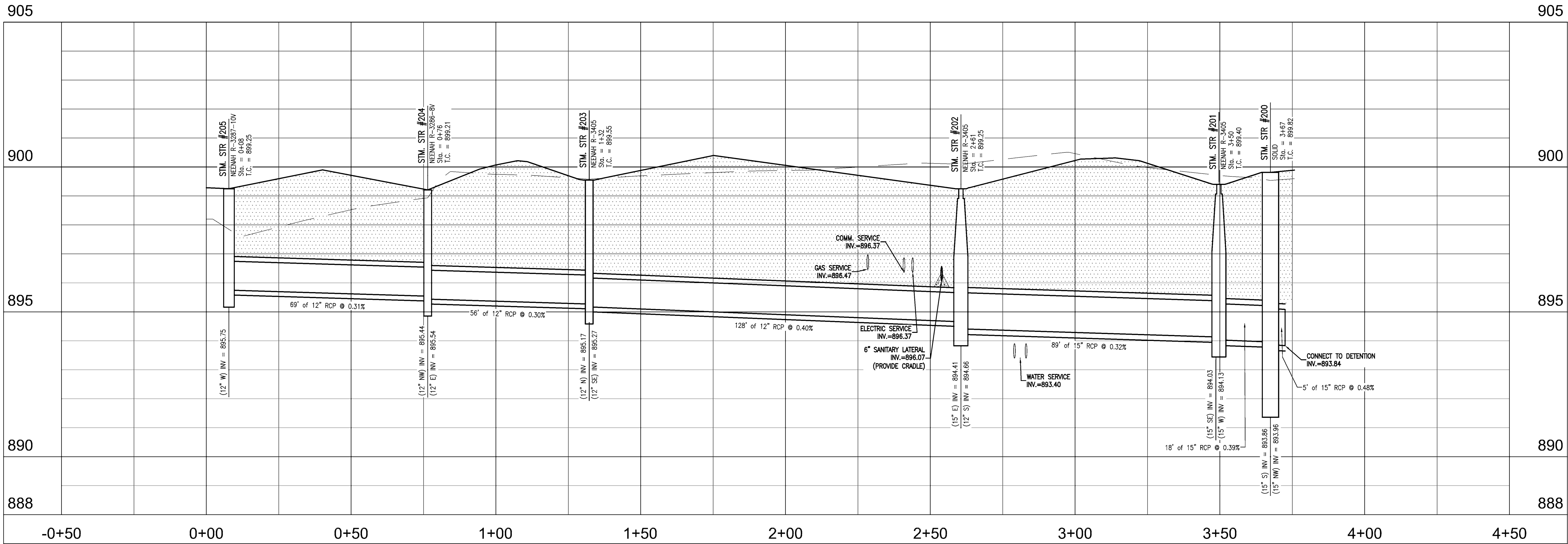


PROFILE LEGEND	
	EXISTING GRADE
	FINISHED GRADE
	GRANULAR BACKFILL

GENERAL NOTES

- STRUCTURES DEEPER THAN 4' MUST BE ACCESSIBLE WITH STEPS.
- ALL STORM SEWER SHALL BE CLEANED AND TELEVIEWED AFTER ALL UNDERGROUND UTILITIES ARE INSTALLED.
- ALL BEEHIVE CASTINGS ON 2x2' BOX SHALL HAVE A SQUARE RISER WITH A ROUND HOLE.

STORM 200



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LOCATION SERVICE TWO (2) WORKING
DAYS BEFORE COMMENCING WORK.

PREPARED FOR:
of WESTFIELD
17651 SUN PARK DRIVE, WESTFIELD, IN 46074

STORM SEWER PLAN AND PROFILE
Part of SWM Section 36, Township 18 North, Range 3 East, Washington Township, Hamilton County, Indiana

SHEET NO.
C605
PROJECT NO.
W15.0316



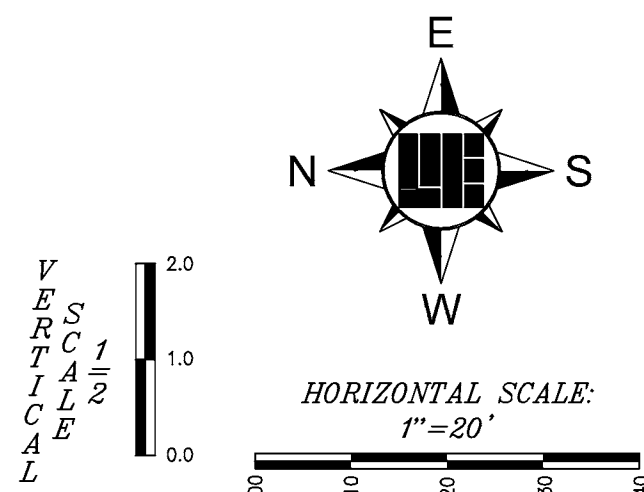
STEVEN SCOTT RUCKER P.E. 11300279

REVISIONS AND ISSUES	
DATE	BY
10-18-2015	B.S.
01-29-2016	B.S.
SUBMITTED FOR COUNTY SURVEYOR REVIEW	
ISSUED FOR TAC REVIEW	

PROJECT NO.	W15.0316
DWG NAME	W150316-C601 -pre.dwg
DESIGNED BY	RLW
DRAWN BY	RLW
CHECKED BY	B.S.
DATE	01-28-2016

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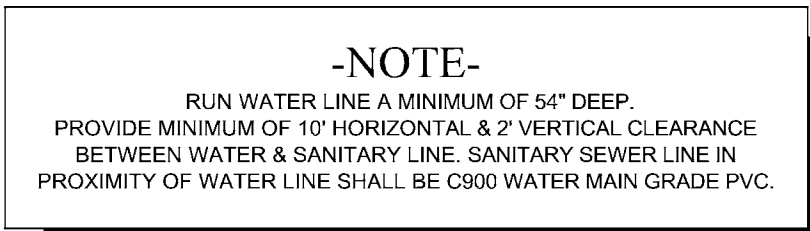
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weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546/ax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER



STORM SEWER PIPE DATA TABLE					
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SIZE	MATERIAL	LENGTH	SLOPE
101	100	12"	A-2000	45'	0.33%

DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SIZE	MATERIAL	LENGTH	SLOPE
200		15"	RCP	5'	0.48%
201	200	15"	RCP	18'	0.39%
202	201	15"	RCP	89'	0.32%
203	202	12"	RCP	128'	0.40%
204	205	12"	RCP	69'	0.31%
204	203	12"	RCP	56'	0.30%

STORM SEWER PIPE DATA TABLE					
DOWNSTREAM STRUCTURE	UPSTREAM STRUCTURE	SIZE	MATERIAL	LENGTH	SLOPE
300	301	15"	RCP	26'	0.50%
302	301	15"	RCP	206'	0.34%



1. STRUCTURES DEEPER THAN 4' MUST BE ACCESSIBLE WITH STEPS.
2. ALL STORM SEWER SHALL BE CLEANED AND TELEVISED AFTER ALL UNDERGROUND UTILITIES ARE INSTALLED.
3. ALL BEEHIVE CASTINGS ON 2x2' BOX SHALL HAVE A SQUARE RISER WITH A ROUND HOLE.

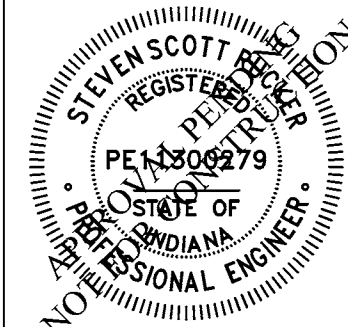


CONTRACTOR TO LOCATE THE BURIED DEPTHS OF THE EXISTING GAS AND WATER LINES AND CHECK FOR CROSSING CONFLICTS FOR THE INSTALLATION OF THE STORM SEWER. THE EXISTING UTILITIES MAY NEED RELOCATED TO ALLOW FOR THE STORM SEWER CONNECTION.

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REVISIONS AND ISSUES	DATE	BY	PROJECT NO.:
SUBMITTED FOR COUNTY SURVEYOR REVIEW	10.16.2015	BJS	W15-0316
ISSUED FOR TAC REVIEW	01.29.2016	BJS	DWG NAME:
			W15016-001 - plat.dwg
			DESIGNED BY:
			RLW
			DRAWN BY:
			RLW
			CHECKED BY:
			BJS
			DATE:



STEVEN SCOTT RUCKER P.E. 1130027

PREPARED FOR:

Calvert

of WESTFIELD

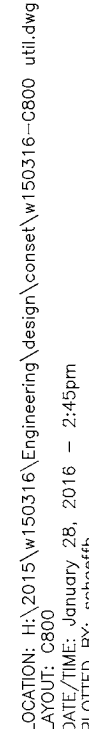
17651 SUN PARK DRIVE, WESTFIELD, IN 46074

STORM SEWER PLAN AND PROFILE

Part of SW44, Section 36, Township 9 North, Range 5 East, Marion County, Indiana

SHEET NO.
C606

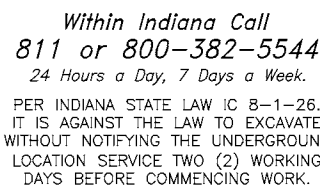
PROJECT NO.
W15.0316



C800

PROJECT NO.

W15.0316



SHEET NO.
C801
PROJECT NO.
W15.0316

STEVEN SCOTT BECKER
REGISTERED
PE 1300279
STATE OF
INDIANA
MECHANICAL ENGINEER

STEVEN SCOTT RUCKER P.E. 1130027

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net

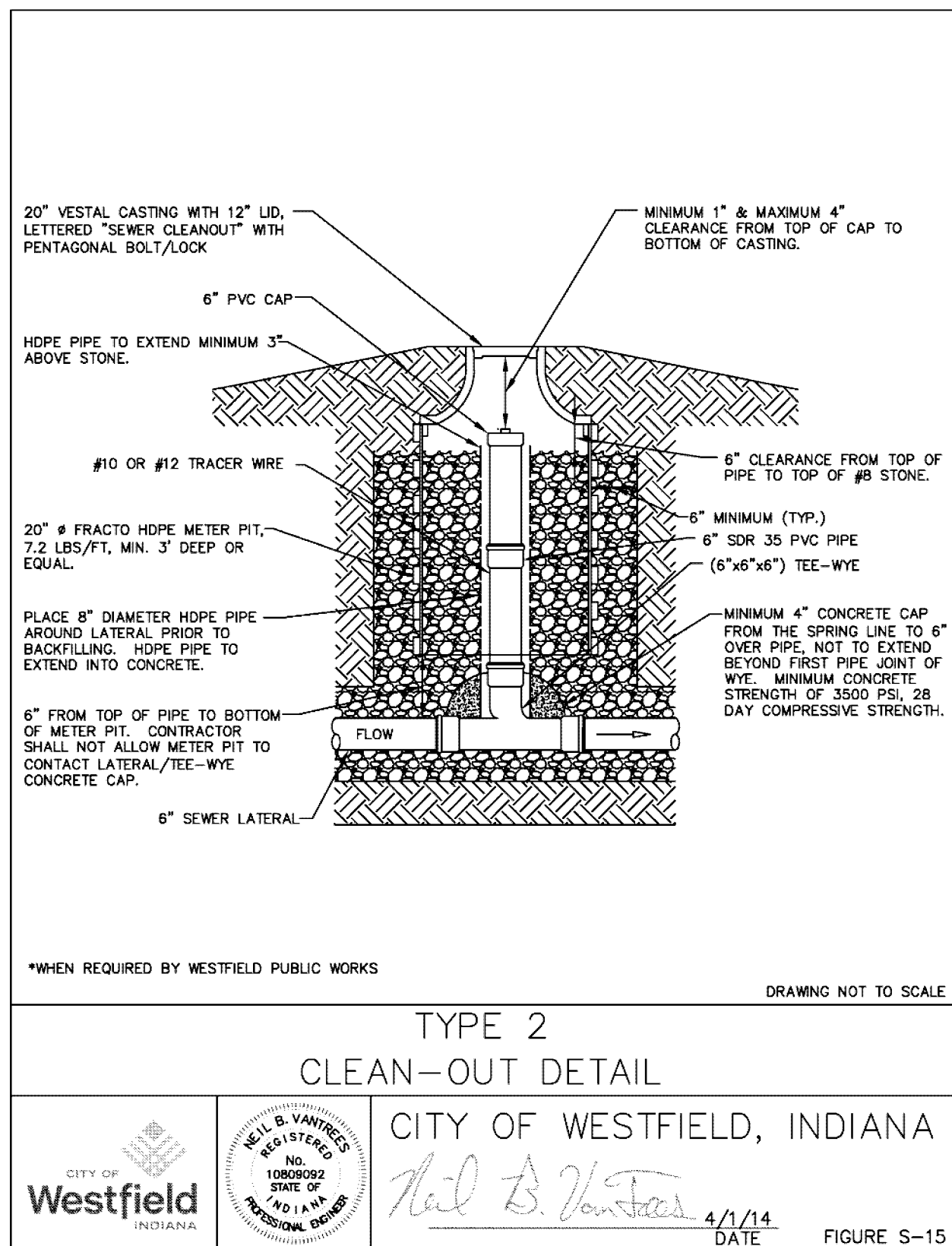
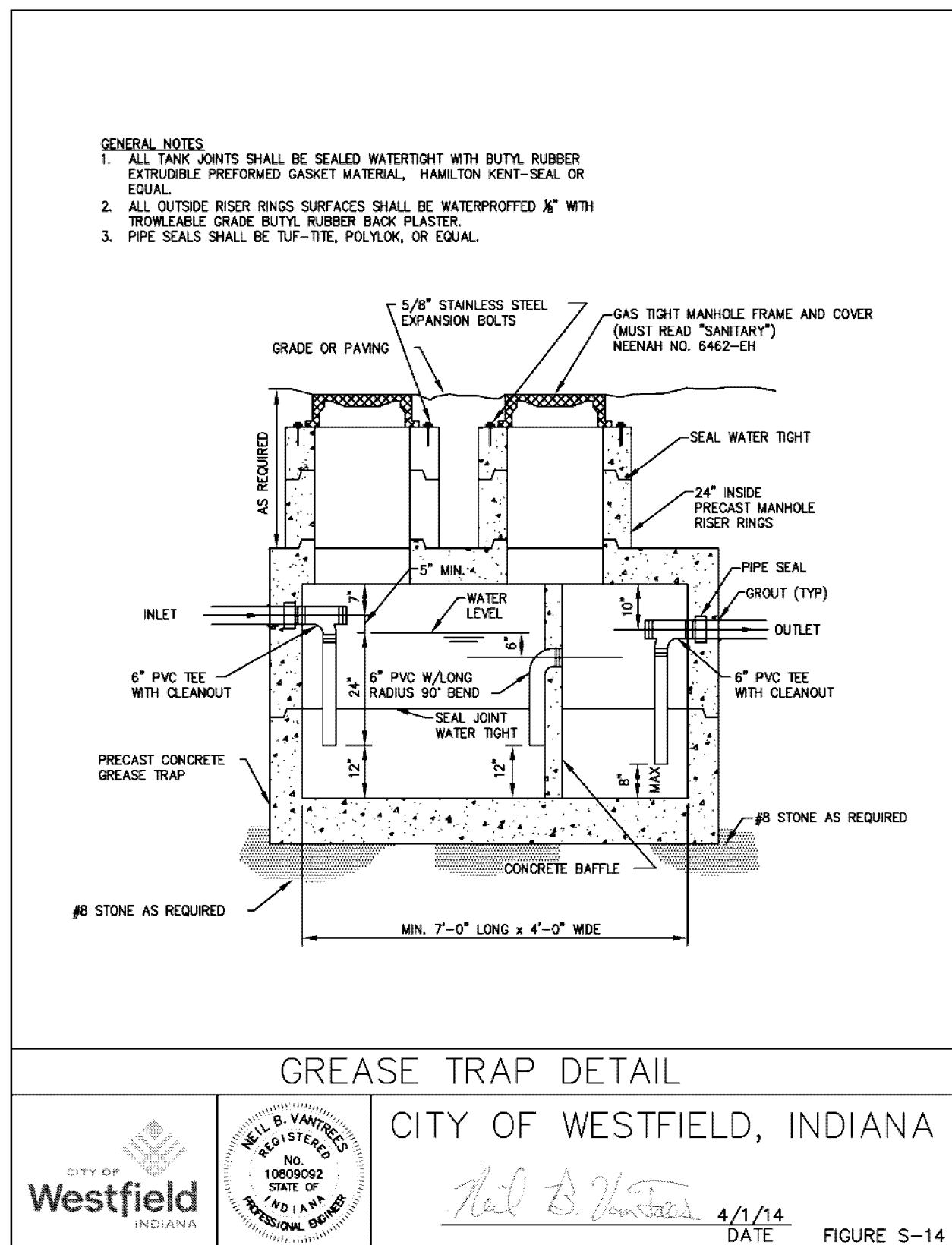
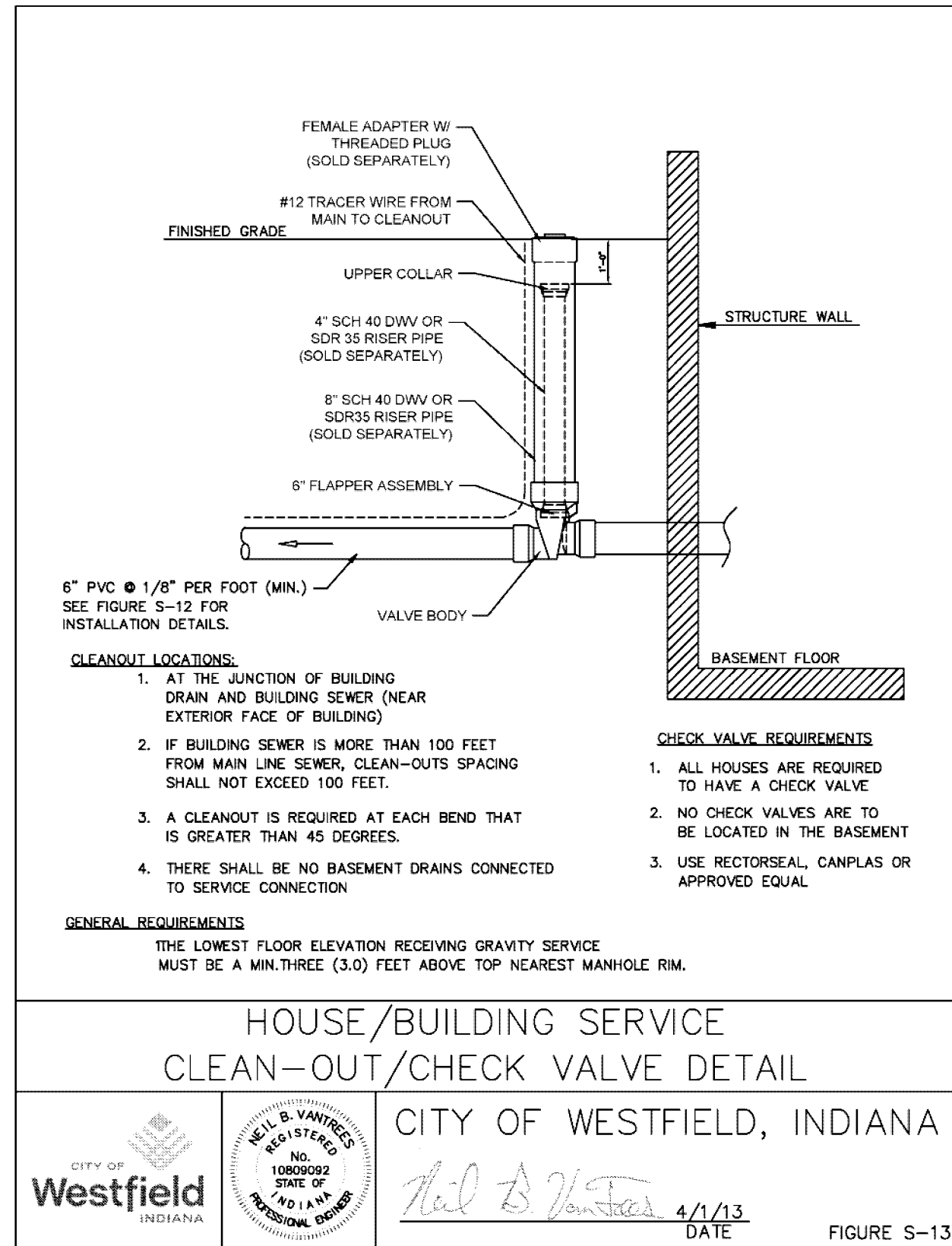
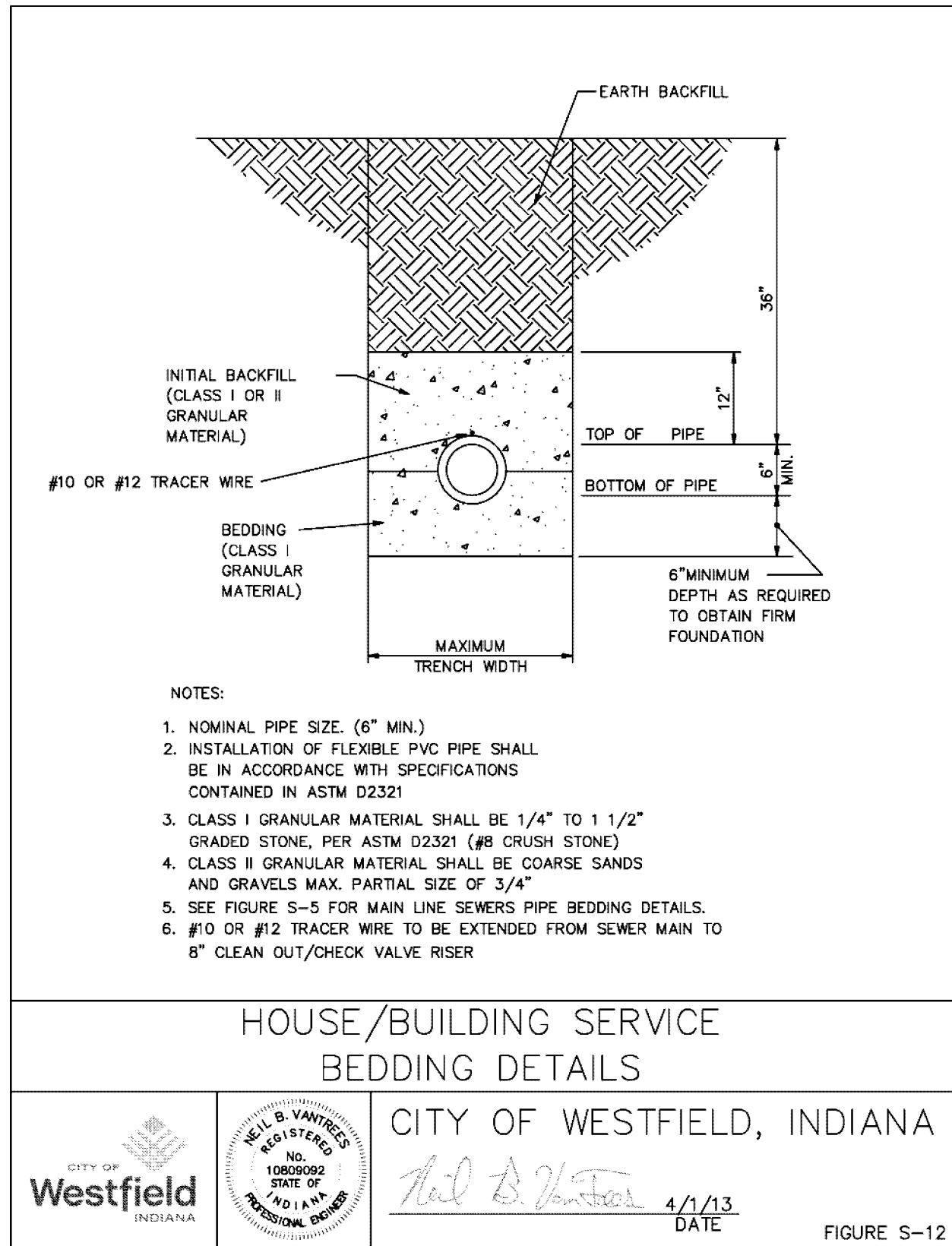
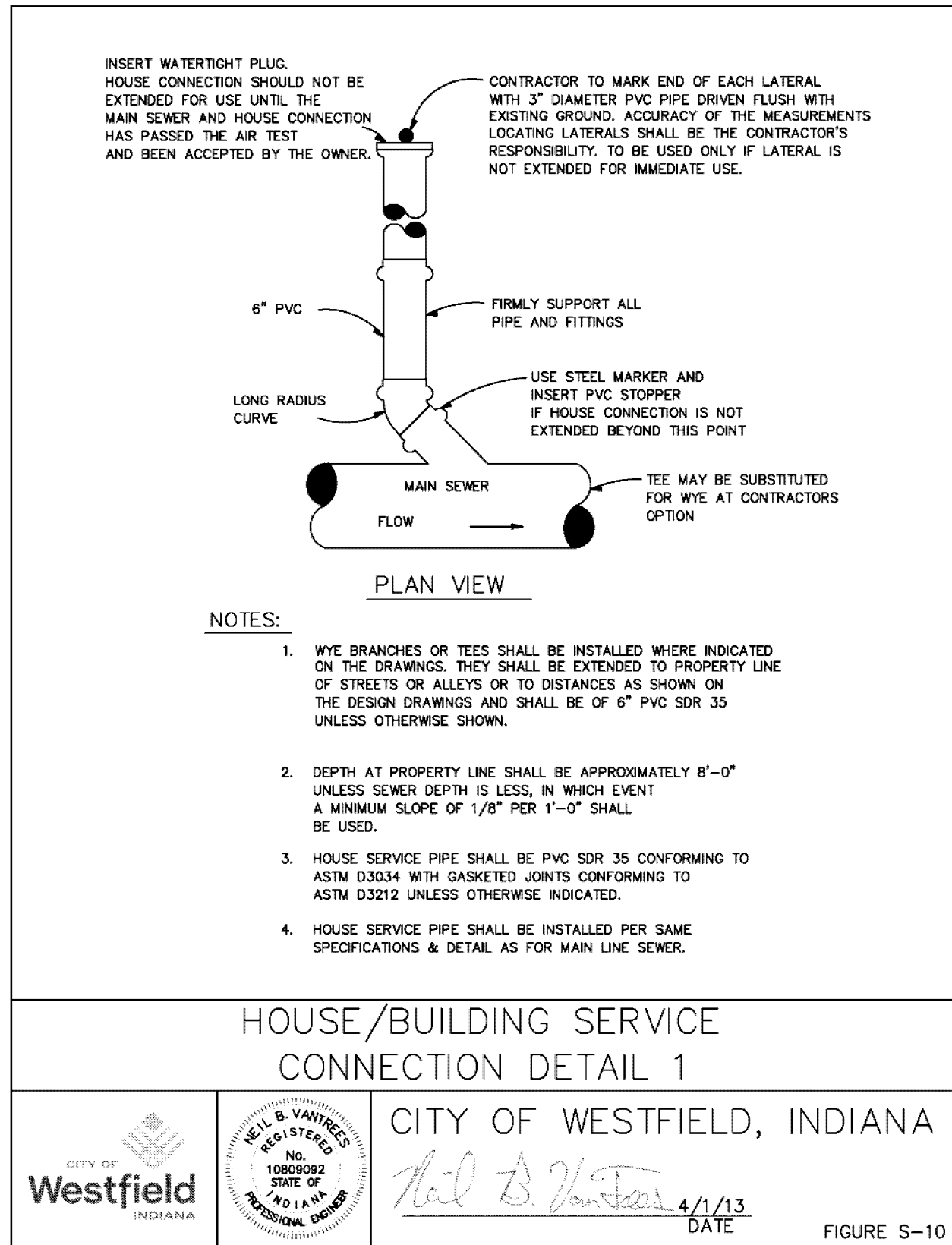
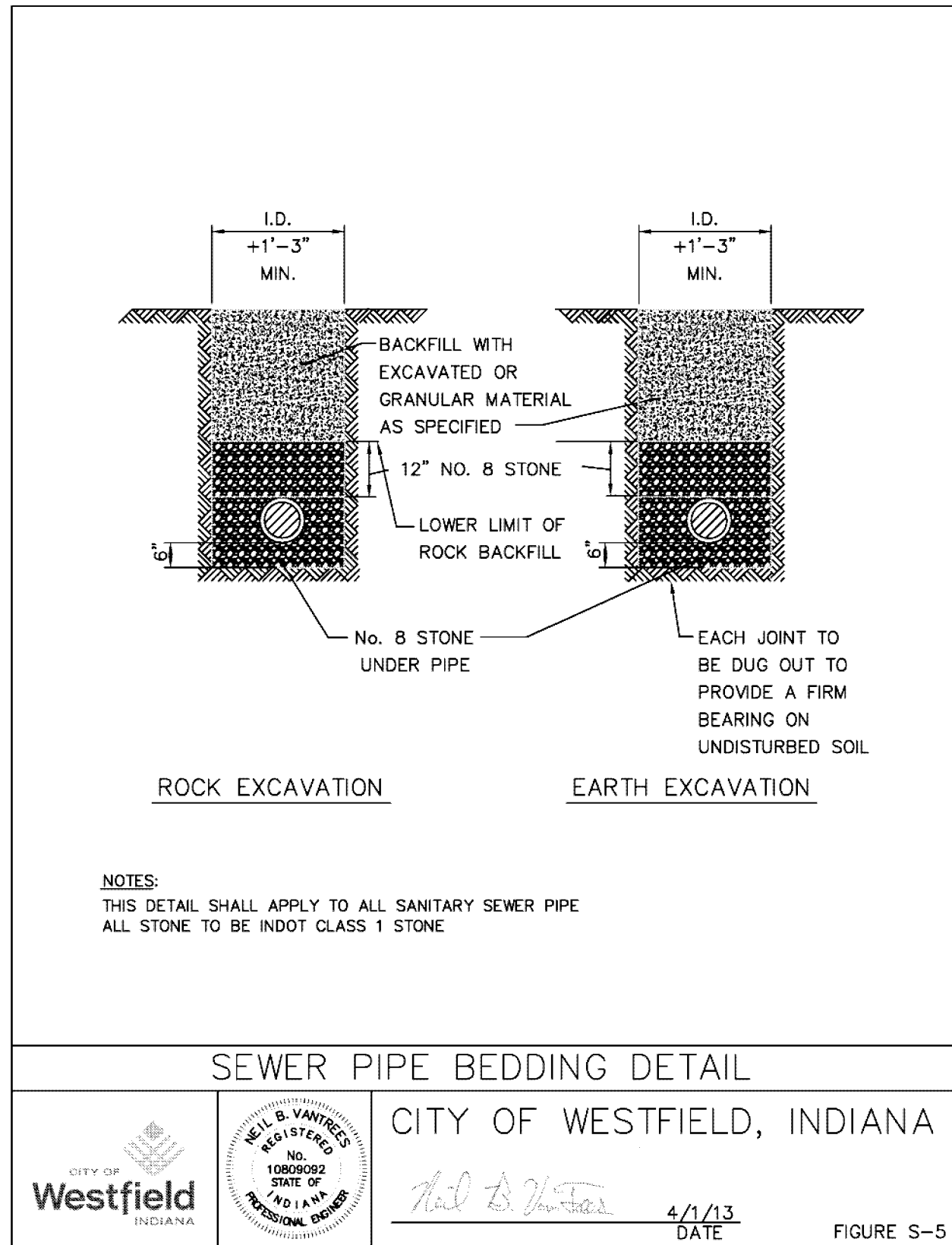
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ALLAN H. WEIHE, P.E., I.S. - FOUNDER

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PLOTTER: ehbaurb

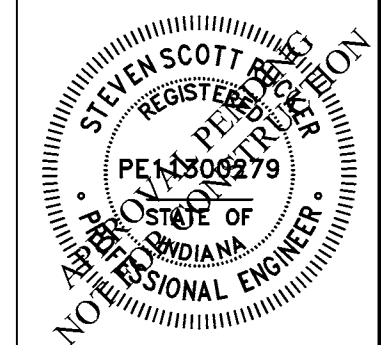


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PREPARED FOR:
CITY OF WESTFIELD
17651 SUN PARK DRIVE, WESTFIELD, IN 46074
UTILITY DETAILS
PROJECT NO.
W15.0316



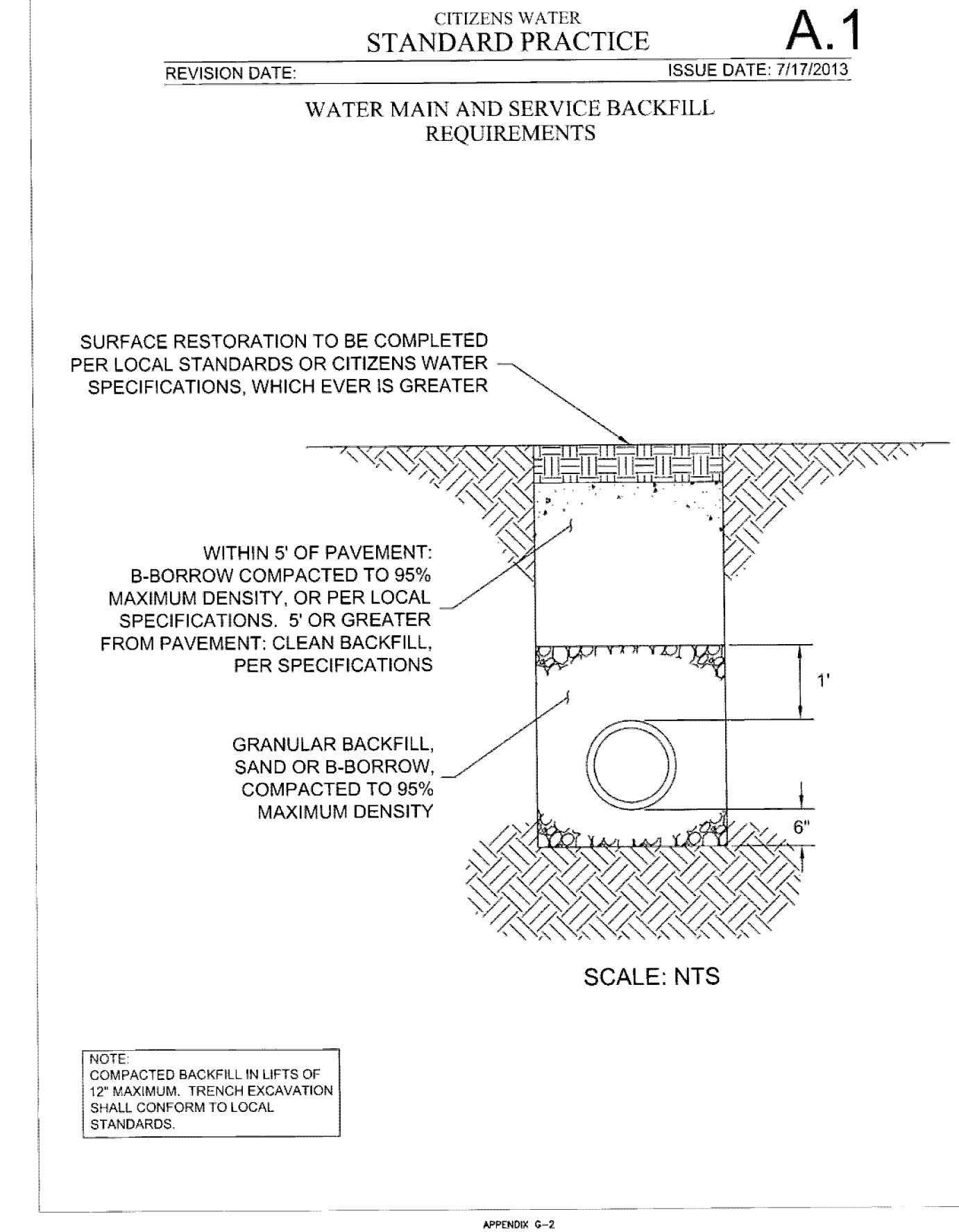
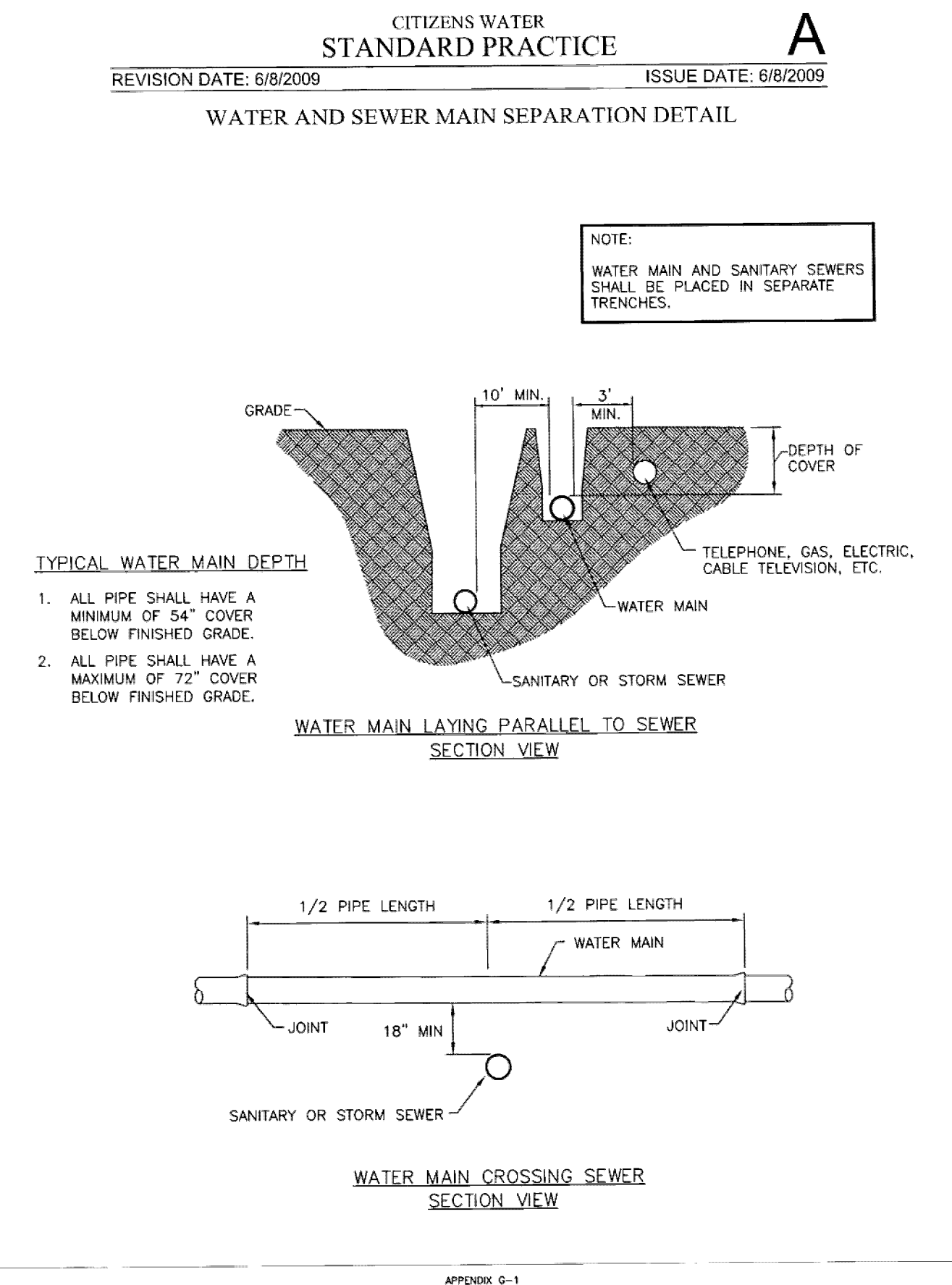
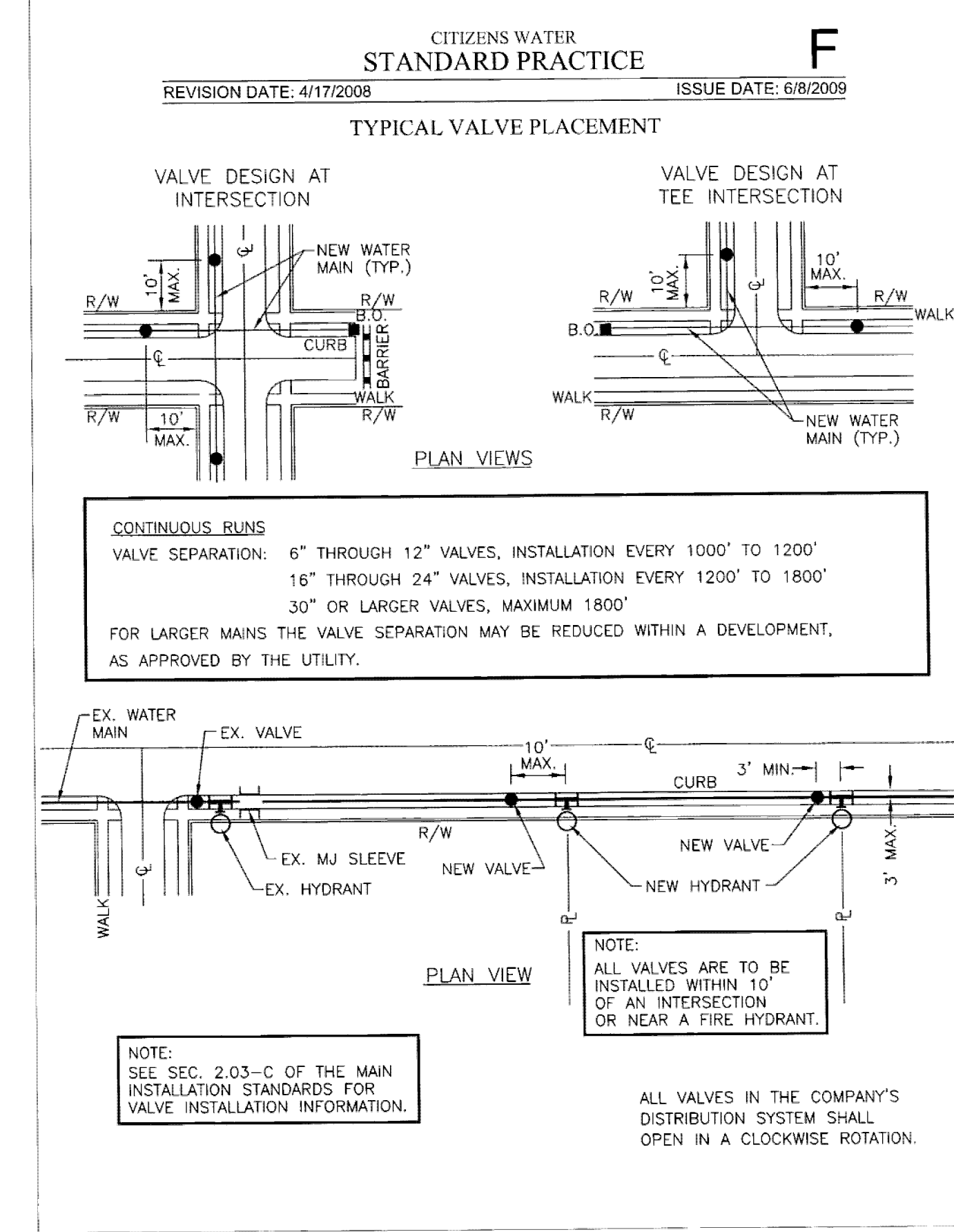
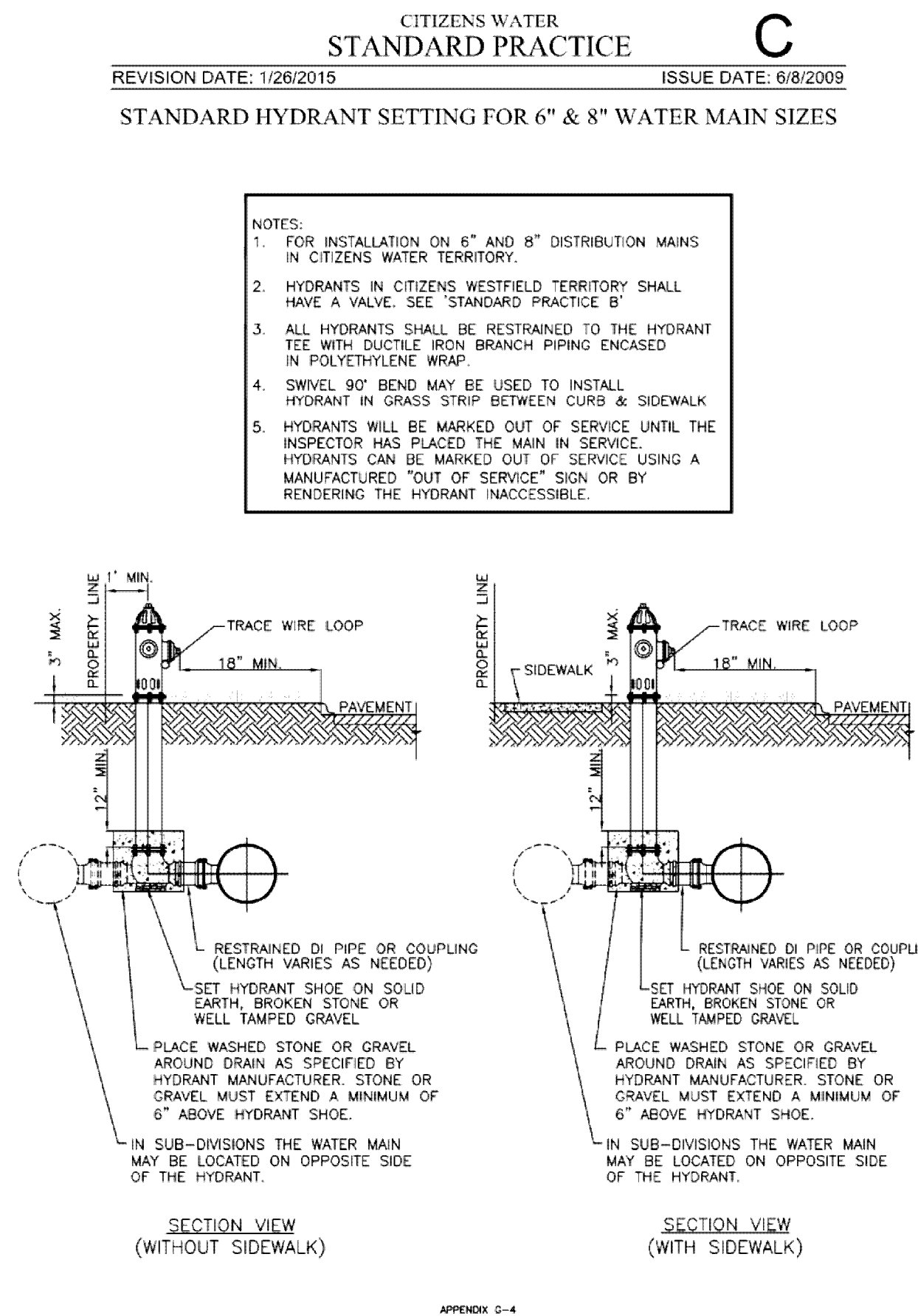
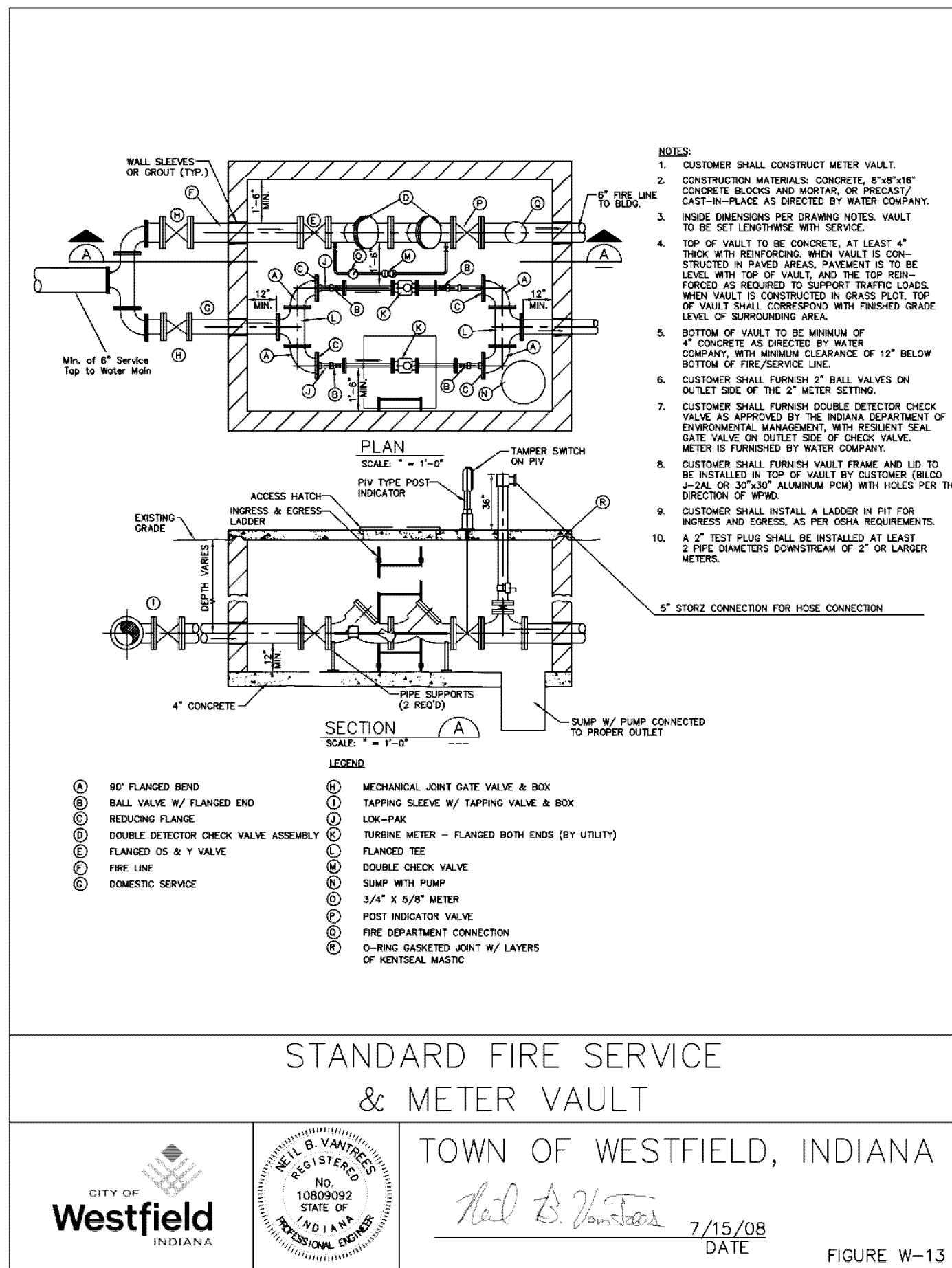
STEVEN SCOTT RUCKER P.E. 11390279

WEIHE ENGINEERS
Land Surveying/Civil Engineering
Landscape Architecture

PROJECT NO.: W15.0316
DWG NAME: W150316-C801.dwg
DESIGNED BY: RLW
DRAWN BY: RLW
CHECKED BY: RLW
DATE: 01-28-2016

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 846 - 6611
800 452 - 6408
317 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

LOCATION: J:\2015\W150316\Engineering\Drawings\W150316-C801.dwg
DATE/TIME: January 26, 2016 - 2:46pm
PLOTTER: HP DesignJet 500



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WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

DATE	BY	PROJECT NO.
10/18/2015	BJS	W15.0316
01/29/2016	BJS	W150316-C801.dwg
DESIGNED BY:	RLW	
DRAWN BY:	RLW	
CHECKED BY:	BJS	
DATE:	01/29/2016	

REVISIONS AND ISSUES	DATE	BY	REVISION
SUBMITTED FOR COUNTY SURVEYOR REVIEW	10/18/2015	BJS	
ISSUED FOR TAC REVIEW	01/29/2016	BJS	



STEVEN SCOTT RUCKER P.E. 11390279

UTILITY DETAILS
17651 SUN PARK DRIVE, WESTFIELD, IN 46074
Part of SWM Section 36, Township 18 North, Range 3 East, Washington Township, Hamilton County, Indiana

C803
PROJECT NO. W15.0316

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DATE/TIME: January 28, 2018 - 2:46pm

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DATE/PLT: January 28, 2016 - 2:46pm
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CHAPTER 400 STORM SEWER PIPES AND OPEN CULVERT MATERIALS

SECTION 401 GENERAL

401.01 Introduction

This section covers all work necessary for the construction of the storm sewer piping systems and related items complete, including catch basins and inlet drains, manholes, junction chambers, diversion chambers, outfall structures, and miscellaneous structures.

This specification covers the following types of materials for storm sewers, culverts, underdrains, inlet drains, conduits, and miscellaneous applications:

1. Reinforced Concrete Pipe and Fittings
2. Polyvinyl Chloride Pipe (PVC)
3. Corrugated Metal Pipe
4. Structural Plate Arches
5. Aluminum or Aluminized Steel Pipe and Structural Plate
6. Multi-Plate Pipe and Pipe Arches
7. PVC Composite Pipe
8. Corrugated Polyethylene Pipe - SSD (Perforated and Non-Perforated)

All lots shall have access to a subsurface or storm drain or open ditch. Storm sewer systems shall have a minimum of four hundred (400) feet between structures.

This specification requires project plans and construction specifications to be submitted to and approved by all appropriate regulatory agencies prior to beginning any work. Before construction and preferably before fabrication, the Contractor shall submit to the Town of Westfield Public Works Department for approval calculations on the thickness or strength class and drawings showing pipe lengths, joints, and other construction and installation details.

Pipe Marking

Each length of pipe shall bear the name or trademark of the manufacturer, the location of the plant, and the date of manufacture. Each length shall likewise be marked to designate the class or strength of the pipe. The marking shall be made on the exterior or interior of the pipe barrel near the bell or groove end and shall be plainly visible.

401.02

Minimum Size for Storm Sewers

The minimum diameter of all storm sewers shall be 12 inches. When the minimum 12-inch diameter pipe will not limit the rate of release to the required amount, the rate of release for detention storage shall be controlled by an orifice plate or other device, subject to acceptance of the Town of Westfield Public Works Department.

401.03

Materials

Manholes, inlets, and Other Structures
Storm sewer manholes and inlets shall be constructed of precast reinforced concrete. Material and construction shall conform to the latest edition of the Indiana Department of Transportation (INDOT) "Standard Specifications", Sections 702 and 720.
Materials for manholes, junction chambers, diversion chambers, and miscellaneous comply with the following:

1. Cement shall be Portland cement and shall meet the requirements of ASTM Specification C150, ACI 301, and ACI 318. Concrete for precast manhole sections shall be 3000 psi concrete. Monolithic manholes shall use 4000 psi concrete. Ready-mix concrete shall conform to ASTM C94, Alternate 2. Maximum size of aggregate shall be 3/4 inch.
Slump shall be between 2 and 5 inches.
2. Forms for chamber and structures shall be plywood or other approved material. Steel forms shall be used for the inside face of monolithic concrete manholes.
3. Reinforcing steel shall conform to ASTM A615, Grade 60 deformed bars, or ASTM A616 Grade 60 deformed bars.

4. Mortar Mortars:

- a. Sand - ASTM Designation C144, passing a No. 8 sieve.
- b. Cement - ASTM Designation C150, Type 1.
- c. Water - may be potable.

The manufacturer shall provide openings for sewers entering and leaving the manhole. Any additional openings needed to be made in the field shall be made by drilling holes at least 1/2 inch in diameter with a maximum spacing of 3 inches.

Manhole steps shall be made from a steel reinforcing rod encapsulated in a copolymer polypropylene resin. The manhole steps shall equal or exceed OSHA requirements.

Any other special manholes, junction chambers, diversion chambers, and miscellaneous concrete structures shall be constructed as detailed on the drawings.

Manhole bases shall be set on a minimum of six (6) inches of 8 concrete.

Concrete ends sections shall have a minimum of a twenty-four (24) inch toe plate, either poured in place or precast, bolted to the end section per Standard Detail (ST-30). Corrugated end sections with toe plates shall require Westfield Public Works approval.

Catch Basins

During construction, precautionary measures such as adequate screening of grades shall be maintained to deter earth and other materials from entering the drains.

Catch Basins, for sediment control, locations to be determined by a Professional Engineer, and approved by the Town of Westfield Public Works Department. Catch Basins shall be located within easily accessible dedicated easements or right of way of sufficient size to facilitate the required maintenance of these structures.

Catch basins and curb inlet structures which are two (2) feet by two (2) feet in size shall not have a depth deeper than four (4) feet from the invert of the lowest pipe to the lowest part of the rim elevation of the casting. All structures which do not meet this criteria shall be a manhole type which is forty-eight (48) inches in diameter.

Castings

Cast iron or ductile iron frames and gratings for catch basins and drain inlets shall be as shown on the drawings. Bearing surfaces shall be clean and shall provide uniform contact. Castings shall be tough, close-grained gray iron, sound, smooth, clean, free from blisters, blow holes, shrinkage, cold shuts, and all defects and shall conform to ASTM A48 Class No. 30-B.

During construction, precautionary measures such as adequate screening of grades shall be maintained to deter earth and other materials from entering the drains.

The following castings types are required:
1. Manholes - Neenah R 1772 A or equivalent
2. Beehive inlets - Neenah R 1442 or equivalent
3. "Roll Curb" inlets - Neenah 3501 - TR or TL or equivalent
4. "Chair Back" Curb Inlet - Neenah 3267 - 10V or equivalent
5. Other types shall require approval of the Westfield Public Works Department.

Curb inlets castings which possess open backs or have grate bars parallel to traffic flow (are not "bicycle safe") shall not be accepted by the Westfield Public Works Department.

Storm sewer castings manhole covers, beehive inlets, curb inlets or other approved castings shall have the following phrases cast in recessed letters two (2) inches in height:
1. "Storm Sewer"
2. "Drains to River" or "Drains to Waterway"
3. "Dump No Waste"

4. Other phrases shall require approval of the Westfield Public Works Department.
All castings frames shall have a horizontal bearing surface around the entire perimeter of the frame in order to support the cover or grate.

Bench Walls

Bench walls shall be shaped and formed for a clean transition with proper hydraulics to allow the smooth conveyance of flows through the structure. The bench wall shall form a defined channel, to a minimum height of the spring line of the pipe. Bench walls shall be formed using full depth Class "A" concrete. Solid concrete block, stone or sand shall not be permitted as a base or filler for the construction of the bench wall.

Reinforced Concrete Pipe and Fittings

Reinforced concrete pipe and fittings shall conform to ASTM C76, latest revision, for circular pipe and ASTM C507 for elliptical pipe.

Reinforced concrete pipe and fittings for normal conditions shall be reinforced in accordance with ASTM C76, Class II, IV or V, Wall B (minimum). Acceptance shall be on the basis of Subsection 4.1.1. of ASTM C76.

Circumferential reinforcing in circular pipe shall be required. Only with approval from the Westfield Public Works Department will elliptical reinforcing or combination of elliptical and circumferential reinforcing or part circular reinforcing shall be permitted, in circular pipe.

Concrete pipe shall be storm cured and shall not be shipped from point of manufacture for at least five days after having been cast.

Concrete pipe shall be reinforced with a minimum of four hundred (400) steel reinforcement bars (rebar) in accordance with ASTM D 4771. Lubricant for jointing shall be approved by gasket manufacturer.
All rubber gaskets similar to and equal to "Press-Seal" or "Tylor" conforming to ASTM Designation C443, latest revision. The gasket shall be attached to the spigot of the pipe and shall be the sole element depended upon to make the joint flexible and practically watertight. Butyl mastic joint sealant in rope or trowel applied form specifically made for permanently sealing joints in tongue and groove concrete sewer pipe. The material shall adhere tightly to the pipe surface and form a tight, flexible joint. The material shall have been in use for at least five years. Test results and material specifications shall be submitted to the Westfield Public Works Department and shall have been approved prior to use on the project.

Polyvinyl Chloride Pipe and Fittings

Polyvinyl chloride (PVC) pipe and fittings shall comply with ASTM D 3034.

Corrugated Metal Pipe and Pipe Arches

The following specifications shall govern the manufacture of the corrugated steel pipe and pipe arches.

1. Specifications for Zinc Coated (galvanized) Steel Sheets (ASTM A444).
2. Manufacture of Corrugated Steel Culverts and Underdrains (ASHTO M-36).
3. Structural Plate for Pipe, Pipe Arches, and Arches (ASHTO M-167).
4. Bituminous Coated Corrugated Steel Pipe and Arches (ASHTO M-190).
5. Sheet Material (ASTM A525).

Bituminous Coated Welded Seam Helically Corrugated Steel Pipe

The pipe shall be fabricated from flat coils. The base metal, spelter coating, and fabrication shall meet the applicable requirements of ASHTO M-36. Corrugations shall be 2-2/3-inch pitch by 1/2-inch depth. Each pipe shall have two annular corrugations rolled in each end. After the ends are rolled, the pipe shall be coated with bituminous material, inside and outside, to a minimum thickness of 0.05 inch as required by ASHTO M-190 for Type A coating.

Bituminous Coated and Powder Invert Welded Se Corrugated Steel Pipom Helicaltye

The pipe shall be fabricated from flat coils. The base metal, spelter coating, and fabrication shall meet the applicable requirements of ASHTO M-36. Corrugations shall be 2-2/3-inch pitch by 1/2-inch depth. Each pipe shall have two annular corrugations rolled in each end. After the ends are rolled, the pipe shall be coated with bituminous material, inside and outside, to a minimum thickness of 0.05 inch. In addition, bituminous material shall be applied to form a smooth pavement in the bottom 25% of pipe and in the bottom 40% of pipe arch as required by ASHTO M-190 for Type C coating.

Smooth Lined Welded Seam Helically Corrugated Steel Pipe

The pipe shall be fabricated from flat coils. The base metal, spelter coating, and fabrication shall meet the applicable requirements of ASHTO M-36. Corrugations shall be 2-2/3-inch pitch by 1/2-inch depth. Each pipe shall have two annular corrugations rolled in each end. Each pipe shall have two lifting lugs welded to the outside of the pipe. After the ends have been rolled, the pipe shall be coated with bituminous material, inside and outside, to a minimum thickness of 0.05 inch as required by ASHTO M-190 for Type A coating. The pipe shall be centrifugally lined on the inside with bituminous material to form a smooth surface which fits the corrugations to a minimum thickness of 1/8 inch above the crests of the corrugations. The bituminous lining material shall meet the requirements of ASHTO M-190.

Bituminous Coated Pipe Couplings

Coupling bands shall be the same base metal and spelter coating as the pipe. Bands shall be 0.064-inch thick and 10-1/2 inches wide. Bands shall be bituminous coated and shall have two corrugations 7-5/8 inches center to center. Bands 12-inch diameter through 30-inch diameter shall be one-piece, and 36-inch diameter through 88-inch diameter shall be two-piece. Band laps 12-inch diameter through 48-inch diameter shall be joined by one galvanized bar, bolt, and strap connector. Band laps 54-inch diameter through 96-inch diameter shall be joined by two galvanized bar, bolt, and strap connectors.

Aluminum Alloy Structural Plate

Aluminum alloy plates and fasteners intended for use in the construction of structural plate pipe and pipe arch for storm sewers shall meet the applicable requirements of ASHTO M-219. The plate shall be fabricated from aluminum alloy 5052 H141. The chemical composition of the plates shall conform to ASTM B209 alloy 5052. The corrugations shall have a pitch of 9 inches plus or minus 3/8 inch and depth of 2-1/2 inches plus or minus 1/8 inch. The inside crown depth of the corrugations shall be not less than 2 inches. The structural plate pipe or arches shall be assembled in accordance with the manufacturer's erection instructions and in accordance with the drawings.

Aluminized Steel Pipe and Arches

Aluminized coated corrugated steel pipe and pipe arch intended for use in the construction of storm sewers shall meet the applicable requirements of ASHTO M-36. Sheet material shall meet the latest revision of ASTM A525 and ASHTO M-274. The coils from which the pipe is produced shall be coated with 1.0 ounce per square foot of commercially pure aluminum. Pipe shall be furnished circular or as a pipe-arch shape as required and shall be fabricated with helical corrugations and a continuous welded seam extending from end to end of each length of pipe. Each end of each pipe with the welded seam shall have two annular corrugations reformed to permit joining with huffer bands. Coupling bands shall be huffer bands.

Multi-plate Pipe and Pipe Arches

Multi-plate pipe and pipe arch structures shall be in accordance with ASHTO M-167. They shall be made with steel sections with corrugations 6 inches wide by 2 inches deep running at right angles to the section. Bolts and nuts shall be special heat-treated galvanized 3/4-inch diameter bolts in accordance with ASTM specifications. Multi-plate pipes and pipe arches shall be designed in accordance with the manufacturer's design criteria and in accordance with the drawings. Detailed instructions regarding erection shall be furnished by the manufacturer.

PVC Composite Pipe and Fittings

ABS or PVC composite pipe and fittings shall conform to ASTM D 2680, Latest Revision.

Corrugated Polyethylene Pipe and Fittings

Corrugated polyethylene pipe shall comply with the requirements fore materials, test methods, dimensions, and marking in accordance with ASHTO M-252 for pipe diameters 6" to 10", ASHTO M-284 for pipe diameters of 12" - 48", and ASHTO MP7 for 54" and 60". The resin material shall meet ASTM D3350 cell classification 3354A00C. The pipe lengths shall be connected using a gasketed, bell and spigot joint. This joint shall consist of a factory installed, gasketed double bell polyethylene coupling, a factory welded bell or integral bell. The spigot end of the pipe shall be furnished with a factory installed elastic profile "oring" rubber gasket that meets ASTM F-477.

The pipe shall be shipped with a removable wrap to protect the gasket. Provide lubrication to the joint prior to pushing together. At least two (2) corrugations of the spigot end must insert into the bell end. All HDPE pipe shall be certified through the Plastic Pipe Institute (PPI) Third Party Certification Program. All HDPE pipe delivered and installed shall bear the Third Party Administered PPI Seal.

Subsurface Drain Tiles

Double wall smooth bore corrugated polyethylene tile, manufactured under specification ASTM F 667, shall be required for all subsurface drain tile installed in swales. Single wall corrugated polyethylene drain tile shall be required for curb sub-grade drainage. Polyethylene tile shall possess male and female pipe ends, which allow the construction of overlapping, gasket pipe joints, in conformance with the requirements of ASTM D 3212. The gasket material shall conform to all requirements of ASTM F 477. As an alternative, pipe joints utilizing external couplings bonds will be accepted, provided the minimum ASHTO requirements for satisfying soil tightness are also achieved. Storm sewer pipe shall be of the size shown on the drawings and shall meet all requirements of these specifications. Subsurface drains (SSD) shall have a minimum of four hundred (400) feet between structures. Subsurface drains shall have clean-outs installed every 400 feet or at changes in direction.

All rubber gaskets similar to and equal to "Press-Seal" or "Tylor" conforming to ASTM Designation C443, latest revision. The gasket shall be attached to the spigot of the pipe and shall be the sole element depended upon to make the joint flexible and practically watertight. Butyl mastic joint sealant in rope or trowel applied form specifically made for permanently sealing joints in tongue and groove concrete sewer pipe. The material shall adhere tightly to the pipe surface and form a tight, flexible joint. The material shall have been in use for at least five years. Test results and material specifications shall be submitted to the Westfield Public Works Department and shall have been approved prior to use on the project.

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Bituminous Coated and Powder Invert Welded Se Corrugated Steel Pipom Helicaltye

The pipe shall be fabricated from flat coils. The base metal, spelter coating, and fabrication shall meet the applicable requirements of ASHTO M-36. Corrugations shall be 2-2/3-inch pitch by 1/2-inch depth. Each pipe shall have two annular corrugations rolled in each end. After the ends are rolled, the pipe shall be coated with bituminous material, inside and outside, to a minimum thickness of 0.05 inch. In addition, bituminous material shall be applied to form a smooth pavement in the bottom 25% of pipe and in the bottom 40% of pipe arch as required by ASHTO M-190 for Type C coating.

Smooth Lined Welded Seam Helically Corrugated Steel Pipe

The pipe shall be fabricated from flat coils. The base metal, spelter coating, and fabrication shall meet the applicable requirements of ASHTO M-36. Corrugations shall be 2-2/3-inch pitch by 1/2-inch depth. Each pipe shall have two annular corrugations rolled in each end. Each pipe shall have two lifting lugs welded to the outside of the pipe. After the ends have been rolled, the pipe shall be coated with bituminous material, inside and outside, to a minimum thickness of 0.05 inch as required by ASHTO M-190 for Type A coating. The pipe shall be centrifugally lined on the inside with bituminous material to form a smooth surface which fits the corrugations to a minimum thickness of 1/8 inch above the crests of the corrugations. The bituminous lining material shall meet the requirements of ASHTO M-190.

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Aluminized Steel Pipe and Arches

Aluminized coated corrugated steel pipe and pipe arch intended for use in the construction of storm sewers shall meet the applicable requirements of ASHTO M-36. Sheet material shall meet the latest revision of ASTM A525 and ASHTO M-274. The coils from which the pipe is produced shall be coated with 1.0 ounce per square foot of commercially pure aluminum. Pipe shall be furnished circular or as a pipe-arch shape as required and shall be fabricated with helical corrugations and a continuous welded seam extending from end to end of each length of pipe. Each end of each pipe with the welded seam shall have two annular corrugations reformed to permit joining with huffer bands. Coupling bands shall be huffer bands.

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The pipe shall be shipped with a removable wrap to protect the gasket. Provide lubrication to the joint prior to pushing together. At least two (2) corrugations of the spigot end must insert into the bell end. All HDPE pipe shall be certified through the Plastic Pipe Institute (PPI) Third Party Certification Program. All HDPE pipe delivered and installed shall bear the Third Party Administered PPI Seal.

CHAPTER 500 INSTALLATION OF STORMWATER FACILITIES

SECTION 501 GENERAL

501.01

Pipe Cover.

Grade and Separation from Sanitary Sewers

Pipe

Pipe grade shall be such that, in general, a minimum of 2.0 feet of cover is maintained over the top of the pipe. If the pipe is to be placed under pavement, then the minimum pipe cover shall be 2.5 feet from top of pavement to top of pipe. Minimum slopes shall be maintained between inlets, manholes and inlets to manholes. Final grade shall be set with full consideration of the capacity required, sedimentation problems, and other design parameters. Minimum and maximum allowable slopes shall be those capable of producing velocities of between 2.5 and 10 feet per second, respectively. When the sewer is flowing full, Maximum permissible velocities for various storm sewer materials are listed in Table 501-1. A minimum of 2.0 feet of vertical separation between storm sewers and sanitary sewers shall be required. When this is not possible, the sanitary sewer must be encased in concrete or ductile iron within 5 feet, each side, of the crossing centerline.

Rear Yard Swale

Rear yard swales shall have a minimum slope of 2% gradient. Swales less than a 2% gradient are required to have double-wall perforated drain tile installed two (2) feet below the invert of the swale. Minimum swale slope shall be greater than 1% gradient. Subsurface drains shall have a minimum slope of .5% gradient. Proposed road grades will be required to be graded within two (2) inches of the proposed subgrade prior to installation of SSD. Trench width for SSD shall be a minimum of three (3) inches on both sides of the SSD, with a minimum trench width of twelve (12) inches.

501.02

Alignment

Storm sewers shall be straight between manholes and/or inlets.

501.03

Manholes/Inlets

All Manholes and inlets must be pre-stamped with an appropriate message per the Town of Westfield Public Works Department Standards. Manholes and/or inlets shall be installed to provide human access to continuous underground storm sewers for the purpose of inspection and maintenance. The casting access minimum inside diameter shall be no less than 22 inches or a rectangular opening of no less than 22 inches by 22 inches. Manholes shall be provided at the following locations:

1. Where two or more storm sewers converge.
2. Where pipe size or the pipe material changes.
3. Where a change in horizontal alignment occurs.
4. Where a change in pipe slope occurs.
5. At intervals in straight sections of sewer, not to exceed the maximum allowed. The maximum distance between storm sewer manholes shall be as shown in Table 501-2.

In addition to the above requirements, a minimum drop of 0.1 foot through manholes and inlet structures should be provided. Pipe slope should not be so steep that inlets surcharge (i.e. hydraulic grade line should remain below rim elevation).

Manhole/inlet inside sizing shall be according to the Town of Westfield Public Works Department Standards. Note that the Town of Westfield Public Works Department may require the applicant to provide pre-treatment BMPs prior to discharge of the storm sewer line into a pond.

501.04

Installation and Workmanship

Bedding and backfill materials around storm sewer pipes, sub-drains, and the associated structures shall be according to the Town of Westfield Public Works Department Standards. The specifications for the construction of storm sewers and sub-drains, including backfill requirements, shall not be less stringent than those set forth in the latest edition of the "NDOT Standard Specifications". Additionally, ductile iron pipe shall be laid in accordance with American Water Works Association (AWWA) C-600 and clay pipe shall be laid in accordance with either American Society of Testing Materials (ASTM) C-12 or the appropriate American Association of State Highway and Transportation Officials (AASHTO) specifications. Day/soaps on newly installed storm systems will not be allowed. Also, infiltration from cracks, missing pieces, and joints shall not be allowed. Variations from these standards must be justified and receive written acceptance from the Town of Westfield Public Works Department. All structures shall require inspection prior to backfill.

501.05

Special Hydraulic Structures

Special hydraulic structures required to control the flow of water in storm runoff drainage systems include junction chambers, drop manholes, stilling basins, and other special structures. The use of these structures shall be limited to those locations justified by prudent planning and by careful and thorough hydraulic engineering analysis. Certification of special structures by a certified Structural Engineer shall be required. The use of stormwater lift stations will not be permitted under any circumstances.

501.06

Connections to Storm Sewer System

Unless otherwise approved, perforated subsurface drain tiles, footer drains, or sump pumps lines shall connect to a storm structure. Storm sewer connections shall be provided by either precast or drilled holes, which are to be a minimum of two (2) inches larger the O.D. of the connecting tile. Drain tile connections shall be made with either "fit or wye" method. Blind connections to storm sewer pipes shall not be allowed. Subsurface tile as specified herein may be used to convey water collected in sump pits and footer drains to an acceptable storm sewer outlet, provided these drain tiles are properly sized to accept these flows. Gutter or building drains shall not be allowed to outlet directly into storm sewer systems. To allow any connections to the storm sewer system, provisions for the connections shall be shown in the drainage calculations for the system. Specific language shall be provided in the protective covenants, on the record plat, or with the parcel deed of record, noting the ability or inability of the system to accommodate any permitted connections, for example, sump pumps and footing drains.

1. Sump pumps installed to receive and discharge groundwater or other stormwater shall be connected only into "T" subsurface drain (SSD) lateral connection if provided. When connection to the SSD is not possible, discharge pipe must daylight. Sump pumps installed to receive and discharge floor drain flow or other sanitary sewage shall be connected to the sanitary sewers. A sump pump shall be used for one function only, either the discharge of stormwater or the discharge of sanitary sewage, each being connected to the respective receiving system only.
2. Footing drains and perimeter drains shall be connected only into "T" subsurface drain (SSD) lateral connection if provided. When connection to the SSD is not possible, discharge pipe must daylight.
3. All roof downspouts, roof drains, or roof drainage piping shall discharge onto the ground and shall not be directly connected to the storm drainage system. Variation from this requirement may be requested and granted by the Town of Westfield Public Works Department in special circumstances. No downspouts or roof drains shall be connected to the sanitary sewers.
4. Garage and Basement floor drains and water softener discharge shall not be connected to the storm sewers.
5. Swimming Pool drains shall not be connected to the storm sewers unless the water is dechlorinated prior to being connected to the storm sewer.

501.07

Inspection and Rejection of Pipe

The quality of all materials, the process of manufacture, and the finished pipe shall be subject to inspection and approval by the Westfield Public Works Department or designee. Such inspection may be made at the place of manufacture or on the work after delivery, or at both places; and the pipe shall be subject to rejection at any time on account of failure to meet any of the specifications' requirements even though sample pipes may have been accepted as satisfactory at the place of manufacture. Prior to being lowered into the trench, each pipe shall be carefully inspected and those not meeting the specifications shall be rejected and at once removed from the work.

The Westfield Public Works Department shall have the right to cut cores from such pieces of the concrete pipe as he deems proper such inspection and tests as he may wish to apply. The Developer/Contractor shall pay for the samples of an Independent Laboratory Testing.

Holes left by the removal of cores shall be filled in an approved manner by and at the expense of the manufacturer of the pipe. The Westfield Public Works Department shall also have the right to take samples of concrete after it has been mixed, or as it is being placed in the forms or molds, and to make such inspection and tests thereof as he may wish.

Any pipe which has been damaged after delivery will be rejected and replaced solely at the Contractor's expense.

501.08

Handling Pipe

Each pipe section shall be handled into its position in the trench only in such manner and by such means as the Westfield Public Works Department or designee approves as satisfactory. As far as practicable, the Contractor will be required to furnish straps, and other approved devices to permit satisfactory support of all parts of the pipe when it is lifted.

501.09

Notice to Westfield Public Works Department

The Westfield Public Works Department or designee shall be notified when the pipes are to be laid in the trench. At least 15 feet of the pipe shall, under ordinary circumstances, be laid before covering begins.

501.10

Laying Pipe

All pipes shall be reinspected for soundness and damage due to handling immediately before being lowered into the trench. Any pipe found to be unsound or damaged will be rejected and shall be removed immediately from the site of the work. No portion of a Storm Sewer pipe, open culvert, manhole, inlet, or subsurface tile system shall be installed directly or indirectly onto frozen ground or with frozen backfill materials. Where ground water is encountered, the contractor shall make every effort necessary to secure a dry trench bottom prior to installation of the storm water system. The contractor shall be required to maintain the trench level below the base of the excavation. The Town, nor the Westfield Public Works

C. Support
The trench shall be excavated to provide a uniform and continuous bearing of support for the pipe barrel and joints.

D. Bedding and Backfill
Backfilling shall be initiated as soon as possible after the placement of pipe in the trench and performed in a manner so as not to damage the pipe or pipe coating. The Utility has the right to alter the backfill procedure, so as to give maximum protection to the pipe and coating. All top excavations are required to be backfilled with granular fill to the point 2' above the water main. For the utility backfill requirements, reference CW Standard Practice Drawing "A.1" - Water Main and Service Backfill Requirements.

No trash, e.g., sticks, welding rod, stumps or refuse material of any kind, shall be buried within the trench. After the pipe has been properly installed and the trench has been properly backfilled by the Contractor/Developer, excess excavated material shall be removed from the construction site and properly disposed in accordance with all Federal, State, and Local regulations by the Contractor/Developer.

All backfill in public right-of-way shall conform to the rules and regulations of the prevailing governmental authority. All backfill shall conform to the joint manufacturers specifications, and shall be clean, non-corrosive, compatible, and free of rock.

E. Sewer and Drainage Flow Maintenance
Adequate provisions shall be made for the continuous flow and operations of sewers, drains and watercourses encountered during construction. Structures that may have been disturbed shall be satisfactorily restored to avoid contamination of the water main at the expense of the Contractor/Developer.

9.06 Erosion Control
The Contractor/Developer shall be responsible to ensure that each applicable construction site shall be in compliance with all the applicable sections of 327 Indiana Administrative Code (IAC) 15-5 (Rule 5).
<http://www.in.gov/iden/4902.htm>

9.07 Contaminated Soils
A. General
Contaminated soils encountered during construction of the water main facilities shall require immediate cessation of construction and notification to the Utility. The Contractor/Developer shall comply with all Local, State and Federal regulations including notification of authorities regarding the contaminated materials.

B. Water Main and Service Line Material Requirements
Only DI pipe, inert gasket material and fittings shall be used in areas in close proximity of contaminated soils. The pipe must be double-wrapped and secured appropriately at the joints with cross-laminated polyethylene wrap.

C. Testing
The Contractor/Developer shall be responsible for all corresponding fees related to contaminated soil (e.g., sampling, testing, permits, disposal, etc.).

D. Disposal of Contaminated Soil
Contractor/Developer shall dispose of contaminated soils in accordance with all Local, State and Federal regulations. Contractor/Developer shall be listed solely as the waste generator.

The Contractor/Developer shall notify the Utility of all projects involving contaminated soils including all supporting documentation.

9.08 Service Taps
Tap placement shall be a minimum of 3' from any existing fitting or tap. Any deviation from 3' must be approved by the Utility.

No "back side" taps are allowed on any size water main, unless approved by the Utility.

All 1-1/2" and 2" taps require installation of a swing joint between the tap and curb stop. See CW Standard Practice Drawing "N - 1-1/2" & 2" Service Line Swing Joint.

9.09 Pipe Installation
A. General
1. Materials Inspection
Before lowering any materials into the trench for assembly, the pipe, fitting, valve or fire hydrant shall be thoroughly inspected by the Contractor/Developer. Any defective, damaged or unsound material shall not be installed and shall be immediately removed from the job site.

2. Materials Cleanliness
When the pipe is installed, it shall be free of all foreign matter and the interior cleaned by swabbing before it is joined in the trench. No debris of any kind shall be left in the bell and/or spigot.

The pipe swabbing shall be performed by using pipe swab brushes comprised of Tampico brush material.

3. Pipe Closures
When necessary, the open ends of the installed pipe shall be closed by approved means and at no time shall trench water be permitted to enter the pipe.

4. Pipe Cutting
When cutting pipe for inserting valves, fittings or closure pieces, it shall be performed in a neat and workmanlike manner without damage to the pipe.

PVC or DI pipe to be inserted into a push-on joint bell end shall have the cut end beveled in accordance with the manufacturer's instructions so as to prevent the edge of the pipe from cutting or tearing the gasket as the spigot end is inserted into the bell of the adjoining pipe or fitting.

PVC pipe inserted into a fitting, valve or other appurtenance with a MJ connection shall have the factory tapered or beveled end removed from the end of the pipe to make the pipe end square.

When cutting HDPE pipe, the cut end of the pipe shall be squared as much as possible prior to facing. Field cutting of HDPE pipe 8" in diameter or less can be accomplished without damaging the pipe ends due to melting by using a pipe saw. HDPE pipe with a diameter larger than 8" is a chain saw with a glycerin based lubricant shall be used.

5. Concrete Thrust Blocking
Blocking shall be installed as shown on the plan drawings and as specified in Section 9.15, "Thrust Blocking".

6. Charging, Flushing, Air Removal and Hydrostatic Testing
Any charging, flushing, air removal and hydrostatic testing shall be conducted as specified in Section 9.19, "Charging, Flushing, Air Removal and Hydrostatic Testing" and Appendix E-Construction Testing Methods.

B. Polyvinyl Chloride (PVC) Pipe
1. Installing Pipe
After placing a length of PVC pipe in the trench, the spigot for the joints shall be properly positioned and the gasket lubricated in accordance with manufacturer's requirements. The spigot end shall then be centered in the bell, the pipe forced to the marks on the pipe and brought into true alignment.

No more than two (2) joints shall be exposed at any one time.

2. Detection of Pipe Joints
The deflection of pipe joints shall not be allowed.

3. Mechanical Pipe Joints
After the preparation of the pipe ends for a mechanical joint connection, the retainer gland shall be installed such that the bolts may be tightened in accordance with the manufacturer's recommendations. The gasket shall be lubricated per the manufacturer's instructions and inserted in the gland toward the bell. The bolts shall be drawn up uniformly on opposite sides of the mechanical joint fitting per the manufacturer's torque and specification procedures.

4. Pipe Joint Restraints
Pipe joint restraints shall be installed as specified in Section 9.16, "Pipe Joint Restraint Devices." See CW Standard Practice Drawing "O"- Installation of Restraints.

5. Tracing Wire and Identification Ribbon
The tracing wire and identification ribbon shall be installed as specified in Section 9.17, "Installation of Tracing Wire and Identification Ribbon".

C. Ductile Iron (DI) Pipe and Fittings
1. Installing Pipe
Following the placement of a length of DI pipe in the trench, the gasket material for the joint shall be properly positioned and lubricated in accordance with the manufacturer's recommendations. The spigot end shall then be centered in the bell, the pipe forced to the marks on the pipe and brought into true alignment.

2. Permissible Deflection of Pipe Joints
The degree of deflection shall not exceed the manufacturer's specifications.

3. Preparation of Pipe Ends
Before installing the pipes, all lumps, blisters, and excess coat or coating and other foreign material shall be removed from the inside of the bell and outside of the spigot ends of each pipe. The pipe surfaces shall then be wiped until clean and dry.

4. Mechanical Joint Fittings
After the preparation of the pipe ends for a mechanical joint connection, the retainer gland shall be installed such that the bolts may be tightened in accordance with the fitting and gland manufacturer's recommendations. The gasket shall be lubricated per the manufacturer's instructions and inserted in the bell by drawing the gland toward the bell. The bolts shall be drawn up uniformly on opposite sides of the mechanical joint fitting per the manufacturer's torque and specification procedures.

5. Pipe Joint Restraints
Joint restraints shall be installed in accordance with the manufacturer's guidelines as needed to provide a continuous secure pipe that is not affected by the resultant thrust forces of the distribution system, as specified in CW Standard Practice Drawing "U"-Installation of Restraints.

6. Restrained Joint Pipe
Restrained joint pipe shall be installed in accordance with the manufacturer's specifications.

7. Polyethylene Wrap
Cross laminated poly wrap shall be required.

8. Tracing Wire and Identification Ribbon
The tracing wire and identification ribbon shall be installed as specified in Section 9.16, "Installation of Tracing Wire and Identification Ribbon".

D. Polyethylene (HDPE) Pipe
1. Materials Inspection
Before lowering any materials into the trench for assembly, the HDPE pipe, fitting, valve assembly or hydrant assembly shall be thoroughly inspected by the Contractor/Developer so as to determine any defects, damage or unsoundness of the material. Any defective, damaged, or unsound pipe or appurtenance shall be rejected. At any point along the polyethylene pipeline where 100% of the wall thickness has been penetrated or removed by way of marking, gouging or abrasion, that damaged section of pipe shall be deemed unsound and shall be removed and replaced with a new, clean section of polyethylene pipe.

2. Water Stop/Thrust Restraints
To help minimize the effects of thermal contraction and expansion for HDPE pipe, water stops shall be installed as shown on CW Standard Practice Drawing "U"-Minimum Requirements for Water Stop Installation. Water stops shall be required at every change in materials.

Minimum Soil Bearing Surface Area Required for Water Stop Installation in

Undisturbed Material (Assuming 3,000 psi Soil Bearing Capacity)		
Pipe Size	Minimum Bearing Surface (ft2)	
6" through 12"	8	
16"	15	
20"	24	
24"	36	

3. Allowable Deflection of HDPE Pipe

The maximum allowable deflection of HDPE pipe shall not exceed the manufacturer's recommendations. Where the maximum allowable deflection is insufficient to achieve the required change in direction, a molded or fabricated butt-fused bend or MJ fitting with MJ adaptor shall be used. Deflection of HDPE pipe shall not be permitted at any in-line, butt-fused, fabricated or molded fitting.

4. Tracing Wire and Identification Ribbon

The tracing wire and identification ribbon shall be installed as specified in Section 9.17, "Installation of Tracing Wire and Identification Ribbon".

5. River Weights

Where HDPE pipe is installed at stream crossings by means of open cutting the streambed, river weights shall be used to prevent the HDPE pipe from floating during installation. The weights shall be composed of concrete.

6. Joining of HDPE Pipe to HDPE Pipe or HDPE Fittings

HDPE pipe shall be joined to successive lengths of HDPE pipe or HDPE fittings by means of butt-fusion or sidewall fusion.

On all poly pipe fusions it will be required to provide a quality control report that includes records of the profile of every poly fusion with all information recorded from the Datalogger. No poly pipe will be charged until these documents have been presented and verified for accuracy. All joints will be required to be numbered and will require measurements.

The Contractor shall furnish the Utility evidence, at the pre construction meeting, that workers performing the fusion of HDPE materials have been trained in the procedure being used in accordance with the recommendations of the pipe manufacturer and the equipment manufacturer. Where sidewall fusion is to be employed, a HDPE sidewall outlet shall be used. Mechanical type taps shall not be permitted on HDPE pipe.

The use of rollers during transport of HDPE pipe during installation is required by the Utility.

An MJ adaptor and back-up ring shall be used to connect HDPE pipe to valves.

When butterfly valves are used, care shall be taken to ensure the full operational range of the valve disk.

When HDPE pipe is to be joined to a mechanical joint fitting, it shall be accomplished by means of a mechanical joint adapter fused to the pipe.

10. Joining of HDPE Tubing to Compression Fittings

When connecting HDPE tubing to compression fittings, the use of a stainless steel insert shall be used to prevent toe-in of the tubing.

9.10 Coating Pipe

A. General Requirement

The installation of casing pipe shall conform to these Standards and any Federal, State, Local or applicable railroad requirements, as specified in CW Standard Practice Drawing "I"-Typical Boring Casing Pipe.

Nominal Diameter of Main	Nominal Diameter of Casing Pipe
4"	10" HDPE
6"	12" HDPE
8"	16" HDPE
10"	
12"	24" STEEL
16"	30" STEEL
20"	36" STEEL
24"	36" STEEL
30"	42" STEEL
36"	48" STEEL
48"	60" STEEL

B. Carrier Pipes

PVC, polyethylene and ductile iron are allowed. All PVC and DI joints shall be restrained, with spacers, tracing wire and all ends sealed.

C. Casing Spacers

For 4' and larger pipe, casing spacers are required every 10' or three (3) per section (one (1) at each end and one (1) in the middle).

- 4' separation from edge of main to end of casing (5/4" - 1 1/4").
- 6' separation from main to end of casing (1 1/2" - 2").
- 8' separation from edge of main to end of casing (4" and larger).

E. Tracing Stations

Tracing stations shall be installed at both ends of casing pipe and as shown in CW Standard Practice Drawing "N"-Tracing Station.

F. Isolation of Water Main in Casing Pipe

- Valves shall be provided as designed by the Utility.
- Access points shall be installed within the limits of the valves to relieve possible pressure (e.g., air-relief valve, blow-off, flushing hydrant, etc.).

9.11 Stream Crossing

A. General Requirement

All stream crossing installations shall be in compliance with all sections of 327 Indiana Administrative Code (IAC) 8-3.2-10 Water mains near surface water bodies. <http://www.in.gov/legislative/lr/703270/ADO000.PDF>

In addition, the Utility has additional requirements as specified in CW Standard Practice Drawing "H"-Typical Channel Crossing. All stream crossing installations require a minimum of 36" of cover. Valves shall be provided at both ends of each crossing, unless directed by the Utility. River crossing pipe may be required by the Utility under certain conditions. Marker and posts shall be provided at both ends of crossing. Only HDPE, DI or pre-stressed concrete pipe shall be used. All joints shall be restrained.

Marker pit and permanent taps shall follow CW Standard Practice Drawing "T.1"-Standard Service Line Installation and Setting for 5/8", 3/4" and 1" Meter in Single Pit. Meter pit installation shall be adjacent to water main, perpendicular to valve, unless directed by the Utility.

In the event that 10' of horizontal separation between the outside edge of the water main and/or service line and the edge of the typical water line of a water body is unattainable, the installation of the water main shall conform to the guidelines set for installation of a water main under a body of water, unless directed by the Utility.

B. Installation Method

The installation of the stream crossing shall conform to the requirements of the permitting agency, be constructed in such a manner as to protect the water main from erosion and restore the stream banks and bottom to their original condition.

C. Erosion Control

The Contractor/Developer shall be responsible to ensure that each applicable construction site shall be in compliance with all the applicable sections of 327 Indiana Administrative Code (IAC) 15-5 (Rule 5).
<http://www.in.gov/iden/4902.htm>

9.12 Valves, Valve Boxes, Fittings and Blow-offs

A. Valves

Gate valves and pipe fittings shall be set and joined to new pipe in the manner specified for cleaning, laying and joining pipe sections. All 16" and larger butterfly valves must be operated to determine the number of total rounds. The number counted, as well as, the valve serial number must be documented accordingly.

B. Valve Boxes

Cast iron valve boxes shall be firmly supported, maintained centered and plumb over the operating nut of the valve, with the box cover flush with the surface of the finished grade or at such other level as may be directed by the Utility. The valve box, if necessary, shall be supported by means of three (3) "S"-hooks hung from the top of the riser pipe to prevent the box from sliding down the riser, as specified in CW Standard Practice Drawing "G"-Standard 8" Valve Box and Cover. Westfield - Refer to Standard Drawing for Westfield Gate Valve and Box.

C. Valve Box Riser

A solid ribbed 8" diameter PVC riser shall be required and shall be centered over the valve. If the valve is 6" deep or greater, a valve nut extension shall be provided in order to bring the operating nut to a depth, 4' below finished grade. The key nut extension shall have a centering mechanism. Westfield - Refer to Standard Drawing for Westfield Gate Valve and Box.

D. Valves shall be supported with proper backfill and blocking so that pipe shall not be required to support the valve's weight. Valves shall be installed so that the operating stem is in a true vertical position.

9.13 Setting Meter Pits, Vaults and Hot Boxes

A. General

Meter pits, vaults and hot boxes shall be set to finished grade as specified in CW Standard Practice Drawing "S"-Standard Installation for Multiple Meter Settings, CW Standard Practice Drawing "T"-Standard Service Line Installation and Setting for 5/8", 3/4" and 1" Meter in Single Pit, and CW Standard Practice Drawing "T.1"-Standard Service Line Installation and Setting for Two (2) 5/8" Meters in Single Pit. Westfield - Refer to Standard Drawings for Water Meter and Pit.

B. Location

Meter pits, vaults and hot boxes shall be installed in an easily accessible location. Meter pits and vaults shall not be installed in a traffic area or driveway unless appropriate means of protection are provided, such as concrete filled bollards. Pits, vaults and installed and heated enclosures shall not be installed in drainage ditches or areas prone to flooding.

C. Meter Pit Lid, Ring and Riser

The top of the meter pit lid shall be flush with finished grade.

D. Vaults

All vaults shall be equipped with a sump pit or drain opening. Vaults shall be set at finished grade. Vaults shall be installed on an 8" thick minimum granular bed of stone or gravel only. Lids shall open in the direction from the outside to the center of the vault. The lid shall be aligned to center above or below the sump or ladder.

9.14 Hydrants

A. General Location

Fire hydrants shall be placed in the field as shown on the approved plans, as specified and in CW Standard Practice Drawing "D"-Cold-to-Sac Water Main and Hydrant Installation and CW Standard Practice Drawing "E"-Cold-to-Sac Water Main with Hydrant at Intersection. Hydrants shall be installed consistent with CW Standard Practice Drawing "B"-Standard Hydrant Setting for 12" and Larger Water Main and CW Standard Practice Drawing "C"-Standard Hydrant Setting for 6" and 8" Water Main. Hydrants shall not be placed on

the street side of the water main unless approved by the Utility.

B. Drainage at Hydrant

#8 washed stone or equivalent shall be placed below and around the base of the hydrant as shown in with CW Standard Practice Drawing "B"-Standard Hydrant Setting for 10" and Larger Water Main and CW Standard Practice Drawing "C"-Standard Hydrant Setting for 6" and 8" Water Main. Sand shall not be used for this purpose.

C. Branch Valves

Branch valves shall be provided on every hydrant on main sizes 12" and larger and all hydrants for Westfield.

D. Alignment

Hydrants shall be aligned vertically plumb. Blocking shall be installed to ensure the hydrant is not misaligned. The break-ring shall be installed within 3' of finished grade.

E. Bollards

Where hydrant protection is necessary, bollards shall be installed in accordance with the Indiana Fire Code, Section 312. http://www.archwire.org/standard/gov/in/fire/in_fire_dfyu.txt

9.15 Thrust Blocking

A. Design

Concrete kicker blocks and thrust blocks shall be sized for the internal static water pressure of 150 psi plus 100 psi water hammer. The thrust blocks shall be designed to allow the thrust forces in the pipeline to be borne by the adjacent soils without allowing a failure in the pipeline. For design purposes, all soils are assumed to be classified as Type C soil as defined in ASTM D2488.

B. Construction

The thrust block shall be constructed against the vertical face of undisturbed earth or sheeting left in-place. The concrete shall not encase joints or bolts in the piping.

The thrust block shall be constructed to allow the hydrant to drain.

The required surface bearing area is provided below

Minimum Soil Bearing Surface Area (ft2) (Assuming 3,000 psi Soil Bearing Capacity)			
Pipe Size	Horizontal Bends	Tees or Dead End	
22-1/2"	45"	90"	
6"	6	8	6
8"	6	8	6
12"	4	6	11
16"	6	11	22
20"	9	18	36
24"	13	27	50
30"	20	45	78
36"	31	59	115
			80

9.16 Pipe Joint Restraint Devices

Joint restraint devices shall be used at all bends and fittings in-place of thrust blocks as specified in CW Standard Practice Drawing "O"-Installation of Restraints. Joint restraint devices shall be required for the following installations:

A. Fire Hydrants

B. Bends

C. Reducers

D. Line Valves

E. Fittings

F. Blowoffs

G. Dead-ends

9.17 Installation of Tracing Wire and Identification Ribbon

Contractor shall install tracing wire along all pipe installations. Contractor shall install identification ribbon along all pipe installations.

A. #10 gauge solid copper tracing wire shall be laid directly on top of the water main. The wire shall be attached to the pipe at a maximum of 20' intervals.

C. The Contractor shall ensure that the tracing wire attached to the main is functional. The results of continuity test shall be documented and forwarded to the Utility. All said activities shall be conducted after the main installation has been completed and prior to final connection. If additional continuity testing is required, the Developer shall be required to pay all related costs on a time and material basis. The project will not be released for service connection until continuity testing has been properly demonstrated and documented to the Utility.

D. At each valve and hydrant, the tracing wire shall be brought to the point as specified herein. At hydrants, the tracing wire shall be connected to the below the 4 1/2" nozzle. The tracing wire shall be taped to the hydrant barrel as it is brought to ground level. At valves, the tracing wire shall be brought to 16" below grade on the outside of the riser. A 1/2" diameter hole shall be cut in the side of the riser and the tracing wire looped and knotted on the inside of the riser to keep the tracing wire at this elevation. A minimum 24" loop of tracing wire shall be left inside of the valve box riser. The tracing wire shall continue down the valve box in a continuous run to the pipe on the opposite side of the valve.

E. A tracing station shall be provided at all changes from metallic to non-metallic (including concrete) pipe where there is not a hydrant or valve adjacent to the transition, as specified in CW Standard Practice Drawing "N"-Tracing Station.

F. The tracing wire shall be made continuous by use of connections. These connections shall be made with a standard solder connect with a waterproof seal, or equivalent. Where all coupling connections are made in the tracing wire, an overhead loop knot shall be made to prevent the coupling from being pulled apart. The connections shall be taped with electrical moisture resistant patches.

G. If the trench is less than 2' wide, the Contractor shall install an identification ribbon to the side of the ditch wall with staples at 10 foot intervals, 1' to 2' below grade.

H. If the trench is wider than 2' wide, the Contractor shall install an identification ribbon directly over the water main at a depth of 24 below finished grade and maintain location during backfilling procedures.

I. In paved areas, the ribbon shall be installed directly under the pavement base.

9.18 Polyethylene Wrap

Polyethylene wrap shall be installed in accordance with AWWA C105.

A. Cross-laminated 4 mil polyethylene wrap for DI main installation shall be cut 2' longer than a standard length of pipe. The tube shall be slipped over the pipe, and centered to allow 1' of overlap on each adjacent pipe section. After the top is made, the slack in the tubing shall be taken up for a snug fit, and the overlay shall be secured with a polyethylene tape, as described in Section 7.15, "Polyethylene Encasement".

B. All metallic appurtenances shall be encased in polyethylene and all seams and joints shall be secured with polyethylene tape.

C. The Contractor shall repair and/or replace the polyethylene wrap, whenever any modifications are made to the main.

9.19 Charging, Flushing, Air Removal and Hydrostatic Testing

The water main shall be charged with water from an existing Utility facility, as directed by the Utility. The Contractor shall conduct the flushing, air removal and hydrostatic testing as specified in Appendix E-Construction Testing Methods.

9.20 Disinfection of Water Mains and Service Lines

A. Disinfection

All pipe installed by a contractor shall be disinfected in accordance with AWWA C651 and all applicable Federal, State and Local requirements. The disinfection process shall be conducted as specified in Appendix E-Construction Testing Methods. If required, the trench/pit(s) of access shall be prepared in such a manner as to comply with all applicable OSHA regulations and as directed by the Utility.

The chlorination point and supply shall be accessible above grade.

B. Bacteriological Samples

The Utility will collect water samples for bacteriological testing. The main will not be approved for final connection to the existing distribution system until sampling results are obtained and approved by the Utility. Sampling requirements for service lines 2" and larger shall be conducted consistent with AWWA C651.

9.21 Connection with Existing Distribution System

A. General Information

The Contractor shall connect the water main(s) and/or service line(s) to the existing distribution system as directed by the Utility, in order to flush the new main. The final connection shall be performed in the presence of the Utility.

Any existing appurtenances (e.g., valves, blow-off assemblies, etc.) shall be operated by the Utility only. If final connection has not been completed within 60 days after sterilization, the main shall be disinfected, as described herein before final connection will be authorized by the Utility - If Applicable.

B. Removing Existing Plugs for Connections

To assure that all the pressure is off the main, the Utility will open the closest hydrant, blow-off assembly or service line. If there is no means of checking for pressure, a 3/4" tap shall be installed by the Contractor on the top of the main adjacent to the plug to be removed.

C. Main Connection

The dewatering of the main connection shall be properly completed to avoid contamination of new and existing mains.

The main connections shall be completed within a 12-hour period, without interruption.

D. Customer Notification

All customers potentially affected by a temporary interruption of water service shall receive a notification of the pending interruption as described in Section 9.01.C.

E. Connection with Existing Services

The contractor may not connect a new service line to any existing pipe unless directed by the Utility. The contractor shall schedule the service connection at a minimum of 24-hour advance notice. The service connection shall not be backfilled without being inspected and approved by the Utility.

Westfield shall utilize the following website for scheduling service connections.
<http://www.citizensenergysgroup.com/Citizens-WestfieldPermits>

9.22 Restoration

A. General Requirement

Refer to Appendix K - "Restoration"

B. Maintenance

Upon completion of the project, the Contractor/Developer shall maintain the surfaces of curbs and gutters, paved surfaces, sidewalks, and grass areas for a period of three (3) years thereafter, or for such greater period as may be required by Federal, State or Local authorities.

In unimproved areas, the Contractor shall maintain the surface of the disturbed trench area for a minimum of three (3) years after completion of the project. Any settling of the trench below the grade of the adjacent

undisturbed areas shall be corrected by bringing additional topsoil in to raise the trench surface to the same level as the adjacent ground. Reseeding of these raised areas shall be performed in order to provide a uniform finished surface.

9.23 Additional Items

A. All water used on a project shall be metered. Only hydrant wrenches shall be used for opening and closing fire hydrants. In no case shall pipe wrenches be used for this purpose.

B. The Condition of the jobsite is the responsibility of the Contractor/Developer. Debris and rubbish material shall become the property of the Contractor/Developer and it shall be the Contractor/Developer's responsibility to dispose of such materials.

C. The Contractor/Developer shall be responsible for scheduling all hydrostatic tests, initial connections and final connections. Should the Contractor/Developer cancel and reschedule these procedures and cause additional costs to the Utility in doing so, the Developer shall be responsible for all corresponding costs.

9.24 Construction Record Measurements

Construction records of all water main installations and appurtenances shall be made during and after construction of the project and provided to the Utility. Construction record measurements shall be made according to the following criteria:

Offset measurements shall be made to all fittings, valves, blow-off assemblies, hydrants and other appurtenances. The first measurement shall be made from the centerline of the nearest street running parallel to the installed water main, thence perpendicular to the centerline of the appurtenance on that water main. The second or cross-measurement shall be made from the nearest centerline of a street running in a perpendicular or near perpendicular direction to the centerline of the appurtenance. Should a nearby street not be available for reference measurement, a permanent structure may be used and referenced to another permanent structure or street intersection or centerline.

A. All installed pipe sizes shall be listed and the length measured along the centerline of the pipe.

B. All materials manufacturer information shall be listed.

C. All easement locations, types, and dimensions shall be included.

D. Projects utilizing logging, all Datalogger information in the correct format.

E. For GPS-related information, refer to Appendix B-Water Distribution Plans.

F. All records to be submitted to: Citizens Water, 2150 Dr. Martin Luther King Jr. Street, Indianapolis, IN 46202.

9.25 Dry Main Installation

The installation of a dry main shall adhere to all applicable subsections of

LOCATION: W15.0316 Engineering Design/Consult/V150316-C904-SS spec.dwg
DATE/PLT: January 28, 2016 - 24.7cm
PLOTED BY: schaffb

SECTION 301 General		
301.01 Introduction	This Chapter contains the minimum material requirements for construction of sanitary sewer facilities within the Indianapolis Sanitary District and Westfield.	
301.02 General for all Materials	The materials used in the construction shall be in full conformance with those guidelines set forth below and according to the applicable ASTM, AWWA, and ANSI specifications. These material requirements are minimum requirements and are in part redactions of requirements set forth within the referenced standards, with noted exceptions. The Engineer shall be ultimately responsible for designing and selecting the appropriate material for each specific application. Information from the referenced specifications has been included within this Chapter for the convenience of the reader. However, the engineer, contractor, and manufacturer must also assume the responsibility of familiarizing themselves with these requirements. The City will not assume responsibility for noncompliance with the referenced specifications as a result of information not provided in this Manual.	
301.03 Material Markings	Each length of pipe and each manhole or other structure shall be marked per the requirements of each respective ASTM, AWWA and/or ANSI Standard referenced within this Chapter.	
301.04 Certification of Materials	The Division or Department reserves the right to require material certification from the manufacturer prior to construction to ensure the material supplied conforms to the prescribed requirements. Upon request, the Contractor shall furnish a certificate of conformance to the required ASTM, AWWA, and/or ANSI Standards, this Manual, and other conformance certifications in the form of affidavits of conformance, test results, and/or copies of test reports. Provisions for obtaining this certification shall be the responsibility of the Applicant. The City of Indianapolis does not assume the responsibility for the expense of obtaining material certification.	
301.05 Handling, Storage, and Color	The handling, storage and color requirements for pipe material are as follows: 1. Handling and Storage 2. Color	

Chapter 300
Materials

page 3-2

SECTION 302
Sanitary Sewer Pipe Material

302.01
Introduction

302.02
Allowable Pipe Materials

This Section applies to materials to be used for the construction of gravity sewers.

For materials to be used for laterals refer to Section 303.

For materials to be used for force mains refer to Section 304.

For materials to be used for manholes refer to Section 305.

The following pipe materials are the only materials that may be used for gravity sanitary sewer installations:

Material	Designation	Max. Depth (ft)	Spans (Nominal Diameter, in.)
		Minimum	Maximum
Polyvinyl Chloride Pipe (PVC)	ASTM D 3034 ASTM F 679 ASTM D 2241 AWWA C300 AWWA C200	25 20 40 40	6 18 9 12 14
Reinforced Concrete Pipe (RCP)	ASTM C 76 ASTM C 695	25 ¹	24 144
Ductile Iron Pipe (DIP)	ASTM A 748 AWWA C151	40	8 60
Closed Profile Large Diameter PVC Pipe	ASTM F 1803	25	18 54
Centrifugally Cast Fiberglass Reinforced Polymer Mortar Pipe	ASTM D 3282	40	18 60
Prestressed Concrete Cylinder Pipe (PCCP)	AWWA C301	40	30 144

¹ - The maximum depth is a guideline. Due to the variability of site conditions, the Engineer is ultimately responsible for verifying the pipe selected is acceptable for the depths listed and the specific project application.

The depth can be increased to forty (40) feet provided the joints and gaskets are designed per ASTM C 349. See Section 302.03 for specific requirements.

The individual requirements and specifications for the above pipe materials are listed in the remainder of this Section.

Verified Clay Pipe (VCP) for gravity sewer construction is not allowed.

Chapter 300
Materials

page 3-3

302.03 Polyvinyl Chloride Pipe (PVC)	The minimum requirements for PVC are as follows: 1. Size 2. Material a. Pipe installations up to twenty-five (25) feet deep Polyvinyl Chloride (PVC) sanitary sewer pipe and fittings eight (8) inches through fifteen (15) inches in diameter shall be the integral wall bell and gasket type with elastomeric seal joints and smooth walls conforming to ASTM D 3034 and a minimum of SDR 35. PVC sanitary sewer pipe and fittings eighteen (18) inches in diameter and larger shall be smooth wall conforming to ASTM F 679. All fittings shall be heavy-walled fittings. Pipe shall have a minimum pipe stiffness of 46 psi when measured at 5% vertical ring deflection and tested in accordance with ASTM D 2412 and a minimum tensile strength of 34.50 MPa. b. Pipe installations over twenty-five (25) feet deep PVC pipe materials shall be ASTM D 2241 (SDR 26 minimum) with minimum cell classification of 12454, AWWA C300 (DR 25 min), or AWWA C200 (DR 25 min). When pipe conforming to AWWA Standards is used, all fittings shall also be made of PVC. 3. Joints and Gaskets i. Joints ii. Gaskets At gaskets shall meet the requirements of ASTM F 417. Solvent welded joints and coupling joints are not acceptable.	
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Chapter 300
Materials

page 3-4

4. Field Cutting of Pipe	All field cutting of pipe shall be done in a neat, trim manner using a hand or power saw, and the cut end shall be beveled using a file or steel to produce a smooth bevel of approximately 15° and be a minimum depth of one-fifth (1/5) the pipe wall thickness or beveled as specifically recommended by the pipe manufacturer. Field cut pipe will only be allowed to be installed at manholes, at prefabricated tees and wyes, and at the connection of new sanitary sewer to existing sanitary sewer.	
5. Rejection of Damaged Pipe	PVC pipe possessing the following defects may be rejected for installation: variation from straight centerline, elliptical shape, legible markings as required herein, deep or excessive gouges or scratches of the pipe wall, fractures, punctures, or cracks passing through the pipe wall, and damaged ends where such damage would prevent making a satisfactory joint.	
6. Pipe Markings	For PVC pipe, each length of pipe must be marked per ASTM and AWWA requirements and at a minimum with the following: name of manufacturer, trademark or trademark, nominal pipe size, production code, material and cell class designation, ASTM designation, and SDR number.	
7. Manufacture and Construction	In addition, the plain end of each pipe length shall have rings painted around the depth of the pipe in the bell. The pipe at the proper location to allow field checking of the correct setting depth of the pipe in the bell. a. Pipes b. Fittings Tees, wyes, and other fittings shall be heavy-walled and capable of withstanding the same stresses as the pipe to which they are connected. All fittings shall be fabricated from pipe meeting the requirements of these standards.	

302.04 Closed Profile Large Diameter PVC Pipe	The minimum requirements for Closed Profile PVC pipe are as follows: 1. Size 2. Materials Pipe and fittings shall be made from polyvinyl chloride compounds which comply with the requirements as specified by ASTM F 1803 with a minimum cell classification of 12504. Minimum pipe stiffness shall be 46 psi when tested in accordance with ASTM D 2412. The actual inside and outside diameter of the pipes shall be in accordance with current manufacturer's literature, unless otherwise agreed to by the Department. Pipe shall be supplied in nominal lengths of fourteen (14) feet unless special sections are needed for construction in which case shorter or longer lengths may be used. Actual laying length shall be nominal plus or minus two (2) inches.	
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Chapter 300
Materials

page 3-5

3. Joints and Gaskets	All joint pipes shall be of the bell and gasket type with elastomeric seals and conform to the requirements of ASTM D 3212. Gaskets shall be factory installed and chemically bonded to the bell end of the pipe. Gasket material shall conform to the requirements of ASTM F 417. 4. Rejection of Damaged Pipe Pipe possessing the following defects may be rejected for installation: variation from straight centerline, elliptical shape, legible markings as required herein, deep or excessive gouges or scratches of the pipe wall, fractures, punctures, or cracks passing through the pipe wall or other noticable defects in pipe manufacture. 5. Marking Each PVC closed profile wall pipe length and fitting shall be clearly marked per ASTM F 1803 and at a minimum with the following: name of manufacturer, trademark or trademark, nominal pipe size, cell classification, pipe stiffness - 46 PSI, and certification. a. Pipes b. Fittings Flanges, elbows, reducers, tees, wyes, laterals and other fittings shall be capable of withstanding the same stresses as the pipe to which they are connected. All fittings shall be fabricated from pipe meeting the requirements of these standards. Fabricated inter joints shall be reinforced by fusion heat welding. Closed Profile Large Diameter PVC Gravity Sewer shall be Lamson Vylon Pipe or an approved equal.	
302.05 Centrifugally Cast Fiberglass Reinforced Polymer Mortar Pipe	The specifications herein shall be the minimum requirements for Centrifugally Cast Fiberglass Reinforced Polymer Mortar Pipe. Due to the differing manufacturing processes and strength characteristics between the different manufacturers, the pipe shall be designed for site specific conditions. The minimum requirements for Centrifugally Cast Fiberglass Reinforced Polymer Mortar Pipe are as follows: 1. Size 2. Materials Pipe shall be manufactured per ASTM D 3282. The actual inside and outside diameter of the pipes shall be in accordance with current manufacturer's literature, unless otherwise agreed to by the Department.	

Chapter 300
Materials

page 3-6

302.06 Ductile Iron Pipe (DIP)	Pipe shall be supplied in nominal lengths of twenty (20) feet unless special sections are needed for construction in which case shorter or longer lengths may be used. Actual laying length shall be nominal ± two (2) inches. Minimum pipe stiffness shall be 46 psi when tested in accordance with ASTM D 2412. Applications which are to be directly jacked into place or micro-tunnelled shall utilize pipe configurations specifically designed for jacking or tunneling applications with no protrusions for the joint coupling. a. Resin Systems b. Glass Reinforcements c. Slice Sand d. Additives Resin additives, such as curing agents, pigments, dyes, fillers, thixotropic agents, etc., when used, shall not detrimentally affect the performance of the product. a. Joints and Gaskets Fiberglass above couplings that utilize elastomeric sealing gaskets of an appropriate profile shall be the sole means to maintain joint tightness. The joints must meet the performance requirements of ASTM D 4101. All joints shall be certified by the pipe manufacturer to perform at least (50) feet of hydrostatic head at 5% deflection. Reinforced glass fibers used to manufacture the components shall be of commercial grade E-glass fibers with binder and curing compatible with impregnating resins. Reinforcing glass fibers used to manufacture the components shall be of commercial grade E-glass fibers with binder and curing compatible with impregnating resins. Reinforcing glass fibers used to manufacture the components shall be of commercial grade E-glass fibers with binder and curing compatible with impregnating resins.	
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Chapter 300
Materials

page 3-7

6. Manufacture and Construction	a. Pipes b. Fittings Centrifugally Cast Fiberglass Reinforced Polymer Mortar Pipe shall be Hobas pipe or an approved equal.	
302.08 Reinforced Concrete Pipe (RCP)	The minimum requirements for Reinforced Concrete Pipe are as follows: 1. Size 2. Material a. Reinforced Concrete: Reinforced concrete pipe shall be in accordance with ASTM C 76. Pipe wall thickness shall be either 10.8 in. or 14.0 in. as appropriate for the size and installation. When deep burial depths are greater than twenty-five (25) feet, require an improved joint to resist higher head conditions. Joint sections manufactured in accordance with ASTM C 381 with a joint rating of at least (Ry) (50) feet shall be incorporated. When special conditions exist and are authorized by the Department, reinforced concrete pipe manufacture in accordance with ASTM C 665 may be used. The minimum D-load design for ASTM C 665 pipe shall be 1000 and the minimum increment of D-load shall be at least 200. If multiple pipe designs are proposed on a single project. For pipe designed in accordance with ASTM C 76 or C 665, factors of safety shall be 1.54 for D-loads of 2000 and less, 1.25 for D-loads of 2000 and higher and uniformly decreasing between 1.5 and 1.25 for D-loads between 2000 and 3000. The wall thickness shall not be less than the wall thickness used to verify the D-load strength. b. Steel Reinforcement Steel reinforcement shall be in accordance with and placed to the requirements of the applicable tables in ASTM C 76 or C 665, or per the approved D-load design. Longitudinal reinforcement shall be continuous and all reinforcement shall have a minimum concrete cover of 1 inch. Minimum cover requirements do not apply to the mating surfaces of the joint, gasket seat, or end of longitudinal. Elliptical reinforcement shall not be permitted.	

Chapter 300
Materials

page 3-8

c. Lift Holes	Lift holes are not allowed.	
d. Linings	All reinforced concrete pipe for sanitary sewers shall be factory lined with one of the following materials: 1. Lock PVC by Ameron, GSE Studier by Grunert/SL Environmental, Agri Sure Grip by Agri America, or approved equal.	
e. Liners	i. Liners shall be completed with heat welded joints at all pipe joints where the liner is discontinuous across the joint. Liner sheets with adhesive backing or other non-heat welded joint overlays are not permitted.	
f. Liner	ii. Liner shall be embedded in concrete to withstand a test pull of at least 100 pounds per linear inch, applied perpendicular to the concrete surface for a period of one minute, without rupture of the lining extensions or withdrawal from embedment. This test shall be made at a temperature of 70-80 degrees Fahrenheit inclusive.	
g. Lining material	iii. Lining material shall have good impact resistance, shall be flexible, and shall have an elongation sufficient to bridge up to one-quarter (1/4) inch settling cracks, which may occur in the joint after installation, without damage to the lining.	
h. Lining	iv. The lining shall be repairable at any time during the life of the pipe or structure by heat welding additional materials to the liner.	
i. Lining materials	v. The lining materials shall be resistant to municipal sewage.	
3. Joints and Gaskets	All joints for pipes in accordance with ASTM C 76 and ASTM C 665 shall comply with the requirements of ASTM D 443.	
4. Joints and Gaskets	Joints and gaskets designated to be in excess of twenty-five (25) feet of head shall be designed in accordance with ASTM C 381.	
5. Joints and Gaskets	Only one style of joint system or configuration shall be permitted between adjacent manholes.	
6. Joints and Gaskets	Rejection of Damaged Pipe	
7. Joints and Gaskets	Pipe possessing the following defects may be rejected for installation: variation from straight centerline, elliptical shape, legible markings, fractures in excess of 0.01 inch or cracks passing through the pipe wall, damaged ends where such damage would prevent making a satisfactory joint, voids and/or nonconforming in the pipe walls, delamination of pipe liner, cracking and crazing of liner, or other noticable defects in pipe or liner manufacture.	

302.09 Lateral Materials	The minimum requirements for laterals shall conform to the following: 1. Allowable Pipe Materials The following are the only materials that shall be used for laterals: <table><thead><tr><th>Material</th><th>Designation</th><th>Classification</th></tr></thead><tbody><tr><td>PVC</td><td>ASTM D 3034</td><td>SDR 35</td></tr><tr><td>PVC</td><td>ASTM D 2241</td><td>SDR 32.5</td></tr><tr><td>PVC</td><td>ASTM D 2406</td><td>Schedule 40</td></tr><tr><td>PVC</td><td>ASTM D 2407</td><td>Schedule 80</td></tr><tr><td>HDPE</td><td>ASTM F 714</td><td>DR 17</td></tr></tbody></table> *HDPE is only allowed for pipe banking applications, shall utilize DIPs for pipe banking and shall have a light reflective interior. Standard black interior lined pipe shall not be accepted.	Material	Designation	Classification	PVC	ASTM D 3034	SDR 35	PVC	ASTM D 2241	SDR 32.5	PVC	ASTM D 2406	Schedule 40	PVC	ASTM D 2407	Schedule 80	HDPE	ASTM F 714	DR 17	
Material	Designation	Classification																		
PVC	ASTM D 3034	SDR 35																		
PVC	ASTM D 2241	SDR 32.5																		
PVC	ASTM D 2406	Schedule 40																		
PVC	ASTM D 2407	Schedule 80																		
HDPE	ASTM F 714	DR 17																		

Chapter 300
Materials

page 3-9

7. Special Shaped Pipe	Special shaped pipe shall conform to the specifications for straight pipe and/or as applicable. Special design or construction necessary for specials shall be subject to approval by the Department on a case-by-case basis.	
302.07 Ductile Iron Pipe (DIP)	The minimum requirements for Ductile Iron Pipe (DIP) are as follows: 1. Size 2. Materials Ductile Iron Pipe shall be centrifugally cast and shall conform to ANSI/AWWA A21.11/C1151 and ASTM A 748. Thickness or pressure class requirements of ductile iron pipe may be used for design in the convenience of sanitary sewage by gravity. The minimum pipe wall thickness allowed shall be Class 250. Weight of pipe fittings shall conform to the requirements of Specifications. The minimum laying lengths shall be eighteen (18) feet. a. Coatings b. Linings c. Linings d. Linings The inside surfaces of all pipe, fittings, and adapters shall be lined with factory applied Protecto-Clay[®] ceramic epoxy lining, or approved equal.	
302.08 Ductile Iron Pipe (DIP)	The outside surfaces of the pipe and fittings shall be bituminous-coated conforming with ANSI/AWWA A21.51C151 and ANSI/AWWA A21.10C110. The pipe surfaces of all pipe, fittings, and adapters shall be lined with factory applied Protecto-Clay[®] ceramic epoxy lining, or approved equal.	
302.09 Ductile Iron Pipe (DIP)	The outside surfaces of the pipe and fittings shall be bituminous-coated conforming with ANSI/AWWA A21.51C151 and ANSI/AWWA A21.10C110. The pipe surfaces of all pipe, fittings, and adapters shall be lined with factory applied Protecto-Clay[®] ceramic epoxy lining, or approved equal.	
302.10 Ductile Iron Pipe (DIP)	The outside surfaces of the pipe and fittings shall be bituminous-coated conforming with ANSI/AWWA A21.51C151 and ANSI/AWWA A21.10C110. The pipe surfaces of all pipe, fittings, and adapters shall be lined with factory applied Protecto-Clay[®] ceramic epoxy lining, or approved equal.	

Chapter 300
Materials

page 3-10

7. Markings	Each pipe length shall be marked per ASTM A 746 and at a minimum the following: nominal size and class designation for the various classes of pipe and fittings shall be cast into fittings in raised numerals, and cast or stamped on the outside of each section of pipe. Weights shall be plainly and conspicuously painted in white on the outside of each section of pipe and each section of pipe shall be marked with the following: 6. Manufacture and Construction Manufacture and test completed pipe sections in accordance with ANSI/AWWA A21.4C104, ANSI/AWWA A21.51C151, ANSI/AWWA A21.10C110 and AWWA C111 (ANSI A 21.11) as appropriate. The minimum requirements for pre-stressed concrete cylinder pipe for gravity applications are as follows: 1. Size 2. Material 3. Lining 4. Joints Steel and rubber gaskets shall conform to AWWA C301.	
302.08 Pre-stressed Concrete Cylinder Pipe (PCCP)	The minimum requirements for pre-stressed concrete cylinder pipe for gravity applications are as follows: 1. Size 2. Material 3. Lining 4. Joints Steel and rubber gaskets shall conform to AWWA C301.	

Chapter 300
Materials

page 3-11

5. Fittings and Special Sections	Fittings and special pipe sections shall be designed and fabricated to the requirements of the appropriate AWWA standards and AWWA Manual M9 Chapter 8, as applicable. All required flanges shall conform to AWWA C307 Class C requirements for standard steel flanges corresponding to the pipe working pressures. The PVC lining in fittings and special sections shall be attached to the mortar lining using methods acceptable to the manufacturer of the lining material. 6. Rejection of Damaged Pipe Pipe possessing the following defects may be rejected for installation: variation from straight centerline, elliptical shape, legible markings, fractures in excess of 0.01 inch, cracks passing through the pipe wall, damaged ends where such damage would prevent making a satisfactory joint, voids and/or nonconforming in the pipe walls, delamination of pipe liner, cracking and crazing of liner, or other noticable defects in pipe manufacture. 7. Marking of Pipe The inside of each pipe section, fitting, or special pipe section shall be plainly marked with the pipe diameter and pressure class for which the section or fitting is designed. In addition, all fittings and special pipe sections shall be marked with an identifying number or station corresponding to that shown on the layout schedule. All fittings or special sections requiring special reinforcement during installation shall be properly marked.																			
303.01 Introduction	This Section applies to the materials to be used for the construction of laterals. For materials to be used for gravity sewers refer to Section 302. For materials to be used for force mains refer to Section 304. For materials to be used for manholes refer to Section 305.																			
303.02 Lateral Materials	The minimum requirements for laterals shall conform to the following: 1. Allowable Pipe Materials The following are the only materials that shall be used for laterals: <table><thead><tr><th>Material</th><th>Designation</th><th>Classification</th></tr></thead><tbody><tr><td>PVC</td><td>ASTM D 3034</td><td>SDR 35</td></tr><tr><td>PVC</td><td>ASTM D 2241</td><td>SDR 32.5</td></tr><tr><td>PVC</td><td>ASTM D 2406</td><td>Schedule 40</td></tr><tr><td>PVC</td><td>ASTM D 2407</td><td>Schedule 80</td></tr><tr><td>HDPE</td><td>ASTM F 714</td><td>DR 17</td></tr></tbody></table> *HDPE is only allowed for pipe banking applications, shall utilize DIPs for pipe banking and shall have a light reflective interior. Standard black interior lined pipe shall not be accepted.	Material	Designation	Classification	PVC	ASTM D 3034	SDR 35	PVC	ASTM D 2241	SDR 32.5	PVC	ASTM D 2406	Schedule 40	PVC	ASTM D 2407	Schedule 80	HDPE	ASTM F 714	DR 17	
Material	Designation	Classification																		
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PVC	ASTM D 2241	SDR 32.5																		
PVC	ASTM D 2406	Schedule 40																		
PVC	ASTM D 2407	Schedule 80																		
HDPE	ASTM F 714	DR 17																		

303.03 Controlled Settlement	The controlled settlement joint shall be a double gasketed joint made specifically for the purpose of allowing axial movement of the pipe for forces from SDR 35 to SDR 135.	
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Chapter 300
Materials

page 3-13

2. Joints	For four (4) inch and six (6) inch laterals, only six (6) inch laterals will be allowed in Westfield. Joints shall be solvent cement type for PVC or butt fused type for HDPE. For eight (8) inch and larger laterals Joints shall be installed in accordance with the manufacturer's recommendations. a. Backwater Prevention Valves (Westfield Only) A backwater prevention valve shall be provided for each sanitary sewer lateral. The backwater prevention valve shall be located outside the structure and right of way. The backwater valve shall be a clean outcheck valve.	
303.03 Controlled Settlement	The controlled settlement joint shall be a double gasketed joint made specifically for the purpose of allowing axial movement of the pipe for forces from SDR 35 to SDR 135.	
Chapter 300 Materials	page 3-13	
(Slip) Joints	IBR The allowable movement within the joint shall be five and one-half (5 1/2) inches. The controlled settlement joint shall be as manufactured by Plastic Trends Inc. or approved equal.	

SECTION 304 Force Main Material

304.01 Introduction

This Section applies to materials to be used for the construction of force mains.

For materials to be used for gravity sewers refer to Section 302.

For materials to be used for laterals refer to Section 303.

For materials to be used for manholes refer to Section 305.

304.02 Allowable Force Main Material

The following pipe materials are the only materials that may be used for sanitary sewer force main installations:

Material	Designation	
	ASTM	AWWA
Polyvinyl Chloride Pipe (PVC)	D 2241	C200 C300
High Density Polyethylene Pipe (HDPE)	F 714	C200
Ductile Iron Pipe (DIP)	A 746	C151
Prestressed Concrete Cylinder Pipe	-----	C301

304.03 Polyvinyl Chloride (PVC) Pipe

The minimum requirements for PVC pipe for force mains are as follows:

1. Material

PVC force main pipe shall conform to ASTM D 2241, AWWA C200 or AWWA C300.

For ASTM D 2241 the material shall conform to ASTM D 1784, Cell Class 12454 and a hydrostatic design stress of 2000 psi. The minimum pressure class/SDR rating shall be Class 200SDR 21.

For AWWA C200 the material shall conform to ASTM D 1784 for cell class 12454 and a hydrostatic design stress of 4000 psi. The minimum pressure class/SDR rating shall be Class 200CR 14.

For AWWA C300 the material shall conform to ASTM D 1784 for cell class 12454 and a hydrostatic design stress of 4000 psi. The minimum pressure class/SDR rating acceptable shall be Class 200CR 21.

2. Joints

Joints shall be a bell and coupling push type with joint restraints as needed.

Joint restraints shall be Megagrip® style mechanical joints for PVC pipe as manufactured by EBAE/IRON® or approved equal.

The push on joint and gaskets shall meet the requirements for ASTM D 3139 and F 477.

3. Fittings

Fittings shall be restrained joint ductile iron fittings conforming to ANSI A21.10/AWWA C110 and ANSI A21.11/AWWA C111. Restrainted joints shall be Megagrip® style for PVC as manufactured by EBAE/IRON or approved equal.

Chapter 300

page 3

Chapter 300
Materials

page 3-16

4. Rejection of Damaged Pipe	Pipe possessing the following defects may be rejected for installation: variation from straight centerline, elliptical shape, legible markings as required herein, deep or excessive gouges or scratches of the pipe wall, fractures, punctures, or cracks passing through the pipe wall, damaged ends where such damage would prevent making a satisfactory joint.	
5. Markings	Each length of pipe must be marked per ASTM and AWWA and at a minimum with the following information: name of manufacturer, trademark or trademark, nominal pipe size, production code, material and cell class designation, and ASTM designation.	
304.04 High Density Polyethylene (HDPE) Pipe	The minimum requirements for HDPE pipe for force main applications are as follows: 1. Material 2. Joints 3. Fittings	
304.05 Ductile Iron Pipe (DIP)	The minimum requirements for ductile iron pipe for force main applications are as follows: 1. Material 2. Joints 3. Fittings	

Chapter 300
Materials

page 3-16

4. Rejection of Damaged Pipe	Pipe possessing the following defects may be rejected for installation: variation from straight centerline, elliptical shape, legible markings as required herein, deep or excessive gouges or scratches of the pipe wall, fractures, punctures, or cracks passing through the pipe wall, damaged ends where such damage would prevent making a satisfactory joint.	
5. Markings	During the extrusion production, the HDPE pipe shall be continuously marked per ASTM and AWWA with double printing with at a minimum the following: nominal pipe size, dimension ratio, pressure rating, trade name, material classification, certification bases, and code. In addition to the requirements in Section 301.05, when moving fused sections of pipe, chains or cable type crockers shall be avoided, ring studs are preferred. Care must be exercised to avoid cutting or gouging the pipe.	
304.05 Ductile Iron Pipe (DIP)	The minimum requirements for ductile iron pipe for force main applications are as follows: 1. Material 2. Fittings 3. Coatings	
304.06 Ductile Iron Pipe (DIP)	Pipe shall be centrifugally cast in metal or sandlined molds and shall conform to ANSI A21.11/AWWA C115 and ANSI/AWWA A21.10C110. Outside surfaces of the pipe and fittings shall be bituminous-coated conforming with ANSI/AWWA A21.51C151 and ANSI/AWWA A21.10C110. Joints and Gaskets Pipe joints shall be push-on type or mechanical joint complying with ANSI A21.11/AWWA C111 unless otherwise noted on the drawings. Restrainted joints shall be Megalug[®] by EBAI Inc. Flex-Ring or Lok-Ring by American Pipe, Pipe and Fittings Co. by US Pipe, Slip-Lok or Ball-Lok by Griffin Pipe, or other similar manufacturer supplied systems. Gaskets for mechanical joints, push-on joints, and restrainted joints shall conform to ANSI A21.11/AWWA C111.	
5. Rejection of Damaged Pipe	Pipe possessing the following defects may be rejected for installation: variation from straight centerline, elliptical shape, legible markings as required herein, deep or excessive gouges or scratches of the pipe wall or lining, fractures or cracks in the pipe wall or lining, damaged ends where such damage would prevent making a satisfactory joint, delamination of linings, cracking and crazing of liner, or other noticable defects in pipe manufacture.	

Chapter 300
Materials

page 3-17

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ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE
ENGINEERS
Land Surveying/Civil Engineering
Landscape Architecture

Chapter 300
Materials

page 3-16

DATE	BY	PROJECT NO.	W15.0316
REVISIONS AND ISSUES			
DATE	BY	REVISION	DESCRIPTION
01-29-2016	BJS	DWG NAME	ISSUED FOR TAC REVIEW
		DESIGNED BY	W15.0316-C904-SS spec.dwg
		DRAWN BY	RLW
		CHECKED BY	RLW
		DATE	01-28-2016

SEVEN SCOTT BECKER
REGISTERED PROFESSIONAL ENGINEER
PE #0006279
STATE OF INDIANA
NO. 000

STEVEN SCOTT RUCKER P.E. 11390279

of WESTFIELD
17651 SUN PARK DRIVE, WESTFIELD, IN 46074
CITIZENS - SANITARY SEWER SPECIFICATIONS
Part of S.W.A. Section 96, Township 16 North, Range 3 East, Washington Township, Hamilton County, Indiana

SHEET NO.
C904
PROJECT NO.
W15.0316

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CITIZENS - SANITARY SEWER SPECIFICATIONS
Part of SWM Station 36: Towards N North, Range 3 East, Washington Township, Hamilton County, Indiana

C905

SHEET NO.

PREPARED FOR:



of WESTFIELD

17651 SUN PARK DRIVE, WESTFIELD, IN 46074

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DATE/TIME: January 28, 2016 - 2:47pm
PLOTED BY: schaffr

SECTION 403
Installation of Precast Manholes, Wet wells, Valve Vaults, or other Appurtenant Structures

403.01 Introduction	The Section provides the minimum installation requirements for manholes, wet wells, valve vaults, and other appurtenant structures. For clarity, only manholes are referenced throughout this Section. Unless noted, all other structures are to be installed in accordance with the same requirements. The minimum requirements are shown in Figures 300.01 through 300.06.
403.02 Bedding	The bedding for all manholes shall be a minimum of six (6) inches of No. 8 crushed stone or No. 8 fractured-face aggregate. The stone and/or aggregate shall be placed to form a stable base. Where poor or unstable soil conditions exist, or over excavation has occurred, additional No. 8 crushed stone, No. 8 fractured-face aggregate, No. 2 stone, or Class B concrete shall be used to form a stable base.
403.03 Backfilling	Manhole backfilling and compaction requirements shall comply with the minimum requirements for the adjacent sanitary sewer pipe as stated in Section 401.06.
403.04 Placement of Manhole Sections	Precast manhole sections shall be placed and aligned to provide vertical seals. The completed manhole shall be tight, true to dimensions, and watertight. The joints between manhole sections shall be properly sealed utilizing an approved rubber gasket and butyl rubber rope.
403.05 Adjustment of Adjusting Rings	Where one (1) solid ring or barrel section cannot be used, final adjustments in elevation of the casting frame and cover shall be accomplished by the use of precast concrete adjusting rings of a minimum thickness of four (4) inches per Section 300.07 and as shown in Figure 300.08. The total number of adjusting rings shall not exceed three (3) and the total height of adjusting rings shall not exceed twelve (12) inches. Concrete adjustment rings less than four (4) inches thick are not allowed. A water tight seal shall be provided between the cone section of the manhole and adjusting ring, and between the adjusting ring and the cone section of the manhole by the use of two (2) rows of one half (1/2) inch diameter cords of extrudable preformed gasket material, non-asphaltic nitrile, or towable grade butyl rubber, as shown on Figure 300.05. This material shall be placed in joints and keyways and be of sufficient quantity to completely fill the joint cavity. The use of brick or block in lieu of adjustment rings is not allowed.
403.06 Butyl Rubber Backfiller	A towable grade butyl rubber base exterior backfiller material one-quarter (1/4) inch minimum thickness, when dry, shall be installed on the outside of the manhole at each joint extending six (6) inches above and below the joint. It shall also be placed on the chimney section from two (2) inches below the bottom adjusting ring on the cone section, and covering the base of the casting.
403.07 Internal Manhole Chimney Seal	Internal Chimney Seals per Section 305.10 shall be installed on the joints of all manholes between the casting frame and the cone section per manufacturer's recommendation.

Chapter 400
Installation

page 4-12

403.08 Connections To Manholes	Sanitary sewer connections to existing manholes shall be cone-drilled and made using a flexible rubber cutting per Section 305.06. Sew cutting and hammer taps are prohibited. All connections shall provide for a watertight seal between the pipe and the manhole. The contractor shall be the sole element relied upon to assure a flexible watertight seal of the pipe to the manhole. When connecting new pipe to existing manholes, a flow channel and bench walls shall be installed per Section 305.06.														
403.09 Groundwater Monitoring Points	An air pressure test is required for all sanitary sewers. When performing the test, an adjustment to the starting air pressure is required to compensate for groundwater above the top of pipe. The measurement of groundwater is optional. However, this Section provides a recommendation on the number of groundwater monitoring points and their locations. If the Contractor chooses not to install the groundwater monitoring points, the air pressure adjustment shall be the maximum required per Section 602.03 (2.0 psi adjustment, starting air pressure 6.0 psi). If groundwater monitoring points are installed as part of the project, then one (1) or more monitoring points shall be installed adjacent to the manhole(s). The monitoring points may be a three (3) inch diameter PVC pipe, capped at the bottom with a screen, located adjacent to the manhole. The elevation of the bottom of the PVC pipe shall be at approximately the same elevation as the top of the highest adjacent sanitary sewer pipe. The number of monitoring points shall be as follows: 1. If groundwater is <u>not</u> present during pipe installation, one (1) monitoring point is required. 2. If groundwater is present during pipe installation, the number of monitoring points shall be as follows: <table><tr><th>Number of Manholes</th><th>Number of Monitoring Points</th></tr><tr><td>1 - 10</td><td>2</td></tr><tr><td>11 - 20</td><td>3</td></tr><tr><td>21 - 30</td><td>4</td></tr><tr><td>31 - 40</td><td>4</td></tr><tr><td>41 - 50</td><td>5</td></tr><tr><td>51 or More</td><td>6</td></tr></table> The monitoring points shall be installed adjacent to selected manholes and spaced as evenly as possible throughout the project. The Contractor shall submit the locations to the RPR for approval. If dewatering wells are used during construction to draw down the groundwater elevation, the site shall be considered to have groundwater present. In both instances, one (1) of the monitoring points shall be installed at the furthest downstream manhole installed as part of the project unless directed otherwise by the RPR. If the development has more than one connection point to existing sewers, the manhole with the lowest invert elevation shall be selected.	Number of Manholes	Number of Monitoring Points	1 - 10	2	11 - 20	3	21 - 30	4	31 - 40	4	41 - 50	5	51 or More	6
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1 - 10	2														
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41 - 50	5														
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Chapter 400
Installation

page 4-13

SECTION 404
Trenchless Installation

404.01 Introduction	This Section provides the minimum requirements for the allowable trenchless methods for construction in the Indianapolis Sanitary District.
404.02 General Requirements	The following three trenchless methods, with their specific applications, are allowed: 1. Auger Boring and Pipe Jacking (Section 404.03) - All installations. 2. Horizontal Directional Drilling (Section 404.04) - Force main installations. 3. Pipe Bursting (Section 404.05) - Existing lateral rehabilitation. The use of an alternate method for site specific conditions will be evaluated on a case-by-case basis. At a minimum, the alternate method will be reviewed through the variation process as contained in Section 102.12. At the discretion of the Department, the alternate method may be required to undergo a thorough evaluation by the Department's "New Products Committee" before any deviations will be considered. The applicant shall be responsible for all variance and product review fees.
404.03 Auger Boring and Pipe Jacking	The following are the minimum requirements when using boring and jacking installation methods: 1. General Boring and jacking will be allowed for the installation of force mains, gravity sanitary sewers, and laterals. The casing pipe or jacked pipe shall extend beyond a minimum of a 1:1 slope extending downward and outward from the edge of pavement plus four (4) feet on each end of the bore and jack alignment. The Engineer or Applicant shall be responsible for obtaining the necessary agency permits for boring and jacking under highways and sidewalks. 2. Specific requirements for Casing, Casing, and Jacking pipes are as follows: a. Casing Pipe Casing pipe for insertion without casing pipe shall conform to the requirements of Chapter 300 of these Standards and the following requirements: i. Provisions shall be made to prevent over-torquing of joints in all accessible center pipe materials to prevent damage during insertion into the casing pipe. RCP, PCPC, and HDPE do not need require such provisions. ii. All force main pipe shall have restrained joints. b. Casing Pipe Casing pipe for installation by jacking and augering shall be steel pipe per ASTM A 138 Grade B and shall have a smooth exterior wall. Additional requirements are as follows: i. Joints - Pipe joints will be butt welded with a continuous circumferential weld. ii. Size - The inside diameter of the casing pipe shall be a minimum of six (6) inches greater than the largest outside diameter of the carrier pipe, bells, or fittings which are placed inside of the casing pipe.

Chapter 400
Installation

page 4-14

ii. Pipe wall thickness - Minimum pipe wall thicknesses are as follows:

Minimum Wall Thicknesses for Steel Casing Pipe				
Casing Pipe	Highway Crossing	Railroad Crossing		
Nominal Size, in.	Actual O.D., in.	Base	Base	
8	8.56	0.250	0.250	
10	10.34	0.250	0.250	
12	12.34	0.250	0.250	
14	14	0.281	0.281	
16	16	0.281	0.281	
18	18	0.312	0.312	
20	20	0.312	0.344	
24	24	0.312	0.375	
30	30	0.375	0.449	
36	36	0.449	0.532	
42	42	0.500	0.625	
48	48	0.500	0.688	
54	54	0.500	0.751	
60	60	0.563	0.844	
66	66	0.625	0.938	
72	72	0.688	1.000	

NOTE: The Contractor shall conform to the requirements of agencies having jurisdiction over the work, with the exception of railroad crossings, where such requirements are greater than those shown above.

c. Jacking Pipe

Jacking pipe shall be used in a one pass method where the jacked pipe acts as the carrier pipe.

Only reinforced concrete pipe (RCP) and centrifugally cast fiberglass reinforced mortar pipe are acceptable for pipe jacking.

RCP shall centrifugally cast fiberglass reinforced mortar pipe for jacking shall meet the requirements of Chapter 300 of these Standards and the following:

- Size - Pipe shall be thirty-six (36) inches in diameter or larger.
- RCP shall be Class III or greater and centrifugally cast fiberglass reinforced mortar pipe shall be specifically manufactured for jacking.
- RCP and centrifugally cast fiberglass reinforced mortar pipe shall have a constant outside diameter (no bell or joint protrusions).
- For RCP pipe, steel reinforcement shall be consistent with the pipe wall, and where required, additional reinforcement shall be provided at the ends of the pipe.

3. Auger Boring and Pipe Jacking Equipment and Construction

The holes shall be bored from the low or downstream end, unless site conditions dictate otherwise.

Chapter 400
Installation

page 4-16

The Contractor shall provide boring equipment which is capable of advancing the bore hole within the required limits of accuracy and can be adjusted during installation to return to the planned alignment if deviations are discovered. Installations shall have a bored hole essentially the same diameter as the outside of the installed pipe. If rods develop or if the bored diameter is greater than the outside diameter of the pipe by more than one (1) inch, grouting shall be used to fill such voids. Provisions for removal of boulders or other material which does not over stress the pipe. Vertical and horizontal curves shall be limited so that well stresses do not exceed 50% of yield stress for the final bending of the HDPE pipe. If the pipe is buckled or otherwise damaged, the damaged section shall be removed and replaced. Appropriate steps shall be taken during drilling to ensure that the HDPE pipe will be installed without damage. All cutting heads shall be removable without retreating the casing pipe. Following installation, the casing pipe shall be carefully inspected to ensure the carrier pipe can be properly placed. During placement of the carrier pipe in the casing, the carrier pipe shall be blocked or otherwise supported with casing pipe spacers or rods. The annular space between the carrier pipe and the casing pipe shall be completely filled with grout and/or cellular grout with minimum compression strength of 150 psi. Details on the material to be used to fill the void and the method of construction shall be submitted to the RPR.
4. Pipe Jacking Equipment and Construction Pipe jacking equipment shall meet all the requirements for boring equipment under No. 3 above. Excavation may be performed by hand digging or with the utilization of a tunnel boring machine (TBM). When utilizing RCP or centrifugally cast fiberglass reinforced mortar pipe, wood cushion rings or other resistant materials shall be used to not affect pipe alignment. The casing shall be placed between the joints and at the thrust rings to prevent joint loading of the joints. The jacked pipe shall be constructed to prevent leakage of the pipe throughout its length. Soil, earth, and other material removal methods shall be installed, operated, and removed in such a manner that prevents damage to interior linings of the jacked pipe. Auger removal of material is not allowed on lined RCP or centrifugally cast fiberglass reinforced mortar pipe. 5. Unforeseen Obstructions If an obstruction stops progress of the pipe during installation, the installation method shall be modified to best suit the conditions encountered, except that elevation, the site shall be considered to have groundwater present. In both instances, one (1) of the monitoring points shall be installed at the furthest downstream manhole installed as part of the project unless directed otherwise by the RPR. If the development has more than one connection point to existing sewers, the manhole with the lowest invert elevation shall be selected.

Chapter 400
Installation

page 4-16

The Contractor assumes the RPR, in writing, that he will perform all proposed work in compliance with applicable laws, regulations, requirements of agencies having jurisdiction, and this Manual. b. In-place pipe shall be left in place and filled with grout with a minimum compression strength of 150 psi. The contractor may use ASCE, Manuals and Reports on Engineering Practice No. 100, "Horizontal Auger Boring Project" as a reference.	404.04 Horizontal Directional Drilling (HDD)
The following are the minimum requirements when using the Horizontal Directional Drilling (HDD) installation method: General HDD is only allowed for force main construction and only after a detailed review of the Department and Division of the specific pumping and force main design and installation conditions associated with the project. The Department will consider any deviations and product review fees. The applicant shall be responsible for all variance and product review fees. The Department will consider any deviations and product review fees. The applicant shall be responsible for all variance and product review fees. The Department will consider any deviations and product review fees. The applicant shall be responsible for all variance and product review fees. The Department will consider any deviations and product review fees. The applicant shall be responsible for all variance and product review fees. The Department will consider any deviations and product review fees. 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Chapter 400
Installation

page 4-17

b. Connections to manholes or other structures shall be induced from movement by special fittings at each connection point specifically designed to prevent pullout, or extension into the structures as a result of thermal or other forces.	
4. Drilling Fluid Bentonite, used in the drilling process, shall be environmentally safe.	
5. Installation HDD shall consist of the drilling of a small diameter pilot bore from one end of the alignment to the other, followed by enlarging the hole diameter for the pipeline installation. It is recommended the pipeline shall be assembled, supported, and preloaded prior to installation in the directional drill tunnel. The Contractor shall be required to remove and reinstall the pipeline if the test fails after the installation. The pipe shall be joined using the thermal butt fusion method per Section 304.04. The required joining shall be assembled in a manner that does not restrict adjacent roadway or public activities. Prior to commencement of drilling operations, drill path shall be surveyed for any surface geo-magnetic variations or anomalies. Directional drilling machines shall consist of a hydraulically powered system to rotate and push hollow drilling pipe into the ground at a variable angle while delivering a pressurized fluid mixture to a groutable drill (bore) head. The drill pipe shall be a diameter sufficient for the torque and longitudinal loads and fluid capacities required for the work. A smoothly drilled pilot bore shall follow the design centerline of the pipe profile and alignment described on the construction drawings. The X, Y and Z axis locations relative to the planned alignment and planned elevations shall be monitored along the course of the pilot bore. An electronic guidance system capable of continuously monitoring the location of the drilling head and providing a readout of the inclination and azimuth on the drilling head to an accuracy of 1/4 inches and 1" bearing shall be available and utilized. The indicated pipe elevation from section readings shall be accurate to within 2% of the depth vertically at all depths up to 150 feet in any soil condition including hard rock. Pipe elevation may not be based on the depth below the indicated surface grade if the profile drawings do not show based on surveyed USGS elevations. The position shall be determined a minimum of once every twenty (20) feet by personnel trained and experienced with electronic guidance systems. All data and readings pertaining to the position of the bore head and the fluid pressures and flows shall be reported to the Department, Division and the RPR at all times. The pilot bore location shall be compared to the designed location to determine the deviation. This information shall be submitted to the RPR for approval prior to pipe installation. Refer to Section 404.04.5. Testing and inspection for guidelines on acceptable deviations. Reaming operations shall be conducted to enlarge the pilot bore after acceptance of the pilot bore location. The number and size of each reaming operation shall be conducted as the operation dictates but in no case shall the size of the reaming operation be greater than a hole greater than 15% of the D.O. of the installed pipe. Note: For crossings under INDOT right-of-way, INDOT Specification Section 715 where this method is limited to a maximum reamer size of twenty-four (24) inches unless otherwise approved by INDOT.	
6. Environmental Provisions The Contractor shall be responsible for additional environmental provisions, associated with the HDD operation beyond those covered by Section 405.03. The HDD operation is to be operated in a manner to prevent the discharge of water, drilling mud, and cuttings to adjacent areas or land area adjacent during the construction process. Equipment and procedures to maximize the reclamation or reuse of drilling mud to minimize waste may be provided. All excavated pipe used in the drilling operation shall be constructed to completely contain the fluid and prevent its escape to underground and/or groundwater. The Contractor shall be responsible for submitting to the RPR the proposed plan for erosion control/environmental protection. At a minimum, the Contractor shall have on site a sufficient quantity equipment (graders, rollers, etc.) and materials (such as groundbeams, hay bales, berms, and absorbent pads) for cleanup and containment for use in the event of a construction spill or leaks of spills. Waste drilling mud and cuttings shall be disposed by the Contractor to an approved off-site location.	
7. Environmental Provisions The Contractor shall be responsible for additional environmental provisions, associated with the HDD operation beyond those covered by Section 405.03. The HDD operation is to be operated in a manner to prevent the discharge of water, drilling mud, and cuttings to adjacent areas or land area adjacent during the construction process. Equipment and procedures to maximize the reclamation or reuse of drilling mud to minimize waste may be provided. All excavated pipe used in the drilling operation shall be constructed to completely contain the fluid and prevent its escape to underground and/or groundwater. The Contractor shall be responsible for submitting to the RPR the proposed plan for erosion control/environmental protection. At a minimum, the Contractor shall have on site a sufficient quantity equipment (graders, rollers, etc.) and materials (such as groundbeams, hay bales, berms, and absorbent pads) for cleanup and containment for use in the event of a construction spill or leaks of spills. Waste drilling mud and cuttings shall be disposed by the Contractor to an approved off-site location.	
8. Pipe Relocation After the pipe has been installed, allow pipe manufacturer's recommended amount of time, but not less than four (4) hours, for cooling and relaxation due to tensile stressing prior to hydrostatic testing.	

Chapter 400
Installation

page 4-19

9. Testing and Inspection The pipe is ONLY required to be hydrostatically tested one (1) time after the complete installation. However, to identify any defects prior to installation, the Department recommends the pipe be hydrostatically tested a total of three (3) times, after joining into continuous sub-sections prior to installation, after installation of each sub-section, and again when all the sub-sections are joined together end-to-end. Hydrostatic testing shall be performed in accordance with Section 603. Any material not passing the hydrostatic testing shall be rejected. A horizontal tolerance of up to three (3) feet left or right of the planned alignment will be permitted at any point on the alignment provided the pipeline is still within the easement or right-of-way where it is installed. Tolerances for vertical alignment compared to planned alignment will be judged on a case-by-case basis depending on the location relative to the non-traffic arteries, overhead overhead or low points, required elevation of air/water valves, and the effect on the pumping system curves. There shall be no allowance for length. The alignment of each plot bore must be approved by the RPR before site can be pulled. If the plot bore fails to conform to the above tolerances, the RPR may require a new plot boring to be made. 404.05 Pipe Bursting (Lateral Replacement Only)	Pipe bursting shall only be used for lateral rehabilitation/replacement and shall conform to the latest editions of the UPRC (IAWQO IS 26-2003) and the following requirements: 1. General The Contractor shall be certified by the particular pipe-bursting system manufacturer and personnel shall be certified as fusion technicians by a manufacturer of HDPE pipe. Certifications shall be submitted with the lateral application. The Contractor shall perform a pre-construction Closed Circuit Television (CCTV) inspection to evaluate the condition of the existing pipe and determine whether the pipe-bursting method is a valid alternative for repair. Inspection video shall be made available to the Division or Department upon request. 2. Materials Only HDPE and butt fusion joints per Section 303.02 or 304.04 shall be used for lateral pipe bursting applications. 3. Construction - General At a minimum, the Contractor shall adhere to the following requirements during construction: a. Defects and Obstructions Contractor shall perform all necessary point repairs and remove all obstructions when pre-construction CCTV inspection reveals leaks, voids, offset joints, sags in the pipe, or collapsed pipe that will prevent the completion of the pipe bursting process. If pre-construction CCTV inspection reveals a sag in the lateral that is greater than one half (1/2) the diameter of the existing pipe, Contractor shall excavate and replace those sections of pipe to result in acceptable grade within the sag.
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Chapter 400
Installation

page 4-20

CHAPTER 500
LIFT STATIONS AND
LOW PRESSURE SYSTEMS

SECTION 501
Requirements Common to both Lift Stations and Low Pressure Systems

501.01 Introduction	This Section provides the planning, design, and submittal requirements common to both lift stations and low pressure sewer systems. For requirements specific to lift stations refer to Section 502 and 503. For requirements specific to low pressure sewer systems refer to Section 504.
501.02 General	When possible, gravity sewers shall be extended to the proposed development. Lift Stations will be allowed if ALL the following conditions are met: 1. The proposed lift station or low pressure system is justified per Section 501.03. 2. The force main is designed per Section 502.10, and 3. Existing Service Area boundaries are not crossed. Sanitary Sewer Service Area boundaries shall not be crossed to avoid extending gravity sanitary sewers. When an existing lift station requires a capacity upgrade for a proposed development, the entire lift station system will be evaluated to determine the necessary upgrades. The requirements shall be determined on a case-by-case basis and shall be at the discretion of the Department. The intent is to upgrade the existing lift station to the Standards set forth in this Manual. 501.03 Justification Lift stations and low pressure systems shall be justified and will only be approved if the installation of a gravity sanitary sewer alternative exceeds the 50-year life cycle cost for the proposed system AND the criteria in Section 501.02 are met. An accurate cost estimate to construct a gravity sanitary sewer alternative and a 50-year life cycle cost estimate for the proposed lift station shall be submitted prior to approval. The Department, at its sole discretion, may choose to estimate the 50-year life cycle cost for the proposed lift station.

Chapter 500
Lift Stations and Low Pressure Systems

page 5-2

SECTION 502
Lift Station Design

502.01 Introduction	This Section provides the planning, design, and submittal requirements for lift stations with pumping capacities of 1,000 gpm or less. Requirements for lift stations with capacities greater than 1,000 gpm will be determined by the Department on a case-by-case basis.
502.02 General	Due to the variability of site conditions, each site and proposed lift station will be evaluated on a case-by-case basis. If deemed necessary, the Department may make additional requirements not covered in this Manual. To avoid unnecessary delays in the permitting process, a pre-submittal meeting with the Division and Department during the planning stages of the project is recommended.
502.03 Submittal Requirements for Approval and Construction Permit	When submitting for an Approval and a Construction Permit, the following are required: 1. Lift Station Service Area - Per Section 502.04. 2. Lift Station Justification - Per Section 501.03. a. 50-year life cycle analysis. b. Gravity sewer alternative cost estimate. 3. Lift Station Calculations. a. Pumping Capacity - Per Section 502.07. b. Total Dynamic Head (TDH) Calculations - Per Section 502.09. c. Pump and System Head Curves - Per Section 502.10. 4. Standard Lift Station Details. The most recent version of the Standard Lift Station Detail Sheets, as furnished by the Department, shall be submitted for lift stations. 5. Pre-Construction Submittal Requirements - Per Section 503.04. 6. Any other information the Division and Department deems necessary to review and evaluate the proposed pumping system.
502.04 Lift Station Service Area	The Applicant shall prepare a Lift Station Service Area Study in accordance with all the requirements in Section 202.03. In addition to the requirements of Section 202.03, if a determined an existing lift station can be abandoned and connected to the proposed sewer system, the area served by the existing lift station shall be included in the proposed lift station Service Area.
502.05 Lift Station Location	Lift station locations will be evaluated by the Department on a case-by-case basis. At a minimum the lift station shall be located to assure the following: 1. SCADA Connectivity The lift station shall be located within the proposed development to assure connectivity to the SDIS SCADA wireless monitoring and control network.

Chapter 500
Lift Stations and Low Pressure Systems

page 5-3

Connectivity shall be verified prior to Approval. To verify connectivity, the location of the lift station shall be stated by the Engineer. Connectivity will be verified by a radio path test done by the Department, or a representative of the Department, and paid for by the Applicant. If the location does not provide adequate connectivity, an alternate location shall be chosen. To assure future connectivity, the development shall be configured in such a way to provide for a thirty (30) feet wide by seven hundred (700) feet long "clear zone" between the antenna at the lift station and the designated receiving cable tower. The clear zone is not required to be extended onto adjacent properties. However, if site conditions allow the Department may require an alternate location for the proposed lift station to have the entire clear zone, or as much as practical, located within the project boundaries. If possible, the clear zone shall be located in obstruction-free areas that cannot be built upon such as, but not limited to, right-of-ways, easements, common areas, flood hazard areas, or detention areas. If any of the above conditions cannot be met, the Department will evaluate alternatives, including building height restrictions, on a case-by-case basis. The clear zone shall be shown on the plans. 2. Adequate Access The lift station shall be located to assure adequate access is available for operation and maintenance activities. Clearance requirements are as follows: a. Concrete Pad i. To adjacent property lines - twenty (20) feet minimum. ii. To public right-of-way - thirty (30) feet minimum. iii. To private paved streets or paved areas - twenty (20) feet minimum and thirty (30) feet maximum. iv. To structures or buildings - thirty (30) feet minimum. b. Access Drive To adjacent property lines - ten (10) feet minimum. Lift stations shall not be located in areas the Department determines to be inaccessible such as, but not limited to, rear yards.

502.06 Lift Station Type	Only submersible duplex lift stations will be allowed. The configuration shall be per the Department's most recent version of the Standard Lift Station Detail Sheets.
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Chapter 500
Lift Stations and Low Pressure Systems

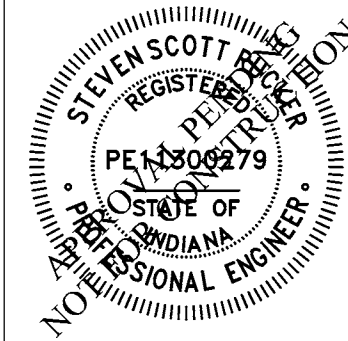
page 5-4

502.07 Pumping Capacity	The pumping capacity shall be calculated as follows: $Q = \text{Design Flow} / 1440$ where: Q = Pumping rate, gpm Design Flow = Flow as determined per Section 202.04, gpd 1440 = Conversion from gpd to gpm Each pump in a duplex station shall have a pumping capacity of Q. The second pump shall act as a backup in the event of one (1) pump is out of service. Q_{total} shall be rounded up in increments of 10 gpm (i.e. 233 gpm shall be rounded up to 240 gpm). The Department may require the pumping capacity to be increased or decreased, if deemed necessary. The minimum pumping capacity shall be 100 gpm.
502.08 Initial Pumping Capacity	Because proposed developments may only be a portion of the overall Lift Station Service Area, the Department may allow or require the pumping capacity to be reduced for the proposed development if the following conditions are met: 1. The area of the proposed development is less than 50% of the Lift Station Service Area. 2. The required Pumping Capacity for the proposed development is less than 50% of the required Pumping Capacity for the Lift Station Service Area. At a minimum, each pump shall be sized to accommodate the Design Flow of the proposed development plus 20%. Meeting the above criteria does not guarantee a reduction will be allowed. The specific equipment requirements and allowable reductions will be at the discretion of the Department and will be evaluated on a case-by-case basis. Only the pumps, motors, and relevant control panel equipment will be considered for allowable reductions. The wet well, valve and meter vaults, piping, valves, and force main shall be sized for the overall Lift Station Service Area.
502.09 Total Dynamic Head Calculations	The Total Dynamic Head (TDH) shall be calculated for the pumping capacity of the lift station. The TDH is the sum of the static head and friction losses for a given pumping rate in a defined pumping system. TDH shall be calculated as follows: $TDH = \text{Static Head} + h_f + h_m$ where: TDH = Total Dynamic Head, feet Static Head = Elevation difference between the force main discharge elevation and the pump off elevation, feet

Chapter 500
Lift Stations and Low Pressure Systems

page 5-5

REVISIONS AND ISSUES	DATE	BY	PROJECT NO.
	10.18.2015	BJS	W15.0316
SUBMITTED FOR COUNTY SURVEYOR REVIEW			
ISSUED FOR TAG REVIEW	01.29.2016	BJS	
DESIGNED BY: RLW			
DRAWN BY: RLW			
CHECKED BY: BJS			
DATE: 01.29.2016			



STEVEN SCOTT RUCKER P.E. 11360279

of WESTFIELD
17651 SUN PARK DRIVE, WESTFIELD, IN 46074
CITIZENS - SANITARY SEWER SPECIFICATIONS
Part of SWM, Section 36, Township 19 North, Range 3 East, Washington Township, Hamilton County, Indiana

PREPARED FOR: Citizens of Westfield

SHEET NO. C906

PROJECT NO. W15.0316

10505 N. College Avenue
Indianapolis, Indiana 46280
w@e.net
317 846 - 6611
800 452 - 6408
317 843 - 0546/fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

LOCATION: J:\2016\16-150316\Engineering\Design\Consent\16-150316-C004_SS_specs.dwg
DATE/TIME: January 26, 2016 1:24 PM
PLOTTER: HP e5700

502.10 Pump Selection	The Pumping Capacity and THM, as calculated in Sections 502.07 and 502.08, shall be used as the Operating Point when selecting the pump make and model. Per Section 502.09, a roughness coefficient of C = 120 was used to determine the Operating Point. However, each pump shall be within the pumping operating range when C = 100 at the Pump Off elevation and C = 140 at the Pump On elevation. The pump, motor, and impeller shall be non-overlapping throughout the entire operating range for all roughness coefficients. Alternate methods to determine minor losses, such as using Equivalent Lengths, may be allowed on a case-by-case basis with prior approval from the Department. The system head curves for each roughness coefficient shall be plotted on the pump performance curve to determine the operating characteristics. Engineering judgment may be used when evaluating pump alternatives. If justified, the Department may require a different operating point or an alternate pump to be used.
502.11 Variable Speed Pumping Systems	The need for variable speed pumping systems will be evaluated on a case-by-case basis and shall be at the discretion of the Department. Variable Speed Pumping systems may be required if <u>ANY</u> of the following conditions are met: 1. Horsepower – Greater than sixty (60) hp. 2. TDH – Greater than fifty (50) feet. 3. Pump Capacity – Greater than 500 gpm. 4. Hydraulic Transients (water hammer) – When the potential for damaging transients exist. 5. Buildout conditions – If the design flow as determined in Section 202.03 justifies and/or. 6. Others – If pump system conditions justify. Lift stations with constant speed pumping systems shall be designated as "Level 3" Lift Stations and those with variable speed pumping systems shall be designated as a "Level 2" Lift Station. Constant speed control system requirements for Level 3 Lift Stations shall be per Section 503.08. Variable speed control system requirements for Level 2 Lift Stations shall be per Section 503.09.
502.12 Wet Well Sizing	The wet well shall be sized for the entire Lift Station Service Area. The minimum size of the wet well shall be as follows:

Chapter 500 Lift Stations and Low Pressure Systems	page 5-7
1. Diameter of Wet Well	The minimum wet well diameter shall be six (6) feet. The depth of Wet Well, below the invert of the incoming sewer. The minimum required depth of the wet well below the invert of the incoming sewer shall be calculated as follows: Depth = 1.5 Feet + Operating Depth + Height of Pump where: 1.5 feet = Difference between the lowest incoming gravity sewer invert and the lead pump on elevation. Height of Pump = Distance from the bottom of the wet well to the top of the pump, feet. Operating Depth = Depth between the lead pump on and pump off elevations, feet. The operating depth is a function of the volume and diameter. The volume shall be based on four (4) skids per hour and shall be calculated as follows: $V = \frac{Q \times T}{4}$ where: V = Volume, gallons Q = Pumping rate per 502.07, gpm T = 15 minutes (15 minute station cycle time) The minimum Operating Depth shall be 2.5 feet. Only one (1) incoming sewer connection is allowed per Section 502.17. When Variable Speed Pumps are required per Section 502.11, the Department may consider or require a reduction of the volume. Both pumps shall remain fully submerged at all times during the full pumping cycle. 3. Detention Time The maximum detention time (pump off time) shall be thirty (30) minutes based on the average daily flow. There may be some situations when one or more of the above wet well sizing criteria cannot be met. The Department will evaluate those instances on a case-by-case basis. Note: If noticeable odors are being generated at any time before the Maintenance Board expires, the Applicant shall determine the cause and construct an odor control facility at either the wet well or the discharge end of the force main. The method used for odor control will be approved by the Department on a case-by-case basis.

n ₁ = Piping friction losses, feet n ₂ = Minor losses, feet The above variables shall be calculated as follows: 1. Static Head, feet Static Head = Force Main Discharge Elevation – Pump Off Elevation When the high point is a force main is not at the discharge elevation, the elevation of the high point shall be evaluated to determine if the pump performance characteristics are adversely affected. 2. n ₁ = Piping friction losses, feet Piping friction losses shall be calculated as follows: $h_f = 10.44 L \frac{Q^{1.85}}{C^{1.75} D^{4.75}}$ where: D = pipe diameter, inches Q = pumping rate, gpm C = pipe roughness coefficient (100, 120, & 140) L = force main length, feet A roughness coefficient of C = 120 shall be used to determine the Operating Point. However, due to changing force main conditions over time, the TDH may also be calculated using C = 100 at the Pump Off elevation and C = 140 at the Pump On elevation. See Section 502.10 for Pump Selection criteria and further explanation. 3. n ₂ = Minor losses, feet Minor losses are due to pipe fittings and shall be calculated as follows: $h_m = \frac{KV^2}{2g}$ where: K = proportionality constant** V = velocity, ft/sec g = gravitational constant = 32.2 ft/sec ² ** The proportionality constant, K, is dependent on the type of fitting. Unless justified, K _{valve} shall be as follows:
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SECTION 503 Lift Station Equipment and Operating Requirements	
503.01 Introduction	This Section provides the equipment and operating requirements for lift stations.
503.02 General	Lift station equipment meeting or exceeding the requirements set herein will be approved. However, the Department may modify any of the requirements in this Section, if justified. All components of the lift station exposed to weather shall be constructed of material that is resistant to corrosion and will not require surface protection throughout the expected life of the lift station. In general, these materials are stainless steel, aluminum, fiberglass reinforced polyester (FRP), and advanced stainless steel PVC.
503.03 Equipment Vendors	All equipment shall be an integral package supplied by the pump manufacturer with local representation so as to provide undisturbed responsibility.
503.04 Submittal Requirements, Pre-Construction	Prior to construction, the Contractor shall submit the following: 1. A cover letter from the Engineer and Contractor indicating all proposed equipment and components meet the requirements of this Manual and the approved Plans. 2. Four (4) sets of shop drawings, detailed specifications, pump warranty, and performance characteristics for all equipment and components to be furnished and installed.
503.05 Power Requirements	Only electric utility delivered 3-phase, 60 Hz, 4 wire wye, or delta power will be allowed. The use of phase converters to derive 3-phase power from 1-phase power is prohibited.
503.06 Pump Equipment	Pumps shall be either Hydromatic, Flygt, KSB or Blarnes, pumps. Westfield shall be either Flygt, or Blarnes. Pump Equipment shall be as follows: 1. Pumps Pumps shall be of the submersible type for handling raw unconsented sewage. Pump valves, motor, and seal housing shall be high quality gray cast iron. The impeller shall be either cast iron or cast bronze of a non-cog design capable of handling minimum three (3) inch solids size. No metal valves, metal valves, and other metal found in normal sewage applications. Impeller shall have pump seal wires on the back shield of the impeller to keep grinding material away from the seal area and increase operating life. Impeller shall be either 10 or 12 inch I.D. type fly or securely lock the impeller to the driving shaft. The pump coupler shall be 1/4 inch with a replaceable bronze wear ring to minimize wear on the impeller and help achieve longer balance operating life. All fasteners shall be of stainless steel. 2. Mating Surfaces All mating surfaces where watertight sealing is required shall be machined and mated with nitrile rubber O-rings. Sealing shall be accomplished when mated to O-rings without requirement of a specific torque limit.

Chapter 500
LIR Stations and Low Pressure Systems

page 5-1

502.13 Operating Set Points	The elevation of the set points for the operation of the lift station shall be as follows: 1. Primary level sensor - Pressure Transducer (Per Section 503.09 or 503.08) a. Alarm Level - 0.5 feet below the lowest incoming invert. b. Lag Pump On - 1.0 feet below the lowest incoming invert. c. Lead Pump On - 1.5 feet below the lowest incoming invert. d. Pump Off = (Lead Pump On Elev. - Operating Depth per Section 502.12) 2. Backup (Alarm) level sensors - Ball Floats (Per Section 503.08 or 503.09) a. Pump On = (lowest incoming pipe invert + 1/2 diameter of pipe) b. Pump Off - 0.5 feet below the lowest incoming pipe invert. 502.14 Valve and Meter Vaults	The minimum vault dimensions for Level 2 and Level 3 lift stations shall be per the most recent version of the Standard Lift Station Detail Sheets. 502.15 Force Main Design	The force main shall be designed as follows: 1. Lift stations shall not pump downflow. Prior to discharging into the receiving manhole, the force main shall not flow downflow. When possible the receiving gravity sewer shall be extended a sufficient distance to avoid downflow pumping. The discharge elevation of the force main at the discharge location shall not be below the elevation in the valve vault and greater than two (2) feet above the invert of the incoming sewer. 2. The size, depth, slope, and location shall be as follows: a. Size The diameter shall be sized using the Pumping Capacity as determined in Section 502.07 with the following velocities: i. Minimum Velocity - 2.5 ft/sec ii. Maximum Velocity - 6.0 ft/sec Higher velocities will be considered and evaluated on a case-by-case basis. If the Pumping Capacity is reduced per Section 502.08, the minimum velocity may be reduced to 2.0 ft/sec when using the Initial Pumping Capacity. The minimum diameter force main shall be 4 inches. b. Depth The minimum depth to the top of the pipe shall be 4.5 feet. The depth may be required to be increased if air release valves can be avoided or the minimum slope cannot be achieved.
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502.16 Seal System	The pump shall be provided with a mechanical rotating shaft seal system running in an oil reservoir or being separate, constantly lubricated lapped seal faces. The cover seal and between the pump and oil chamber shall consist of one (1) stationary seal and one (1) rotating ring held in place by its own spring. The lower seal shall be renewable without disassembling the seal chamber. The upper seal between the motor and the seal chamber shall be of the same design with its own separate spring system. The seals shall require neither maintenance nor adjustment, but shall be easily inspected and replaceable. Shaft seals with concentric glands and O-rings shall be avoided. Seals subject to hot oil leaks and leaking a pressure or different to high external pressure shall not be considered acceptable for use in the lift station independent seal system. The shaft sealing system shall be capable of operating submerged to pressure equivalent to the pumped (200) feet. No seal damage shall result from operating the pump unit out of its liquid environment. The seal system shall not rely upon the pumped media for lubrication. The seal chamber shall also be equipped with a seal failure sensor probe which will sense water intrusion through the lower seal. This sensor shall be connected to an alarm in the control panel to indicate lower seal failure.
502.17 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.

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502.41 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.42 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.43 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.44 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.45 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.46 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.47 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.48 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.49 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.50 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.51 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.52 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.53 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.54 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.55 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.56 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.57 Lift Station Components	The lift station shall be configured and shall include all components shown on the most recent version of the Standard Details Lift Station Details and the following: a. Material The wet well, valve and meter vaults, flat tops and base slabs shall be constructed of precast concrete meeting the requirements of ASTM C 475. Cast-in-place nonreinforced concrete will be substituted with the prior written approval from the Department. b. Joints All joints between precast sections shall be per Section 305.02. c. Waterproofing The outside wall below grade shall be coated with bituminous waterproofing material.
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502.58 Lift Station Components	The
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503.05
Control System
Requirements -
Level 2 Lift Stations

The Control System Requirements for Level 2 Lift Stations with variable speed pumps shall be as the current Consultant specification or as follows:

1. Overall Lift Station Control System End User Requirements

Note to specifier: Select items a or b below as appropriate

a. Outdoor Location Requirements

- i. Control and electrical components shall be individually equipment rack mounted as shown on schematics and as follows:
- Pump Control Panel NEMA 4X stainless steel with dead front and internal wiring out panel door. Include pump controls, operator interface, flow meter transmitter, pressure equipment and uninterruptible power supply
 - Power distribution panel NEMA 4X stainless steel. Include phase monitor, surge protection devices, and branch circuit breakers
 - IMPL approved meter socket
 - Service entrance rated NEMA 3R double throw fused main disconnect switch for utility power and portable emergency generator connection. Include exterior mounted weather proof generator receptacle mounted to disconnect enclosure
 - Disconnect and re-energize shall be suitable for outdoor use
 - NEMA 3R control power transformer, suitable for 200 V
- Note to specifier: Covert alarm system required on interim basis until SCADA System is operational
- NEMA 4X stainless steel rated "Covert" alarm system
- ii. Provide NEMA 4X rated variable speed drives suitable for outdoor use. Drive enclosure shall be end product of drive manufacturer. Drive may be mounted to equipment rack or freestanding as shown on schematics

- iii. Enclosures shall be mounted on lift station concrete pad. Concrete pad shall be a minimum three inches above the adjacent ground. Concrete pad shall be a minimum of one foot larger in dimension than enclosure plus radius of drive pumps. Enclosure panel

- iv. jumbled terminations shall not be acceptable
- ii. Include provisions for grounding of shields on shielded twisted pair cables entering or leaving panel. Cable shields shall be grounded at terminal block end only
- iii. Provide separate locations on terminal strips for mounted in the following types of signals:
- 480 V 240 volt power circuits
 - 120VAC power circuits
 - 120VAC discrete signals
 - 24 or 48 Vdc discrete signals
 - Analog signals
 - Serial or parallel digital communication signals

- iv. Provide separate terminal strip for intrinsically safe circuits. Intrinsically safe wiring shall be separated by non-conducting or grounded barrier within panel, and not combined with any other wiring within conduit or wire duct

c. Power Distribution

- i. Panels having 3 phase power supply
- Service entrance rated NEMA 3R double throw fused main disconnect switch to isolate utility power to panel and allow connection of portable emergency generator. Mount generator receptacle to disconnect enclosure. Disconnect and re-energize shall be rated for 200 V
 - Provide circuit breakers for all variable frequency drives provided
 - Provide phase monitor relay (PMR)
 - If panel includes separate 120 vac control power supply, provide auxiliary control to isolate control power when main circuit breaker is opened
 - 480VAC, only 1/2 120 control power transformer requirements:
 - Both primary leads shall be fused
 - First secondary lead shall be fused
 - Second secondary lead shall be grounded

- ii. Panels having 120 vac power supply
- Provide circuit breaker on power supply entering panel

- iii. Provide separately fused power supply to each major panel component

- iv. Panels using modular or solid state VFD devices
- Provide separately fused power circuit for panel providing I/O
 - Provide separate fused power for field devices. Provide separate circuit for each module

- v. Include digital transient surge suppressor/varistor installed in parallel with output contact at terminal strip for each output signal driving an inductive load including

- Relays
- Solenoids
- Motor starters
- Motors

4. VFD Requirements

- vi. ground and o-ring. Provide with stainless steel braided support cable to prevent transducer from being supported by signal cable
- vii. Accuracy +/- 0.25% of span including linearity, hysteresis, and repeatability
- viii. Provide with lightning and surge protection to be mounted in Pump Control Panel

- vi. Suitable for use in Class 1, Division 1, Group D hazardous classified location when used with appropriate panel
- vii. Arrester model 575

- b. In high grease or other applications, ultrasonic level sensor may be used with approval from OWNER

- i. Ultrasonic level measurement
- ii. 120 VAC powered
- iii. 4 - 20 mAdc output signal
- iv. Accuracy +/- 0.1 % of span including linearity, hysteresis, and repeatability
- v. Provide with lightning and surge protection to be mounted in Pump Control Panel

- vi. Suitable for use in Class 1, Division 1, Group D hazardous classified location
- vii. Manufacturers:
- Mifronics MTR-Ranger
 - Endress and Hauser Prosonic M
 - No substitutions allowed

- c. Provide wet well float switches to sense high and low level in wet well and control standby pump on/off operation. Standby pump operation shall be independent of PLC

- i. SPDT contacts, rated 1 amp at 150 VAC/Vdc inductive, mechanical life 10 million operations
- ii. Corrosion: Model 2000 pear shaped neoprene covered mercury switch ball float of standard size, supported by stainless steel cable

- d. For lift stations containing a dry well, or areas prone to flooding due to pump seal or piping failure, provide dry well float switch to sense dry well flooding

- ii. SPDT contacts, rated 1 amp at 150 VAC/Vdc inductive, mechanical life 10 million operations
- iii. Corrosion: Model 2000 pear shaped neoprene covered mercury switch ball float of standard size

- e. Provide intrusion detection switches

- i. When control and electrical components are mounted outdoors, provide intrusion detection switches for electrical and control equipment enclosure

- ii. When control and electrical components are mounted indoors provide intrusion detection switches for air entrances into pump station

- iii. Reed switch encased in ABS plastic case, normally closed contact
- iv. Serrol 1045 series or approved equal

f. Provide magnetic float meter:

- i. Size meter to maintain average velocity of 3 ft/sec
- ii. System accuracy of +/- 25% of flow rate with 10:1 turndown
- iii. Meter body:
- Utilize frequency dc pulse
 - Accidental surges/range rating of 30 to water for 48 hours
 - Polystyrene or hard rubber seal, 316 stainless steel electrodes

- Phase fail
- ii. Discrete Outputs
- Pump 1 required - variable speed
 - Pump 2 required - variable speed
 - Pump 3 required - constant speed
 - Pump 4 required - constant speed
 - Pump 1 seal test (submersible pump applications only)
 - Pump 2 seal test (submersible pump applications only)
 - Common alarm to horn and light

Note to specifier: Covert alarm system required on interim basis until SCADA System is operational

- Covert Alarm 1
- Covert Alarm 3
- Covert Alarm 4
- Covert Alarm 5

ii. Analog Outputs

- Pump 1 speed
- Pump 2 speed
- Pump 3 current
- Pump 4 current
- Wet well level
- Flow

- iii. Analog Inputs
- Pump 1 speed control
 - Pump 2 speed control

h. OUI shall be configured to allow

- i. Display pump run, pump fail, VFD fail, pump speed, automatic mode, overheat, shut fail, motor over-temperature, accumulated pump run time, and accumulated pump number of starts for each pump

- ii. Display all discrete and analog signals input to PLC, and calculated or derived parameters including communication fail, crew on site, intrusion, and float control mode

- iii. Wetwell level, high and low level alarms
- iv. Lead Pump 1 / Lead Pump 2 / Lead Pump Alternator selection

- v. Pump 1 / Pump 2 / Pump 3 / Pump 4 / Pump 5 / Pump 6 / Pump 7 / Pump 8 / Pump 9 / Pump 10 / Pump 11 / Pump 12 / Pump 13 / Pump 14 / Pump 15 / Pump 16 / Pump 17 / Pump 18 / Pump 19 / Pump 20 / Pump 21 / Pump 22 / Pump 23 / Pump 24 / Pump 25 / Pump 26 / Pump 27 / Pump 28 / Pump 29 / Pump 30 / Pump 31 / Pump 32 / Pump 33 / Pump 34 / Pump 35 / Pump 36 / Pump 37 / Pump 38 / Pump 39 / Pump 40 / Pump 41 / Pump 42 / Pump 43 / Pump 44 / Pump 45 / Pump 46 / Pump 47 / Pump 48 / Pump 49 / Pump 50 / Pump 51 / Pump 52 / Pump 53 / Pump 54 / Pump 55 / Pump 56 / Pump 57 / Pump 58 / Pump 59 / Pump 60 / Pump 61 / Pump 62 / Pump 63 / Pump 64 / Pump 65 / Pump 66 / Pump 67 / Pump 68 / Pump 69 / Pump 70 / Pump 71 / Pump 72 / Pump 73 / Pump 74 / Pump 75 / Pump 76 / Pump 77 / Pump 78 / Pump 79 / Pump 80 / Pump 81 / Pump 82 / Pump 83 / Pump 84 / Pump 85 / Pump 86 / Pump 87 / Pump 88 / Pump 89 / Pump 90 / Pump 91 / Pump 92 / Pump 93 / Pump 94 / Pump 95 / Pump 96 / Pump 97 / Pump 98 / Pump 99 / Pump 100 / Pump 101 / Pump 102 / Pump 103 / Pump 104 / Pump 105 / Pump 106 / Pump 107 / Pump 108 / Pump 109 / Pump 110 / Pump 111 / Pump 112 / Pump 113 / Pump 114 / Pump 115 / Pump 116 / Pump 117 / Pump 118 / Pump 119 / Pump 120 / Pump 121 / Pump 122 / Pump 123 / Pump 124 / Pump 125 / Pump 126 / Pump 127 / Pump 128 / Pump 129 / Pump 130 / Pump 131 / Pump 132 / Pump 133 / Pump 134 / Pump 135 / Pump 136 / Pump 137 / Pump 138 / Pump 139 / Pump 140 / Pump 141 / Pump 142 / Pump 143 / Pump 144 / Pump 145 / Pump 146 / Pump 147 / Pump 148 / Pump 149 / Pump 150 / Pump 151 / Pump 152 / Pump 153 / Pump 154 / Pump 155 / Pump 156 / Pump 157 / Pump 158 / Pump 159 / Pump 160 / Pump 161 / Pump 162 / Pump 163 / Pump 164 / Pump 165 / Pump 166 / Pump 167 / Pump 168 / Pump 169 / Pump 170 / Pump 171 / Pump 172 / Pump 173 / Pump 174 / Pump 175 / Pump 176 / Pump 177 / Pump 178 / Pump 179 / Pump 180 / Pump 181 / Pump 182 / Pump 183 / Pump 184 / Pump 185 / Pump 186 / Pump 187 / Pump 188 / Pump 189 / Pump 190 / Pump 191 / Pump 192 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/ Pump 648 / Pump 649 / Pump 650 / Pump 651 / Pump 652 / Pump 653 / Pump 654 / Pump 655 / Pump 656 / Pump 657 / Pump 658 / Pump 659 / Pump 660 / Pump 661 / Pump 662 / Pump 663 / Pump 664 / Pump 665 / Pump 666 / Pump 667 / Pump 668 / Pump 669 / Pump 670 / Pump 671 / Pump 672 / Pump 673 / Pump 674 / Pump 675 / Pump 676 / Pump 677 / Pump 678 / Pump 679 / Pump 680 / Pump 681 / Pump 682 / Pump 683 / Pump 684 / Pump 685 / Pump 686 / Pump 687 / Pump 688 / Pump 689 / Pump 690 / Pump 691 / Pump 692 / Pump 693 / Pump 694 / Pump 695 / Pump 696 / Pump 697 / Pump 698 / Pump 699 / Pump 700 / Pump 701 / Pump 702 / Pump 703 / Pump 704 / Pump 705 / Pump 706 / Pump 707 / Pump 708 / Pump 709 / Pump 710 / Pump 711 / Pump 712 / Pump 713 / Pump 714 / Pump 715 / Pump 716 / Pump 717 / Pump 718 / Pump 719 / Pump 720 / Pump 721 / Pump 722 / Pump 723 / Pump 724 / Pump 725 / Pump 726 / Pump 727 / Pump 728 / Pump 729 / Pump 730 / Pump 731 / Pump 732 / Pump 733 / Pump 734 / Pump 735 / Pump 736 / Pump 737 / Pump 738 / Pump 739 / Pump 740 / Pump 741 / Pump 742 / Pump 743 / Pump 744 / Pump 745 / Pump 746 / Pump 747 / Pump 748 / Pump 749 / Pump 750 / Pump 751 / Pump 752 / Pump 753 / Pump 754 / Pump 755 / Pump 756 / Pump 757 / Pump 758 / Pump 759 / Pump 760 / Pump 761 / Pump 762 / Pump 763 / Pump 764 / Pump 765 / Pump 766 / Pump 767 / Pump 768 / Pump 769 / Pump 770 / Pump 771 / Pump 772 / Pump 773 / Pump 774 / Pump 775 / Pump 776 / Pump 777 / Pump 778 / Pump 779 / Pump 780 / Pump 781 / Pump 782 / Pump 783 / Pump 784 / Pump 785 / Pump 786 / Pump 787 / Pump 788 / Pump 789 / Pump 790 / Pump 791 / Pump 792 / Pump 793 / Pump 794 / Pump 795 / Pump 796 / Pump 797 / Pump 798 / Pump 799 / Pump 800 / Pump 801 / Pump 802 / Pump 803 / Pump 804 / Pump 805 / Pump 806 / Pump 807 / Pump 808 / Pump 809 / Pump 810 / Pump 811 / Pump 812 / Pump 813 / Pump 814 / Pump 815 / Pump 816 / Pump 817 / Pump 818 / Pump 819 / Pump 820 / Pump 821 / Pump 822 / Pump 823 / Pump 824 / Pump 825 / Pump 826 / Pump 827 / Pump 828 / Pump 829 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CHAPTER 600									
TESTING									
SECTION 601									
General									
601.01 Introduction									
This Section provides the testing requirements common to all sanitary sewer facilities. For testing requirements specific to sanitary sewers refer to Section 602. For testing requirements specific to force mains refer to Section 603. For testing requirements specific to manholes refer to Section 604. For testing requirements specific to lift stations refer to Section 605.									
601.02 General Testing Requirements									
All testing shall be performed under the observation of the RPR. It is the Contractor's responsibility to schedule the testing. Test results obtained in the absence of the Division's RPR or Department will not be accepted. The Contractor shall be responsible for providing all testing equipment at no cost to the City, Division, or Department. All pressure gauges used shall be calibrated within one (1) year of use for any test. Calibration papers and test date information shall be made available at the request of the RPR, Division, or Department. The City of Indianapolis will not assume any liability for the actions of the Owner, Contractor, or their agents in the performance of the required tests.									
SECTION 602									
Gravity Sanitary Sewer Testing Requirements									
602.01 Introduction									
This Section provides the testing requirements specific to gravity sanitary sewers. For testing requirements specific to force mains refer to Section 603. For testing requirements specific to manholes refer to Section 604. For testing requirements specific to lift stations refer to Section 605. For testing requirements common to all sanitary sewer facilities refer to Section 601.									
602.02 General Requirements									
All sanitary sewers twenty-four (24) inches and less shall be air tested by means of a low pressure air test per Section 602.03. All sewers larger than twenty-four (24) inches shall be tested per Section 602.04. All sanitary sewers constructed of flexible pipe (PVC and Centrifugally Cast Fiberglass Reinforced Polymer Mortar) shall be tested for deflection by means of a mandrel test per Section 602.05.									
602.03 Low Pressure Air Test									
All sewers twenty-four (24) inches and less shall be tested by means of a low pressure air test to detect damaged piping and/or improper piping. Testing shall be done per ASTM F 1417 for flexible and semi-rigid pipe and ASTM F 924 for RCP. The use of the low pressure air test for flexible and semi-rigid pipe larger than twenty-four (24) inches will be evaluated on a case-by-case basis. The Contractor is responsible for ensuring the test is conducted in a safe manner and all applicable safety procedures are followed. Do not enter, or allow anyone to enter, the manhole during testing. The low pressure air test shall be as follows:									
1. Waiting Period									
The air test may be done immediately after final backfill is placed in the trench.									
2. Equipment									
At a minimum, the following shall be provided:									
a. Mechanical or pneumatic plugs.									
b. Air control panel.									
c. Shut-off valve, pressure regulator valve, pressure relief valve, and input pressure gauge. The pressure regulator or relief valve shall be set no higher than 9 psig (1 psig for RCP) to avoid over pressurization.									
d. Continuous monitoring pressure gauge having a range of 0 to at least 10 psig. The gauge shall be no less than four (4) inches in diameter with minimum divisions of 0.10 psi and an accuracy of 0.5 of psi.									
e. To reduce the potential for sewer line over-pressurization, two (2) separate hoses shall be used to:									
i. Connect the control panel to the sealed line for introducing low pressure air, and									
ii. Constantly monitor air pressure buildup in the line.									
Chapter 600									
Testing									
If pneumatic plugs are utilized, a separate hose shall be required to inflate the pneumatic plugs.									
3. Testing Procedures									
The Test Data Sheet per Appendix C shall be used when conducting the air test. The procedures for the low pressure air test are as follows:									
a. Plug Installation									
After a segment of pipe has been backfilled to final grade, securely place and brace suitable test plugs in the ends of the sewer segment and in all lateral stubs included in the test. All plugs shall be securely restrained and braced prior to and during the test.									
b. Line Pressurization									
Add air slowly to the test section until the pressure inside the pipe reaches 4.0 psig PLUS the necessary adjustment for groundwater (Maximum 2.0 psig adjustment for a 6.0 psig maximum total). The air pressure adjustment for groundwater shall be determined by the following:									
Adjustment = Depth of Groundwater x 0.43									
where									
Adjustment = Adjustment added to the starting pressure of the low-pressure air test. The maximum adjustment shall be 2.0 psig.									
Depth of Groundwater = As measured above the top of pipe, feet.									
0.43 = Conversion factor									
Do not exceed 8.0 psig at any time during the low-pressure air test. The groundwater monitoring wells installed per Section 405.09 shall be used to determine the depth of groundwater. If more than one well was installed, take the average depth of the nearest downstream and nearest upstream monitoring locations. If the monitoring wells were not installed, the monitoring shall be 2.0 psig.									
c. Pressure Stabilization									
After a constant pressure of 4.0 psig PLUS the necessary adjustment for groundwater is reached, the air supply shall be throttled to maintain that internal pressure for at least two (2) minutes. This time permits the temperature of the entering air to equalize with the temperature of the pipe wall.									
d. Timing Pressure Loss									
When temperatures have been equalized and the pressure stabilized at 4.0 psig PLUS the necessary adjustment for groundwater, the air hose from the control panel to the air supply shall be shut-off or disconnected.									
Chapter 600									
Testing									
The Engineer and manufacturer are responsible for ensuring the system will operate as intended.									
504.09 Grinder Pump Equipment									
Simplex or duplex grinder pumps may be used for single dwelling units. For uses other than single dwelling units, the Engineer shall determine which is appropriate. General equipment requirements are as follows:									
1. Grinder Pump Station									
The grinder pump stations shall be a complete package consisting of all equipment and appurtenances required for a fully complete pumping system. Pump wear controls, starter, alarm, piping, fittings, valves, and all accessories shall be part of a factory fabricated package so that after having the wet well, the feed connection of the gravity lateral, discharge line and electrical service line to the control box, will complete the installation.									
2. Manufacturer									
Each grinder pump station shall be manufactured and assembled by a single manufacturer.									
Chapter 600									
Lift Stations and Low Pressure Systems									
SECTION 504									
Low Pressure Pump Stations and Appurtenances									
504.01 Introduction									
This Section describes, in general terms, the guidelines and requirements for the planning, design, and submital requirements for low-pressure sewer systems.									
504.02 General									
Low pressure systems will only be considered in areas where sanitary sewers currently serve the surrounding areas and where conventional sanitary sewer facilities cannot be constructed.									
504.03 Submittal Requirements for Approval and Construction Permit									
Approval of low-pressure sewer systems will be evaluated on a case-by-case basis and will only be allowed with prior written approval from the Department. At the discretion of the Department, a lift station may be required in lieu of a low pressure system. When submitting for an Approval and Construction Permit, the following are required:									
1. Written approval from the Department.									
2. Low pressure system service area - Per Section 504.04.									
3. Low pressure system justification - Per Section 501.03.									
a. 50-year life cycle analysis, and									
b. Gravity sewer alternative cost estimate.									
4. Low pressure system calculations - Per manufacturer's recommendations and at a minimum the following:									
a. Calculation worksheet - Per manufacturer;									
b. Individual pump curves; and									
c. Make and model number of pumps.									
5. Standard Low Pressure System Detail Sheet.									
6. Identification of the person(s) responsible for the maintenance of the pumps and other components of the system that are not the responsibility of the City.									
7. Homeowners Association Covenants and Restrictions, if applicable, and									
8. Any other information the Division and/or Department deems relevant to review and evaluate the proposed low-pressure system.									
504.04 Low Pressure System Service Area									
The Applicant shall prepare a Low Pressure System Service Area Study in accordance with all the requirements in Section 202.03.									
504.05 Responsibility									
The City will only be responsible for the operation and maintenance of the common force main and the portion of the lateral from the common force main to, and including, the shut-off valve. The homeowner shall be responsible for all piping, pumping equipment, and appurtenances between the building and the shut-off valve.									
Chapter 600									
Lift Stations and Low Pressure Systems									
water alarm condition. Alarm beacon light shall be as follows:									
a. Watertight, suitable for outdoor installation and provided with a red lens.									
b. Light source shall be high intensity strobe type with light intensity of 1,000,000 (1 million) peak candlepower.									
c. Mount unit on top of starter panel enclosure using watertight conduit hulk, similar to Myers ST-1, T&B-401, or OZ Gendrey D-48-507.									
11. Acceptable Manufacturers:									
a. Motor starters and control components: Allen Bradley									
b. Circuit breakers and motor circuit protectors: Square D									
c. Level sensor:									
i. Voterm, model 517, or									
ii. Endress+Hauser									
d. Beacon light: Federal Signal "Firebell 2".									
503.11 Watertight Lift Station Specifications									
1. Ductile iron pipe shall meet the requirements of ANSI Specification A21.51 (AWWA C151). Design and manufacture pipe for a working pressure of 150 psi plus 100 psi surge and a safety factor of 2 and a depth of cover indicated on the drawings and specified in this Section. Minimum thickness shall be 360.									
2. Pipe joints shall be push-on type. Joints shall meet the requirements of ANSI/AWWA A21.11C/11. Restrained joints shall be Lok-Ring, Lok-Fast, Lok-Type, or approved equal.									

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	The continuous monitoring pressure gauge shall then be observed while the pressure is decreased to no less than 3.5 psig (PLUS the necessary adjustment for groundwater). At this reading, or any convenient observed pressure reading between 3.5 psig and 4.0 psig (PLUS the necessary adjustment for groundwater), testing shall begin. A limited pressure drop of either 1.0 psig or 0.5 psig shall be used. The RPR shall determine the appropriate pressure drop. The allowable time shall be predetermined using either Table 600.01 or 600.02, depending on which pressure drop is used. When testing RCP sewers, a 1.0 psig pressure drop shall be used. e. Time adjustment for laterals. No time adjustment for lateral lengths will be allowed. 1. Determination of Line Acceptance If the time shown for the designated pipe size and length elapses before the pressure drops (1.0 or 0.5 psig), the section of pipe being tested shall have passed the test. The test may be discontinued once the prescribed time has elapsed even though the pressure drop has not occurred. g. Determination of Line Failure If the pressure drops before the appropriate time has elapsed, the air loss rate shall be considered excessive and the section of pipe being tested shall have failed the test. The Contractor shall be required to uncover, replace, or repair any section of sewer not passing the test. The method of repair shall be per approval of the Division and/or Department. Grouting is not an acceptable method of repair.
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Chapter 600
Testing

page 6-5

b. Joint Air Test	i. Pressurize the void volume with air to 3.5 psi PLUS the necessary adjustment for groundwater above the top of pipe (maximum 2.0 psi adjustment for a 5.0 psi maximum total). Allow the air pressure and temperature to stabilize before shutting off the air supply. Start the timing of the test. The air pressure adjustment shall be per Section 602.03.3.b. ii. Measure the pressure drop for five (5) seconds. iii. After the joint test is completed, exhaust void volume, then exhaust end element tubes prior to removal of the testing apparatus. c. Joint Water Test i. Introduce water into the void volume until water flows evenly from open petcock. Close the petcock and pressurize with water to 3.5 psi PLUS the necessary adjustment for groundwater above the top of pipe (maximum 2.0 psi adjustment for a 5.5 psi maximum total). Shut off the water supply and start test timing. ii. Measure the pressure drop for five (5) seconds. iii. After the joint test is completed, exhaust end element tubes which will automatically release the water from the void volume, prior to removal of the testing apparatus. d. Determination of Line Acceptance If the pressure holds or drops less than one (1) psi for the five (5) second test time, the joint shall have passed the test. e. Determination of Line Failure If the pressure drops one (1) psi or more during the five (5) second test time, the joint shall have failed the test. If the joint fails, the Contractor shall repair and retest as necessary. The method of repair shall be per approval of the Division and/or Department. Grouting is not an acceptable method of repair.
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602.05 Water Infiltration Test	All gravity sanitary sewers shall be watertight and free from leakage. The rate of infiltration into the sanitary sewer system between any two adjacent manholes or the entire system shall not be in excess of 100 gallons per inch of pipe diameter per mile per day (100 gpm/in./mi). The Contractor may be required to conduct a vent test to determine if the 100 gpm/in./mi maximum allowable infiltration rate is being exceeded. The vent test will be required if water is observed in the sewer at any time during the acceptance process. The vent test will be at the sole discretion of the RPR, Division, or Department. The Contractor shall be required to repair all visible leaks, even if the allowable infiltration requirements are met. The method of repair shall be per the approval of the Division and/or Department.
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Chapter 600
Testing

page 6-6

Grouting of the joint or crack to repair the leakage shall not be permitted. If the defective portion of the sanitary sewer cannot be located, the Contractor shall remove and reconstruct as much of the work as necessary to obtain a system that passes infiltration requirements.

602.08
Mandrel Deflection
Test for Flexible
Pipe

All sanitary sewers using flexible pipe shall be tested for deflection by means of a go/no-go mandrel gauge or other methods as approved by the Department.

The mandrel deflection test shall be as follows:

1. Waiting Period

The mandrel deflection test shall be done no sooner than thirty (30) days after final backfill has been placed.

2. Equipment

Mandrels shall be constructed with nine (9) or ten (10) arms. Mandrels with fewer than nine (9) arms are not allowed.

The Length (L) shall be measured between points of contact on the mandrel arm.

The Diameter (D) mandrel dimension shall carry a tolerance of ± 0.01 inches.

3. Allowable Deflection

The allowable deflection shall be based on the pipe type as follows:

a. PVC Pipe

The allowable deflection for PVC pipe shall be 5% of the basic inside diameter as determined by ASTM D 3534 and F 699. The dimensions are as follows:

DIMENSIONS FOR MANDREL			
Nominal Pipe Diameter, inches	Length (L) of Mandrel, inches	Basic (D) of Pipe, inches	Diameter (D) for Deflection of 5%, inches
8	8.0	7.695	7.36
10	10.0	9.603	9.08
12	10.0	11.361	10.79
15	12.0	13.566	13.20

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Chapter 600
Testing

page 6-7

c. Centrally Cast Fiberglass Reinforced Polymer Mortar Pipe	i. Polyester Resin The allowable deflection for Centrally Cast Fiberglass Reinforced Polymer Mortar pipe made with polyester resin shall be 4% based on the inside diameter as determined on a case-by-case evaluation of the pipe design. ii. Vinyl Ester Resin The allowable deflection for Centrally Cast Fiberglass Reinforced Polymer Mortar pipe made with vinyl ester resin shall be 3% based on the inside diameter as determined on a case-by-case evaluation of the pipe design. The Contractor shall provide proving rings to check the mandrel. The proving rings shall be clearly labeled with the dimensions and ASTM standard. 4. Testing Procedure a. The mandrel shall be hand pulled through all sections of the sewer lines. b. Determination of Line Acceptance If the mandrel can be hand pulled through the entire length of the section tested, the section shall have passed the test. c. Determination of Line Failure If the mandrel cannot be hand pulled through the entire length of the section tested, the section shall have failed the test. The Contractor shall be required to uncover, replace, or repair any section of sewer not passing the mandrel test.
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Chapter 600
Testing

page 6-8

SECTION 603 Force Main Testing Requirements	
603.01 Introduction	This Section provides the testing requirements for force mains and low pressure systems. For testing requirements specific to sanitary sewers, refer to Section 602. For testing requirements specific to force mains refer to Section 604. For testing requirements specific to lift stations refer to Section 605. For testing requirements common to all sanitary sewer facilities refer to Section 601.
603.02 General Requirements	All force mains for lift stations and common force mains in low pressure systems shall be tested for leakage by a Hydrostatic Leak Test per Section 603.03.
603.03 Hydrostatic Leak Test	The hydrostatic leak test shall be done in accordance with AWWA standards based on force main materials, in accordance with ASTM E 1003, and as follows: 1. Waiting Period The hydrostatic test may be done immediately after final backfill is placed and the air and/or vacuum release valves are installed. 2. Equipment At a minimum, the following shall be provided: a. Hydrostatic Test Pump (jockey pump) b. Continuous monitoring pressure gauge having a range of 0 – 150 psi graduated in 1 psi increments. The gauge shall be no less than four (4) inches in diameter. c. Pipe plugs and/or caps. The plug/caps shall be equipped with a minimum of two (2) openings for filling/drawing the force main and for bleeding air from the line. d. Calibrated graduated container to measure the quantity of water required to be added during the hydrostatic test to maintain the test pressure. 3. Testing Procedures The procedures for the hydrostatic test are as follows: a. Plug/Cap Installation After the force main has been backfilled to final grade, securely plug and/or bulkhead the ends being tested. Thwart blockage restraints shall be installed at each bulkhead in accordance with the bulkhead manufacturer's requirements. b. Air and/or Vacuum Release Valves All air and/or vacuum release valves shall be installed and in normal (open) in-service position during the test.

Chapter 600
Testing

page 6-9

c. Line Pressurization	i. The force main shall be slowly pressurized with water to 1.5 times the working pressure, or 100 psi, whichever is greater. ii. Trapped air shall be expelled through high point bleed off valves as the force main is being filled. iii. When the pressure has been reached, the test pump shall be shut off. iv. After the force main has been pressurized, measure the pressure drop for two (2) hours. d. Determination of Force Main Acceptance If no pressure drop occurs within the two (2) hour test time, the force main shall have passed the test. e. Determination of Force Main Failure If a pressure drop occurs within the two (2) hour test time, the force main shall have failed the test. The Contractor shall repair any defects and retest, or select per the Alternate Testing Procedure. 4. Alternate Testing Procedure a. Plug/Cap Installation Same as the above Testing Procedures. b. Line Pressurization The force main shall be slowly pressurized with water to a test pressure 1.5 times the working pressure or 100 psi, whichever is greater. Water shall be added to maintain the test pressure for two (2) hours. c. Determination of Force Main Acceptance The amount of water added during the line pressurization shall be measured. The allowable leakage, in gallons per hour, shall be calculated as follows: i. For PVC Pipe $L = (ND/A)^{1/3} / 7400$ ii. For Ductile Iron Pipe $L = (SD/A)^{1/3} / 132,200$ where: L = allowable leakage, gph N = number of joints in the pipeline tested
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Chapter 600
Testing

page 6-10

S = length of pipe tested, feet D = nominal diameter of the pipe, in P = average test pressure (psi) If the amount of water added is less than the allowable leakage, the force main shall have passed the test. The Contractor shall be required to uncover, replace, or repair the force main and/or air release valve and retest.
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Chapter 600
Testing

page 6-11

SECTION 604 Manhole Testing Requirements	
604.01 Introduction	This Section provides the testing requirements for manholes. For testing requirements specific to sanitary sewers refer to Section 602. For testing requirements specific to force mains refer to Section 603. For testing requirements specific to lift stations refer to Section 605. For testing requirements common to all sanitary sewer facilities refer to Section 601.
604.02 General Requirements	All manholes shall be tested for infiltration by means of a negative air (vacuum) pressure test per Section 604.04. All internal chimney seals shall be tested per Section 604.05.
604.03 Leakage	All manholes shall be watertight and free from leakage. Each manhole shall be visually inspected for leakage by the Division's RPR after assembly and backfilling. If the manhole shows signs of leakage, the manhole shall be repaired to the satisfaction of the Division and reinspected.
604.04 Negative Air (Vacuum) Test	All manholes shall be tested for infiltration by means of a Negative Air (Vacuum) Pressure Test. Testing shall be done per ASTM C 1244. All joints between the top of casing to the bottom of the manhole base shall be included in the test. The vacuum test shall be as follows: 1. Waiting Period If possible, each manhole shall be tested immediately after assembly and prior to backfilling. If the test is done after backfilling, the Contractor shall be responsible for re-excavation to locate and correct any leaks that have been identified. The vacuum test shall be done BEFORE the chimney seal is installed and tested. 2. Equipment Equipment used shall be made specifically for vacuum testing of manholes. 3. Testing Procedures a. Plug Installation All pipes entering the manhole shall be temporarily plugged, taking care to securely brace the pipes and plugs to prevent them from being drawn into the manhole. b. Test Head Installation The test head shall be placed at the top of the manhole casing in accordance with the manufacturer's recommendation.

Chapter 600
Testing

page 6-12

c. Air Evacuation

A vacuum of ten (10) inches of mercury shall be drawn on the manhole, the valve on the vacuum line of the test head closed, and the vacuum pump shut off.

d. Timing Pressure Rise

The time for the vacuum reading to drop from ten (10) inches to nine (9) inches of mercury shall be measured. The allowable time shall be determined by using the following:

Minimum Test Times			
Manhole Depth, feet	Manhole Diameter, in		
	48	60	72
8	25	35	45
10	25	35	45
12	30	38	48
14	30	40	50
16	40	52	67
18	45	58	73
20	60	65	81
22	65	72	88
24	59	75	97
26	64	80	105
28	69	87	113
30	74	96	121

e. Determination of Manhole Acceptance

If the time shown for the designated manhole depth and diameter elapses before the vacuum reading drops one (1) inch, the manhole shall have passed the test.

f. Determination of Manhole Failure

If the vacuum reading drops more than one (1) inch before the appropriate time has elapsed, the manhole shall have failed the test.

The Contractor shall be required to uncover, replace, or repair any or all sections of the manhole and retest.

604.05 Chimney Seal Leakage Test	All internal chimney seals shall be tested using a leakage test. The leakage test shall be as follows: 1. Waiting Period The leakage test shall be done AFTER the manhole has passed the vacuum test.
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Chapter 600
Testing

page 6-13

2. Testing Procedures	a. Install the chimney seal and only the bottom expansion band per manufacturer's recommendation. Fully tighten the bottom band. Do not install the top expansion band. b. Pulling the top of the seal away from the manhole floor, pour one (1) gallon of water behind the seal. c. Observe the bottom seal for a minimum of one (1) minute for leakage. d. Drain the water by tilting the top of the chimney seal down. e. If the chimney seal passes the test, install the top expansion band per manufacturer's recommendation. 3. Determination of Chimney Seal Acceptance If the bottom expansion band holds water without leaking, the chimney seal will have passed the test. 4. Determination of Chimney Seal Failure If the bottom expansion band has any leakage during the test time, the chimney seal will have failed the test. The Contractor shall be required to remove, replace, or reposition the bottom expansion band and retest.
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Chapter 600
Testing

page 6-14

SECTION 605 Lift Station Testing	
605.01 Introduction	This Section provides the testing requirements for lift stations. For testing requirements specific to sanitary sewers refer to Section 602. For testing requirements specific to force mains refer to Section 603. For testing requirements specific to manholes refer to Section 604. For testing requirements common to all sanitary sewer facilities refer to Section 601.
605.02 General Requirements	The force main and all gravity sanitary sewers constructed as part of the project shall have passed all required tests prior to the startup and final acceptance of the lift station.
605.03 Vet Well Leakage Testing	All vet wells shall be watertight and free from leakage. The vet well shall be visually inspected for leakage by the Division's RPR after assembly and backfilling. All dewatering activities shall be ceased a minimum of eight (8) hours prior to the leak testing. If the vet well shows signs of leakage, it shall be repaired to the satisfaction of the Division and reinspected.
605.04 Lift Station Testing	All equipment testing shall be observed by the Department and the RPR during the lift station's final inspection. Partial testing will not be accepted. The testing must be done on the complete lift station. It is not the RPR's, Division's, or Department's responsibility to engage in ANY activity or supply ANY equipment to test and/or accept the lift station. The Contractor shall provide the clean water to run the pumps and perform all tests. The startup and final inspection shall be as follows: 1. Waiting Period The waiting period shall be after BOTH of the following: a. AFTER the force main, gravity sewers and manholes constructed as part of the project have passed all required tests contained in Sections 602, 603, and/or 604. b. After ALL equipment has been installed, been determined to be in working order by the Contractor and manufacturer, and been previously tested by the manufacturer. 2. Equipment The Contractor or manufacturer shall provide all necessary equipment to safely complete all the tasks necessary to test and accept the lift station.

Chapter 600
Testing

page 6-15

3. Testing Procedures	a. Lift station checklist provided by the Department shall be completed during the start-up and final inspection. The test shall verify all equipment performs in accordance with the design and the requirements of this Manual. Procedures for each component shall be determined by the Department at the time of startup. At a minimum, the following shall be tested: a. Pumping rate for all pumps in gym b. Communications equipment c. Programmable Logic Controller d. All electronic equipment e. All mechanical equipment f. All instrumentation and control equipment g. All programming h. Incoming power i. The overall operating condition of the lift station; and j. Any other test the Department deems necessary. 4. Calibration All measuring equipment supplied for the lift station shall be calibrated prior to acceptance. Calibration test results shall be made available upon request. The measuring equipment shall include at a minimum the following: a. Level Transducers b. Flow Meters c. Gauges and d. Other equipment as deemed necessary by the Department. 5. Determination of Lift Station Acceptance If the station performs to the satisfaction of the Department, as designed, and per the requirements of this Manual, the lift station shall have passed the test. 6. Determination of Lift Station Failure If the station does not perform to the satisfaction of the Department, as designed, and per the requirements of this Manual, the lift station shall have failed the test. The Contractor shall be required to correct all deficiencies and retest.
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Chapter 600
Testing

page 6-16

TABLE 600.01												
MINIMUM SPECIFIED TIME REQUIRED FOR A 1.0 PSIG PRESSURE DROP FOR SIZE AND LENGTH OF PIPE FOR ALL PIPE												
1 Pipe Diameter (in)	2 Minimum Time (min:sec)	3 Length for Minimum Time (ft)	4 Time for Longer Length	Specification Time for Length (L) Shown (min:sec)								
				100 ft	150 ft	200 ft	250 ft	300 ft	350 ft	400 ft	450 ft	500 ft
4	3:46	597	380.1	3:46	3:46	3:46	3:46	3:46	3:46	3:46		
6	5:40	368	654.1	5:40	5:40	5:40	5:40	5:40	5:40	5:40		
8	7:34	268	1,520.1	7:34	7:34	7:34	7:34	7:36	8:52	10:08		
10	9:26	239	2,374.1	9:26	9:26	9:26	9:53	11:52	13:51	15:49		
12	11:20	199	3,418.1	11:20	11:20	11:24	14:15	17:05	19:56	22:47		
15	14:10	159	5,342.1	14:10	14:10	17:46	22:15	26:42	31:09	35:36	40:04	44:31
18	17:00	133	7,602.1	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41	64:06
21	19:50	114	10,470.1	19:50	26:10	34:54	43:37	52:21	61:00	69:48	78:31	87:15
24	22:40	99	13,674.1	22:47	34:11	45:34	56:56	68:22	79:45	91:10	102:33	113:57
27	25:30	88	17,306.1	26:51	43:16	57:41	72:07	86:32	100:57	115:57	129:48	144:13
30 ¹	28:20	80	21,365.1	30:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15	178:03
33 ¹	31:10	72	25,852.1	43:05	64:38	88:10	107:43	129:16	160:49	172:22	193:53	215:26
36 ¹	34:00	66	30,789.1	51:17	76:55	102:34	128:12	153:50	179:29	205:07	230:46	256:40
Reinforced Concrete Pipe (RCP)												
24	3:6	100	0.036	3:36	5:24	7:12	9:00	10:48	12:36	14:24	16:12	18:00

1. Per Section 602.03, the low pressure air test for these pipe diameters can only be conducted with prior approval of the Department.

Chapter 600
Testing

page 6-17

TABLE 600.02 MINIMUM SPECIFIED TIME REQUIRED FOR A 0.5 PSIG PRESSURE DROP FOR SIZE AND LENGTH OF PIPE FOR FLEXIBLE AND SEM-RIGID PIPE												
1 Pipe Diameter (in)	2 Minimum Time (min:sec)	3 Length for Minimum time (ft)	4 Time for Longer Length	Specification Time for Length (L) Shown (min:sec)								
				100 ft	150 ft	200 ft	250 ft	300 ft	350 ft	400 ft	450 ft	500 ft
4	1:53	597	0.100 L	1:53	1:53	1:53	1:53	1:53	1:53	1:53		
6	2:50	398	0.427 L	2:50	2:50	2:50	2:50	2:50	2:50	2:50	2:51	
8	3:47	298	0.760 L	3:47	3:47	3:47	3:47	3:48	4:26	5:04		
10	4:43	239	1.187 L	4:43	4:43	4:43	4:57	5:56	6:55	7:54		
12	5:40	199	1.709 L	5:40	5:40	5:42	7:08	8:33	9:58	11:24		
15	7:05	159	2.671 L	7:05	7:05	8:54	11:08	13:21	15:35	17:48	20:02	22:16
18	8:30	133	3.846 L	8:30	9:37	12:49	16:01	19:14	22:26	25:38	28:51	32:03
21	9:55	114	5.235 L	9:55	13:05	17:27	21:46	26:11	30:32	34:54	39:16	43:38
24	11:20	99	6.837 L	11:24	17:57	22:48	28:30	34:11	39:53	45:35	51:17	56:59
27	12:45	88	8.653 L	14:25	21:38	28:51	36:04	43:16	50:30	57:42	64:54	72:06
30	14:10	80	10.683 L	17:46	26:43	35:37	44:31	53:25	62:19	71:13	80:07	89:01
33	15:35	72	12.926 L	21:33	32:49	43:56	53:52	64:38	75:24	86:10	96:57	107:43
36	17:00	66	15.384 L	25:39	38:28	51:17	64:06	76:55	89:44	102:34	115:23	128:12

1. Per Section 602.03, the low pressure air test for these pipe diameters can only be conducted with prior approval of the Department.

Chapter 600
Testing

page 6-18

Chapter 600 Testing		page 6-18	
REVISIONS AND ISSUES			
DATE	BY	ISSUED FOR	REVIEW
10-16-2015	BJS	W15.0316	REVIEW
01-29-2016	BJS	W15.0316	REVIEW
SUBMITTED FOR COUNTY SURVEYOR REVIEW			
ISSUED FOR FAC REVIEW			
STEVEN SCOTT RUCKER P.E. 11300270			
REGISTERED PROFESSIONAL ENGINEER			
PE No. 000579			
STATE OF INDIANA			
NOT EXPIRING			
PREPARED FOR			
of WESTFIELD			
17651 SUNI PARK DRIVE, WESTFIELD, IN 46074			
CITIZENS - SANITARY SEWER SPECIFICATIONS			
Part of S.W.A. Section 36, Township 19 North, Range 3 East, Washington Township, Hamilton County, Indiana			
SHEET NO.			
C910			
PROJECT NO.			
W15.0316			

15055 N. College Avenue
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ALLAN H. WEIHE, P.E., I.S. - FOUNDER

WEIHE
ENGINEERS
Land Surveying/Civil Engineering
Landscape Architecture

PROJECT NO.: W15.0316
DWG NAME: W150316-C904-SS spec.dwg
DESIGNED BY: RLW
DRAWN BY: RLW
CHECKED BY: BUS
DATE: 01-28-2016

LOCATION: I:\2015\W150316\Engineering\design\coronet\W150316-L101 landscape.dwg
DATE/TIME: January 26, 2016 - 2:49pm
PLOTTER: b6, ehofarb

TOURNAMENT TRAIL

SUN PARK DRIVE

STATE ROAD 32

LANDSCAPE PLAN NOTES

1. SOD- ALL SOD SHALL BE CERTIFIED GRADE CULTIVATED GRASS SOD OF "ADVENTURE BLEND" TURF TYPE TALL FESCUE (BY GENERAL CONTRACTOR)
2. LANDSCAPE BED EDGE (TYP.)
3. MULCH

WESTFIELD REQUIRED NOTES

1. ALL STREET TREES ARE TO MATCH THE CURRENT CITY OF WESTFIELD MASTER TREE LIST.
2. STREET TREES SHALL NOT BE WITHIN 4 FEET OF ANY PAVEMENT.
3. THERE SHALL BE NO TREES WITHIN 10 FEET OF ANY STORM SEWER INCLUDING SSD.

LEGEND

SYMBOL	QUANTITY	PLANTING AREA
GHS	1	ST
F		FOUNDATION PLANTINGS
PI		INTERIOR PARKING LOT
PP		PERIMETER PARKING LOT
NA		NOT REQUIRED BY ZONING
ST		STREET FRONTAGE PLANTINGS

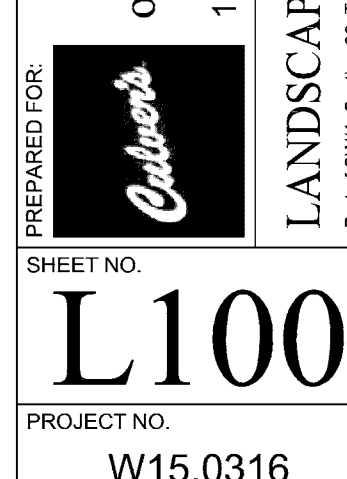
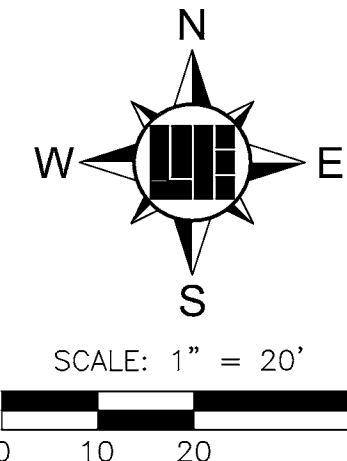
GENERAL NOTES

1. IN CASE OF DISCREPANCIES BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE. IF IN QUESTION, CONTACT THE LANDSCAPE DESIGNER.
2. ALL SHRUBS PLANTING AREAS TO BE COVERED WITH 4" THICK LAYER OF SHREDDED HARDWOOD BARK MULCH. ALL GROUND COVER BEDS SHALL BE COVERED WITH 1" SHREDDED HARDWOOD BARK MULCH. BARK MULCH SHALL BE APPROVED BY LANDSCAPE DESIGNER AND SHALL BE UNIFORM IN TEXTURE AND COLOR AND SHALL BE OBTAINED FROM SAWMILL OR LUMBERING OPERATIONS. NO UTILITY MULCH OR PROCESSED TREE TRIMMINGS WILL BE ALLOWED.
3. AN APPROVED PRE-EMERGENT HERBICIDE SHALL BE APPLIED IN ALL PLANTING AND GROUND COVER BEDS AT RATES SPECIFIED BY MANUFACTURER FOR EACH VARIETY OF PLANT.
4. FINAL PLACEMENT OF PLANT MATERIALS, ETC. SHALL BE APPROVED BY LANDSCAPE DESIGNER BEFORE PLANTING OPERATIONS ARE TO PROCEED. ALL TREE LOCATIONS SHALL BE MARKED WITH A WOODED STAKE INDICATING VARIETY AND SIZE OF TREE. ALL GROUND COVER AND MULCH BED LINES SHALL BE MARKED BY A HIGHLY VISIBLE PAINT LINE WITH OCCASIONAL WOOD STAKES FOR REFERENCE. ALL STAKES SHALL BE REMOVED FOLLOWING PLANTINGS OPERATIONS. LANDSCAPE DESIGNER RESERVES THE RIGHT TO ADJUST PLANT LOCATIONS ON SITE.
5. NO SUBSTITUTIONS OF PLANT MATERIAL WILL BE ALLOWED. IF PLANTS ARE SHOWN TO BE UNAVAILABLE, THE CONTRACTOR SHALL NOTIFY LANDSCAPE DESIGNER PRIOR TO BID DATE IN WRITING. ALL PLANTS SHALL BE INSPECTED AND APPROVED OR REJECTED ON THE JOB SITE.
6. ALL PLANTS ARE TO MEET OR EXCEED AMERICAN STANDARDS FOR NURSERY STOCK, LATEST EDITION, AS SET FORTH BY AMERICAN ASSOCIATION OF NURSERYMEN.
7. PLANTS AND ALL OTHER MATERIALS TO BE STORED ON SITE WILL BE PLACED WHERE THEY WILL NOT CONFLICT WITH CONSTRUCTION OPERATIONS AND AS DIRECTED BY OWNER.
8. ALL NEW LANDSCAPE PLANTINGS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FOLLOWING FINAL INSPECTION BY LANDSCAPE DESIGNER. AT THE END OF THIS PERIOD, PLANT MATERIAL TERMED DEAD OR UNSATISFACTORY BY LANDSCAPE DESIGNER SHALL BE REPLACED AT NO ADDITIONAL CHARGE BY THE LANDSCAPE CONTRACTOR.
9. THE LANDSCAPE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES THAT MAY BE REQUIRED FOR HIS PORTION OF WORK.
10. PEAT MOSS TO BE USED ON PROJECT SHALL BE A DOMESTIC OR IMPORTED MATERIAL, CHOCOLATE BROWN IN COLOR AND COMPOSED OF PARTIALLY DECOMPOSED VEGETABLE MATERIAL. PEAT MOSS TO ALSO BE MILDLY ACIDIC IN CHARACTER AND SHALL MEET APPROVAL OF LANDSCAPE DESIGNER.
11. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE DESIGNER IN WRITING PRIOR TO BID DATE OF ANY PLANTS THAT HE FEELS MAY NOT SURVIVE IN LOCATIONS NOTED.
12. ALL LANDSCAPING PLANTINGS TO BE MAINTAINED FOR 1 YEAR FOLLOWING TURNOVER. MAINTENANCE TO INCLUDE WATERING, WEEDING, CULTIVATION, MULCHING, MOWING AND ALL OTHER NECESSARY OPERATIONS REQUIRED FOR PROPER ESTABLISHMENT OF PLANTINGS. NOTE: AT END OF MAINTENANCE PERIOD, CONTRACTOR TO REMOVE GUYING AND STAKING FROM TREES.
13. CONTRACTOR TO SUBMIT UNIT PRICES ON EVERY TYPE OF WORK AS REQUESTED BY LANDSCAPE DESIGNER.
14. BACKFILL FOR TREE AND SHRUB PLANTING SHALL BE 75% APPROVED TOPSOIL AND 25% APPROVED PEAT MOSS. TOP LAYER OF BACKFILL SHALL BE 100% EXISTING TOPSOIL. A 5-10-5 ANALYSIS SLOW RELEASE FERTILIZER SHALL BE INCORPORATED INTO BACKFILL AT APPROVED RATES.
15. PROVIDE MINIMUM 4" PLANTING SOIL IN ALL GROUND COVER AND FLOWER AREAS WITH MIXTURE COMPRISING OF ONE PART COMMERCIAL GRADE "POTTING SOIL," 5 PARTS TOPSOIL AND 4 PARTS PEAT MOSS. A FULL 4" LAYER OF APPROVED SHREDDED FIBROUS PEAT MOSS MAY BE USED IN LIEU OF PLANTING MIX.
16. PLANTS SHALL BEAR A TAG SHOWING GENUS, SPECIES AND VARIETY.
17. PLANTS SHALL BE CERTIFIED BY THE STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES AND FREE FROM DISEASE OR HAZARDOUS INSECTS.
18. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PERTAINING TO THEIR PHASE OF WORK. UTILITIES ARE SHOWN TO BE APPROXIMATE. CALL UTILITY LOCATE PRIOR TO ANY PLACEMENT OF PLANT MATERIAL OR OTHER LANDSCAPE MATERIAL.
19. CONTRACTOR TO REVIEW AND VERIFY ALL STABILIZATION REQUIREMENTS AS SHOWN IN THE SWPPP PORTION OF THE CONSTRUCTION PLANS.

PLANT SCHEDULE									
PLAN KEY	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	ROOT CONDITION	ON CENTER SPACING	SPECIAL INSTRUCTIONS	MATURE SIZE	
CANOPY DECIDUOUS TREES									
AR	ACER RUBRUM	RED MAPLE	2 1/2"	3	X	SEE PLAN	X	50'T x 40'W	
GIS	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'	SKYLINE HONEYLOCUST	2 1/2"	2	X	SEE PLAN	X	40'T x 30'W	
LT	LIRIODENDRON TULIPIFERA	TULIP TREE	2 1/2"	2	X	SEE PLAN	X	70'T x 40'W	
ORNAMENTAL UNDERSTORY TREES									
AgF	ACER GINNALA 'FLAME'	AMUR MAPLE	1 1/2"	2	X	SEE PLAN	MULTI BRANCH	17'T x 17'W	
AgA	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	1 1/2"	5	X	SEE PLAN	X	20'T x 20'W	
DECIDUOUS SHRUBS									
CaC	CLETHRA ALNIFOLIA 'CRYSTALLINA'	SUGARTINA SUMMERSWEET	#3	32	X	SEE PLAN	MIN 18"	5'T x 5'W	
CJ	CALLICARPA JAPONICA	JAPANESE BEAUTYBERRY	#3	7	X	SEE PLAN	MIN 18"	7'T x 7'W	
PIG	POTENTILLA FRUTICOSA 'GOLDFINGER'	GOLDFINGER POTENTILLA	#2	32	X	SEE PLAN	MIN 18"	3'T x 3'W	
SpM	SYRINGA PATULA 'MISS KIM'	MISS KIM LILAC	#2	11	X	SEE PLAN	MIN 18"	8'T x 8'W	
EVERGREEN SHRUBS									
BM	BUXUS MICROPHYLLA	LITTLELEAF BOXWOOD	18"	29	X	SEE PLAN	MIN 18"	3'T x 3'W	
CoN	CHAMAECYPARIS OBUSA 'NANA'	HINKI CYPRESS	18"	16	X	SEE PLAN	MIN 18"	2'5'T x 2'5'W	
IgC	ILEX GLABRA 'COMPACTA'	COMPACT HOLLY	18"	58	X	SEE PLAN	MIN 18"	3'T x 5'W	
TmD	TAXUS X MEDIA 'DENSIFORMIS'	DENSE YEW	18"	24	X	SEE PLAN	MIN 18"	3'5'T x 5'W	
ToH	THUJA OCCIDENTALIS 'HOLMSTRUP'	HOLMSTRUP ARBORVITAE	18"	5	X	SEE PLAN	MIN 18"	5'T x 4'W	
ORNAMENTAL GRASSES									
LS	LIRIOPE SPICATA 'SILVER DRAGON'	SILVER DRAGON LILYTURF	#1	223	X	12" OC	X	1'T x 1'W	
PvN	PANICUM VIRGATUM 'NORTHWIND'	NORTHWIND SWITCHGRASS	#1	12	X	SEE PLAN	X	5'T x 2'W	
PERENNIALS									
ArC	AJUGA REPTANS 'CHOCOLATE CHIP'	BUGLEWEED	2'25" x 20" SCS	169	X	16" OC	X	4'T x 16'W	
AnP	ASTER NOVI-ANGIAE 'PURPLE DOME'	PURPLE DOME NEW ENGLAND ASTER	#1	36	X	2'5" OC	X	2'T x 3'W	
CM	COREOPSIS 'MOONBEAM'	MOONBEAM TICKSEED	#1	83	X	18" OC	X	18'T x 2'W	

LANDSCAPE ORDINANCE REQUIREMENTS

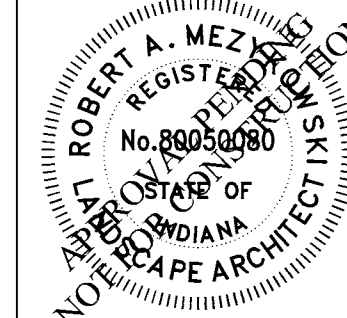
MUNICIPALITY REQUIREMENTS	REQUIRED	PROVIDED
CHAPTER 5.3. SR 32 OVERLAY - 30' WIDE TRAIL CORRIDOR ALONG SR 32 - 3 SHADE TREES AND 1 ORNAMENTAL TREE PER 100 LINEAR FEET - LANDSCAPING SHALL BE COUNTED TOWARD MEETING LANDSCAPING STANDARDS AS IF THE TRAIL CORRIDOR WERE PART OF THE ADJACENT LOT BEING DEVELOPED.	(165' ±) - 5 SHADE TREES - 2 ORNAMENTAL TREES	- 5 SHADE TREES - 2 ORNAMENTAL TREES
CHAPTER 6.8 K. LOT LANDSCAPING REQUIREMENTS - 10 SHADE TREES, 10 ORNAMENTAL OR EVERGREEN TREES, AND 25 SHRUBS PER ACRE. - ALL OTHER REQUIRED PLANTINGS FOR THIS LOT MAY BE COUNTED TOWARD THE LOT LANDSCAPING REQUIREMENT.	(1.11 AC ±) - 11 SHADE TREES - 11 ORNAMENTAL TREES - 7 ORNAMENTAL TREES (REDUCED PER PUD) - 251 SHRUBS	- 11 SHADE TREES (INCLUDES FUTURE PLANTINGS ALONG TOURNAMENT TRAIL) - 7 ORNAMENTAL TREES (REDUCED PER PUD) - 251 SHRUBS
CHAPTER 6.8 L. FOUNDATION PLANTINGS - 1 SHRUB OR ORNAMENTAL TREE PER 12 LINEAL FEET ALONG FRONT BUILDING FACADE. - PLANTINGS REQUIRED INTERMITTENTLY AGAINST EXPANSES OVER 60' OF BUILDING FACADES OR FENCES. - MUST BE PLANTED WITHIN 15' OF BUILDING FACADE AND PLANTED IN BEDS AT LEAST 8" IN WIDTH.	(144' ±) - 12 SHRUBS OR ORNAMENTAL TREES	- 21 SHRUBS
CHAPTER 6.8 M. EXTERNAL STREET FRONTAGE - 3 SHADE OR EVERGREEN TREES, 2 ORNAMENTAL TREES, AND 25 SHRUBS PER 100 LINEAR FEET - MAY BE CREDITED TOWARD PARKING AREA LANDSCAPING IF PARKING AREA LANDSCAPING IS WITHIN 20' OF THE RIGHT-OF-WAY.	SUN PARK DR. (240' ±) - 7 SHADE OR EVERGREEN TREES - 5 ORNAMENTAL TREES - 60 SHRUBS SR 32 (165' ±) - 5 SHADE OR EVERGREEN TREES - 3 ORNAMENTAL TREES - 41 SHRUBS	SUN PARK DR. - NO TREES PER PUD - 60 SHRUBS SR 32 - 5 SHADE TREES - 4 ORNAMENTAL TREES - 42 SHRUBS
CHAPTER 6.8 O. PARKING AREA LANDSCAPING - INTERIOR (PER PUD) - 900 SQUARE FEET OF PARKING SURFACE AREA TO BE LANDSCAPED ISLANDS - ISLANDS TO BE A MINIMUM OF 120 SF AND 7' IN WIDTH - AN AGGREGATE OF 5 TREES AND 20 SHRUBS MUST BE PLANTED - PERIMETER (PER PUD) - APPLIES ONLY WHEN A PARKING LOT IS LOCATED WITHIN AN ESTABLISHED YARD OR IS WITHIN 20' OF A LOT LINE OR RIGHT-OF-WAY LINE - 1 TREE PER 30 LINEAR FEET - 1 SHRUB PER 3 LINEAR FEET - REQUIRED PLANTINGS ALONG THE NORTH PROPERTY LINE ARE NOT TO BE INSTALLED UNTIL THE TOURNAMENT TRAIL EXTENSION IS CONSTRUCTED.	INTERIOR (29,542 SF ±) - 2,798 SF ISLANDS REQUIRED - 1 TREE & 4 SHRUBS PER ISLAND FRONTAGE PERIMETER (135' ±) - 5 TREES - 45 SHRUBS EAST PERIMETER (199' ±) - 7 TREES - 66 SHRUBS NORTH PERIMETER (118' ±) - 4 TREES - 39 SHRUBS	INTERIOR - 914 SF ISLANDS - 5 TREES - 25 SHRUBS FRONTAGE PERIMETER - MET BY EXTERNAL STREET FRONTAGE PLANTINGS EAST PERIMETER - NO TREES PER PUD - 66 SHRUBS NORTH PERIMETER - TO BE INSTALLED WITH FUTURE TOURNAMENT TRAIL IN ROW



PROJECT NO. W15.0316

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317 846 - 6611
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ALLAN H. WEIHE, P.E., L.S. - FOUNDER

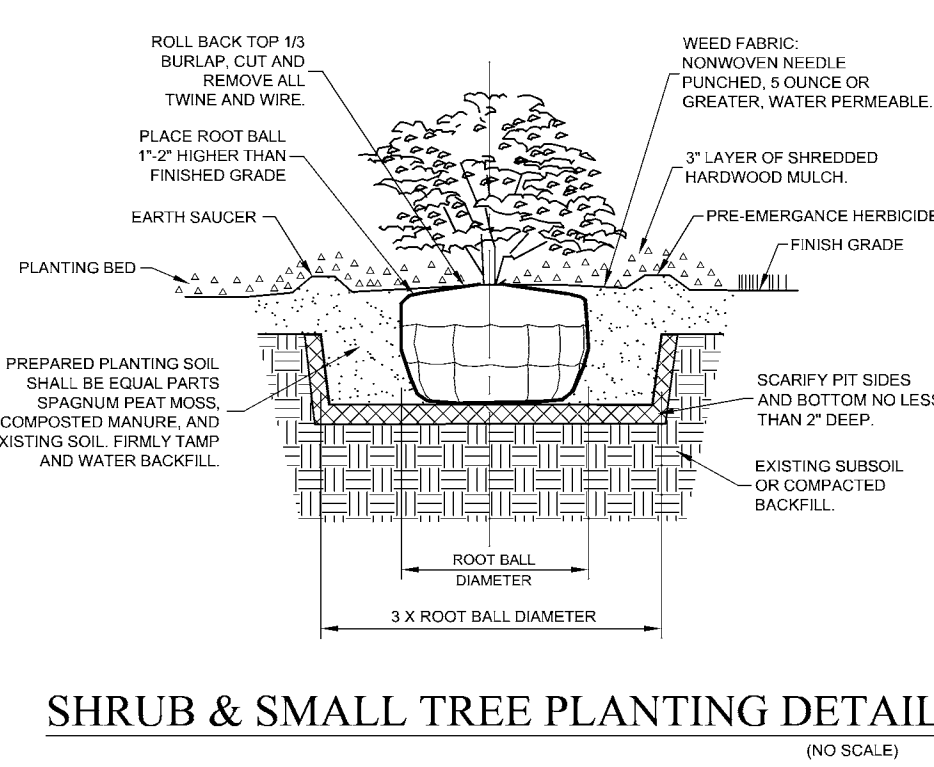
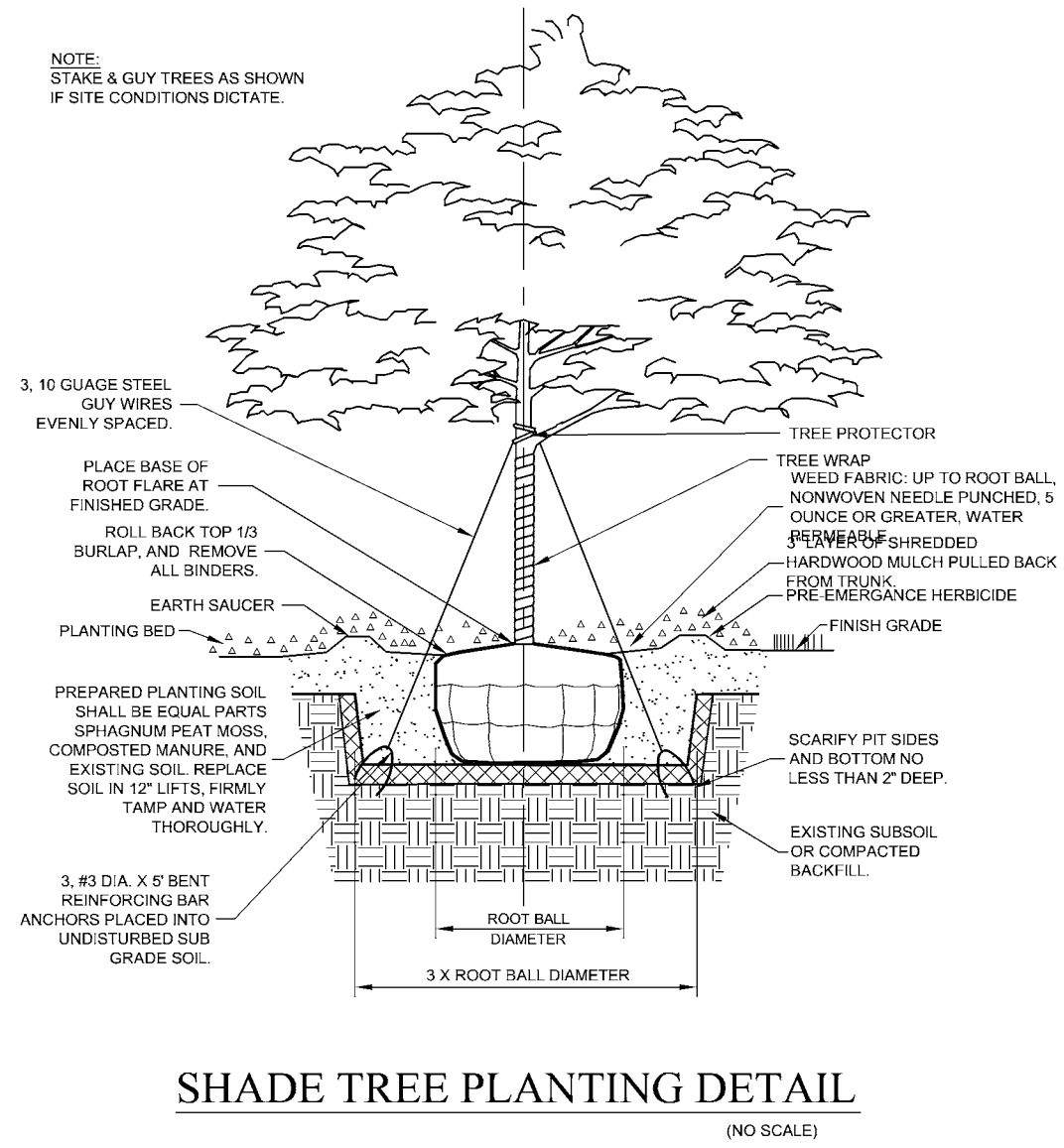
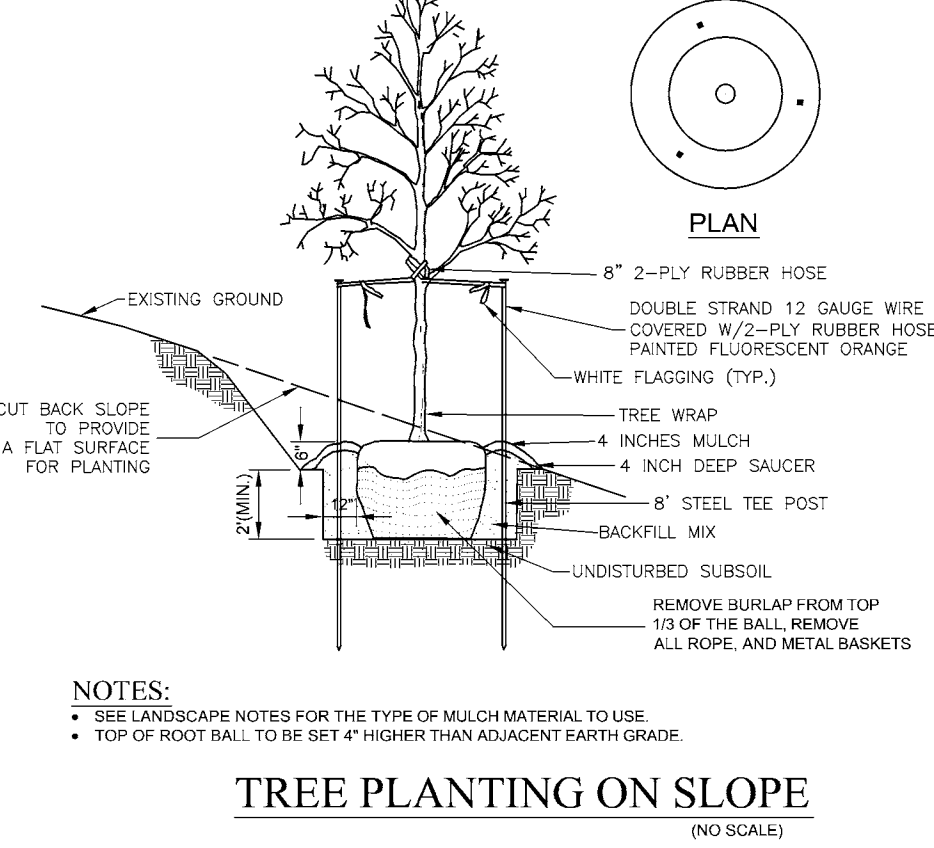
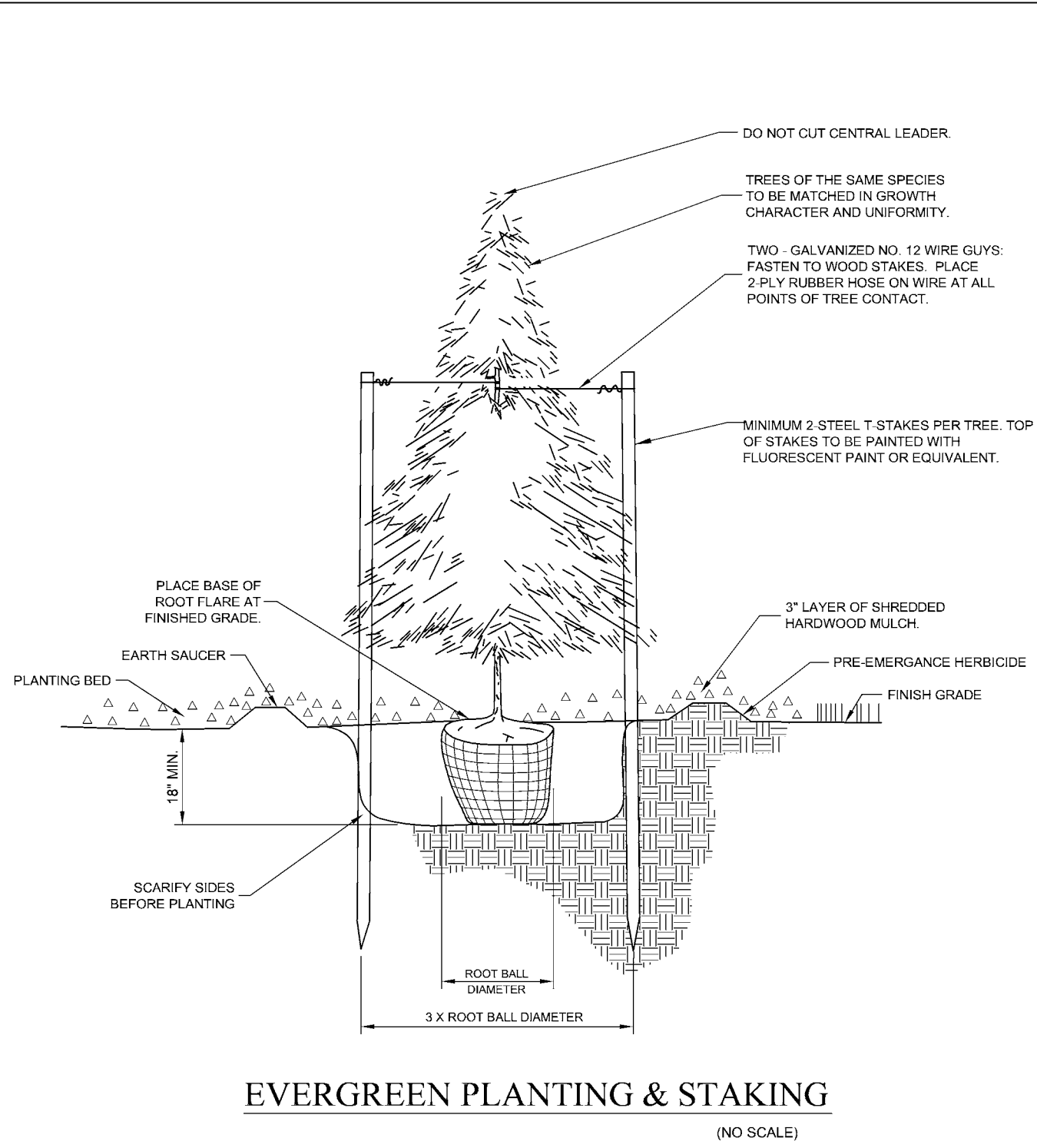
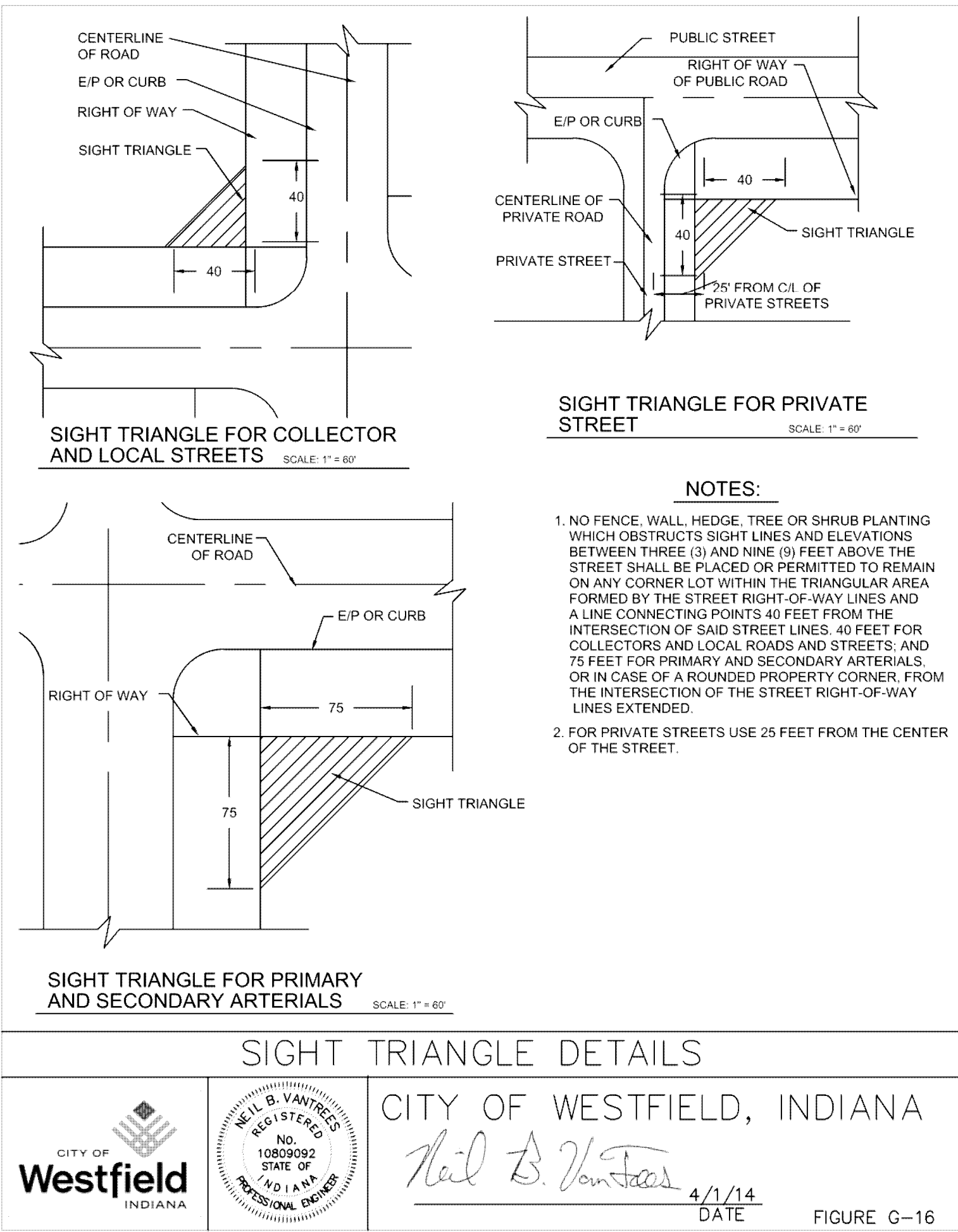
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DESIGNED BY: RLW
DRAWN BY: RLW
CHECKED BY: BUS
DATE: 01-26-2016



ROBERT A. MEZOWSKI L.A.80050088

17651 SUN PARK DRIVE, WESTFIELD, IN 46074
Part of S.W.M. Section 36, Township 19 North, Range 3 East, Washington Township, Hamilton County, Indiana

LOCATION: I:\2015\W150316\Engineering\Design\Consent\W150316-L101 Landscape.dwg
DATE/TIME: January 24, 2016 - 2:49pm
PLOTTER: HP JetPlotter



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800 452 - 6408
317 843 - 0546/ax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

PROJECT NO.: W15.0316
DWG NAME: 150316-L101 Landscape.dwg
DESIGNED BY: RLW
DRAWN BY: RLW
CHECKED BY: BAS
DATE: 01-28-2016

REVISIONS AND ISSUES
DATE BY DATE
10-18-2015 BJS
SUBMITTED FOR COUNTY SURVEYOR REVIEW
01-29-2016 BJS
ISSUED FOR FAC REVIEW

ROBERT A. MEZYKOWSKI
REGISTERED PROFESSIONAL ENGINEER
No. 10809092
STATE OF INDIANA
NOTARY PUBLIC
ARCHITECTURAL SEAL

ROBERT A. MEZYKOWSKI L.A. 80050080

of WESTFIELD
17651 SUN PARK DRIVE, WESTFIELD, IN 46074
LANDSCAPE DETAILS
Part of S.W.M. Section 36, Township 19 North, Range 3 East, Washington Township, Hamilton County, Indiana

PREPARED FOR: **Calvert**
SHEET NO.: **L200**
PROJECT NO.: **W15.0316**

Westfield-Washington Advisory Plan Commission (APC) held a meeting on Monday, March 7, 2016 scheduled for 7:00 PM at the Westfield City Hall.

Opening of Meeting: 7:00 PM

Roll Call: Note Presence of a Quorum.

APC Members Present: Nathan Day, Randell Graham, Steve Hoover, Robert Horkay, Tom Smith, Andre Maue, David Schmitz, Robert Smith and Chris Woodard.

City Staff Present: Jennifer Miller, Assistant Director; Andrew Murray, Senior Planner; Kevin Todd, Senior Planner; Amanda Rubadue, Associate Planner; Pam Howard, Associate Planner; and Brian Zaiger, City Attorney.

Approval of Minutes: February 16, 2016, APC Meeting Minutes

Motion: To approve the February 16, 2016 minutes.

Motion: Horkay; Second: Woodard; Vote: Approved 9-0.

Murray reviewed the meeting rules and procedures.

Case No. 1602-DDP-03

Description: Central Christian Church
SEC of 151st Street and Towne Road
Central Christian Church by Weihe Engineers requests Detailed Development Plan review for a new church building on approximately 19.99 acres +/-, located in the AG-SF1: Agriculture/Single-Family Rural District.

Todd presented an overview of the Detailed Development Plan, as outlined in the staff report.

T. Smith asked about the architecture for any future buildings on the adjacent property to the east of the church.

Petitioner stated that there are no additional buildings planned for the church site, beyond the future expansion noted on the plans. He also stated that the 60 acres to the east is actively being sold for residential development, and that developer would be bringing forward their own architecture for the homes.

Schmitz asked about waivers.

Todd noted that all issues were addressed and the waivers were no longer needed.

Motion: To approve 1602-DDP-03 with the following condition:

- All necessary approvals be obtained from the Westfield Public Works Department, Westfield Fire Department and the Hamilton County Surveyor's Office prior to the issuance of an improvement location permit.

Motion: Woodard; Second: Day; Vote: 9-0.

Case No. 1602-ODP-02 & 1602-SPP-03

Description: Waterford at the Bridgewater, Parcel L3
SEC of 151st Street and Carey Road
Throgmartin Henke Development, LLP by Stoeppelwerth & Associates, Inc. requests Overall Development Plan and Primary Plat review for twenty (20) single-family lots on approximately 10.23-acres +/-, located in the Bridgewater PUD District.

Murray presented an overview of both the Overall Development Plan and Primary Plat, as outlined in the staff report.

Motion: To approve 1602-ODP-02 and 1602-SPP-03 with the following condition:

- All necessary approvals be obtained from the Westfield Public Works Department and the Hamilton County Surveyor's Office prior to the issuance of improvement location permit.

Motion: R. Smith; Second: Schmitz; Vote: 9-0.

Case No. 1510-ODP-20 & 1510-SPP-20

Description: Waters Edge West
MI Homes of Indiana, LP by Terra Site Development requests Overall Development Plan and Primary Plat review for 88 single-family lots on approximately 55.83 acres +/-, located in the Spring Mill Trails PUD District.

Howard presented an overview of both the Overall Development Plan and the Primary Plat, as outlined in the staff report.

Ann Kloc, MI Homes, gave a brief presentation/update.

Woodard asked about drainage.

Kloc noted that any current issues are not as a result of any work being done onsite now. The site will be graded to drain into their ponds.

Jason Farmer, 1415 W. 186th Street did speak up with concerns about drainage. Mr. Farmer was advised the public hearing was already held.

Motion: To approve 1510-ODP-20 and 1510-SPP-20 with the following condition:

- All necessary approvals be obtained from the Westfield Public Works Department and the Hamilton County Surveyor's Office prior to the issuance of an improvement location

permit.

Motion: Maue; Second: Horkay; Vote: 9-0.

Case No. 1602-ODP-04 & 1602-SPP-04

Description: West Rail
NEC of 156th Street and Ditch Road
Beazer Homes of Indiana, LLP by Nelson & Frankenberger requests Overall Development Plan and Primary Plat review for 183 single family lots on approximately 108.2 acres +/-, located in the West Rail PUD District.

Rubadue presented an overview of both the Overall Development Plan and the Primary Plat, as outlined in the staff report.

Motion: To approve 1602-ODP-04 and 1602-SPP-04 with the following conditions:

- a. All necessary approvals be obtained from the Westfield Public Works Department and the Hamilton County Surveyor's Office prior to the issuance of an improvement location permit.
- b. The final approval of the landscape plan be delegated to the Department.

Motion: Woodard; Second: T. Smith; Vote: 9-0.

Case No. 1603-SPP-05, 1603-ODP-05 & 1603-DDP-06 [PUBLIC HEARING]

Description: Culver's
17651 Sun Park Drive
Custard Kings by Weihe Engineering requests Primary Plat, Overall Development Plan and Detailed Development Plan review for a 4,658 square foot +/- restaurant on approximately 0.99 acre +/- within the Culver's Sun Park Planned Unit Development (PUD) District.

Todd presented an overview of the Primary Plat, Overall Development Plan and the Detailed Development Plan, as outlined in the staff report.

T. Smith asked about the exterior elevations.

Todd noted that those issues were all addressed with the approval of the PUD.

Public Hearing opened at 7:24 pm.

No public comments.

Public Hearing closed at 7:25 pm.

No action is required at this time.

Woodard recused himself.

Case No. 1603-ODP-06 & 1603-SPP-06 [PUBLIC HEARING]

Description: Harmony – Section 4
North of 151st Street, between Ditch Road and Towne Road
Estridge Development Management requests an amendment to the previously approved Overall Development Plan and Primary Plat for single-family residential lots on approximately 138.8 acres +/-, located in the Harmony PUD District.

Murray presented an overview of both the Overall Development Plan and the Primary Plat, as outlined in the staff report.

Public Hearing opened at 7:29 pm.

Becky Cage, 1461 W 151st Street; She and her neighbors feel that there is a push to put more homes into the neighborhood without leaving enough common area space. Concerned about the width and configuration of the adjacent roadways, EMS response time, density with the condos and potential traffic issues on 151st Street.

Cindy Spoljaric, 1613 Chancellors Ridge Way; Noted that the right of way widths appeared to be increasing and decreasing front yard setbacks. Spoljaric also asked about where the 63 acres of common space was to be located.

Public Hearing closed at 7:33 pm.

Murray noted that the open space as presented is compliant with the PUD and that the condos permitted by the PUD are further south near 146th Street.

Bryan Stumpf, Estridge Development Management, explained the change in lot widths and adjusting to market demand. Stumpf gave a summary on the development's clubhouse and other amenities planned within the area.

T. Smith asked about the changes contemplated.

Stumpf explained that there will not be changes to the open space or roads, but the proposal allows them to more quickly respond to market changes/desires.

T. Smith noted that the speaker had concerns about density and concentration.

Stumpf noted that the previously done traffic studies contemplated significantly more lots than what they will build. The current 151st Street will be able to handle the traffic.

Todd noted that the right of way was increased to allow for street trees and to not penalize the developer, reduced setbacks and reduced lot square feet. Todd also noted that there are no changes to the road network from what was previously approved in January.

Graham asked about EMS responses.

Murray noted that the Fire Department is part of the technical review process and did not have comments relative to that concern.

Becky Cage addressed the Commission again about improvements to 151st Street.

Zaiger explained that staff would provide a business card to her to contact regarding specific follow-up questions.

No action required at this time.

Woodard returned to the meeting.

Case No. 1603-PUD-02 [PUBLIC HEARING]

Description: Keeneland Park PUD
Southwest Corner of Spring Mill Road and 169th Street
Beazer Homes Indiana LLP requests an amendment to the Keeneland Park PUD to allow an additional architectural theme within the development.

Rubadue presented an overview of the amendment to the PUD, as outlined in the staff report.

T. Smith asked how many options are currently available.

Rubadue noted there are six and this will make seven.

Public Hearing opened at 7:47 pm.

No public comments.

Public Hearing closed at 7:48 pm.

Motion: To forward ordinance 1603-PUD-02 to the City Council with a favorable recommendation.

Motion: Schmitz; Second: Horkay; Vote: 9-0.

Case No. 1603-PUD-03 [PUBLIC HEARING]

Description: Spring Mill Station Northeast Quadrant PUD
Kroger Limited Partnership by EMH&T requests an amendment to the Spring Mill Station Northeast Quadrant PUD District to permit a Monument Sign on an Outlot.

Pam Howard presented an overview of the amendment to the PUD, as outlined in the staff report.

Graham asked about the size of the current sign.

Woodard noted that the current sign will be removed and asked if the proposed sign will be similar in size.

Paula Gartner, EMHT, will have more information in two weeks. They anticipate rebuilding and upgrading the former monument sign, on the new site.

Public Hearing opened at 7:52 pm.

Michael DeSalvo, 16176 Lakeville Xing; Concerned about signage placement relative to patrons exiting the station and visibility. Does not see a reason to move the sign or add more. The gas station itself has created traffic issues on Lakeville Xing where there are already 2 stop signs that are not obeyed.

Public Hearing closed at 7:56 pm.

Gartner responded that the existing monument sign will be removed when the existing station is removed. The sign on the canopy will be removed at the request of the Spring Mill Station Task Group. The sign itself is outside the clear vision triangle for the intersection and the right turn lane and passing blister will be added as required by the City's Public Works Department.

Graham requested better illustrations showing the improvement for the next meeting.

Woodard asked about the stop signs.

Gartner identified those locations.

Hoover asked about striping in the Kroger parking lot for pedestrian crossings.

Gartner noted that stop bars and signs will be installed to improve the intersection.

No action is required at this time.

Case No. 1506-ZC-02 [CONTINUED]

Description: Bent Creek Commitment Modification
Langston Residential Development, LLC by Nelson & Frankengerger requests a modification to the commitments associated with the rezoning of property from the AG-SF1: Agriculture/Single-Family Rural District to the SF2: Single-Family Low Density District, as approved by Ordinance 04-43, for Bent Creek.

Case No. 1506-ODP-16 & 1506-SPP-15 [CONTINUED]

Description: Bent Creek
Northwest corner of 159th Street and Town Road
Langston Residential Development, LLC by Nelson & Frankengerger requests Overall Development Plan and Primary Plat approval of 158 single-family lots on

approximately 129.74 acres +/-, located in the SF2: Single-Family Low Density District with Zoning Commitments.

Case No. 1603-DDP-07 [CONTINUED]

Description: Riverview Hospital
Northeast Corner of US 31 and SR 32
Riverview Hospital by American Structurepoint, Inc. requests Detailed Development Plan review for a 100,000 square foot +/- building on Approximately 8.53 acres +/- on Lot 1 in the Gateway Northeast Quadrant Subdivision in the Junction Planned Unit Development (PUD) District.

Case No. 1602-CPA-01 [CONTINUED]

Description: The Conservancy Addendum
The Conservancy Task Group requests approval of The Conservancy Addendum, an addendum to the Westfield-Washington Township Comprehensive Plan.

Case No. 1601-ODP-01 & 1601-SPP-01 [CONTINUED]

Description: The Trails
East of Oak Ridge Road, South of State Road 32
Edge Rock Development, LLC by TERRA Site Development, Inc. requests Overall Development Plan and Primary Plat approval of two (2) lots on approximately 13.75 acres +/- located in the Trails PUD District.

Case No. 1512-PUD-27 [CONTINUED]

Bridgewater PUD Amendment – Bridgewater Marketplace
Northwest corner of 146th Street and Gray Road
KRG Bridgewater LLC by Bose McKenney & Evans LLP request an amendment to the Bridgewater PUD District Ordinance to allow a discount store, in excess of 10,000 square feet of gross floor area but not to exceed 20,000 square feet of gross floor area, to locate within the Bridgewater Marketplace retail center.

REPORTS/COMMENTS

APC MEMBERS

No report.

CITY COUNCIL LIAISON

No report.

BZA LIAISON

No report.

ECD STAFF

No report.

ADJOURNMENT (8:02 pm)

Motion: Schmidt; Second: T. Smith; Vote: 9-0

President, Randell Graham

Vice President, Andre Maue

Secretary, Matthew S. Skelton