

## **ALWAYS & FUREVER MIDWEST ANIMAL SANCTUARY**

### **HOMESTEAD CUP NARRATIVE**

#### **General Description of Proposed Use:**

Always & Furever Midwest Animal Sanctuary (“A&F”) is a 501(c)(3) animal rescue network licensed by the Kansas Department of Agriculture and currently headquartered on 5 acres at 23595 W. 223rd St., Spring Hill, Kansas. In the early days, A&F was nothing more than a converted barn for senior dogs to live out the rest of their days surrounded by love, a true senior sanctuary. Founded by Jennifer Dulski in 2018, A&F has since transformed into a professional rescue network with a licensed animal shelter in the state of Missouri and a network of over 300 fosters throughout Kansas and Missouri. Over the past 5+ years, the organization has saved close to 4,000 animal lives with the assistance of a small, dedicated staff and many passionate and wonderful volunteers.

In 2022, A&F acquired a 40-acre tract immediately east of its current location with the intent to develop and operate a one of a kind/state of the art kennel operation to be called the “Homestead.” This new location will be used to save the lives of the homeless and surrendered dogs and cats of Miami County and beyond. The Homestead will also be a licensed “animal shelter” by the Kansas Department of Agriculture. Since our doors have been open, we have and will continue to maintain adequate insurance, we have an annual audit of our financial statements, we obtain all required licenses and follow rules to maintain them. In applying for a shelter license, we commit to a set number of dogs and cats as our shelter capacity. Every animal is entered into a web-based record management system, and are tracked from intake through adoption. We are routinely inspected by the Kansas Department of Agriculture as well as the Missouri Department of Agriculture with no advance notice. They assess our facilities, animal welfare, recordkeeping, and verify that we are within our approved capacity. Our annual license renewals require that we have an on-site inspection by a veterinarian who assesses our standards of care and animal inventory. These inspections as well as our state inspections have consistently been satisfactory.

The Homestead is designed to be one of, if not the, premier animal shelter facility in the United States. The large acreage of the Homestead allows ample space for the construction of eight (8) buildings to care for and house our animals. All buildings and all primary activities will be located on the north 20 acres of the property (adjacent to 223<sup>rd</sup>). The south 20 acres will only be used for walking or exercising the dogs, and otherwise will remain as an open natural space which is heavily treed. The Homestead will have security measures in place to ensure no animals can escape the property, including a 6-foot black chain-link fence surrounding the perimeter and two secured gated entries.

Each of the eight (8) buildings on the Homestead will be designed/constructed similarly but will be tailored to specific group needs. The layout includes four (4) dog barns, one (1) barn dedicated to an A&F veterinary clinic that will share space with our cat haven, and three (3) dog villas.

The four red barns will allow dogs to be grouped according to various ages, sizes, temperament and play style. For instance, puppies require the companionship of other puppies or gentle, patient dogs to guide them and learn how to engage and interact with both humans and their canine counterparts. Another barn can be dedicated to "little" dogs only. A 14-year-old Chihuahua and a 10-year-old Great Dane might be best friends in a home they have lived in together, but if exposed to a new environment they should be separated to eliminate any uncertainty or accidents.

The Homestead's Health Clinic will serve the needs of the A&F animals in our care. This will eliminate the majority of our current travel for routine medical care. The Health Clinic will share the space with a Cat Haven to provide a safe and secure temporary and forever home for our cats. It will consist of various wings, segregated for specific needs. The cats will not be allowed outside to protect them from the elements. Double-gated entries will be used to protect against human error. The only feral cats that will be on the Homestead are those that may be brought in by animal control should a contract be reached between Miami County, or other local municipalities, to utilize our services. Note, should such an agreement be made it would not affect the maximum number of animals housed on the Homestead at any time. All cats would be spayed/neutered, vaccinated, and then appropriately placed through our adoption process. No A&F cats will be roaming free on the Homestead.

As for the three (3) dog villas, this is a new concept to be deployed at the Homestead. Each villa will be comprised of 4 "tiny homes" for dogs that may need longer or specialized care and training in an individualized setting. Each tiny home will have its own fenced-in yard, with one dog per tiny home which allows for a calmer environment. This allows us to house and rehabilitate all ages of pets in a secure and safe environment. The maximum capacity for the Homestead is **120 dogs** and **40 cats**.

There will be no runs or dog doors that would allow animals to move between indoors and outdoors on their own. The four (4) dog barns and the three (3) dog villas will have six-foot tall, double gated privacy (wood) fenced-in play yards. This system consists of two gates or doors that an individual must pass through before gaining access to the area where dogs are kept. The two gates are never open at the same time; one door must close and lock before the second is opened. This system offers an additional layer of security to safeguard against human error and potential hazards, helping to ensure the safety of both the dogs and the humans involved. Any ingress/egress gates utilized for people and dogs will be double gated. Each barn will have visitation rooms equipped with couches, TVs and toys which will further human and dog socialization skills and create a homelike environment to help prepare them for adoption.

When dogs are walked they will always be double-leashed. Double-leashing a dog refers to the practice of attaching two leashes to a dog's collar or harness at the same time. If one leash were to fail - either due to equipment malfunction, such as a broken clip, or the dog managing to slip out of it - the second leash acts as a backup, ensuring the dog remains safely attached to the handler. No dog will be permitted to roam freely on the Homestead, unless within the boundaries of the fenced-in yards with trained staff. Moreover, A&F invests significantly in trained handlers

to teach animal social skills. No dog is ever left outdoors at night. All animals will be kept indoors to sleep in comfort and safety in a secure setting.

Our goal is to always move our animals to foster or forever homes as quickly as possible. Our intent is to have the capacity for urgent situations, **not** to house the 120 dogs and 40 cats maximum on a consistent basis. The Homestead will look nothing like a stereotypical “kennel.” A&F’s standard of care is unquestionably the highest in the industry. Animals are not locked in cages unattended all day or put into runs to come and go without supervision. Instead, each barn on the Homestead will model a home-like environment inside and out, each barn will have outdoor fenced yards where the dogs are allowed to play during the day under careful supervision of trained staff.

The Homestead’s operating hours will be 7 am to 7 pm. The morning shift will begin with quick walks, clean ups, and breakfast and then their day will be filled with human and animal socialization and training. The evening shift ends with last walks and tuck-ins and most importantly allows our staff to safely drive home and have quiet hours.

Please refer to the chart below for detailed information on animal capacity and staffing.

BUILDING SCHEDULE		
LEGEND	BUILDING	SQUARE FOOTAGE
12	RED BARN 1	12,000 SF
13	HOMESTEAD HEALTH CLINIC / CAT HAVEN	6,000 SF
14	RED BARN 2	4,600 SF
15	RED BARN 3	3,900 SF
16	DOG VILLA	1,250 SF
16	DOG VILLA	1,250 SF
16	DOG VILLA	1,250 SF
17	RED BARN 4	3,900 SF
18	MAINTENANCE BUILDING	1,800 SF
19	STORAGE BUILDING	1,800 SF
20	TRASH ENCLOSURE	250 SF
<b>TOTAL BUILDING FOOTPRINT</b>		<b>38,000 SF</b>

	Red Barn 1	Red Barn 2	Red Barn 3	Red Barn 4	Homestead Health Clinic /Cat Haven	Dog Villa 1	Dog Villa 2	Dog Villa 3	HOMESTEAD TOTAL
<b>Daily Staffing - 2 Shifts (Morning &amp; Afternoon)</b>									
Staff	3 per shift / 6 total	3 per shift / 6 total	3 per shift / 6 total	2 per shift/4 total	2 per shift / 4 total	1 per shift / 2 total	1 per shift / 2 total	1 per shift / 2 total	16 per shift / 32 total
Volunteer	1 per shift / 2 total	1 per shift / 2 total	1 per shift / 2 total	1 per shift/2 total	0	0	0	0	4 per shift / 8 total
<b>Dog/Cat Capacity Per Building</b>									
Dog Capacity	24	34	24	24	2	4	4	4	120
Cat Capacity	0	10	0	0	30	0	0	0	40

The Homestead contains significant natural landscaping which will be preserved as much as possible except for the barn structures and 20 acres of the property will be literally untouched other than walking paths for our animals and humans to enjoy. This will help provide a buffer area for adjacent properties and provide fewer distractions for our animals.

All forms of dog waste will be manually picked up daily and disposed of in dumpsters throughout the Homestead. Waste and other trash from these dumpsters will be picked up and taken off-site by a waste management company. All remains for any animal that passes on the Homestead will be sent to a facility (either external veterinary office or crematorium).

The upcoming list illustrates the activities planned to take place on the premises covered by the CUP. Each of these activities necessitates an RSVP or booking and are not accessible to the general public. Our aim is to carry out these activities in a regulated, private setting to ensure the safety and well-being of all our animals and human participants.

## 1. Pup/Cat Movement

**a. Freedom drives:** These are the one-time trips where our drivers pick up animals from other shelters, often slated for euthanasia, and bring them to our location. The frequency of freedom drives depend on available space at A&F but are infrequent in nature.

**b. Vet rides:** As we presently do not operate our own health clinic, we facilitate transportation services to and from our partner veterinary clinics, known as vet rides. Every pup/cat that is brought into A&F is taken on a vet ride for an initial comprehensive check-up to help identify any potential health issues. Any pup/cat later needing treatment or surgery will also be provided a vet ride. Most A&F animals are placed in foster or furever homes prior to any of the routine follow-up appointments. Once we have our Homestead Health Clinic up and running, we will no longer need routine vet transportation.

**c. Dog dates:** These are scheduled one-on-one outings between a volunteer and an adoptable pup under our care waiting for a furever home. A volunteer picks up the pup from A&F and returns him/her that same day. These dog dates provide companionship for the human and invaluable socialization opportunities for the pup, better preparing them to be adopted. We typically average 1-2 dog dates a week.

**d. Off-site community events:** Approximately 8 events per month, A&F staff usually take 3 pups to nearby nursing homes or assisted living facilities for interactions with the residents. Such visits can significantly enhance the residents' well-being and importantly, boost the exposure and potential for adoption of the pups.

**e. Off-site adoption events:** Local businesses supporting our cause welcome A&F staff and typically 3 or fewer adoptable pups into their establishment and facilitate exposure to a broader and diversified audience. These events help socialize dogs, foster a stronger sense of community and increase the likelihood of finding adoptive homes for the pups.

## 2. Volunteer Events:

**a. Volunteer Orientation:** provides important instruction on policies and procedures for anyone that will interact with the pups. We offer it once a month, typically 3-15 attendees.

### **b. Volunteer Special Events:**

**i. Youth Group Visits:** average one per month with between 10-20 youth. Examples include: Girl/Boy Scouts, High School Animal Science Classes & Service Groups: activities include exercising and cleaning up after dogs and dropping off items from donation drives.

## 3. Organizational Events:

**a. Adoption Open House:** once a month except during winter. These events are fewer than 20 people.

**b. Once a year Gatherings/Celebrations:** 20-30 staff/volunteers in a barn.

**i. Anniversary of A&F opening (May).** Vehicles capped to account for parking lot allowance and to prevent parking overflow.

**ii. David's Day (October).** 20-30 attendees.

**iii. Thanksgiving or Christmas event.** 20-30 attendees.

**4. Adoption Meet & Greets:** Prospective adopters meet a dog under supervision of a trained staff member. These meetings help reduce the risk of an adoption failing due to unforeseen incompatibilities between the pet and the potential owner. When conducting meet & greet sessions, we refrain from scheduling more than one session at a time. The frequency varies, but typically 1-3 times a week.

**6. Non-traditional Events:**

**a. Yoga with the dogs:** A&F has only held this twice in the five years we have been open, and if we continue it would be likely once or twice a year. 10-20 attendees. This activity offers a serene and tranquil time with the dogs, creating a peaceful atmosphere and socialization for the dogs.

**b. Birthday Parties:** In the past five years we have had approximately five on-site “parties” where children who have opted for their guests to donate presents to the dogs come to the barn. If requested, the children may accompany the staff walking the pups. Generally, 10-20 people with staff and adult supervision at all times. These small gatherings encourage animal welfare and socialization of the dogs.

All events referenced above are private events and typically capped at 30 participants. Based on operations and activities, the number of parking spaces shown on our site map is more than adequate to accommodate staffing and event parking needs.

With respect to potential concerns that could be identified by the staff, we have also proposed thoughtful operational details that further support low impact conditions that are consistent with rural character and address each such potential concern.

**RURAL FARM AESTHETIC CONCERNS**

Like the neighbors and the current zoning, the A&F team also wants to maintain the rural farm aesthetic feel for The Homestead and the community. To that end, the following are Farm/Homestead Architectural Inspiration photos for the buildings on The Homestead.

**Architectural Inspirations – Barns, Shelter, & Dog Villas**



ARCHITECTURAL EXTERIOR INSPIRATION PHOTO - BARN  
• BARN-STYLE ARCHITECTURE

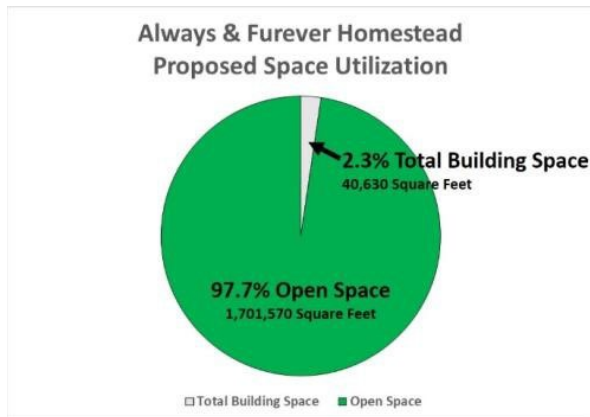


ARCHITECTURAL EXTERIOR INSPIRATION PHOTO - DOG VILLA  
• WOOD FRAME CONSTRUCTION

We are very excited about the architectural inspirations being a perfect fit for the Rural Farm Aesthetic of the neighborhood.

In addition, The Homestead site plan calls for retaining as many of the trees and natural vegetation as possible. This is especially true on the perimeter of the property to ensure we maintain visual screening for our neighbors. We plan to place a 6' black chain link fence around the perimeter of the property, but again, the intent is to install this inside the tree line making it invisible and maintaining the natural Farm/Rural Aesthetic of the neighborhood. The Landscaping Plan will provide additional visual breaks and enhance the rural feel of The Homestead.

Even when all the buildings are fully constructed, The Homestead will retain 97.7% Open Space, preserving the much-desired rural farm aesthetic of the neighborhood. We're also proposing to limit our construction to the 20 acres located in the northernmost part of the property, which is furthest away from our neighbors.



## AESTHETIC/VISUAL IMPACT SUMMARY

- Farm/Homestead Architectural Inspiration of Buildings
- Retention of as Many Trees and Natural Vegetation as Possible
- Perimeter Tree & Vegetation Buffer
- 6' Black Chain Link Border Fence Hidden in Trees and Vegetation
- Landscaping Plan
- **97.7% Open Space** with Much of This Covered by Trees and Vegetation
- Signage Consistent with Farm/Homestead Architectural Inspiration and Meets All Miami County Regulations

- **All buildings and all primary activities will be located on the north 20 acres of the property.**

## **ENVIRONMENTAL IMPACT MITIGATION**

A&F recognizes that addressing any potential odor, sanitation, and environmental impacts is an essential component for the successful and sustained operation of this Homestead. Good animal husbandry is key for physical animal rehabilitation and the protection of staff and volunteers, and for creating clean habits and behaviors that help animals adapt to home environments. An unhygienic facility will not pass State inspections, and will not create a positive impression for potential adopters.

A&F currently picks up dog waste multiple times per day in the play yards, and staff is instructed to carry “poop bags” to pick up dog waste as needed while on walks with dogs. This process will continue on The Homestead. Dog waste will be picked up multiple times per day in the play yards associated with each barn, placed in plastic bags, and put in sealed trash containers at each barn. All waste will then be picked up from those containers and moved to the dumpster daily. Staff that will be responsible for walking dogs on The Homestead will continue to carry “poop bags” and pick up the dog waste as needed on walks. No dog will ever be allowed to run free on The Homestead so this will ensure there is never unattended dog waste on the grounds.

The same is true for cleaning the inside of each barn, shelter, or dog villa. Dog suites will be cleaned and sanitized throughout the day, with dog waste being disposed of in the same way as waste picked up in the play yards.

Another major change to the A&F operation which will minimize the environmental impact on The Homestead property is the decision to **contract all laundry to an off-site laundry cleaning service**. This is similarly done by other large shelters in the Kansas City area with great success and will be implemented for the operation of The Homestead. **This dramatically reduces the amount of wastewater the on-site septic systems need to handle.**

A&F and our engineering and design partners are working with Miami County staff to ensure all waste management systems meet and exceed all requirements. **A&F will comply with all applicable KDHE requirements and regulations and will be reflected in the building permit application.**

## **ENVIRONMENTAL IMPACT MITIGATION SUMMARY**

- **97.7% Open Space** with Much of This Covered by Trees and Vegetation
  - Total Square Footage of Buildings at 100% buildout – 40,630 square feet
  - Property - 1,742,400+ Square Feet

- **Open Space – 97.7% Under Roof – 2.3%**
- Retention of as Many Trees and Natural Vegetation as Possible
- Landscaping Plan
- **Laundry Washing to Be Contracted with Off-Site Laundry Service**
- Dog Poop Picked Up Multiple Times Per Day from Play Yards & Placed in Sealed Trash Bin at each Barn
- Staff Picks Up/Bags Poop While Walking Individual Dogs on Homestead Campus
- Daily Cleaning of All Dog Barns, Cat Barn, and Miami County Shelter
- Bagged and Placed in Dumpster Daily
- Regularly Scheduled Dumpster Pick Up\
- **All buildings and all primary activities will be located on the north 20 acres of the property.**

#### **NOISE MITIGATION:**

There is ample evidence that based on the proposed operational practices (consistent with current practices), the enhanced building design, the extensive landscape buffering and the ample separation distance, this concern is limited strictly to daytime operating hours and minimized by thoughtful supervision and management of the animals. These solutions not only benefit the neighbors, but create a calmer environment supporting animal rehabilitation and training and staff well-being.

A&F has had zero noise complaints from the current operation of the Little Red Barn over the past 5 Years due to the way A&F manages the dogs in our care. With Miami County having no leash laws, the only dogs we hear barking after hours are not from the dogs on our property, as all A&F dogs are safely secured inside the Little Red Barn with no free access outside the building. This proactive management practice will continue on The Homestead property.

We have learned from our experience operating the existing facility, as well as ideas and experiences in working with dozens of Animal Shelters across the Midwest, and incorporated these lessons into the design of the buildings on The Homestead. Many shelters and kennels have indoor/outdoor runs where the dogs have unfettered access to the outdoors. This is NOT the case with the design of every building on The Homestead where dogs or cats will be housed. Dogs will not have access to outside play yards unless they are accompanied by A&F staff. There are no “pet doors” allowing our dogs to freely come and go into the open yard areas as they desire. All dogs will also be accompanied by A&F staff whenever they are walked on The Homestead trails. There is never any time when dogs or cats in our care will have unmanaged access to outside spaces. Dog barking is significantly minimized or eliminated altogether when they are properly managed and accompanied by trained staff like we have here at A&F.

All buildings are designed with sound proofing to mitigate sounds from within the building using insulated exterior and interior walls. The current design plans show multiple Suite Rooms with calming classical music playing throughout each building which will minimize dog barking. Dogs

will always be secured in their individual suites from 7:00 PM to 7:00 AM and will only have managed access outside their respective barn from 7:00 AM to 7:00 PM.

## **BARKING/NOISE MITIGATION SUMMARY**

- Barn/Shelter Design
  - Sound proofing of Exterior and Interior Wall using Designed Insulation
  - 4-6 Suite Rooms per Barn/Shelter
  - 4-5 Dog Suites/Kennels per Room
  - Soothing Classical Music Played 24/7 Throughout Building
- Hours of Operation – 7:00 AM to 7:00 PM
  - All Dogs Secured in their Individual Suites from 7:00 PM – 7:00 AM
  - No Exterior Access 7:00 PM – 7:00 AM
  - Staff Managed Access to Play Yards and Trails – 7:00 AM – 7:00 PM
- Individual Play Yards per Suite Room – 6' Privacy Fence
  - Dogs Managed by Staff Individually or Small Groups in Designated Play Yards
  - Dogs Never Allowed to Roam Homestead Unattended
- Retention of as Many Trees and Natural Vegetation as Possible
- **All buildings and all primary activities will be located on the north 20 acres of the property**
- **97.7% Open Space** with Much of This Covered by Trees and Vegetation

## **LIGHT POLLUTION MITIGATION**

With respect to the potential for light pollution making the area feel more like a commercial property and less like a rural farm property, there is ample evidence from the Photometric lighting plan that light will not spread beyond property boundaries or skyward, and that the use of lighting will be minimized after close of early evening hours. Certainly outdoor sports recreational facilities, outdoor riding arenas, and outdoor commercial uses would have much greater impact than this facility which has limited hours, one-story buildings, and has retained mature trees as buffers between uses.

In working with our design and engineering partners, a Photometric lighting plan was designed to minimize any light pollution from The Homestead. The Photometric Plan calls for ZERO Foot Candles at all property lines. Lighting from the front property line will not extend beyond the road surface and into the property located across 223rd Street. Exterior lighting on The Homestead will be minimized outside of operational hours from 7:00 PM to 7:00 AM. The remaining lighting is for security and directional purposes only. All parking lot lights will be turned off after 7 p.m. with the exception of the entrance sign which will only light the entrance sign and would be necessary for identification in the event any emergency vehicle would need to access the site. Lights on all the buildings will use motion sensors for security reasons, especially at night. They are designed to minimize light pollution by directing all of its light downward. This prevents light from being emitted above the horizontal plane, ensuring that no light is wasted or directed upwards into the

sky, which contributes to skyglow. Full cutoff fixtures have a flat lens and a housing that extends beyond the light source, which helps prevent light from spilling upwards or sideways. This design not only reduces light pollution and glare but also increases the efficiency and effectiveness of the lighting by directing light only where it is needed. The only other lighting on-site will be near the Knox Box and ground-level lighting in the parking lot in order to provide easy access to emergency personnel.

The Photometric plan calls for lighting in each play yard connected to each building where dogs will be housed. However, these particular lights will be off between the hours of 7:00 PM to 7:00 AM. Even while lights are on in the play yards during hours of operation until 7:00 PM, the 6' privacy fence for each play yard will minimize any light that escapes the area. Again, after 7:00 PM those lights will be turned off.

The operational plan is to turn off as many of the exterior lights as possible after 7:00 PM. The following exterior lights will be turned off at 7:00 PM:

- Main Parking Lot Lights
- Driveway Lights – as allowed by Fire & Law Enforcement agencies
- Pathway Lights
- Individual Play Yard Lights
- Barn & Villa – Front Entrance Lights – as allowed by **Fire & Law Enforcement agencies**
- **All buildings and all primary activities will be located on the north 20 acres of the property**

The Landscaping Plan for The Homestead calls for retention of as many trees and natural vegetation as possible, and additional natural landscaping which will also help mitigate direct view of any lighting.

The net impact is there should be very minimal exterior lighting on The Homestead between 7:00 PM and 7:00 AM maintaining the existing rural farm property feel.

#### **LIGHT POLLUTION MITIGATION SUMMARY**

- Homestead Hours of Operation – 7:00 AM – 7:00 PM
- Minimal Homestead Lighting – 7:00 PM – 7:00 AM
  - Shielded Down Lighting at Barn/Shelter Entrances Only
  - Individual Play Yard Lights Off After Hours
  - 6' Privacy Fences Around Each Play Yard
  - Use of Shielded Down Lighting
  - Retention of as Many Trees and Natural Vegetation as Possible
  - Landscaping Plan
  - Photometric Plan - ZERO Foot Candles at All Property Lines
  - **All buildings and all primary activities with lighting will be located on the north 20 acres of the property**

## **SAFETY/SECURITY CONCERNS**

A&F agrees that safety and security is an essential component to a successful animal rescue and rehabilitation facility. There is ample evidence that the design and operational practices previously mentioned will protect against the escape of animals kept within the property boundaries, and prevent the encroachment of people or animals from outside property boundaries. There are multiple layers of safety and security involved in protecting the neighbors, staff and animals, from the physical to the operational. These measures are detailed below.

Through double leashing, installing double gates, and pet traps being added to all play yards which are also used for entry and exit into the each barn safety is a key concept in the design of the proposed barns, shelter, and dog villas to provide a physical pet trap to eliminate any accidental escapes. No accidental escapes at the current property have occurred since these changes were made, the last of which occurred in June of 2021 and not one incident of an A&F dog escaping and biting anyone outside our property has occurred.

As you can see in the illustrative diagram below for one of our proposed barns, access out of The Homestead buildings will require going through an inner vestibule with double entry on the front of the building, or an outer pet trap and gated and fenced area at the rear of the building. These are the only ingress and egress points that will be utilized for dogs entering or exiting the barns or shelter buildings. The other doors provide access to the play yards which are all fenced with a 6' wood privacy fence and managed by A&F staff.

The Homestead property will be secured with a 6' black chain link fence with electronically secured and gated access surrounding the entire property. All dogs will be secured in their individual suites from 7:00 PM – 7:00 AM. Dog access to play yards will be managed by A&F staff. No dogs will have free access to The Homestead grounds but will be taken for walks by A&F personnel exiting their respective buildings through the secured rear entrance with Pet Trap. All dogs are double leashed with a clip leash secured to their collar or harness in addition to the use of a slip lead to ensure each dog is 100% secured. Please see photos below for examples.

This focus on safety and dog management protocols when designing The Homestead ensure the concerns of the neighbors are fully addressed.



## SAFETY/SECURITY SUMMARY

- Barn/Shelter Design
  - Pet Traps/Vestibule at Controlled Entrances/Exits Used to Access Homestead
  - No Access Used From Individual Play Yards Per Suite Room – 6’ Privacy Fenced
  - Secured Doors On Each Suite Room
- Homestead Campus
  - 6’ Black Chain Link Fence Inside Tree Vegetation Line Around Entire Homestead
  - Electronic Secure Gated Access to Homestead Campus
  - Homestead Campus Not Open to the Public – Appointment Only
- Dog/Cat Management
  - Cats Never Allowed Outside Cat Haven – Secured in Crates for Transport
  - No Feral Cats loose on the Homestead
  - Dogs Double Leashed (Clip Leash & Slip Leash) When Outside Barn/Shelter or Play Yard

- Only Pet Trap Secured Front & Rear Entrance Access Used from Barn/Shelter Building
  - Individual Dog Walks on Homestead Trails
  - Transport
- Dogs Never Allowed to Roam Homestead Unattended
- All Dogs Secured in their Individual Suite/Kennel from 7:00 PM – 7:00 AM
- No Exterior Access 7:00 PM – 7:00 AM
- Staff Managed Access to Play Yards – 7:00 AM – 7:00 PM

**TRAFFIC IMPACT ON 223<sup>RD</sup> STREET**

The Homestead would generate minimal additional traffic on 223<sup>rd</sup> Street and as well as additional safety impacts. At the direction of Miami County Planning staff, we engaged a certified traffic engineer for an impact study and evaluation. There is ample evidence that The Homestead operations will not create a negative impact on 223<sup>rd</sup> street. Additional traffic is to be expected with any new development of the property, but the proposed traffic does not necessitate any redesign of the existing roadway for safety or capacity concerns.

**SUMMARY OF CERTIFIED TRAFFIC IMPACT STUDY**

At the direction of Miami County to have a Certified Traffic Impact Study completed, A&F engaged Priority Engineering, Inc. This study documents the impact of the full build-out of The Homestead on the surrounding roadway network. In addition to the AM and PM Peak Hours used for design hours, additional more conservative scenarios were included. These scenarios are not to be considered as design peak hours but were supplied as additional information to demonstrate the magnitude of traffic that could be added to W 223rd Street without adversely impacting levels of service or requiring a turn lane. The estimated traffic volume at our location is well below volume required to trigger additional improvements such as adding turn lanes.

Always & Furever Homestead																
Vehicle Traffic By Hour - Normal Operational Day																
	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	Total	Right Turns
Inbound	8	5	5	3	4	6	6	5	5	4	1				52	5 - 8
Outbound		1	2	4	4	4	5	6	5	4	4	4	6	3	52	43 - 46

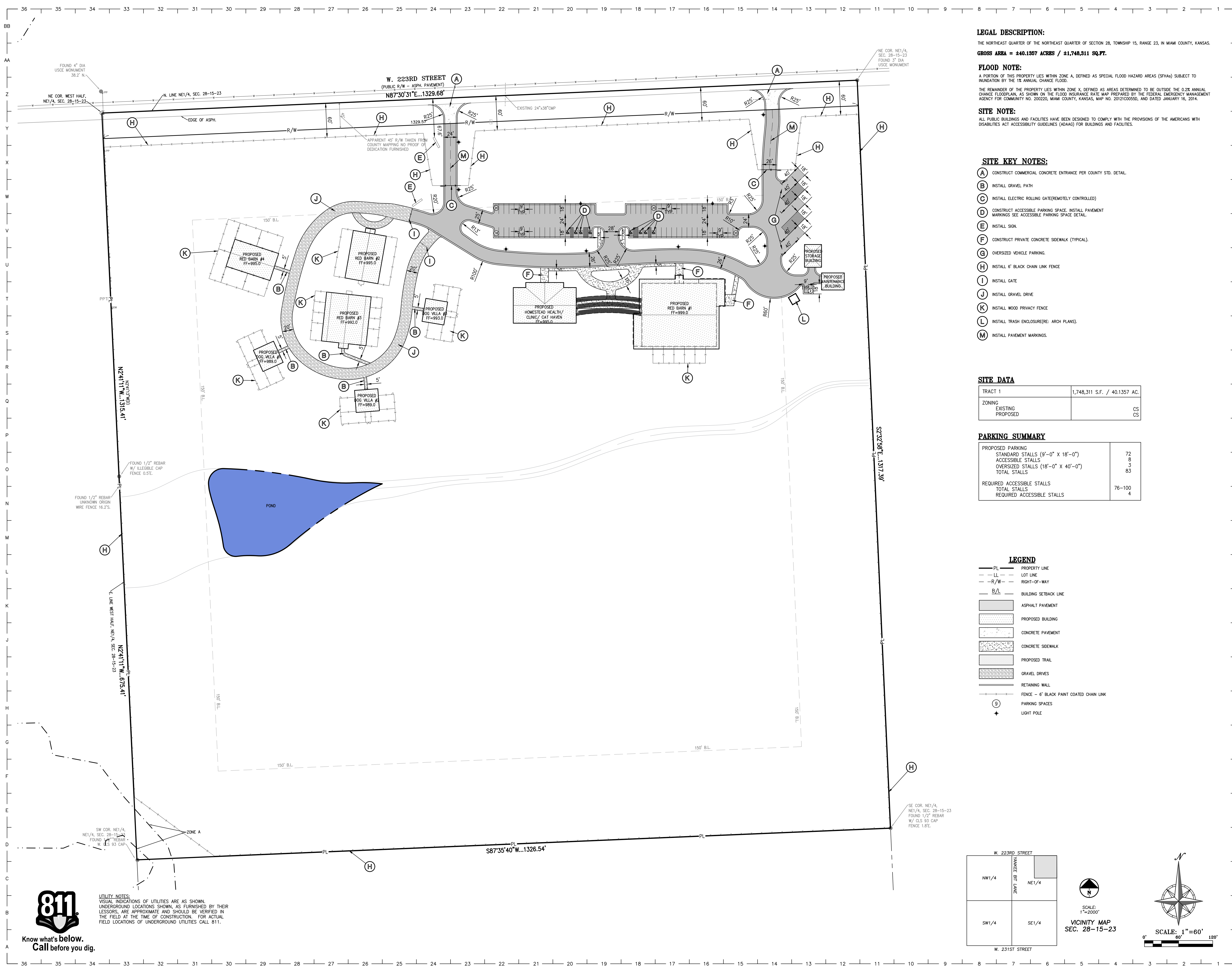
Overall, the traffic anticipated to be generated by our site is minor, and will not result in lowered levels of service, queueing, or increased delays. The proposed drive and service road will be constructed to the standards of Miami County. No additional improvements are recommended by the traffic engineer as a result of this development.

Finally, it is important to clarify that the ultimate goal for every animal on the Homestead is to find them a safe, loving, forever home. Most go through our foster program while we advocate for them and tell their stories on our website and social media platforms. If a foster/adopter cannot be secured, they will stay on the Homestead. Knowing and appreciating the precious life and future

of every animal in our custody drives our standard of care to be as impeccable as possible. Our dream is to wake up to a world where every animal is treated with kindness, dignity, respect and most importantly their lives have been touched by love, even if only for a moment. We know this is a big request and change is not easy, but this is a journey we are whole-heartedly committed to, one which we are not only improving the lives of the animals in our care, but also for the lives of people involved and the community around us. If along the way we have motivated just one person to change and treat an animal better, then together we are changing the world - one soul at a time.

If you're an animal lover, please look at our website or visit us on Facebook so you can see firsthand how we treat our animals. We will always believe with all our hearts it really is never too late for happily ever after. We welcome the opportunity to answer any further questions about our operations so that everyone will feel comfortable and proud to have Always & Furever be the model for other rescues and shelters, demonstrating how one dream really can change the world.

Jennifer Dulski  
Always & Furever  
<https://www.alwaysandfurever.org>



**LEGAL DESCRIPTION:**  
 THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 15, RANGE 23, IN MIAMI COUNTY, KANSAS.  
**GROSS AREA = ±40.1357 ACRES / ±1,748,311 SQ.FT.**

**FLOOD NOTE:**  
 A PORTION OF THIS PROPERTY LIES WITHIN ZONE A, DEFINED AS SPECIAL FLOOD HAZARD AREAS (SFHA) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD.  
 THE REMAINDER OF THE PROPERTY LIES WITHIN ZONE X, DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON THE FLOOD INSURANCE RATE MAP PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR COMMUNITY NO. 202220, MIAMI COUNTY, KANSAS, MAP NO. 201210055D, AND DATED JANUARY 16, 2014.

**SITE NOTE:**  
 ALL PUBLIC BUILDINGS AND FACILITIES HAVE BEEN DESIGNED TO COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) FOR BUILDINGS AND FACILITIES.

- SITE KEY NOTES:**
- (A) CONSTRUCT COMMERCIAL CONCRETE ENTRANCE PER COUNTY STD. DETAIL.
  - (B) INSTALL GRAVEL PATH
  - (C) INSTALL ELECTRIC ROLLING GATE (REMOTELY CONTROLLED)
  - (D) CONSTRUCT ACCESSIBLE PARKING SPACE, INSTALL PAVEMENT MARKINGS SEE ACCESSIBLE PARKING SPACE DETAIL.
  - (E) INSTALL SIGN.
  - (F) CONSTRUCT PRIVATE CONCRETE SIDEWALK (TYPICAL).
  - (G) OVERSIZED VEHICLE PARKING.
  - (H) INSTALL 6" BLACK CHAIN LINK FENCE
  - (I) INSTALL GATE
  - (J) INSTALL GRAVEL DRIVE
  - (K) INSTALL WOOD PRIVACY FENCE
  - (L) INSTALL TRASH ENCLOSURE (SEE ARCH PLANS).
  - (M) INSTALL PAVEMENT MARKINGS.

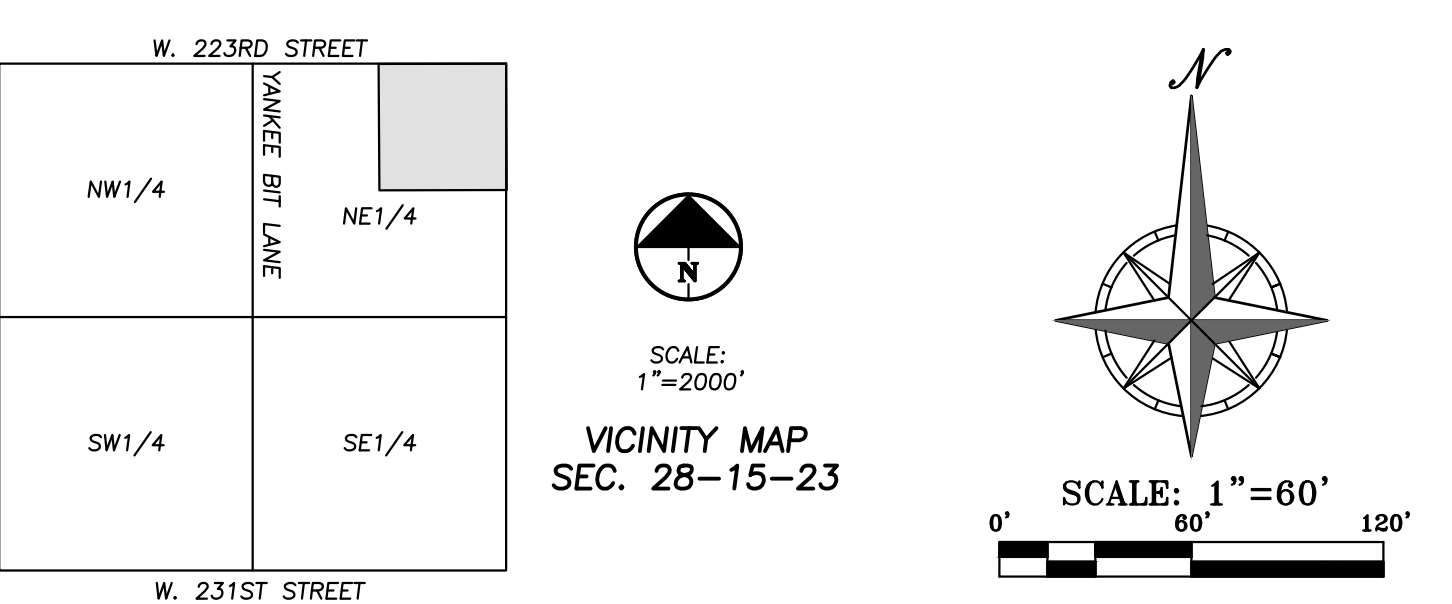
**SITE DATA**

TRACT 1	1,748,311 S.F. / 40.1357 AC.
ZONING	
EXISTING	CS
PROPOSED	CS

**PARKING SUMMARY**

PROPOSED PARKING	
STANDARD STALLS (9'-0" X 18'-0")	72
ACCESSIBLE STALLS	8
OVERSIZED STALLS (18'-0" X 40'-0")	3
TOTAL STALLS	83
REQUIRED ACCESSIBLE STALLS	
TOTAL STALLS	76-100
REQUIRED ACCESSIBLE STALLS	4

- LEGEND**
- PL — PROPERTY LINE
  - - - LL - - - LOT LINE
  - - - R/W - - - RIGHT-OF-WAY
  - - - B/L - - - BUILDING SETBACK LINE
  - ▒ ASPHALT PAVEMENT
  - ▒ PROPOSED BUILDING
  - ▒ CONCRETE PAVEMENT
  - ▒ CONCRETE SIDEWALK
  - ▒ PROPOSED TRAIL
  - ▒ GRAVEL DRIVES
  - ▒ RETAINING WALL
  - ▒ FENCE - 6" BLACK PAINT COATED CHAIN LINK
  - ⊙ PARKING SPACES
  - ⊕ LIGHT POLE



**CLIENT:**  
**ALWAYS & FUREVER**  
 MIDWEST ANIMAL SANCTUARY  
 PROJECT HOMESTEAD

23595 W. 223RD ST.,  
 SPRING HILL, KS 66208



**PHELPS ENGINEERING, INC.**  
 1270 N. Winchester  
 Olathe, Kansas 66061  
 (913) 393-1155  
 Fax: (913) 393-1166  
 www.phelpsengineering.com



**ARCHITECT:**  
**Bell / Knott & Associates**  
 CORPORATE ARCHITECTS, P.C.  
 12730 State Line Road Voice: 913.378.1600  
 Suite 100 Fax: 913.378.1601  
 Leawood, KS 66209 www.bellknott.com

**SEAL:**

**REVISIONS:**


**ISSUE DATE:** 06/22/2023  
**REASON FOR ISSUE:**   
**PROJECT NUMBER:** 22-050  
**PROJECT PHASE:** CD

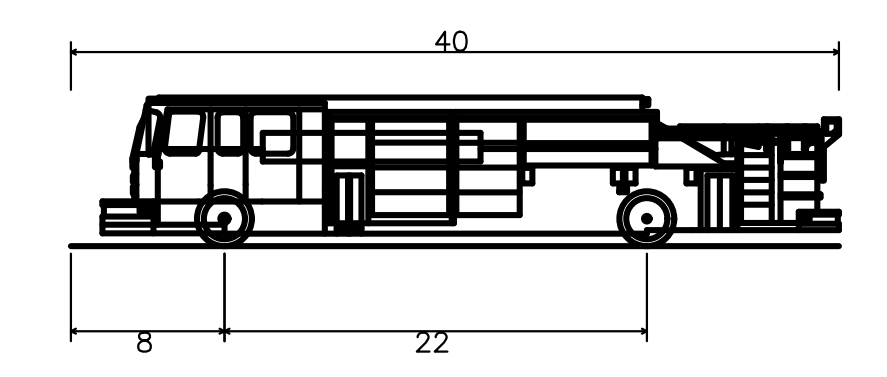
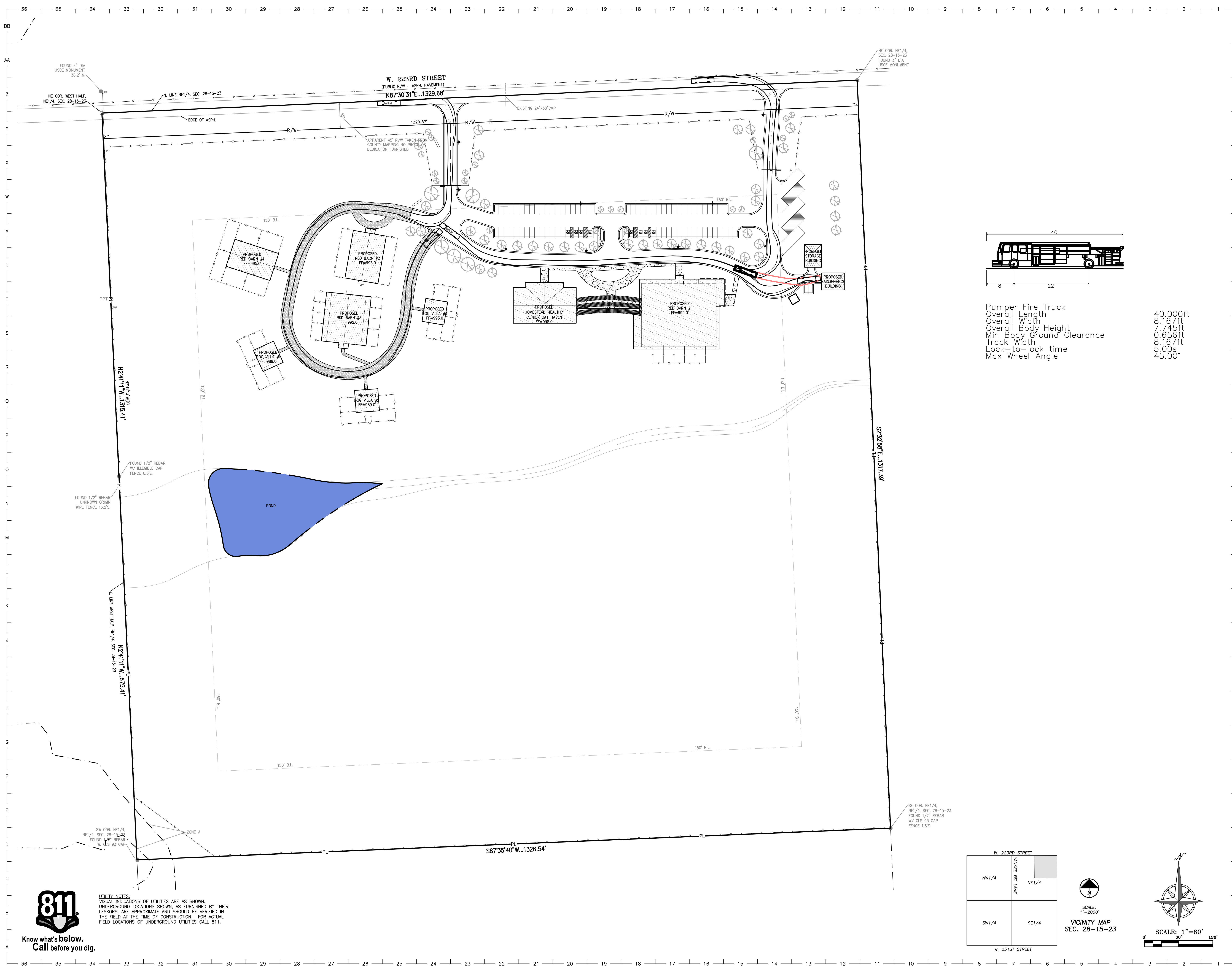
**SHEET TITLE:**  
**SITE PLAN**  
**SHEET NUMBER:**  
**C1**

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

UTILITY NOTES:  
 VISUAL INDICATIONS OF UTILITIES ARE AS SHOWN.  
 UNDERGROUND LOCATIONS SHOWN, AS FURNISHED BY THEIR LESSORS, ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD AT THE TIME OF CONSTRUCTION. FOR ACTUAL FIELD LOCATIONS OF UNDERGROUND UTILITIES CALL 811.







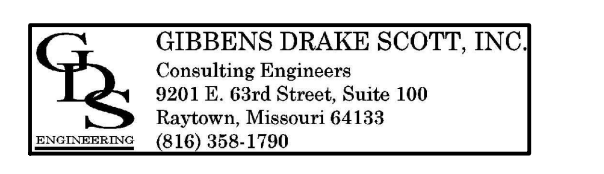
Pumper Fire Truck  
 Overall Length 40.000ft  
 Overall Width 8.167ft  
 Overall Body Height 7.745ft  
 Min Body Ground Clearance 0.656ft  
 Track Width 8.167ft  
 Lock-to-lock time 5.00s  
 Max Wheel Angle 45.00°

CLIENT:  
**ALWAYS & FUREVER**  
 MIDWEST ANIMAL SANCTUARY  
 PROJECT HOMESTEAD

23595 W. 223RD ST.,  
 SPRING HILL, KS 66208



**PHELPS ENGINEERING, INC.**  
 1270 N. Winchester  
 Olathe, Kansas 66061  
 (913) 393-1155  
 Fax (913) 393-1166  
 www.phelpsengineering.com



ARCHITECT:  
**Bell / Knott & Associates**  
 CORPORATE ARCHITECTS, P.C.  
 12730 State Line Road Voice: 913.378.1600  
 Suite 100 Fax: 913.378.1601  
 Leawood, KS 66209 www.bellknott.com

SEAL:

REVISIONS:

NO.	DATE	DESCRIPTION

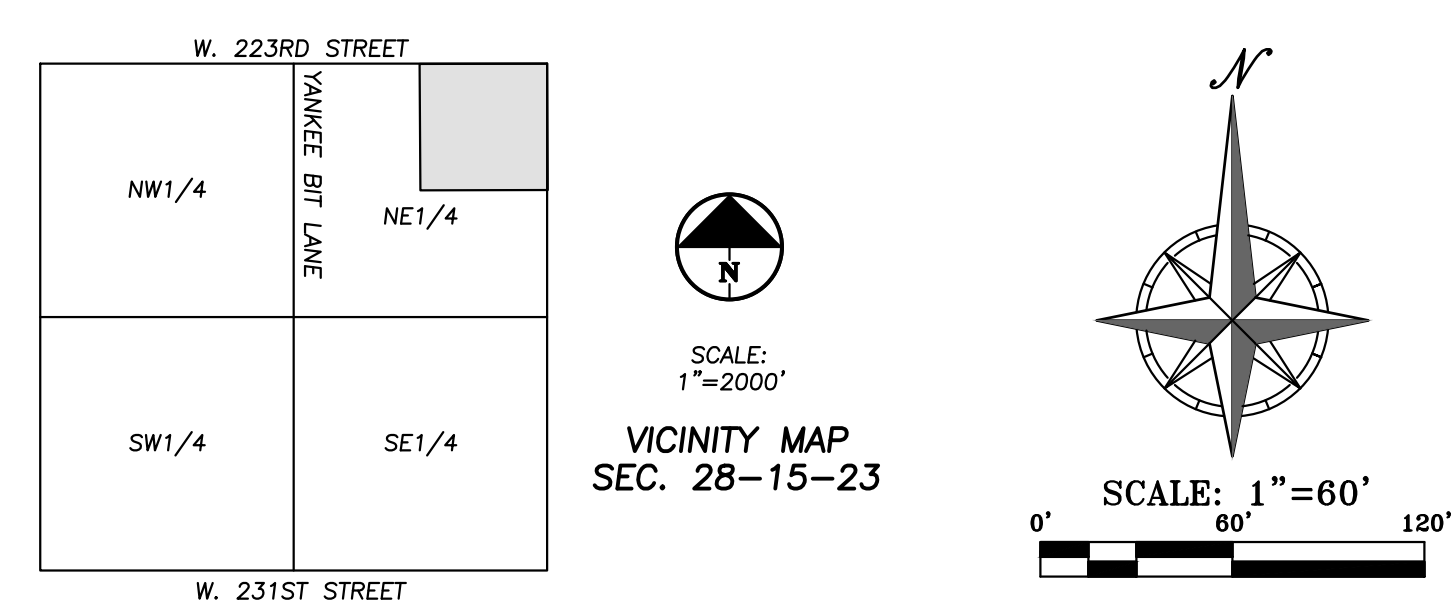
ISSUE DATE: 06/22/2023  
 REASON FOR ISSUE:  
 PROJECT NUMBER: 22-050  
 PROJECT PHASE: CD

SHEET TITLE:  
**TRUCK TURN PLAN**

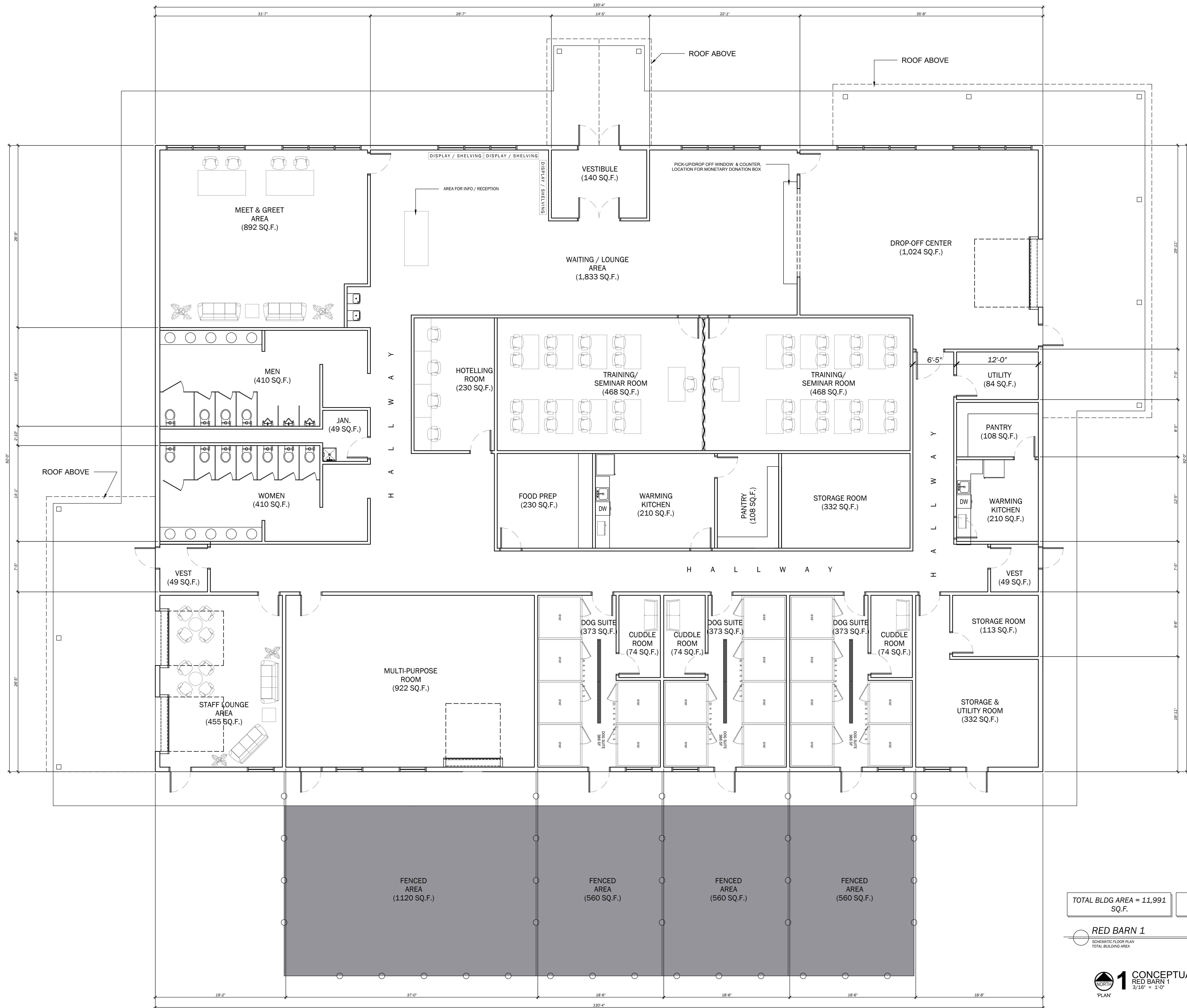
SHEET NUMBER:  
**C4**

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

UTILITY NOTES:  
 VISUAL INDICATIONS OF UTILITIES ARE AS SHOWN.  
 UNDERGROUND LOCATIONS SHOWN, AS FURNISHED BY THEIR LESSORS, ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD AT THE TIME OF CONSTRUCTION. FOR ACTUAL FIELD LOCATIONS OF UNDERGROUND UTILITIES CALL 811.







TOTAL BLDG AREA = 11,991 SQ.F.

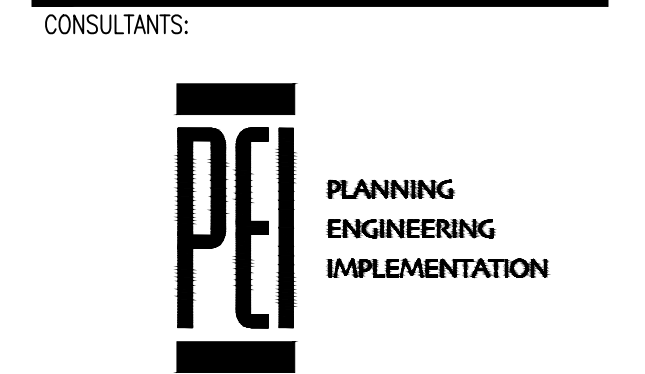
TOTAL NO. OF DOGS @ DOG SUITES = 18

RED BARN 1  
SCHEMATIC FLOOR PLAN  
TOTAL BUILDING AREA 11,991 SQ.F.

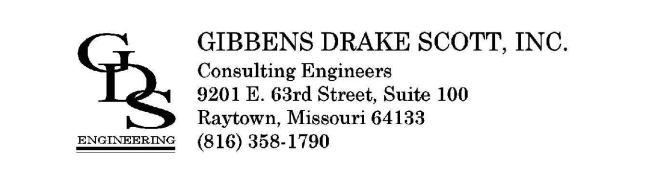
**1** CONCEPTUAL FLOOR PLAN  
RED BARN 1  
3/16" = 1'-0"

CLIENT:  
**ALWAYS & FUREVER**  
MIDWEST ANIMAL SANCTUARY  
PROJECT HOMESTEAD

23595 W. 223RD ST.,  
SPRING HILL, KS 66208



PHELPS ENGINEERING, INC.  
1370 N. Winchester  
Olathe, Kansas 66061  
(913) 393-1155  
Fax: (913) 393-1166  
www.phelpsenengineering.com



GIBBENS DRAKE SCOTT, INC.  
Consulting Engineers  
2001 E. 64th Street, Suite 100  
Raytown, Missouri 64133  
(816) 306-1798



ARCHITECT:  
**Bell / Knott & Associates**  
CORPORATE ARCHITECTS, P.C.  
12730 State Line Road Voice: 913.378.1600  
Suite 100 Fax: 913.378.1601  
Leawood, KS 66209 www.bellknott.com

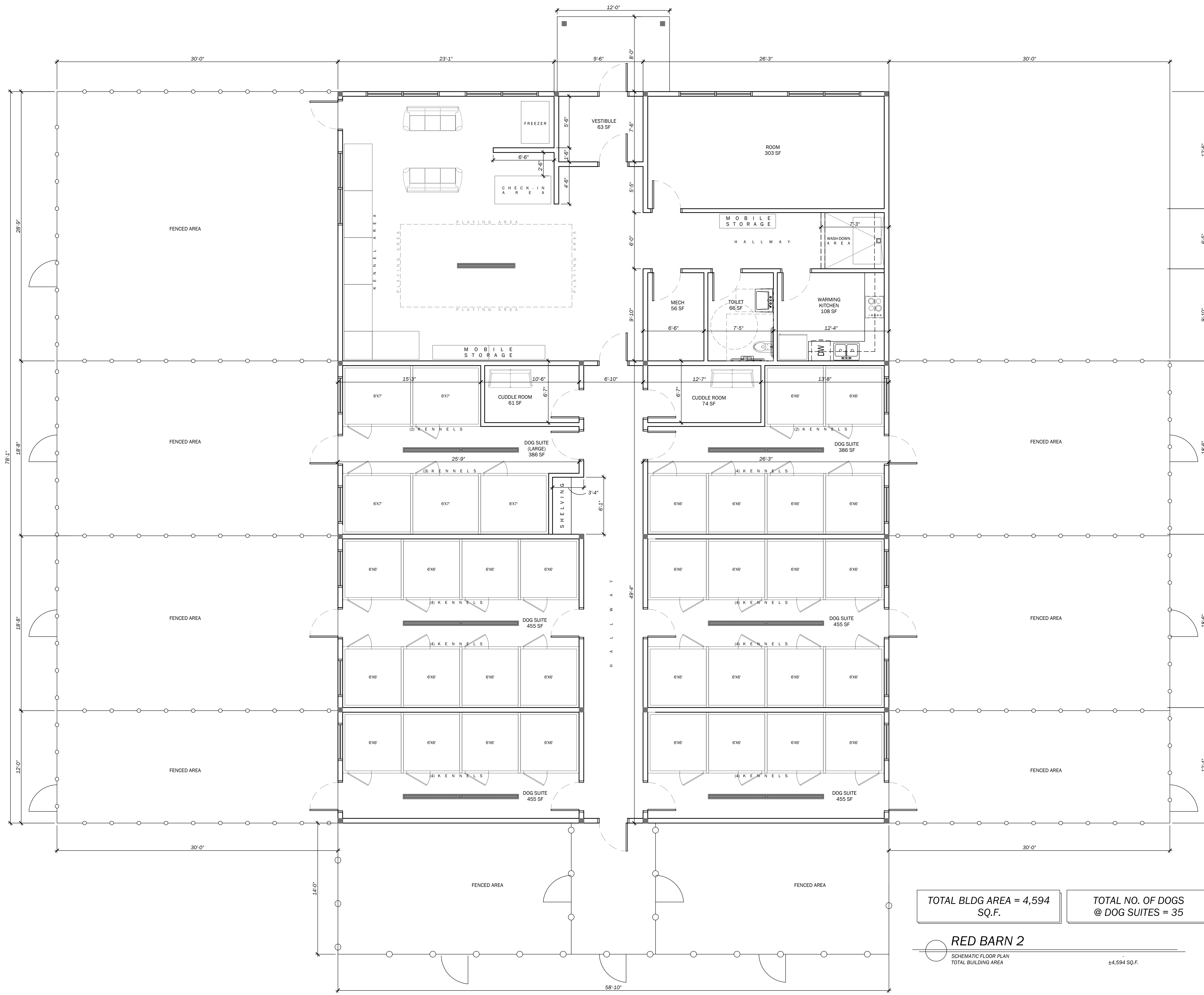
SEAL:  
**NOT FOR CONSTRUCTION**

REVISIONS:


ISSUE DATE: 07/17/23  
REASON FOR ISSUE: REVIEW  
PROJECT NUMBER: 22-050  
PROJECT PHASE: SD

SHEET TITLE:  
**NEW WORK FLOOR PLAN - RED BARN 1**

SHEET NUMBER:  
**1-A100**



TOTAL BLDG AREA = 4,594 SQ.F.

TOTAL NO. OF DOGS @ DOG SUITES = 35

**RED BARN 2**  
 SCHEMATIC FLOOR PLAN  
 TOTAL BUILDING AREA 14,594 SQ.F.

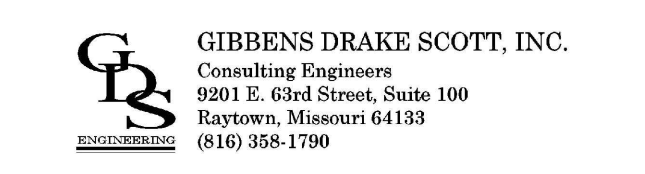
**1** CONCEPTUAL FLOOR PLAN  
 RED BARN 2  
 1/4" = 1'-0"

CLIENT:  
**ALWAYS & FUREVER**  
 MIDWEST ANIMAL SANCTUARY  
 PROJECT HOMESTEAD

23595 W. 223RD ST.,  
 SPRING HILL, KS 66208



PHELPS ENGINEERING, INC.  
 1370 N. Winchester  
 Olathe, Kansas 66061  
 (913) 393-1155  
 Fax: (913) 393-1166  
 www.phelpsengineering.com



ARCHITECT:  
**Bell / Knott & Associates**  
 CORPORATE ARCHITECTS, P.C.  
 12730 State Line Road Voice: 913.378.1600  
 Suite 100 Fax: 913.378.1601  
 Leawood, KS 66209 www.bellknott.com

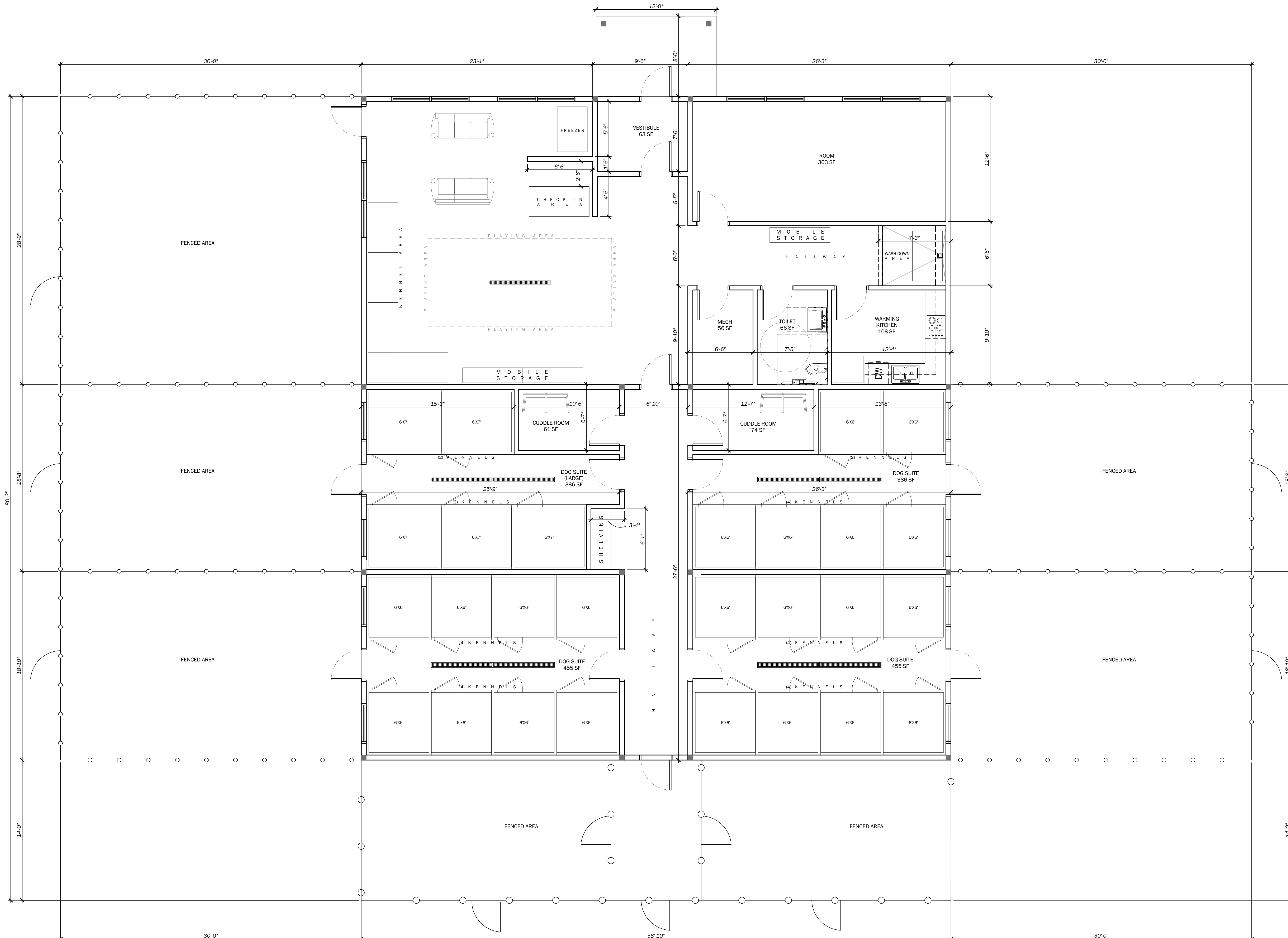
SEAL:  
**NOT FOR CONSTRUCTION**

REVISIONS:


ISSUE DATE: 07/17/23  
 REASON FOR ISSUE: REVIEW  
 PROJECT NUMBER: 22-050  
 PROJECT PHASE: SD

SHEET TITLE:  
**NEW WORK FLOOR PLAN - RED BARN 2**

SHEET NUMBER:  
**2-A100**



TOTAL BLDG AREA = 3,898 SQ.F.

TOTAL NO. OF DOGS @ DOG SUITES = 27

**RED BARN 3 & 4**  
SCHEMATIC FLOOR PLAN  
TOTAL BUILDING AREA

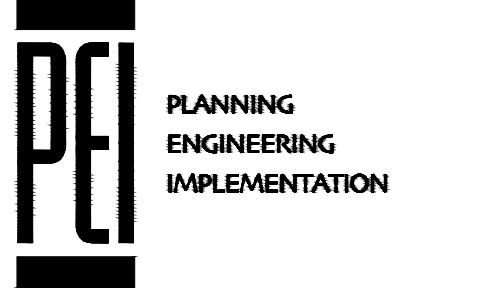
±3,898 SQ.F.

**1** CONCEPTUAL FLOOR PLAN  
RED BARN 3 & 4  
1/4" = 1'-0"

CLIENT:  
**ALWAYS & FUREVER**  
MIDWEST ANIMAL SANCTUARY  
PROJECT HOMESTEAD

23595 W. 223RD ST.,  
SPRING HILL, KS 66208

CONSULTANTS:



**PHELPS ENGINEERING, INC.**  
1370 N. Winchester  
Olathe, Kansas 64061  
(913) 393-1155  
Fax: (913) 393-1166  
www.phelpsenengineering.com

**GIBBENS DRAKE SCOTT, INC.**  
Consulting Engineers  
2001 E. 64th Street, Suite 100  
Raytown, Missouri 64133  
(816) 306-1798



ARCHITECT:  
**Bell / Knott & Associates**  
CORPORATE ARCHITECTS, P.C.  
12730 State Line Road Suite 100  
Leawood, KS 66209  
Voice: 913.378.1600  
Fax: 913.378.1601  
www.bellknott.com

SEAL:

**NOT FOR CONSTRUCTION**

REVISIONS:

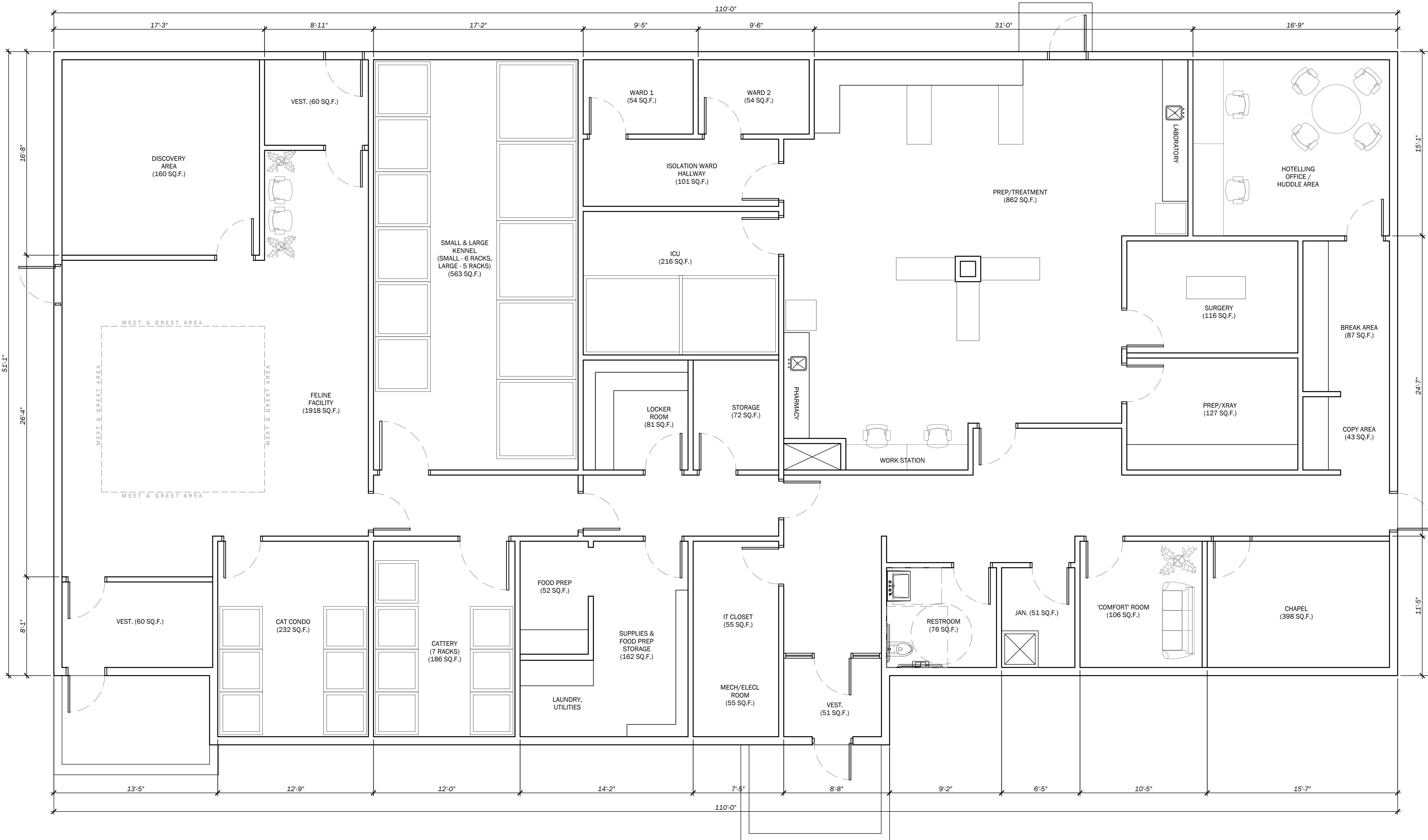

ISSUE DATE: 07/17/23  
REASON FOR ISSUE: REVIEW  
PROJECT NUMBER: 22-050  
PROJECT PHASE: SD

SHEET TITLE:  
**NEW WORK FLOOR PLAN - RED BARN 3&4**

SHEET NUMBER:  
**3-A100**

**Construction Notes:**

- ①
- ②



TOTAL BLDG AREA = 5,935 SQ.F.

**HOMESTEAD HEALTH CLINIC**

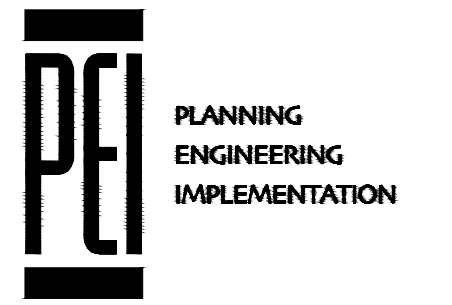
SCHEMATIC FLOOR PLAN TOTAL BUILDING AREA ±5,935 SQ.F.

**1** CONCEPTUAL FLOOR PLAN  
HH CLINIC / CAT HAVEN  
1/4" = 1'-0"  
PLAN

CLIENT:  
**ALWAYS & FUREVER**  
MIDWEST ANIMAL SANCTUARY  
PROJECT HOMESTEAD

23595 W. 223RD ST.,  
SPRING HILL, KS 66208

CONSULTANTS:



PHELPS ENGINEERING, INC.  
1370 N. Winchester  
Olathe, Kansas 66061  
(913) 393-1155  
Fax: (913) 393-1166  
www.phelpsenengineering.com

GIBBENS DRAKE SCOTT, INC.  
Consulting Engineers  
2001 E. 64th Street, Suite 100  
Raytown, Missouri 64133  
(816) 306-1798



ARCHITECT:  
**Bell / Knott & Associates**  
CORPORATE ARCHITECTS, P.C.  
12730 State Line Road Suite 100  
Leawood, KS 66209  
Voice: 913.378.1600  
Fax: 913.378.1601  
www.bellknott.com

SEAL:

**NOT FOR CONSTRUCTION**

REVISIONS:

ISSUE DATE: 07/17/23  
REASON FOR ISSUE: REVIEW  
PROJECT NUMBER: 22-050  
PROJECT PHASE: SD

SHEET TITLE:  
**NEW WORK FLOOR PLAN - HOMESTEAD CLINIC / CAT HAVEN**

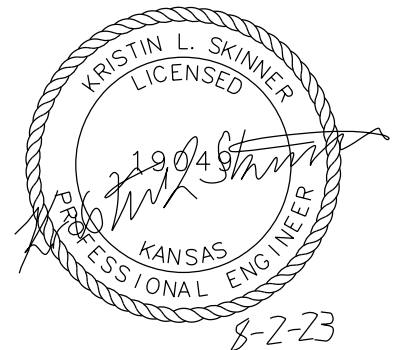
SHEET NUMBER:  
**4-A100**

**Always & Furever**  
**Midwest Animal Sanctuary**  
**Miami County, KS**  
**TRAFFIC IMPACT STUDY**

August 2, 2023

Prepared For:  
Bell/Knott & Associates  
12730 State Line Road, Suite 100  
Leawood, Kansas 66209

Prepared By:  
Priority Engineers, Inc.  
PO Box 563  
Garden City, MO 64747





August 2, 2023

Mr. Kerry Knott  
Bell/Knott & Associates  
12730 State Line Road, Suite 100  
Leawood, Kansas 66209

RE: Always & Furever Traffic Impact Study – Miami County, KS

Dear Mr. Knott,

In response to your request, Priority Engineers, Inc. has completed a traffic impact study for the above referenced project. This study documents the calculations used to determine the potential traffic impacts associated with this development on the intersections and streets surrounding this site, during the AM, noon and PM peak hours. The following report documents our analysis and recommendations.

We appreciate the opportunity to work with you on this project. Please contact us with any questions or if you require additional information.

Sincerely,

PRIORITY ENGINEERS, INC.

A handwritten signature in blue ink that reads 'Kristin L. Skinner'. The signature is fluid and cursive, written in a professional style.

Kristin L. Skinner, P.E., PTOE  
President

## Table of Contents

<u>Section</u>	<u>Page No.</u>
1) INTRODUCTION	1
2) EXISTING CONDITIONS	1
3) PROPOSED DEVELOPMENT	1
4) TRIP GENERATION	1
5) TRIP DISTRIBUTION AND ASSIGNMENT	3
6) LEVEL OF SERVICE AND VOLUME/CAPACITY ANALYSIS	3
7) ACCESS MANAGEMENT & TURN LANES	5
8) SIGHT DISTANCE	5
9) RECOMMENDATIONS & CONCLUSIONS	6
 <b>APPENDIX II</b>	
Project Location	Figure 1
Site Plan	Figure 2
Existing Peak Hour Traffic Volumes	Figure 3
Existing Peak Hour Lane Configurations & Levels of Service	Figure 4
Proposed AM Peak Hour Traffic Volumes	Figure 5
Proposed Noon Peak Hour Traffic Volumes	Figure 6
Proposed PM Peak Hour Traffic Volumes	Figure 7
Proposed AM Peak Hour Lane Configurations & Levels of Service	Figure 8
Proposed Noon Peak Hour Lane Configurations & Levels of Service	Figure 9
Proposed PM Peak Hour Lane Configurations & Levels of Service	Figure 10
Proposed AM Peak Hour (Open Vet Office & Office Space) Traffic Volumes	Figure 11
Proposed PM Peak Hour (Open Vet Office & Office Space) Traffic Volumes	Figure 12
Proposed AM Peak Hour (Open Vet Office & Office Space) Lane Configurations & Levels of Service	Figure 13
Proposed PM Peak Hour (Open Vet Office & Office Space) Lane Configurations & Levels of Service	Figure 14
Proposed Anniversary Celebration PM Peak Hour Traffic Volumes	Figure 15
Proposed Anniversary Celebration Lane Configurations & Levels of Service	Figure 16
 <b>APPENDIX II</b>	
Always & Furever provided trip generation	
Traffic Counts	
Synchro Reports	

## 1) INTRODUCTION

The purpose of this study is to examine the potential traffic impacts associated with the proposed Always & Furever Midwest Animal Sanctuary to be located on W 223<sup>rd</sup> Street in Miami County, Kansas. The site is to be located on 40 acres to the east of 23595 West 223<sup>rd</sup> Street.

The study area is shown in Figure 1. The site layout is shown in Figure 2.

## 2) EXISTING CONDITIONS

The existing site is located in Miami County, KS and is outside of the municipal limits of the City of Spring Hill. The site is mostly wooded, with a single agricultural building. The site is bordered to the north by W 223<sup>rd</sup> Street. W 223<sup>rd</sup> Street is a two-lane roadway with graded shoulders and a posted speed limit of 45 MPH.

According to the Miami County Road Classification Map, W 223<sup>rd</sup> Street is classified as an arterial roadway with 120' right-of-way width and a driveway separation of 500'.

Turning movement counts were collected on Wednesday, October 12<sup>th</sup>, 2022 for a period of 24 hours at the intersection of W 223<sup>rd</sup> Street with Yankee Bit Lane. The daily traffic on W 223<sup>rd</sup> Street adjacent to the site was found to be 1667 vehicles. The AM Peak Hour was from 7:00-8:00 AM and the PM Peak Hour was from 4:45-5:45 PM.

The AM, Noon, and PM Peak Hour traffic volumes are shown in Figure 3.

## 3) PROPOSED DEVELOPMENT

The animal sanctuary is now expected to be constructed in a single phase with all buildings to be located in the northern half of the property. The site will include three small dog villas, four barns, and the Homestead Health Clinic, which will not be open to the public. The villas and barns are expected to have a maximum capacity of 120 dogs and 40 cats and will include a building dedicated to house up to use as the Miami County Animal Shelter.

Two access points will be provided to the site, both of which will be gated. The main entrance will be located near the center of the property and will have a single entering lane and one exiting lane. The single inbound lane will allow for a total of 7 vehicles to be stored prior to the gate. The eastern access is located at the same location as the existing drive to the property and will be used as a service road.

## 4) TRIP GENERATION

Typically, development trips are estimated using the latest edition of using the Institute of Transportation Engineers' (ITE) Trip Generation Manual. The Always & Furever site is unique and a comparable ITE Land Use Code was not available for the site as a whole.

### **Always & Furever Estimates**

An Always & Furever volunteer familiar with both the volunteer activities and transportation demands of the organization compiled a detailed estimate of the number of people to be visiting the site on a daily basis. A typical day was considered, along with events expected to occur only quarterly and annually. According to these estimates, the noon hour is expected to be the

peak hour for the site. These estimates are depicted in Table 1 below. The complete data provided is attached in Appendix II.

<b>Table 1: Trip Generation - Proposed Site (Provided by Always &amp; Furever)</b>										
<i>Land Use</i>	<i>Daily</i>	<i>AM Peak</i>			<i>Noon Peak Hour</i>			<i>PM Peak</i>		
		<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>
Phase 3 - Full Buildout	104	6	5	1	10	6	4	8	4	4
<b>Total</b>	<b>104</b>	<b>6</b>	<b>5</b>	<b>1</b>	<b>10</b>	<b>6</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>4</b>

**Existing Facility Counts**

In addition to the data provided by Always & Furever, 24 hour counts were collected at the entrances to three of the existing Always & Furever sites. Table 2 below illustrates the peak hour activity at these three sites. The building sizes have been estimated based on aerial photos.

<b>Table 2: Trip Generation - Existing Sites</b>											
<i>Land Use</i>	<i>Intensity</i>	<i>Daily</i>	<i>AM Peak</i>			<i>Noon Peak Hour</i>			<i>PM Peak</i>		
			<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>
Little Gray Barn	5500 SF	25	2	1	1	0	0	0	3	1	2
Always & Furever Midwest Animal Sanctuary	2000 SF	40	2	2	0	3	2	1	5	3	2
Osawatomie Pound	1200 SF	24	4	3	1	0	1	0	2	2	0
<b>Total</b>	<b>8700 SF</b>	<b>89</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>10</b>	<b>6</b>	<b>4</b>

The combination of the existing three sites is comparable to that estimated by Always & Furever during the AM and PM Peak Hours. During the Noon Peak Hour, the proposed estimates are higher. Although the proposed site is significantly larger than the existing uses, it is reasonable to assume that some of the existing site trips are generated by transporting the animals to and from veterinary appointments, which will no longer be necessary on the proposed site. Additionally, some staff members may be traveling between facilities, which also will not be necessary with the proposed sanctuary.

**Unrealistically Conservative Trip Generation**

In order to illustrate a conservative depiction of the proposed site, a combination of the existing site data collected and the Trip Generation Manual, 11<sup>th</sup> Edition data was used. The trips were generated in this way not because this amount of traffic is expected, but to depict the impact on W 223<sup>rd</sup> Street if the site were to function in a way that was more open to the public.

For this scenario, the proposed dog villas, barns, and miscellaneous buildings were estimated proportionately based on the data collected from the existing Always & Furever sites as illustrated in Table 2. As previously discussed, it is expected that some of the trips observed at the existing sites included trips to a veterinarian or other trips that may be consolidated with the proposed sanctuary. The veterinary clinic was estimated based on ITE Land Use 640, Veterinary Hospital, which would be a facility open to the public. These volumes are shown in Table 3 below.

<b>Table 3: Trip Generation - Unrealistically Conservative</b>								
<i>Land Use</i>	<i>Intensity</i>	<i>Daily</i>	<i>AM Peak</i>			<i>PM Peak</i>		
			<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>
Red Barns, Dog Villas, & Miami County Shelter	30,750 SF	315	28	21	7	35	21	14
Veterinary Hospital	6,000 SF	129	22	15	7	22	9	13
<b>Total</b>		<b>444</b>	<b>50</b>	<b>36</b>	<b>14</b>	<b>57</b>	<b>30</b>	<b>27</b>

**Annual Event Traffic**

The data provided by Always & Furever included an estimate for an annual Anniversary Celebration event which could include 150-200 people. Typically, traffic impact studies focus on average weekdays and designs are not based on events that only occur once annually. However, in order to illustrate the impact of such an event on W 223<sup>rd</sup> Street, a scenario was estimated for an event which would have both 100 entering and 100 exiting vehicles.

**5) TRIP DISTRIBUTION AND ASSIGNMENT**

The US 169 interchange with W 223<sup>rd</sup> Street lies about one mile to the east of the site. It was assumed that 90 percent of the proposed trips would be traveling to and from the east, with the remaining 10 percent traveling to and from the west.

The trips for each of the scenarios analyzed were added to the existing traffic volumes on W 223<sup>rd</sup> Street and can be seen in Figures 6-8, 11-12, and 15.

**6) LEVEL OF SERVICE AND VOLUME/CAPACITY ANALYSES**

Capacity analysis was used to quantify the impacts of the increased traffic on the intersections studied. The methodology outlined in the Highway Capacity Manual, 6th Edition, was used as a basis to perform the analysis for this study. Capacity analysis defines the quality of traffic operation for an intersection using a grading system called Level of Service (LOS). The LOS is defined in terms of average vehicle delay. Levels of service A through F have been established with A representing the best and F the worst.

<b>Table 4: Level of Service Definitions</b>		
<b>Level of Service</b>	<b>Unsignalized Intersection</b>	<b>Signalized Intersection</b>
A	< 10 Seconds	< 10 Seconds
B	< 15 Seconds	< 20 Seconds
C	< 25 Seconds	< 35 Seconds
D	< 35 Seconds	< 55 Seconds
E	< 50 Seconds	< 80 Seconds
F	≥ 50 Seconds	≥ 80 Seconds

The study intersections were evaluated using Synchro software, which is based in part on Highway Capacity Manual methods. The analysis reports are included in Appendix II.

**Existing Conditions**

The levels of service, lane configuration, and queue lengths for existing conditions are shown in Figure 4 of Appendix I. The intersection of W 223<sup>rd</sup> Street and Yankee Bit Lane (a private drive that is signed “no trespassing”) was analyzed as the closest intersection. The level of service on Yankee Bit Lane and westbound on W 223<sup>rd</sup> Street is an A with less than one vehicle in the design queue.

**Proposed Conditions**

The levels of service, lane configuration, and queue lengths for this scenario are shown in Figures 8-10 of Appendix I. With the addition of the traffic projected by the proposed development, the level of service at the site drive and at Yankee Bit Lane is an A with a design queue of less than one vehicle.

**Unrealistically Conservative Conditions**

The levels of service, lane configuration, and queue lengths for this scenario are shown in Figures 13-14 of Appendix I. If the site were to function in this way, with the veterinary clinic open to the public, the level of service at the site drive and at Yankee Bit Lane remains an A with a design queue of less than one vehicle.

**Annual Event Traffic**

As noted previously, annual events are not typically considered as a design scenario. The levels of service, lane configuration, and queue lengths for such a scenario are shown in Figure 15 of Appendix I. During such an event, with both arriving and exiting vehicles, the level of service at the site drive and at Yankee Bit Lane remains an A with a design queue of less than one vehicle.

**7) ACCESS MANAGEMENT & TURN LANES**

The Miami County Road Classification Map identifies W 223<sup>rd</sup> Street as an Arterial roadway with 120’ right-of-way width and a driveway separation of 500’. Along the south side of West 223<sup>rd</sup> Street, the main entrance into the Always & Furever Sanctuary is more than 900’ from the nearest drive to the west. Within the site, the main drive and the service road are approximately 550’ apart. The service road is located approximately 600’ from the next drive to the east. Driveways on the north side of the street are within 500’ of the proposed access.

Table 4-27 of the KDOT Access Management Policy was consulted to determine if a left turn lane was warranted on W 223<sup>rd</sup> Street. W 223<sup>rd</sup> Street is posted as a 45 MPH roadway, and a

50 MPH design speed was assumed. KDOT Access Management Policy Table 4-27, for a 50 MPH design speed, has been summarized below. The volumes from each of the scenarios in this study are summarized in Table 5 below.

<b>KDOT Access Management Policy Table 4-27 (50-mph speed)</b>				
<b>Opposing Volume <math>V_o</math> (vph)</b>	<b>Advancing Volume <math>V_a</math> (vph)</b>			
	<b>5% Left Turns</b>	<b>10% Left Turns</b>	<b>20% Left Turns</b>	<b>30% Left Turns</b>
800	118	86	64	56
700	138	100	75	66
600	161	117	88	77
500	188	137	103	90
400	221	161	120	105
300	260	189	142	124
200	309	224	168	147
100	369	268	201	175

<b>Table 5: Left Turn Lane Warrant</b>			
<b>Scenario</b>	<b><math>V_o</math></b>	<b><math>V_a</math></b>	<b>% Left Turns</b>
Proposed AM Peak Hour	99	61	8%
Proposed Noon Peak Hour	49	47	11%
Proposed PM Peak Hour	93	85	5%
Unrealistically Conservative AM Peak Hour	102	88	36%
Unrealistically Conservative PM Peak Hour	96	125	25%

Even based on the most conservative estimates for this development, a left turn lane is not warranted.

Table 4-25 of the KDOT Access Management Policy, Right-turn treatment guidelines for two-lane highways, was also consulted to determine if a right turn lane would be necessary. For a 50 MPH roadway, 200 eastbound vehicles and 30 right turning vehicles would need to be present in a peak hour to warrant a right turn taper. 73 right turning vehicles would need to be present in the peak hour to warrant a right turn lane. The traffic volumes at this location fall far below these volumes.

### 8) SIGHT DISTANCE

Stopping sight distance and Intersection sight distance was measured at the proposed access points onto W 223<sup>rd</sup> Street. At both access points, the available stopping and intersection sight distance exceeded 700' to the east and to the west. Table 6 below illustrates the required AASHTO sight distance values for a 50 MPH design speed.

<b>Table 6: Sight Distance Values</b>			
	Measured Distances	AASHTO Stopping Sight Distance (50 mph)	AASHTO Intersection Sight Distance (50 mph)
<b>Main Entrance</b>			
To the East	>700'	425'	555'
To the West	>700'	425'	480'
<b>Service Road</b>			
To the East	>700'	425'	555'
To the West	>700'	425'	480'

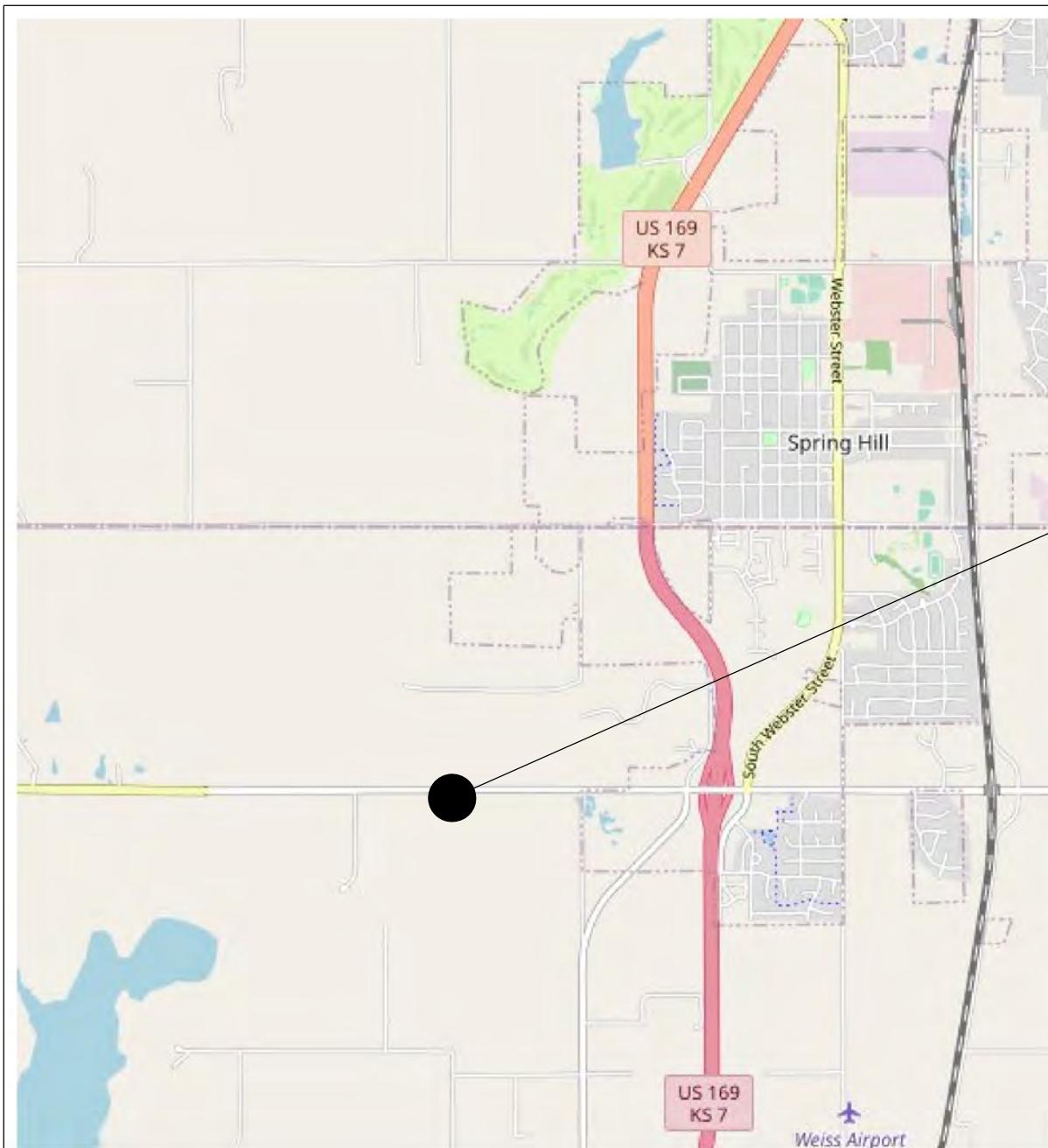
**9) RECOMMENDATIONS & CONCLUSIONS**

This study documents the impact of the full build-out of the proposed Always & Furever Midwest Animal Sanctuary on the surrounding roadway network. In addition to the AM and PM Peak Hours used for design hours, additional more conservative scenarios were included. These scenarios are not to be considered as design peak hours, but were supplied as additional information to demonstrate the magnitude of traffic that could be added to W 223<sup>rd</sup> Street without adversely impacting levels of service or requiring a turn lane.

Overall, the traffic anticipated to be generated by this site is minor, and will not result in lowered levels of service, queueing, or increase delays. The proposed drive and service road should be constructed to the standards of Miami County. No additional improvements are recommended as a result of this development.

## APPENDIX I

Project Location	Figure 1
Site Plan	Figure 2
Existing Peak Hour Traffic Volumes	Figure 3
Existing Peak Hour Lane Configurations & Levels of Service	Figure 4
Proposed AM Peak Hour Traffic Volumes	Figure 5
Proposed Noon Peak Hour Traffic Volumes	Figure 6
Proposed PM Peak Hour Traffic Volumes	Figure 7
Proposed AM Peak Hour Lane Configurations & Levels of Service	Figure 8
Proposed Noon Peak Hour Lane Configurations & Levels of Service	Figure 9
Proposed PM Peak Hour Lane Configurations & Levels of Service	Figure 10
Proposed AM Peak Hour (Open Vet Office & Office Space) Traffic Volumes	Figure 11
Proposed PM Peak Hour (Open Vet Office & Office Space) Traffic Volumes	Figure 12
Proposed AM Peak Hour (Open Vet Office & Office Space) Lane Configurations & Levels of Service	Figure 13
Proposed PM Peak Hour (Open Vet Office & Office Space) Lane Configurations & Levels of Service	Figure 14
Proposed Anniversary Celebration PM Peak Hour Traffic Volumes	Figure 15
Proposed Anniversary Celebration Lane Configurations & Levels of Service	Figure 16



*Project Location*

copyright OpenStreet Map Contributors

Project Location

Always & Furever  
Stillwell, KS

No Scale

Figure 1



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400



**Construction Notes:**

- 1 ELECTRIC GATE.
- 2 PERIMETER FENCE.
- 3 NEW LANDSCAPING, REFER TO LANDSCAPE PLAN.
- 4 PARKING.
- 5 OVERSIZED VEHICLE PARKING.
- 6 SIGNAGE.
- 7 EXISTING CREEK, FIELD VERIFY.
- 8 WALKING TRAIL.
- 9 NEW ROAD, RE: CIVIL PLANS.
- 10 WALKING BRIDGE.
- 11 STORM WATER RETENTION AREA.
- 12 RED BARN 1, RE: BUILDING SCHEDULE.
- 13 SHELTER HEALTH FELINE FACILITY, RE: BUILDING SCHEDULE.
- 14 RED BARN 2, RE: BUILDING SCHEDULE.
- 15 RED BARN 3, RE: BUILDING SCHEDULE.
- 16 DOG VILLA, RE: BUILDING SCHEDULE.
- 17 RED BARN 4, RE: BUILDING SCHEDULE.
- 18 MAINTENANCE BUILDING, RE: BUILDING SCHEDULE.
- 19 STORAGE BUILDING, RE: BUILDING SCHEDULE.
- 20 TRASH ENCLOSURE, RE: BUILDING SCHEDULE.
- 21 FENCED AREA.
- 22 ENTRY GATE.
- 23 PERGOLA.

**Parking Count:**

72	STANDARD PARKING
8	ADA PARKING
3	OVERSIZED VEHICLE PARKING
83	TOTAL PARKING



**PHELPS ENGINEERING, INC.**  
 1270 N. Winchester  
 Olathe, Kansas 66061  
 (913) 393-1155  
 Fax (913) 393-1166  
 www.phelpsengineering.com

**GIBBENS DRAKE SCOTT, INC.**  
 Consulting Engineers  
 9201 E. 63rd Street, Suite 100  
 Raytown, Missouri 64133  
 (816) 308-1700



**Bell / Knott & Associates**  
**CORPORATE ARCHITECTS, P.C.**  
 12730 State Line Road Voice: 913.378.1600  
 Suite 100 Fax: 913.378.1601  
 Leawood, KS 66209 www.bellknott.com



**priority**  
 ENGINEERS

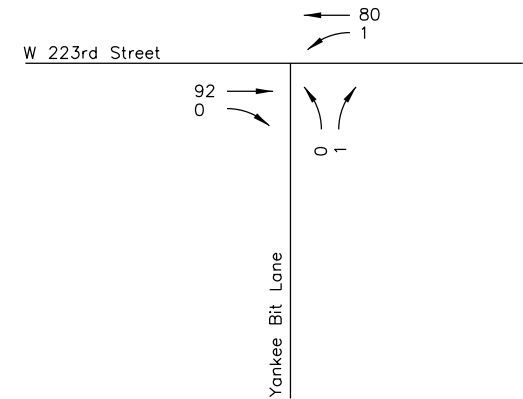
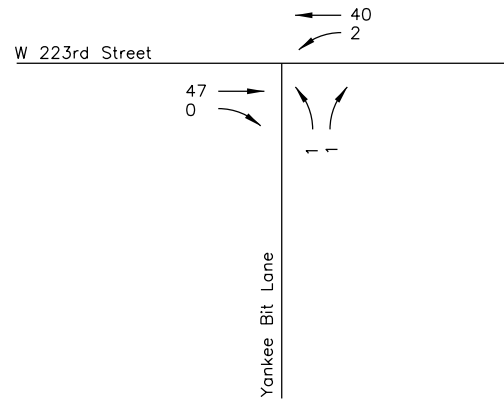
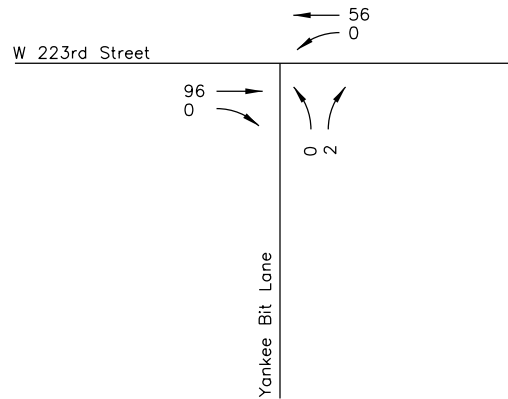
PO Box 563  
 Garden City, MO 64747  
 816.738.4400

Site Plan

Always & Forever  
 Stillwell, KS

No Scale

Figure 2



LEGEND

Total Volume

Existing Peak Hour  
Traffic Volumes

Always & Furever  
Stillwell, KS

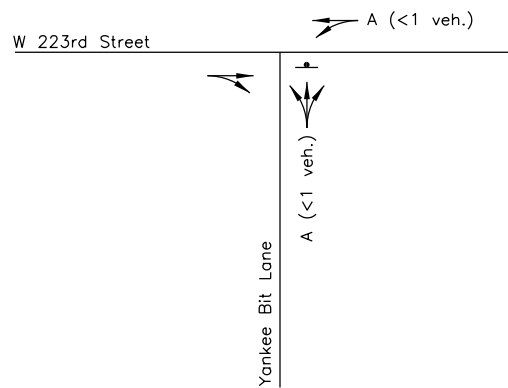
No Scale

Figure 3

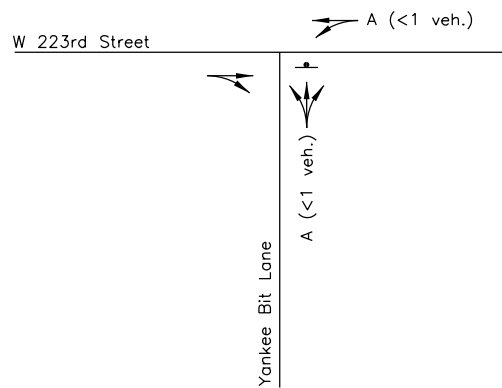


priority  
ENGINEERS

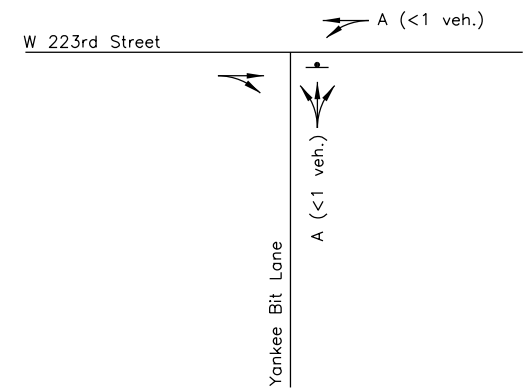
PO Box 563  
Garden City, MO 64747  
816.738.4400



AM Peak Hour





Noon Peak Hour



PM Peak Hour

LEGEND

-  HCM LOS (95th Percentile Queue)
-  Stop Sign

Existing Peak Hour  
Lane Configuration &  
Levels of Service

Always & Furever  
Stillwell, KS

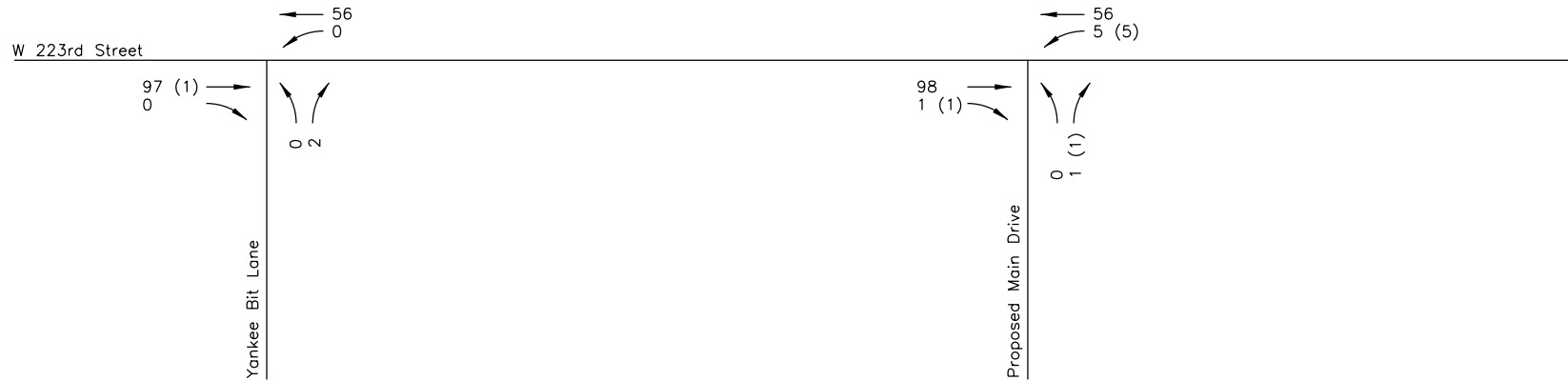
No Scale

Figure 4



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400



LEGEND

 Total Volume

Proposed AM Peak Hour  
Traffic Volumes

Always & Furever  
Stillwell, KS

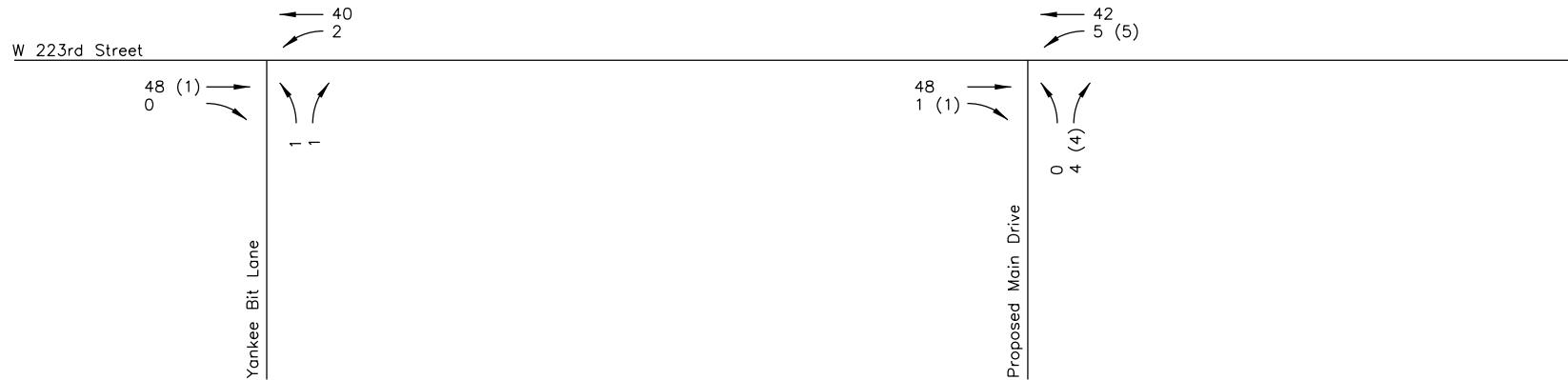
No Scale

Figure 5



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400



LEGEND

 Total Volume

Proposed Noon Peak Hour  
Traffic Volumes

Always & Furever  
Stillwell, KS

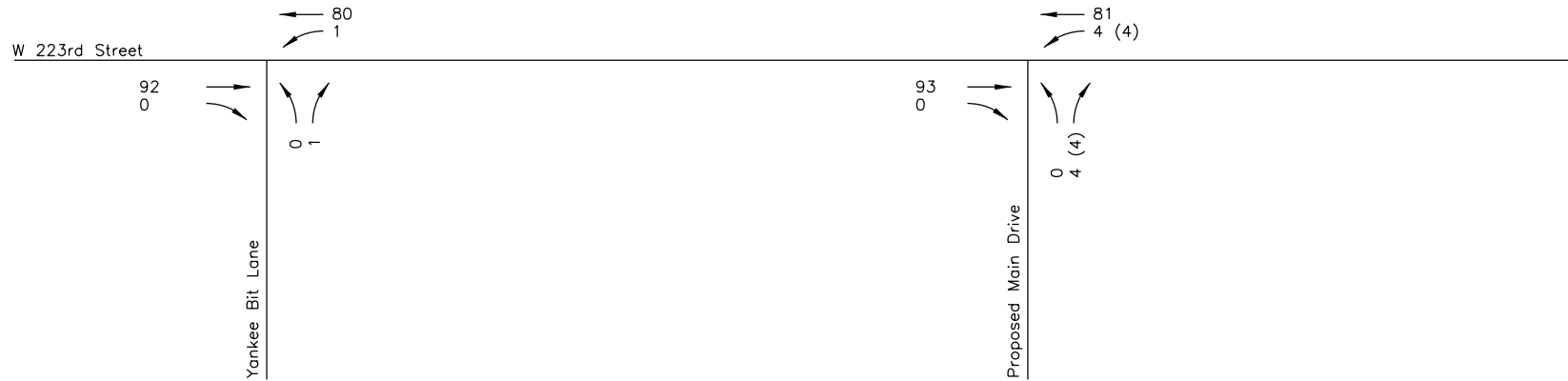
No Scale

Figure 6



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400



LEGEND

 Total Volume

Proposed PM Peak Hour  
Traffic Volumes

Always & Furever  
Stillwell, KS

No Scale

Figure 7



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400



LEGEND

 Total Volume

Proposed AM Peak Hour  
Lane Configuration &  
Levels of Service

Always & Furever  
Stillwell, KS

No Scale

Figure 8



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400



LEGEND

 Total Volume

Proposed Noon Peak Hour  
Lane Configuration &  
Levels of Service

Always & Furever  
Stillwell, KS

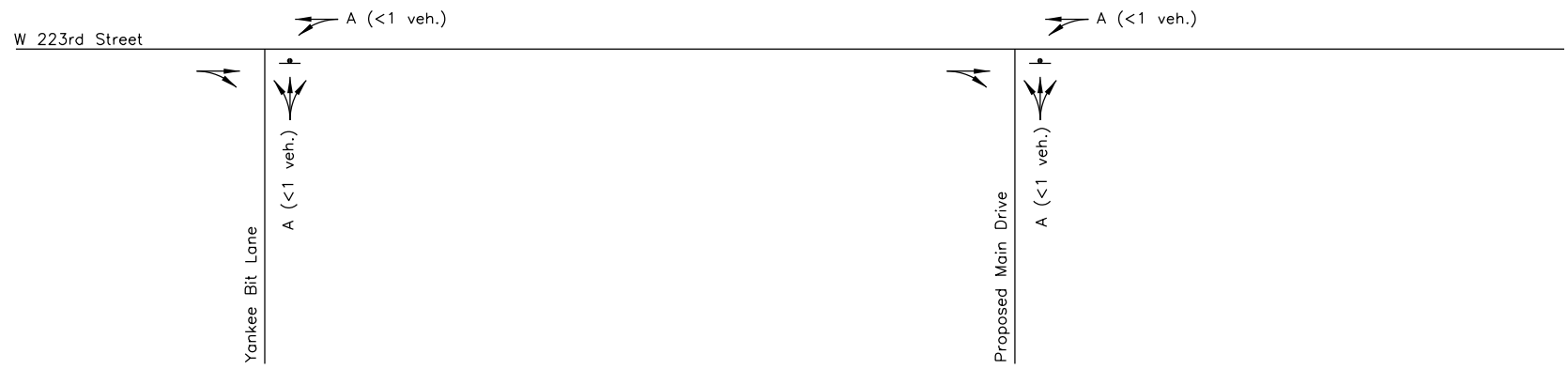
No Scale

Figure 9



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400



LEGEND

 Total Volume

Proposed PM Peak Hour  
Lane Configuration &  
Levels of Service

Always & Furever  
Stillwell, KS

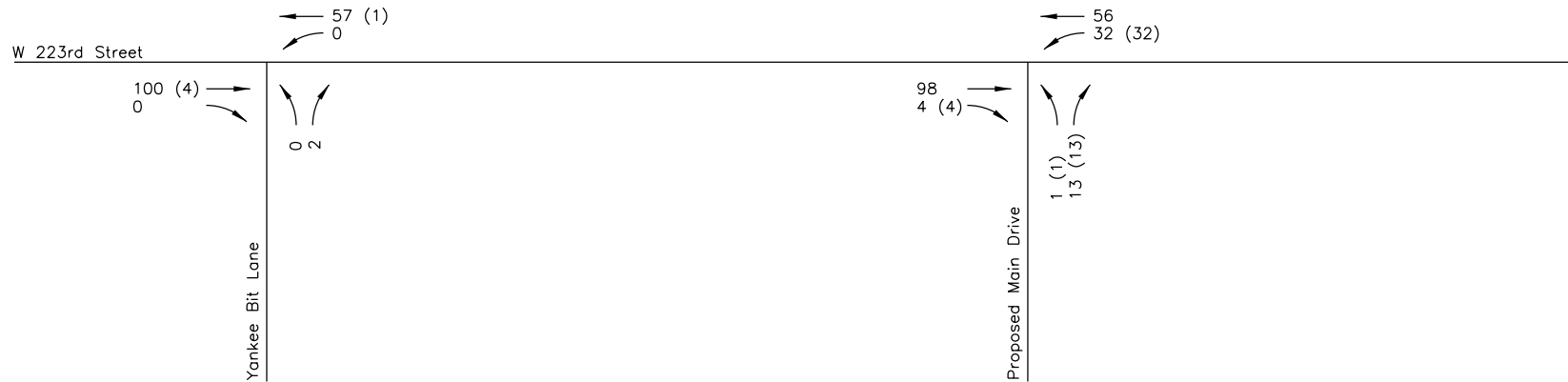
No Scale

Figure 10



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400



LEGEND

 Total Volume

Proposed AM Peak Hour  
(Open Vet Office)  
Traffic Volumes

Always & Furever  
Stillwell, KS

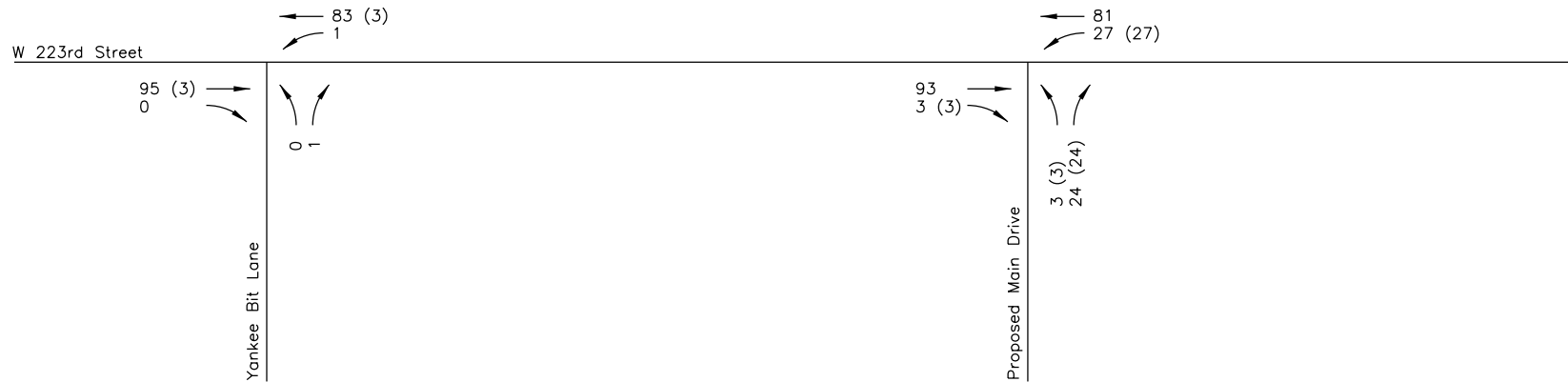
No Scale

Figure 11



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400



LEGEND

 Total Volume

Proposed PM Peak Hour  
(Open Vet Office)  
Traffic Volumes

Always & Furever  
Stillwell, KS

No Scale

Figure 12



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400



LEGEND

 Total Volume

Proposed AM Peak Hour  
(Open Vet Office & Office Space)  
Lane Configuration &  
Levels of Service

Always & Furever  
Stillwell, KS

No Scale

Figure 13



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400



LEGEND

 Total Volume

Proposed PM Peak Hour  
(Open Vet Office & Office Space)  
Lane Configuration &  
Levels of Service

Always & Furever  
Stillwell, KS

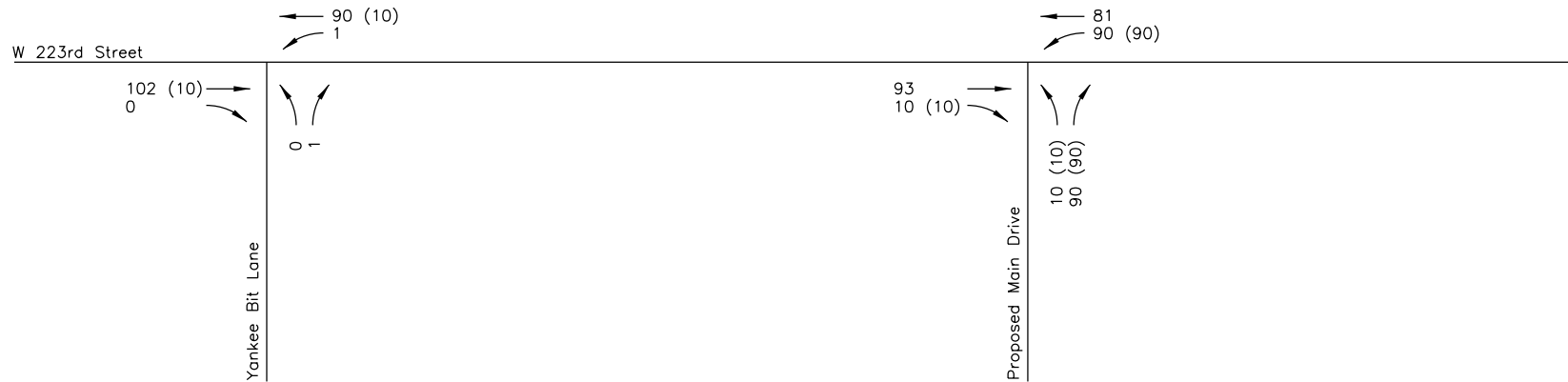
No Scale

Figure 14



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400



LEGEND

 Total Volume

Proposed Anniversary Celebration  
PM Peak Hour  
Traffic Volumes

Always & Furever  
Stillwell, KS

No Scale

Figure 15



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400



LEGEND

 Total Volume

Proposed Anniversary Celebration  
PM Peak Hour  
Lane Configuration &  
Levels of Service

Always & Furever  
Stillwell, KS

No Scale

Figure 16



priority  
ENGINEERS

PO Box 563  
Garden City, MO 64747  
816.738.4400

## APPENDIX II

Always & Furever provided trip generation

Traffic Counts

Synchro Reports

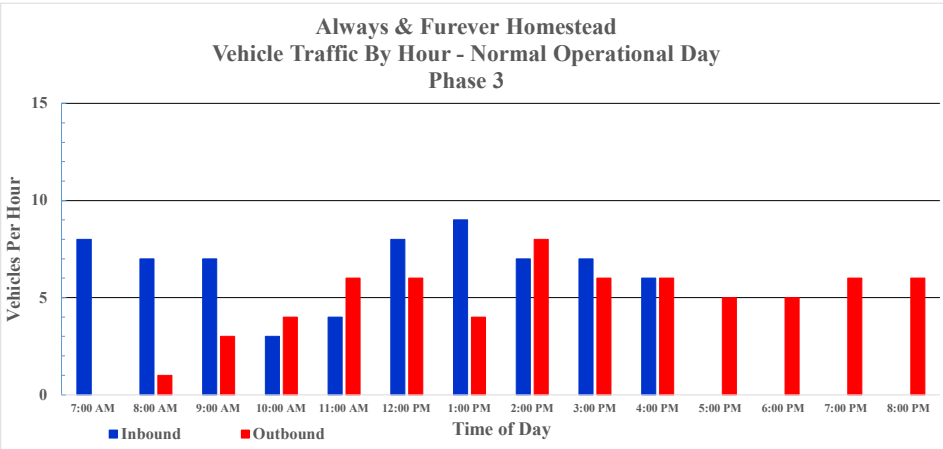
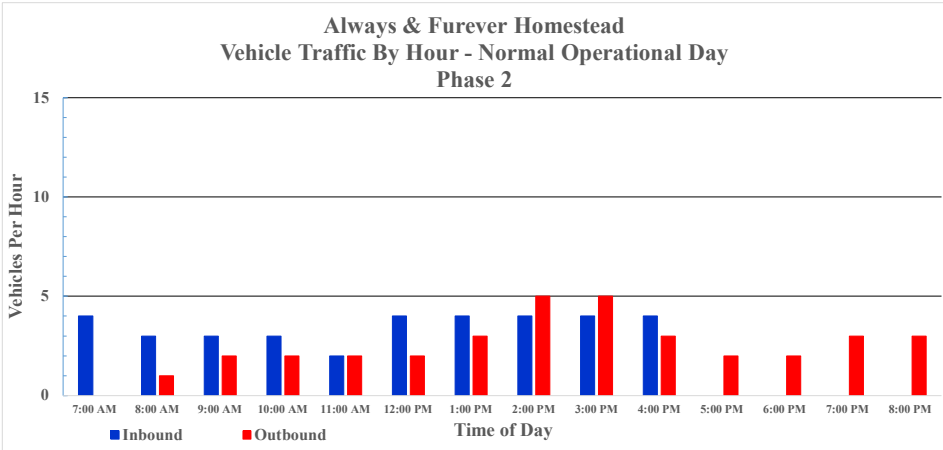
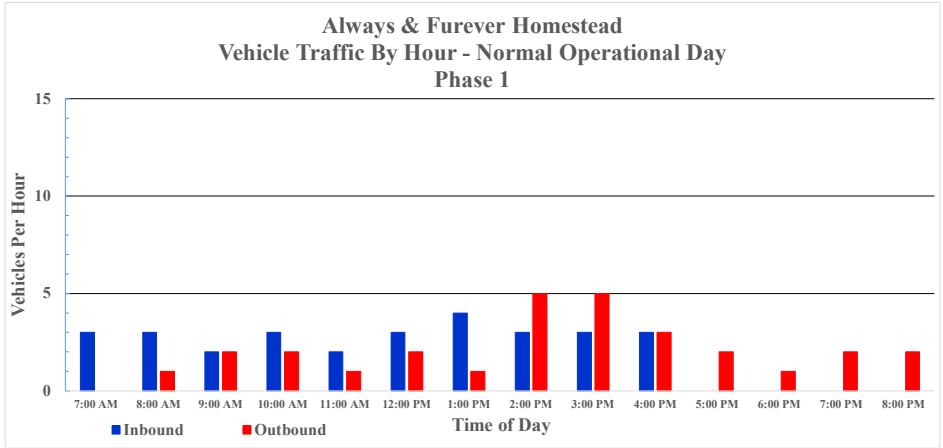
Existing AM Peak Hour	Page 1
Existing Noon Peak Hour	Page 2
Existing PM Peak Hour	Page 3
Proposed AM Peak Hour	Pages 4-5
Proposed Noon Peak Hour	Pages 6-7
Proposed PM Peak Hour	Pages 8-9
Proposed AM Peak Hour (Conservative Use)	Pages 10-11
Proposed PM Peak Hour (Conservative Use)	Pages 12-13
Proposed Anniversary Celebration PM Peak Hour	Pages 14-15



Phase 1		7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	Total	Right Turns
Inbound		3	3	2	3	2	3	4	3	3	3					29	3 - 6
Outbound		1	2	2	2	1	2	1	5	5	3	2	1	2	2	29	23 - 26

Phase 2		7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	Total	Right Turns
Inbound		4	3	3	3	2	4	4	4	4	4					35	4 - 7
Outbound		1	2	2	2	2	2	3	5	5	3	2	2	3	3	35	28 - 31

Phase 3		7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	Total	Right Turns
Inbound		8	7	7	3	4	8	9	7	7	6					66	7 - 13
Outbound		1	3	4	6	6	6	4	8	6	6	5	5	6	6	66	53 - 59



<b>Administration Building</b>	0
<b>Veterinary Hospital / Decompression Facility</b>	10
<b>Big Red Barns (3)</b>	58
<b>Little Red Barn</b>	24
<b>Little Puppies Barn</b>	20
<b>Feline Family Facility</b>	20
<b>Dog Villas (7)</b>	4 per Villa / 28 total
<b>Miami County Barn Shelter</b>	30
<b>HOMESTEAD TOTAL</b>	190



### 3: Yankee Bit Lane & 223rd Street

Existing AM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	96	0	0	56	0	2
Future Vol, veh/h	96	0	0	56	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	2	2	5	2	2
Mvmt Flow	104	0	0	61	0	2
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	104	0	165	104
Stage 1	-	-	-	-	104	-
Stage 2	-	-	-	-	61	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1488	-	826	951
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	962	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1488	-	826	951
Mov Cap-2 Maneuver	-	-	-	-	826	-
Stage 1	-	-	-	-	920	-
Stage 2	-	-	-	-	962	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0	8.8			
HCM LOS						A
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	951	-	-	1488	-	
HCM Lane V/C Ratio	0.002	-	-	-	-	
HCM Control Delay (s)	8.8	-	-	0	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile Q(veh)	0	-	-	0	-	

### 3: Yankee Bit Lane & 223rd Street

Existing Noon Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	47	0	2	40	1	1
Future Vol, veh/h	47	0	2	40	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	0	2	43	1	1

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	51	0	98
Stage 1	-	-	-	-	51
Stage 2	-	-	-	-	47
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1555	-	901
Stage 1	-	-	-	-	971
Stage 2	-	-	-	-	975
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1555	-	900
Mov Cap-2 Maneuver	-	-	-	-	900
Stage 1	-	-	-	-	971
Stage 2	-	-	-	-	974

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	955	-	-	1555	-
HCM Lane V/C Ratio	0.002	-	-	0.001	-
HCM Control Delay (s)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

### 3: Yankee Bit Lane & 223rd Street

Existing PM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	87	0	1	79	0	1
Future Vol, veh/h	87	0	1	79	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	2	2	2	2	2
Mvmt Flow	95	0	1	86	0	1

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	95	0	183
Stage 1	-	-	-	-	95
Stage 2	-	-	-	-	88
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1499	-	806
Stage 1	-	-	-	-	929
Stage 2	-	-	-	-	935
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1499	-	805
Mov Cap-2 Maneuver	-	-	-	-	805
Stage 1	-	-	-	-	929
Stage 2	-	-	-	-	934

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	962	-	-	1499	-
HCM Lane V/C Ratio	0.001	-	-	0.001	-
HCM Control Delay (s)	8.7	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

### 3: Yankee Bit Lane & 223rd Street

Proposed AM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	97	0	0	56	0	2
Future Vol, veh/h	97	0	0	56	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	2	2	3	2	2
Mvmt Flow	105	0	0	61	0	2

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	105	0	166
Stage 1	-	-	-	-	105
Stage 2	-	-	-	-	61
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1486	-	824
Stage 1	-	-	-	-	919
Stage 2	-	-	-	-	962
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1486	-	824
Mov Cap-2 Maneuver	-	-	-	-	824
Stage 1	-	-	-	-	919
Stage 2	-	-	-	-	962

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	949	-	-	1486	-
HCM Lane V/C Ratio	0.002	-	-	-	-
HCM Control Delay (s)	8.8	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

## 5: Proposed Main Drive & 223rd Street

Proposed AM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	98	1	5	56	0	1
Future Vol, veh/h	98	1	5	56	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	2	2	3	2	2
Mvmt Flow	107	1	5	61	0	1
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	108	0	179	108
Stage 1	-	-	-	-	108	-
Stage 2	-	-	-	-	71	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1483	-	811	946
Stage 1	-	-	-	-	916	-
Stage 2	-	-	-	-	952	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1483	-	809	946
Mov Cap-2 Maneuver	-	-	-	-	809	-
Stage 1	-	-	-	-	916	-
Stage 2	-	-	-	-	949	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0.6	8.8			
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	946	-	-	1483	-	
HCM Lane V/C Ratio	0.001	-	-	0.004	-	
HCM Control Delay (s)	8.8	-	-	7.4	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	48	0	2	40	1	1
Future Vol, veh/h	48	0	2	40	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	0	2	43	1	1

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	52	0	99
Stage 1	-	-	-	-	52
Stage 2	-	-	-	-	47
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1554	-	900
Stage 1	-	-	-	-	970
Stage 2	-	-	-	-	975
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1554	-	899
Mov Cap-2 Maneuver	-	-	-	-	899
Stage 1	-	-	-	-	970
Stage 2	-	-	-	-	974

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	954	-	-	1554	-
HCM Lane V/C Ratio	0.002	-	-	0.001	-
HCM Control Delay (s)	8.8	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

## 5: Proposed Main Drive & 223rd Street

Proposed Noon Peak Hour

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	48	1	5	42	0	4
Future Vol, veh/h	48	1	5	42	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	1	5	46	0	4
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	53	0	109	53
Stage 1	-	-	-	-	53	-
Stage 2	-	-	-	-	56	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1553	-	888	1014
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	967	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1553	-	885	1014
Mov Cap-2 Maneuver	-	-	-	-	885	-
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	964	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0.8	8.6			
HCM LOS			A			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	1014	-	-	1553	-	
HCM Lane V/C Ratio	0.004	-	-	0.003	-	
HCM Control Delay (s)	8.6	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

### 3: Yankee Bit Lane & 223rd Street

Proposed PM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	92	0	1	80	0	1
Future Vol, veh/h	92	0	1	80	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	2	2	2	2	2
Mvmt Flow	100	0	1	87	0	1

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	0	0	100	0
Stage 1	-	-	-	100
Stage 2	-	-	-	89
Critical Hdwy	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-
Pot Cap-1 Maneuver	-	-	1493	-
Stage 1	-	-	-	924
Stage 2	-	-	-	934
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	1493	-
Mov Cap-2 Maneuver	-	-	-	799
Stage 1	-	-	-	924
Stage 2	-	-	-	933

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	956	-	-	1493	-
HCM Lane V/C Ratio	0.001	-	-	0.001	-
HCM Control Delay (s)	8.8	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

## 5: Proposed Main Drive & 223rd Street

Proposed PM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	93	0	4	81	0	4
Future Vol, veh/h	93	0	4	81	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	2	2	2	2	2
Mvmt Flow	101	0	4	88	0	4
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	101	0	197	101
Stage 1	-	-	-	-	101	-
Stage 2	-	-	-	-	96	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1491	-	792	954
Stage 1	-	-	-	-	923	-
Stage 2	-	-	-	-	928	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1491	-	790	954
Mov Cap-2 Maneuver	-	-	-	-	790	-
Stage 1	-	-	-	-	923	-
Stage 2	-	-	-	-	925	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0.3	8.8			
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	954	-	-	1491	-	
HCM Lane V/C Ratio	0.005	-	-	0.003	-	
HCM Control Delay (s)	8.8	-	-	7.4	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

### 3: Yankee Bit Lane & 223rd Street

Proposed AM Peak Hour (Conservative Use)

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	100	0	0	57	0	2
Future Vol, veh/h	100	0	0	57	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	2	2	3	2	2
Mvmt Flow	109	0	0	62	0	2

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	109	0	171
Stage 1	-	-	-	-	109
Stage 2	-	-	-	-	62
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1481	-	819
Stage 1	-	-	-	-	916
Stage 2	-	-	-	-	961
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1481	-	819
Mov Cap-2 Maneuver	-	-	-	-	819
Stage 1	-	-	-	-	916
Stage 2	-	-	-	-	961

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	945	-	-	1481	-
HCM Lane V/C Ratio	0.002	-	-	-	-
HCM Control Delay (s)	8.8	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

## 5: Proposed Main Drive & 223rd Street

Proposed AM Peak Hour (Conservative Use)

Intersection						
Int Delay, s/veh	1.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	98	4	32	56	1	13
Future Vol, veh/h	98	4	32	56	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	2	2	3	2	2
Mvmt Flow	107	4	35	61	1	14
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	111	0	240	109
Stage 1	-	-	-	-	109	-
Stage 2	-	-	-	-	131	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1479	-	748	945
Stage 1	-	-	-	-	916	-
Stage 2	-	-	-	-	895	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1479	-	730	945
Mov Cap-2 Maneuver	-	-	-	-	730	-
Stage 1	-	-	-	-	916	-
Stage 2	-	-	-	-	874	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	2.7	9			
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	926	-	-	1479	-	
HCM Lane V/C Ratio	0.016	-	-	0.024	-	
HCM Control Delay (s)	9	-	-	7.5	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	

### 3: Yankee Bit Lane & 223rd Street

Proposed PM Peak Hour (Conservative Use)

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	95	0	1	83	0	1
Future Vol, veh/h	95	0	1	83	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	2	2	2	2	2
Mvmt Flow	103	0	1	90	0	1

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	103	0	195
Stage 1	-	-	-	-	103
Stage 2	-	-	-	-	92
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1489	-	794
Stage 1	-	-	-	-	921
Stage 2	-	-	-	-	932
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1489	-	793
Mov Cap-2 Maneuver	-	-	-	-	793
Stage 1	-	-	-	-	921
Stage 2	-	-	-	-	931

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	952	-	-	1489	-
HCM Lane V/C Ratio	0.001	-	-	0.001	-
HCM Control Delay (s)	8.8	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

## 5: Proposed Main Drive & 223rd Street

Proposed PM Peak Hour (Conservative Use)

Intersection						
Int Delay, s/veh	1.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	93	3	27	81	3	24
Future Vol, veh/h	93	3	27	81	3	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	2	2	2	2	2
Mvmt Flow	101	3	29	88	3	26
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	104	0	249	103
Stage 1	-	-	-	-	103	-
Stage 2	-	-	-	-	146	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1488	-	739	952
Stage 1	-	-	-	-	921	-
Stage 2	-	-	-	-	881	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1488	-	724	952
Mov Cap-2 Maneuver	-	-	-	-	724	-
Stage 1	-	-	-	-	921	-
Stage 2	-	-	-	-	863	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	1.9	9			
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	920	-	-	1488	-	
HCM Lane V/C Ratio	0.032	-	-	0.02	-	
HCM Control Delay (s)	9	-	-	7.5	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	

### 3: Yankee Bit Lane & 223rd Street

Proposed Anniversary Celebration PM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	102	0	1	90	0	1
Future Vol, veh/h	102	0	1	90	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	2	2	2	2	2
Mvmt Flow	111	0	1	98	0	1

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	111	0	211
Stage 1	-	-	-	-	111
Stage 2	-	-	-	-	100
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1479	-	777
Stage 1	-	-	-	-	914
Stage 2	-	-	-	-	924
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1479	-	776
Mov Cap-2 Maneuver	-	-	-	-	776
Stage 1	-	-	-	-	914
Stage 2	-	-	-	-	923

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	942	-	-	1479	-
HCM Lane V/C Ratio	0.001	-	-	0.001	-
HCM Control Delay (s)	8.8	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

## 5: Proposed Main Drive & 223rd Street

Proposed Anniversary Celebration PM Peak Hour

Intersection						
Int Delay, s/veh	4.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	93	10	90	81	10	90
Future Vol, veh/h	93	10	90	81	10	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	2	2	2	2	2
Mvmt Flow	101	11	98	88	11	98

Major/Minor	Major1	Major2	Minor1	Minor2		
Conflicting Flow All	0	0	112	0	391	107
Stage 1	-	-	-	-	107	-
Stage 2	-	-	-	-	284	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1478	-	613	947
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	764	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1478	-	570	947
Mov Cap-2 Maneuver	-	-	-	-	570	-
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	711	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	888	-	-	1478	-
HCM Lane V/C Ratio	0.122	-	-	0.066	-
HCM Control Delay (s)	9.6	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.2	-