



**Needs Assessment Study for
City of Wylie, TX Animal Shelter**

April 23, 2024

Revision No. 1 April 24, 2024



"Shelter Planners of America"

®

1106 W. Randol Mill Rd. Suite 300, Arlington, TX 76012 Phone (817) 265-8522 www.shelterplannersofAmerica.com

Table of Contents

	Page Number
1. Purpose and Scope of Study	3
2. Review of Existing Facility	4
3. People and Animal Levels	13
4. Building Space Program	19
5. Site Considerations	20
6. Recommended Features	24
7. Staffing	35
8. Operating Cost	36
9. Opinion of Probable Cost	37
<i>Exhibit A - Current and Projected Human Population and Animal Intake</i>	<i>1 page</i>
<i>Exhibit B - Building Space Program - New Shelter</i>	<i>5 pages</i>
<i>Exhibit C - Opinion of Probable Cost - New Shelter</i>	<i>1 page</i>
<i>Exhibit D - Diagram of Stop-Gap Improvement</i>	<i>1 page</i>
<i>Exhibit E - Opinion of Probable Cost - Stop-Gap Improvement</i>	<i>1 page</i>
<i>Exhibit F - Cost Examples of Other Shelters</i>	<i>12 pages</i>
-Arlington Animal Service Center, TX	
-Brown County Humane Society, IN	
-Marshall Texas Animal Shelter	
-Montgomery County Animal Adoption & Care Center, VA	
-Universal City Animal Shelter, TX	
-Fort Bend County Animal Services, TX	

1. PURPOSE AND SCOPE OF STUDY

The purpose of this Needs Assessment Study (Study) is for Shelter Planners of America (SPA) to provide information to the City of Wylie (City) that will guide them in regard to their future animal shelter facility needs.

The Study was authorized by Brent Parker, City Manager, on November 14, 2023 in accordance SPA proposal dated November 3, 2023.

Information in this Study was developed from information provided by the City and observed during our on-site visit on January 29, 2024. The Study provides a review of the existing facility describing attributes and deficiencies, looks at people and animal levels, provides a proposed Building Space Program, provides site considerations, recommended features, discusses staffing, operating cost, and Opinion of Probable Cost.

It should be understood this Study is the first step in planning a new shelter. The second step will be to develop the Conceptual Site Plan and Building Floor Plan based on the approved Building Program contained in this Study. The third and final step will be development of the working drawings and specifications for constructing your project.

This Study also includes suggestions for “Stop-Gap Improvements” that the City might pursue to give some relief until a new animal shelter could be constructed.

The Needs Assessment meeting was held on February 1, 2024, at City Hall that lasted about 8 hours. The following were in attendance:

<u>Name</u>	<u>Organization</u>	<u>Title</u>
Shelia Patton	Wylie Animal Services	Manager
Chris Marren	Wylie Animal Services	Lead ASO
Michael Barnard	Shelter Planners of America	President

2. REVIEW OF EXISTING FACILITY

General

The City of Wylie Animal Services (WAS) started in 2000. The Shelter Manager is responsible for the operation of the existing shelter under the leadership of the Deputy City Manager. The present shelter building was originally shared between Public Works and the animal shelter. Public Works moved out in 2013. The Dog Kennel Building was constructed in 2006. The shelter contains approximately 6,232 square feet of indoor space.



Front view of existing shelter



Dog Exercise Yards

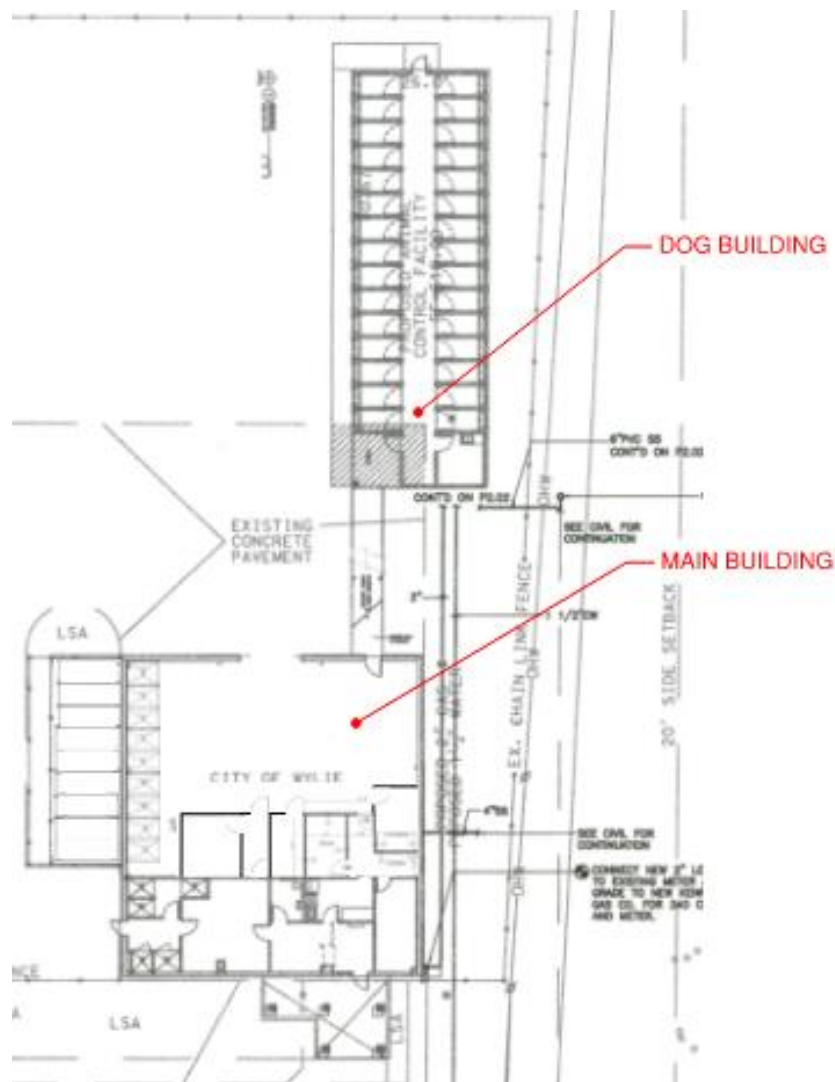


Front of Dog Kennel Building



Side of Existing Shelter showing Existing Outdoor Dog Kennels

The present shelter facility was built with materials and concepts that are of lower quality materials and finishes than today's modern shelters. The building does not have good flow and creates additional work for staff. The dog kennels are not ideal for ease of cleaning and maintaining the animals in a healthy state. The staff has done the best job possible of maintaining the building under difficult conditions. They are to be commended for keeping the building clean and presentable to the public.



Layout of Existing Building

Administrative Areas

The shelter has one Lobby, but two lobbies is desirable to separate the happy experience of adopting an animal and the sad experience of surrendering an animal. The facility lacks a public education center. The office is combined with several other functions that do not provide proper workflow and efficiency. The customer service counter does not present a welcoming appearance.



Lobby and customer service window



Lobby



There is only one toilet for staff and public



Reception Desk adjacent to Lobby

Dog Housing

The existing shelter only provides each dog with a single compartment. This causes the staff to use more time moving all the dogs in order to clean the kennels every day.

Unfortunately, the kennels are built with an undesirable drain system, and have the look of an industrial warehouse. This is the opposite of the welcoming, pleasant look needed to encourage the public to visit for adoptions and returns. The cooling, heating and ventilation system recirculates air in the animal housing areas and is not ideal for the animals' health protection.



Cages in the Sally Port



Kennels in the Sally Port are not air conditioned and are in poor condition.



Dog Kennels are arranged to where dogs face each other and is stressful for the dogs.



The flooring is peeling up and chain-link fencing is difficult to disinfect.



A curtain has been hung to segregate dogs, but this is not an ideal situation.

Cat Housing



The Cat Room has a water heater exposed in the room. This room also serves as a corridor that dogs are brought through.



Cat cages are normally in this room but were out for cleaning the day photo was taken.



This type of cat cage does not meet modern standards.

Support Areas



The freezer for animal carcasses is in the laundry.



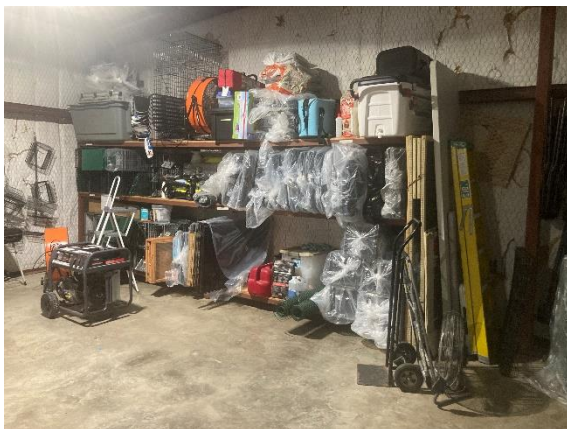
The laundry uses residential laundry equipment, but commercial equipment is preferred.



The Sally Port is one large space with multiple functions, including staff lockers, and the public has to walk through this space to get to the dog Adoption Kennels.



Storage in the Sally Port



Storage in the Sally Port the public walks through



Euthanasia Room

SUMMARY

The existing shelter has numerous deficiencies that would be extremely expensive to correct, especially keeping the existing shelter in operation during the construction. The existing shelter is too small for the needs of the community. We recommend the City plan to construct a new animal shelter on a new site. However, it takes as much as three years to identify a new site, design, bid and construct a new animal shelter. Therefore, we propose several modifications that could be made as a Stop-Gap solution to help alleviate a few major issues until the City can build a new shelter.

3. PEOPLE AND ANIMAL LEVELS

Wylie Animal Services (WAS) serves the City of Wylie with a total people population of approximately 62,826 for 2023. The number of animals received at the shelter in 2023 was approximately 1,061. This total is composed of approximately 571 dogs, 184 cats, and 306 other species (54% dogs, 17% cats, and 29% other species).

There are no other animal shelters that serve the City of Wylie. The 1,061 animals received at WAS in 2023 is only 1.7% of the human population.

Nationally, the number of animals normally received at local shelters annually is 2-3% of the human population. This means the number of animals received per year at WAS is slightly below the range of the national average. While the number of animals received is below national averages there is still an animal over-population challenge.

Over the next 20 years, the population of Wylie is projected to increase to approximately 68,472, a 9% increase.

Extensive preventative programs including low cost and subsidized spay/neuter procedures, public education promoting responsible pet ownership, and developing progressive ordinances is part of the solution to reducing unwanted and stray animals. The underlying overpopulation of pets is caused by irresponsible pet ownership and uncontrolled breeding of pets. Although animal overpopulation is beginning to come down nationwide due to remedial programs, it can be countered by increasing human population and continued irresponsible pet ownership. WAS with the help of TCAP has a spay/neuter program.

Of the 1,079 dogs and cats dispositioned at the shelter in 2023 the results are as follows:

Adoption: approximately 583, or approximately 54%, are adopted or transferred. The number of adoptions is fair compared to many modern shelters that have adoption rates of 70 – 80%.

Returned to Owner: approximately 429, or approximately 40%, are returned to their owners. The number of returns to owners is higher when compared to many modern shelters that have return to owner rates between 10-20%. This usually indicates people within the community really care for their animals.

Euthanized: approximately 63, or about 6%, were euthanized which is good compared to many modern shelters that have rates of 10–20%. There is a strong push nationally to move to a 90% live release rate, and WAS is to be commended for already achieving this goal. However, maintaining this year after year is a challenge.

Died in Shelter: approximately 4, or about 0.3%, die in the shelter which is in the normal range.

Projected Animal Housing Need

Before we discuss the proposed animal housing for the new shelter, we want to discuss an important question.

“Will Holding More Animals for Longer Periods of Time Increase the Number of Animals Adopted?”

“If we hold more animals for longer times won’t more be adopted?” The two following examples can help individuals understand this frequently misunderstood question. Before we examine the questions, however, we want to emphasize the importance of all healthy animals being provided a reasonable stay. As long as animals are emotionally and physically healthy, and kennels are not overcrowded, it is reasonable to extend their stay. However, dogs should not be kenneled so long that it adversely affects their behavior, causing neurotic behavior such as pacing, spinning and aggression.

This issue often becomes confusing for many people when trying to understand the value (or lack thereof) of building bigger shelters and holding more and more animals for longer periods. The following examples will help facilitate understanding:

1. In the first example, assume the shelter holds animals an average of ONE week each during a one-year period. During the year, 100 people (or pet rescue groups) visit per month with the intention to adopt a pet. How many animals could be adopted in that year? If every visitor adopted, you would adopt 1,200 animals.

Now, assume you kept every animal for FOUR weeks (four times longer) during a one-year period. The same 100 people per month visited with the intention to adopt a pet. How many animals could be adopted in a year? If every visitor adopted, you would still adopt 1,200 animals. As you can clearly see, holding the animals longer, by itself, did not affect adoptions.



It is important that your shelter make an informed decision of how many animals to hold at any given time and how long to hold each animal to provide the best opportunity for adoption and have humane treatment.

2. In this second example the shelter houses about 60 animals available for adoption at all times. The same 100 people visit per month with the intention to adopt a pet. How many will be adopted in one year? If every visitor adopts, you will have 1,200 adoptions in one year.

Now, assume the organization builds a shelter to house twice as many animals, holding about 120 animals at all times, how many will then be adopted? If all of the 100 visitors adopted, you would still adopt 1,200 animals. As you can see, holding twice as many animals does not affect the number adopted.

The conclusion of these two examples is simply this: The only factor that truly affects the number of animals you adopt is the number of people (or rescue groups) who visit the shelter with the intention of adopting. **Holding animals longer and holding many more animals does not significantly increase adoptions.**

NOTE: (A shelter may hold an animal an extended period of time and finally get it adopted, but other animals are being euthanized to allow that one animal the space to stay longer. This is the scenario that causes people to think incorrectly, “If we could just hold all animals longer, they would all eventually be adopted”.)

TO INCREASE ADOPTIONS, YOU MUST INCREASE THE NUMBER OF VISITORS (WHO WANT TO ADOPT). This is done through a good visible shelter location, visibility of all animals, weekend and evening hours, web-site pet listings, an attractive welcoming shelter, well-groomed and healthy animals, friendly staff, adoption requirements that are not too restrictive, reasonably low adoption fees, promotion of adoptions in all local media, special adoption events, the help of rescue groups and transfer programs.

The more effective approach an animal shelter can take rather than warehousing animals is to help get all pets in their service area spayed or neutered and educate their community about responsible pet ownership. This will eventually solve the pet overpopulation problem in a community. A community simply cannot “shelter their way” out of an animal overpopulation problem.

Refer to Exhibit A that shows the summary of current and projected animal intake and proposed animal housing along with the Average Length of Stay (ALS). This information is discussed in more detailed below.

Dog Housing Capacity

The existing shelter has a 12 day Average Length of Stay (ALS) for the approximate 571 dogs handled per year with the present dog housing capacity of 18.

For the new shelter, we propose housing for 30 dogs be provided, which results in an approximate 15 day ALS. This provides a reasonable average length of stay for dogs to avoid the adverse effects of housing animals in shelters too long. Please refer to discussion starting on page 15 above that explains why excess lengths of stay do not really increase adoption.

The Building Space Program, EXHIBIT B, includes housing for 30 dogs which is an increase of 66% over the existing shelter. Refer to the Animal Housing section of the Building Space Program for the breakdown of the proposed Dog Housing.

Cats Housing Capacity

The existing shelter has a 24 day Average Length of Stay (ALS) for the approximate 184 cats received per year with the present cat housing capacity of 12. WAS believes they could take in more cats than the data shows. SPA has suggested using 2% animal intake of the 20 year projected human population and using 40% of that number for the projected number of cats that would need to be housed. This is shown in EXHIBIT A.

We propose cat housing for 32 cats be provided, which results in a 21 ALS. This is a reasonable average length of stay for cats to avoid the adverse effects of housing animals in shelters. Please refer to the discussion starting on page 15 above that explains why excessive lengths of stay do not really increase adoption.

The Building Space Program EXHIBIT B includes housing for 32 cats which is an increase of 166% over the existing shelter. Refer to the Animal Housing Section of the Building Space Program for the breakdown of the proposed cat housing.

Other Animal Species

For the new shelter, Wylie does not plan to dedicate any space specifically for housing other animal species.

4. BUILDING SPACE PROGRAM

The Building Space Program is a detailed listing of each room or space proposed to accommodate WAS's needs based on a 20 year planning horizon. The net area of each room or space is listed. Net area is defined as the inside dimensions of the space but does not include the wall thickness and corridors. The quantity of each type of room or space is also listed. The rooms are sub-divided into major groupings such as Administrative, Animal Housing, Animals support areas. The net area totals are listed at the bottom of each section and then a grossing factor is applied to the net area. The grossing factor projects the estimated SF needed to accommodate the wall thickness, corridors and any other unidentified space. This helps to determine the total SF needed. The total SF is critical to developing an Opinion of Probable Cost.

NEW ANIMAL SHELTER

Refer to attached EXHIBIT B dated 4-22-24 for the Proposed Building Space Program for a new animal shelter.

STOP-GAP IMPROVEMENTS

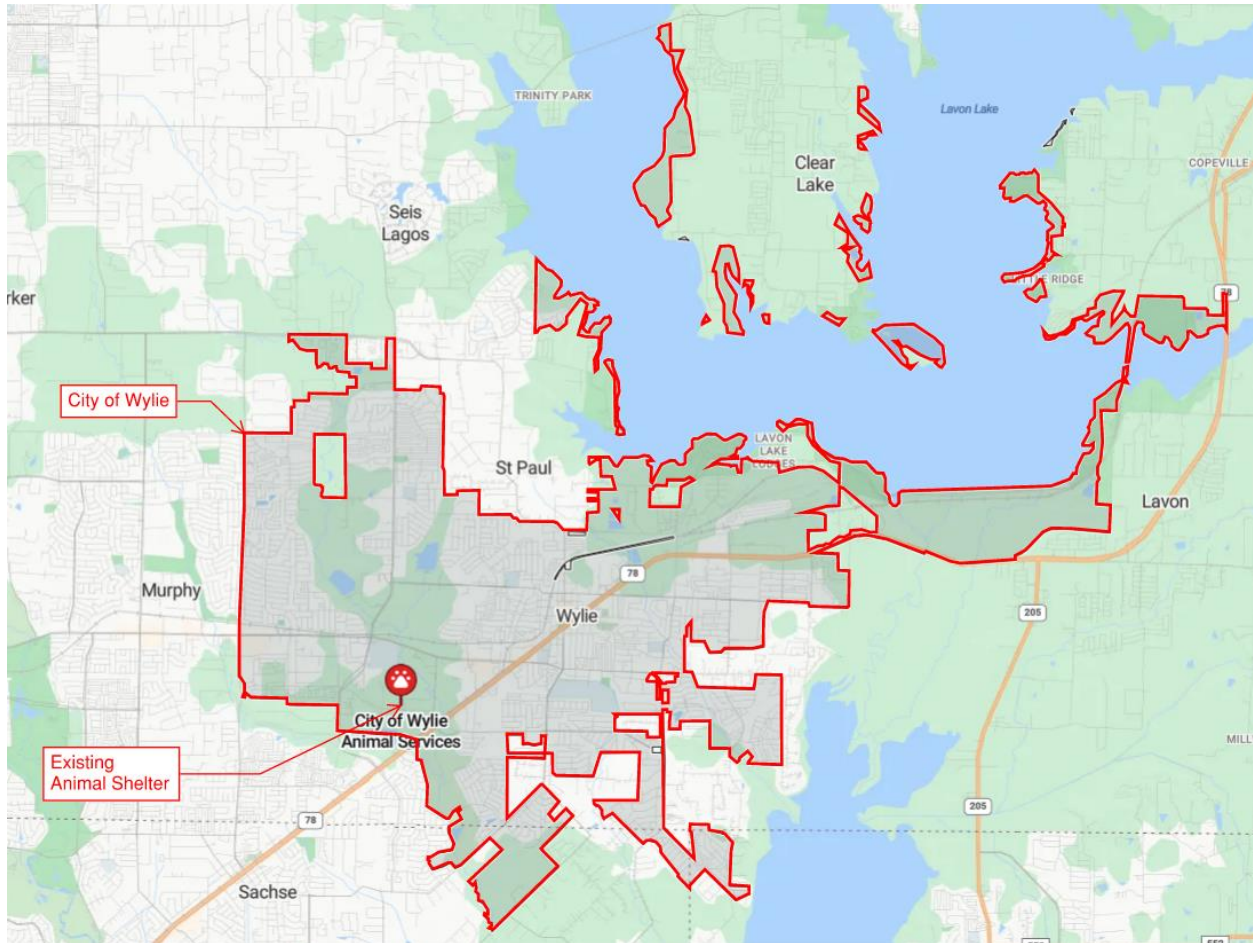
Since it will take approximately three years to acquire property, design, bid and construct a new animal shelter, we have included a diagram of a way the City might be able to make some minor improvements at the existing shelter to help WAS function better in the interim time.

5. SITE CONSIDERATIONS

The qualifications of a site are very important for the special needs of the shelter. WAS is considering moving to a new site. One possible site near the new city hall was discussed, but any new site for WAS should be examined for compliance to the following criteria:

A. Visibility: This is a very important concern for an animal shelter; however, it is most often overlooked. In the past, it was customary to locate shelters at out-of-the-way places on the least expensive properties like industrial areas or near sewage treatment plants or landfills. The theory was that if someone wanted to visit the shelter, they could call for directions to find it. Today it is recognized that locating shelters in high-visibility locations not only increases visitors and the number of pets adopted and returned to owners, but also reduces the need for animal euthanasia and helps build public awareness and community goodwill. **A good location can increase adoption by 100%.** Coupled with an active adoption promotion program, this location and visibility factor can increase adoptions and reduce euthanasia.

B. Accessibility: It is important that the animal shelter be centrally located to the area it serves. If the shelter were located in a far corner of the jurisdiction, the driving time may be lengthy and people would be less likely to use the shelter. That long drive would mean people being less likely to come to look for lost pets or visit for adoptions. The service area is the City of Wylie which is approximately 37.30 square miles. Therefore, the travel distance is not too significant to certain areas from any one location. The site should have good access on and off of a major freeway or arterial street.



Map of Service Area and Location of Existing Shelter

C. Suitability: It is very important to check potential sites for the following:

1. Availability of utilities such as water, sewer, gas and electricity.
2. Zoning restrictions: Finding a new site with zoning that will allow an animal shelter “by right” can be a challenge. If a special use permit or zoning change is required, these have been a challenge in some cities.
3. Easements, right-of-ways and setbacks: Each potential site should be carefully examined to make sure there are no restrictions that would prohibit the construction of the new animal shelter.
4. Excessive topography or drainage concerns: Each potential site should be examined to make sure the slope across the site will allow for proper drainage and there is a place to drain the water to. However, sites with excess slopes should be avoided if possible. Sites should be checked to confirm they are not in an area that floods.

5. Check for wetland concerns: Each potential site should be examined to make sure it does not have any wetlands or if it does the remaining area is still sufficient for the proposed project.
6. A rectangular shape is desirable: Odd shapes can be used but may require acquiring more land due to inefficiency of the shape. Potential sites may need to be “test fit” to determine everything works before acquiring the property.

D. Parking: Adequate parking is very important for the success of an animal shelter.

The parking needed for the shelter, based on function, is estimated as follows:

Public Visitors	40
Staff	11
Volunteers	5
Foster Parking	0
ASO Vehicles	5 (3 ASO trucks and 1 Tahoe with additional in future)
Trailers	0 (future trailer)
Total	61

The City’s required minimum parking is sometimes less than the functional need, however, sometimes it is more. Once we know the location of the proposed new shelter, we can review the parking requirements based on the zoning ordinance of the zoning district it is located in. However, sometimes a variance is required because the Authority Having Jurisdiction’s required parking is not compatible with the functional needs of an animal shelter.

Parking should be arranged to provide good visible parking for visitors and located for easy access to the main entrance. Staff parking should be separate and located to the side near a separate staff entrance. Shelter vehicles should be provided with simple to navigate routes with adequate turning radius and concealed from public view in a screened service yard.

E. Site Size: The new site needs to be approximately 2 to 3 acres. This is based on a one story building using indoor kennels with surface parking for approximately 60 vehicles. This is assuming the site is relatively flat and rectangular in shape. If the site is an odd shape or has extensive slope, additional space may be required. Please let us “Test Fit” any site.

F. Other Outdoor Features: Space for designated areas for outdoor features is also important when considering the site. The following items are requested.

1. Three dog exercise yards.
 2. Two covered outdoor get acquainted yards
 3. Chicken coop
 4. One Dumpster
 5. Delivery vehicle unloading area with step vans, bobtail trucks, and school buses.
- No 18-wheel trucks are anticipated.

G. Summary: The City is in the process of choosing a new site for their proposed new shelter. Please allow SPA to review potential sites before purchasing to “test fit” and evaluate to the criteria provided.

6. RECOMMENDED FEATURES

A. Design Concept



**An example of a welcoming new animal shelter by
“Shelter Planners of America”
of about the size needed for Wylie, TX**

The shelter should have low-maintenance, heavy-duty materials. The interior should be brightly lighted and open with pleasing colors and pleasant public spaces. Animal housing areas should provide as much health protection, safety and comfort as possible with today’s new materials and designs.

For the new shelter we recommend a one-story building. The structure would be a slab on grade, depending on the soil condition, with masonry and framed walls and sloped truss roof. The exterior should avoid an institutional look, preferring a human scale and welcoming feel. It should be compatible with the community and be attractive and inviting to the public. Natural lighting should be provided to all public areas, animal housing areas and staff work areas.

Attractive landscaping will be very important to the appearance of the shelter. We recommend that an extensive landscaping plan, be a part of the building project.

1. Dog Housing – SPA presented several dog housing options to WAS for consideration and they selected indoor/outdoor kennels. It is important that each dog has two spaces: a primary enclosure where their food, water, and bedding is located and a secondary space where they can eliminate away from their primary enclosure allowing them to live in their normal behaviors. The indoor portion of the kennel will allow the dogs to be comfortable both the summer and winter.

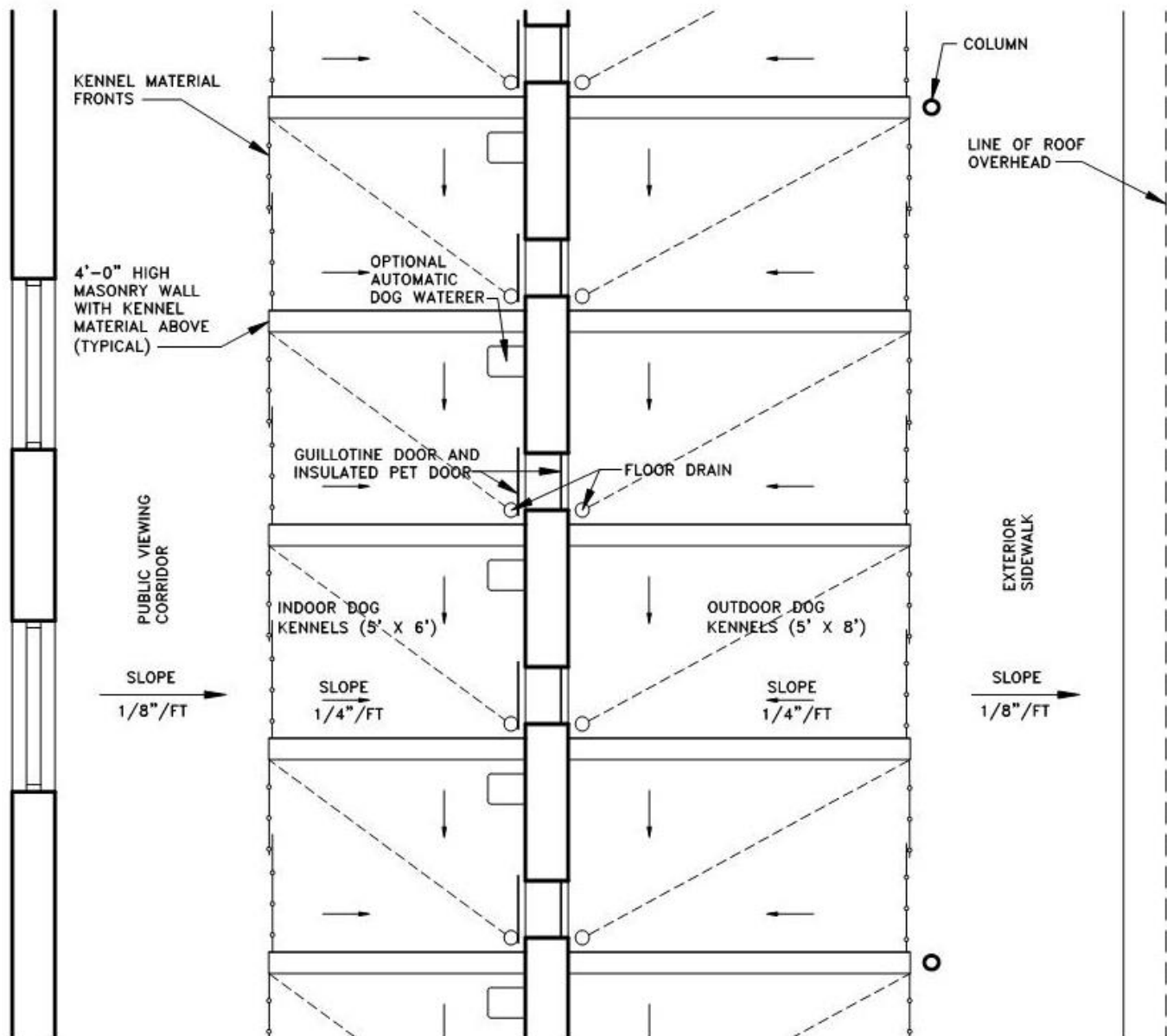


DIAGRAM OF INDOOR/OUTDOOR KENNELS (NOT TO SCALE)

The two-compartment kennel design will allow dogs to be kept safe and dry during the cleaning procedure by moving dogs to the covered outside run. This allows for efficient daily cleaning. Floors will be sloped to individual drains thereby eliminating trench drains which are difficult to clean and can cause cross contamination.

There should be special sound control materials used in the design to keep the noise level down. Dog Kennels should be arranged where dogs are not looking at each other across the aisle which can cause stress and increase barking.



Photo of outdoor portion of indoor/outdoor kennels
Note: Wylie intends to have the overhang extend out to cover the outdoor walkway in front of the outdoor Kennels.

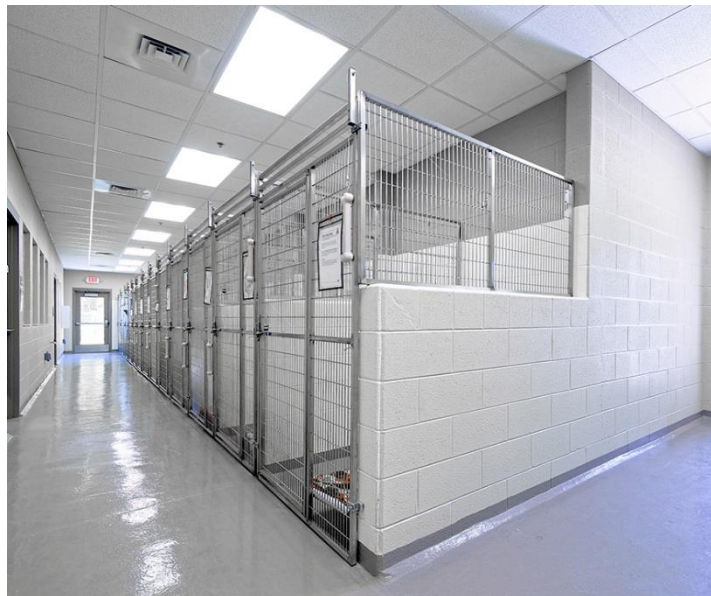


Photo of indoor portion of indoor/outdoor kennels

2. Puppy areas - Puppies are to be housed separately from the adult dogs for disease control. We recommend all puppies be housed in floor level pens. This is to prevent them from stepping out of an elevated cage with an open door, falling out of cages located several feet above the floor and possibly injuring themselves.



Puppies will have individual inside pens to hold litters of puppies separated from adult dogs.

3. Cat Housing

SPA recommends two compartment housing for cats which is consistent with recommendations of the Association of Shelter Veterinarians. This allows the cat cages to be spot cleaned on one side while the cat is in the other compartment. This eliminates the need to move the cats out of their cages for cleaning. This reduces the potential transfer of disease and reduces stress for the cats.



Mason Cat Towers



Shor-line Stainless Steel Cat Suite



Shor-line "Comfort Suite" with individual exhaust in each litterbox.



Catio with free roam cats

B. Interior Features

Shelters built in the past did not have the advantage of using many of the new innovative materials and equipment available only in recent years. Animal shelters of today are no longer just “warehouse structures” with cages lined down the walls.

Shelters are very specialized buildings which are more like hospitals and shopping malls than warehouses in construction.

A high level of quality is needed if the facility is to be able to keep animals healthy and to hold up under heavy wear. This is especially important for a shelter that is striving to present an attractive, welcoming image to the public.



An attractive, spacious, quiet front lobby is important in a shelter. This improves customer satisfaction and increases adoptions.

The goal is to make the shelter a place where employees feel positive and the public enjoys visiting for pet adoption, pet retrieval, pet owner education and other animal services. Most importantly, the shelter must house animals in the healthiest, least stressful manner possible.

Today, modern shelters are designed to include central washing equipment, automatic animal watering systems, individual kennel floor drains, fresh air with heat exchangers

for economy, heated kennel floors, noise control systems and long-lasting, easily disinfected wall and floor finishes.

Special equipment can be utilized in a new shelter. During the preparation of the construction drawings and specifications in Step 3 we will review with you all of the details and choices that are available including performances, features, pros & cons, and the cost implications of the various options. Some of the equipment and finishes are pictured below.



STONTEC

Decorative Flake Finish Flooring Systems

Dense, stain resistant, epoxy and urethane-based systems in an extensive range of flake finishes and color options. Popular with design teams for applications from pharma labs to university concourses. Perfect for quick installations.



The special epoxy on kennel floor finish comes in an attractive array of earth tone colors to make kennels cheerful and bright. It also halts bacteria growth.



BiteGuard KennelPlex™ Commercial Dog Doors



Featuring Two
Energy Efficient
Designs:

**Single Panel
Top Swing**
and
**Dual Panel
Saloon Style**
Kennel Doors



Versatility for all types of installations

Models engineered for the requirements of professional kennels worldwide

Shelter Planners of America uses special Guillotine doors with an insulated Pet door that prevents loss of heated or cooled air from the kennel.

MODEL 1200 AUTOMATIC KENNEL WATERER

Provides a constant supply of fresh water. Eliminates the time-consuming task of refilling water bowls. Saves on the expense of replacing damaged water bowls. Conserves water.

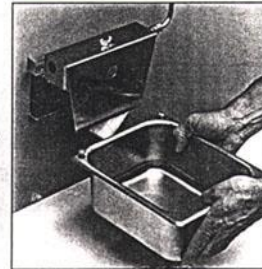
DRINKING BOWL CLEANS FAST AND EASY



1. A quick 1/4 turn of optional water line valve shuts off water flow.



2. Slide latch bar with thumb to release the stainless steel drinking bowl.



3. The drinking bowl disconnects from the wall bracket and lifts out from under the float valve. Takes less than 10 seconds.

Each dog Kennel is equipped with an automatic waterer so that dogs always have fresh water available with no staff time required refilling bowls.



Attractive Kennels with bright lighting levels, epoxy floor finishes and sound absorbing ceilings make quiet, inviting public spaces.



Professional grooming tub that animals can be walked into through a swinging door.

C. Heating, Ventilating, Air Conditioning (HVAC)

Heating, ventilating and air conditioning systems must be designed to provide clean, odor free and uncontaminated air throughout all animal housing areas. This is essential to control the spread of air borne disease.

The HVAC system will be custom designed to provide a high volume of fresh air to kennels with a specific number of air changes per hour at the proper temperature and humidity range. The system will be designed to provide ceiling air supply above public walkways with a ceiling exhaust above dog runs opposite each supply providing the best odor control for the visiting public and staff.

Additionally, the systems will be fitted with heat exchangers to recapture energy before it is exhausted. This helps keep utility bills as low as possible. There will also be supplemental roof mounted exhaust fans (with separate switches on timers, with red lights) to pull out moist air during and immediately following kennel cleaning.

The facility should be served by multiple, separate, smaller HVAC systems, each to serve a portion of the facility. This smaller equipment is less expensive to install and service and if a system fails, you still have portions of the building heated and cooled until the system is repaired. Animals can be doubled up until repairs are made. The administrative areas are on a separate air system to prevent odors from entering the staff areas.

7. STAFFING

The present animal shelter staff consists of the following staff positions:

	Position	Number of Staff		Accumulated Total
		Full Time	Part Time	
1	Manager	1		1
2	Lead ASO	1		2
3	ASO	5		7
4	Kennel Attendant		1	7.5

This staffing level is average compared to most shelters across the Country handling approximately the same number of animals and having similar adoption results.

Also, in a new shelter that is a more pleasant environment, it should be possible to have a successful volunteer program. Volunteers can help with a wide variety of activities at the shelter to promote adoption.

In the future, with a larger shelter that houses more animals, it is anticipated WAS should plan to increase staff.

8. OPERATING COST

The present annual operating cost is \$708,586, not including utility costs that were not provided. The average cost per animal handled is approximately \$668 based on 1,061 animals. Nationally, animal shelter operational budgets run between \$350 and \$600 per animal. It should be noted that a shelter with small animal intake numbers often has a higher cost per animal. The Wylie Animal Services operating cost is reasonable for the shelter size and their high live release rate.

The proposed new shelter will be larger than the present shelter and the cost of utilities will be higher than the existing shelter. However, the maintenance cost of a new building will be generally less than an older building. We anticipate the operating budget should be increased to accommodate the increased utility costs and additional staff.

9. OPINION OF PROBABLE COST

Construction cost of animal shelters vary significantly, based on the national economy, the region of the country they are constructed in, when they are constructed, the individual market factors at that time and the method of project delivery. Other important factors are the size of the shelter, the site conditions such as soil and topography, quality of finishes and materials, HVAC systems included and the quality of animal equipment. Since detailed design drawings and engineering have not been prepared at this time, only estimated costs can be presented.

The Opinion of Probable Cost presented is based on actual costs of several good quality shelters we have designed. We have taken those costs and adjusted the cost for Dallas, TX in 2024 based on the R.S Means cost guide. Refer to EXHIBIT F for examples of shelters built around the country with the estimated cost per sf adjusted for Dallas, TX.

Please note that modern animal shelters are more like a combination of a hospital and a shopping mall than a warehouse or other industrial use. The cost of modern animal shelters often surprises people because the cost is actually more than many buildings they may be familiar with. The following are some reasons for this:

1. Animal shelter foundations are complicated because there will be slopes within the animal housing areas to drains and this requires additional labor beyond most buildings like schools or office buildings.
2. The floor finishes in animal housing areas are perhaps 3 times the cost of typical carpet or other floor finishes in most buildings.
3. Animal shelters have animal equipment that can add \$30 to \$45/SF on top of the cost of most buildings. Occasionally, the costs people hear about other animal shelters they do not know if this equipment is included in the price or not. For the estimate in this study we have included the animal equipment.

4. Animal shelters have more walls per SF than most any other building type. For example, dog kennels walls are usually 4 feet to 6 feet apart whereas classrooms in schools are more like 20 feet apart.
5. The Heating, Ventilation and Air-Conditioning (HVAC) systems in the animal housing portions of animal shelters are more expensive than other buildings to reduce disease transmission.
6. The wall finishes in the animal housing portions of animal shelters need to be a non-porous and durable finish to prevent disease transmission and to stand up to the daily washing. Glazed structural tile is a common material but costs significantly more than other materials.
7. Sound control within animal shelters is generally more cost than many building types due to the dogs barking. This requires the walls being extended to the roof deck to prevent sound transmission to other areas and this requires sound absorption materials that cost more than normal materials.

Two Opinion of Probable Costs are proposed:

NEW SHELTER

Refer to Exhibit C dated 4-22-24 for the Opinion of Probable Cost for a new shelter.

STOP-GAP IMPROVEMENTS OF EXISTING SHELTER

Refer to Exhibit D and E dated 4-22-24 for the Diagram of proposed Stop-Gap Improvements and the Opinion of Probable Cost for those proposed improvements to the existing shelter.

We have included Construction Costs including Site Work as well as for soft costs and contingency that should be considered. Please note, the cost of land is not included.

EXHIBIT A

CITY OF WYLIE, TX ANIMAL SHELTER

Date: 4/22/24

FIGURE 1. EXISTING AND PROJECTED HUMAN POPULATION AND ANIMAL INTAKE

	2023 Human Population Estimate	2023 Actual Animal Intake	2023 Intake as a % of Population	2033 Human Population Estimate	2033 Projected Intake Ratio*	2033 Projected Animal Intake* (1)	2043 Human Population Estimate	2043 Projected Intake Ratio* (1)	2043 Projected Animal Intake*
Dogs		571	0.91%		1.08%	732		1.08%	737
Cats		184	0.29%		0.80%	544		0.80%	548
Other		306	0.49%		0.12%	82		0.12%	82
Total	62,826	1,061	1.69%	67,994	2.00%	1,357	68,472	2.00%	1,369

Note1 : WAS is planning on 2% intake ratio to human population.

Note 2: The intake ratio of cats have been increased from 17% to 40%
lowering the intake ratio of others from 29% to 6%

FIGURE 2. CURRENT AVERAGE LENGTH OF STAY (ALS)

Based on Existing Housing Spaces			
	2023 Actual Intake	Existing Housing Spaces	Current ALS
Dogs	571	18	12
Cats	184	12	24
Other	306	4	5
Total	1,061	34	

FIGURE 3. 2033 AND 2043 PROJECTED ANIMAL HOUSING NEEDS

2033 (10-YEAR PROJECTION)			
	2033 Projected Animal Intake	Desired ALS	Number of Animals to be Housed
Dogs	732	15	30
Cats	544	21	32
Other	82	14	3
Total	1,357		65

2043 (20-YEAR PROJECTION)			
	2043 Projected Animal Intake	Desired ALS	Number of Animals to be Housed
Dogs	737	15	30
Cats	548	21	32
Other	82	14	3
Total	1,367		65

BUILDING SPACE PROGRAM - NEW SHELTER

CITY OF WYLIE, TX ANIMAL SHELTER

DATE: 4/22/2024

Summary:	Interior	Exterior
A. Administrative	3,788	
B. Medical Clinic	0	
C. Animal Housing (Interior)	2,865	
D. Animal Housing (Exterior)		1,244
E. Animal Support Area (Interior)	2,246	
F. Animal Support Area (Exterior)		500
TOTAL SF	8,900	1,744
COMBINED SF	10,644	

SECTION A - ADMINISTRATIVE

	Room or Space	No. of Rooms				SF of Each		Total SF	Adjacent to or Near	Equipment / Comments
	PUBLIC AREAS									
1	Adoption Lobby	1				300		300		Visitor seating for 6. Table for 4.
2	Vestibule for Adoption Lobby	0				80		80		Not required per Client
3	Animal Intake Lobby	1				300		300		Visitor seating for 4, wall to separate from Adoption Lobby.
4	Vestibule for Admissions Lobby	0				80		80		Not required per Client
5	Customer Service Counter (3 Customer Service Representatives at counter)	1				210		210		Arrange counter to serve both the Adoption Lobby (space for 2 people) and the Animal Intake Lobby (space for 1 person) .Connected to conserve staff time. Space for Volunteer Check-in.
6	Education Center (Multi-purpose Meeting Room)	1				500		500	Adjacent to Lobby	Seating for 16 using training tables in rows, or 24 in rows of chairs. 18'x28' in size
7	Meeting Room Storage	1				80		80	Adjacent to Education Center	To store tables and chairs when not in use and other materials to support meeting room.
8	Meeting Room Kitchen	1				80		80	Education Center, screened from view.	Counter with sink, under counter refrigerator, microwave, coffee maker
9	Public Toilets	2				60		120		Two unisex family. Verify code minimum.

SECTION A - ADMINISTRATIVE - Continued

	Room or Space	No. of Rooms			No. of People	SF of Each		Total SF	Adjacent to or Near	Equipment / Comments
	OFFICES									
10	Shelter Manager's Office	1			1	100		100		
11	ASO Team Lead's Office	1			1	100		100		
12	ASO Group Office	1			4	50		200		Include space for 4 people. Space for master station
	OTHER ADMIN. SPACES									
13	Workroom	1				80		80	Front Desk and ASO offices	Copy machine, 12' counter. No file cabinets required per Client
14	Staff Breakroom	1				150		150	Consider access to outdoor space	Counter with sink, microwave, Full refrigerator, coffee maker, seating at table for 4
15	Staff Locker Alcove	1				20		20	Staff only Hallway	10 Lockers for staff 1' x1' x3'
16	Staff Toilets	2				60		120		Unisex, verify quantity with code.
17	Staff Shower Room	1				64		64		Unisex, verify size, comply with accessible code.
18	Volunteer Check-In and Lockers	1				50		50		Kiosk Computer for Check-In at Front Desk & name tags, 12 lockers 1' x1' x1'
19	Mechanical/ Elec Room	1				150		150		
20	Data/Phone Closet	1				80		80		
21	Janitorial Closet	1				50		50		
Subtotal:								2,914		
Net to Gross SF Factor 30%:								874		
Departmental Gross Area:								3,788		

EXHIBIT B

SECTION B - MEDICAL CLINIC (NOT USED)

	Room or Space	No. of Rooms		No. of People	SF of Each		Total SF	Adjacent to or Near	Equipment / Comments
							-		
	Subtotal:						-		
	Net to Gross SF Factor 30%:						-		
	Departmental Gross Area:						-		

SECTION C - ANIMAL HOUSING - INTERIOR

	Room or Space	No. of Spaces	Animals per Space	Animals to be Housed	Size			SF of Each	SF of Walkway	Total SF	Adjacent to or Near	Equipment / Comments
1	Adoption Dog Runs - Jumbo	1	1	1	6.0	x	6.0	36	30	66		See corresponding Exterior Run
2	Adoption Dog Runs - Standard	9	1	9	5.0	x	6.0	30	25	495		See corresponding Exterior Run
3	Stray Dog Runs - Jumbo	1	1	1	6.0	x	6.0	36	30	66		See corresponding Exterior Run
4	Stray Dog Runs - Standard	9	1	9	5.0	x	6.0	30	25	495		See corresponding Exterior Run
5	Nursing Mother Dogs - Jumbo	0	0	0	6.0	x	6.0	36	30	-		See corresponding Exterior Run
6	Medical Observation Dog Runs	0	0	0	5.0	x	6.0	30	25	-		See corresponding Exterior Run
7	Medical Isolation Dog Runs	3	1	3	5.0	x	6.0	30	25	165		See corresponding Exterior Run
8	Quarantine Dog Runs	3	1	3	5.0	x	6.0	30	25	165		See corresponding Exterior Run
9	Puppy Pens	2	2	4	3.0	x	5.0	15	25	80		See corresponding Exterior Run.
10	Transfer Dog Runs - Jumbo	0	0	0	6.0	x	6.0	36	30	-		See corresponding Exterior Run
11	Transfer Dog Runs - Standard	0	0	0	5.0	x	6.0	30	25	-		See corresponding Exterior Run
	TOTAL DOGS:			30								
12	Adoption Cat Room - Adult	16	1	16				5	20	400		Each cat is housed in a 2-compartment cage. Cat cages open to staff
13	Adoption Cat Room - Kitten	0	0	0								
14	Cat Community Rooms (18 SF / cat Free Roam)	0	0	0	8.0	x	8.0	64		-		
15	Stray Cat Room - Adult	8	1	8				5	12	136		Each cat is housed in a 2-compartment cage.
16	Stray Cat Room - Feral	0		0				5	12	-		
16	Stray Cat Room - Kitten	0		0				5	12	-		
17	Nursing Mother Cats	0		0				5	12	-		
18	Medical Observation Cats - Non-Viewable	0	1	0				5	12	-		Each cat is housed in a 2-compartment cage.
19	Medical Isolation Cats - Non-Viewable	4	1	4				5	12	68		Each cat is housed in a 2-compartment cage.
20	Quarantine Cat Room - Viewable by public	4	0	4				5	12	68		Each cat is housed in a 2-compartment cage.
	TOTAL CATS:			32								
21	Other Animals	0	0	0				4	12	-		Not included per Client
								-	-	-		
								-	-	-		
	Subtotal:									2,204		
	Net to Gross SF Factor 30%:									661		
	Departmental Gross Area:									2,865		

SECTION D - ANIMAL HOUSING - OUTDOOR COVERED

	Room or Space	No. of Spaces	Animals per Space		Size			SF of Each		Total SF	Adjacent to or Near	Equipment / Comments
1	Adoption Dog Runs - Jumbo	1	2		6.0	x	8.0	48		48		See corresponding Interior Run
2	Adoption Dog Runs - Standard	9	1		5.0	x	8.0	40		360		See corresponding Interior Run
3	Stray Dog Runs - Jumbo	1	1		6.0	x	8.0	48		48		See corresponding Interior Run
4	Stray Dog Runs - Standard	9	1		5.0	x	8.0	40		360		See corresponding Interior Run
5	Nursing Mother Dog Runs - Jumbo	-	1		6.0	x	8.0	48		-		See corresponding Interior Run
6	Medical Observation Dog Runs	-	1		5.0	x	8.0	40		-		See corresponding Interior Run
7	Medical Isolation Dog Runs	3	1		5.0	x	8.0	40		120		See corresponding Interior Run
8	Dog Quarantine Runs	3	1		5.0	x	8.0	40		120		See corresponding Interior Run
9	Puppy Runs -	2	4		5.0	x	6.0	30		60		See corresponding Interior Run
10	Transfer Runs - Jumbo	-	1		6.0	x	8.0	48		-		See corresponding Interior Run
11	Transfer Runs - Standard	-	2		5.0	x	8.0	40		-		See corresponding Interior Run
12	Cat Sun Porch	2			8.0	x	8.0	64		128		See corresponding Interior Run
Subtotal:										1,244		
Departmental Gross Area:										1,244		

SECTION E - ANIMAL SUPPORT AREA - INTERIOR

	Room or Space	No. of Rooms				SF of Each		Total SF	Adjacent to or Near	Equipment / Comments
1	Animal Receiving	1				200		200	Near Admissions Lobby and Sally Port	Stainless Steel Counters with sink, refrigerator, scales (one for dogs, one for cats), microscope, space to photograph animals, computer, exam table, 2 undercounter refrigerators (one for dogs, one for cats). Drain in floor.
2	Dog Intake Holding	1				72		72	Animal Receiving	(2) 4'x4' pens
3	Cat Intake Holding	1				40		40	Animal Receiving	Two cat cages
4	Foster Animal Housing`	1				64		64		4 cat cages
5	Get Acquainted Rooms	1				80		80		One for cats
6	Behavior Assessment	0				150		-		Not Required per Client
7	Behavior Training	0				400		-		Not Required per Client
8	Photo Room	1				72		72		
9	Animal Kitchen	2				100		200	One near dogs, one near cats	Counter with 2-compartment sink, commercial dishwasher, and under counter refrigerator, utility sink also in Cat Room for litter pans.
10	Food and Litter Storage	1				100		100		
11	Donation Receiving Alcove	1				20		20	Lobby	Out of view from Public
12	Workshop	0				150		-		Not Required per Client
13	Foster Storage	0				80		-		Not Required per Client
14	Food Storage for Giveaway Program	0						-		Not Required per Client
15	Laundry	1				240		240		1 Commercial washer and 1 dryer with folding tables, 12' shelves for laundry.
16	Cleaning Equipment Room	2				80		160	One near dogs, one near cats	Metal shelves for cleaning supplies, pressure wash equipment (if used), janitor's sink, space for trash cans, etc.
17	Litter Pan Cleaning Room	1				60		60		Utility Sink
18	Grooming Room	1				120		120		1 Grooming tub & 1 Grooming table
19	Euthanasia Room	1				150		150	Freezer	Stainless steel counter with sink, wet table refrigerator, wet table. Freezer
20	Mechanical Room	1				150		150		
Subtotal:								1,728		
Net to Gross SF Factor 30%:								518		
Departmental Gross Area:								2,246		

SECTION F - ANIMAL SUPPORT AREA - UNFINISHED SPACE & NON-AIR CONDITIONED

	Room or Space	No. of Rooms				SF of Each		Total SF	Adjacent to or Near	Equipment / Comments
1	Enclosed Sally Port (1 space)	1				500		500		Back in is acceptable
2	General Storage	1				300		300		
3	Event Storage	1				100		100		
4	Trap Storage	1				100		100		
5	Crate Storage	1				100		100		
Subtotal:								500		
Departmental Gross Area:								500		

EXHIBIT C

OPINION OF PROBABLE COST - NEW SHELTER

CITY OF WYLIE, TX ANIMAL SHELTER

DATE: 4/22/24

Based on New Construction on a New Site:

	2043
Fully Enclosed Space - SF :	8,900
Exterior Space - SF :	1,744
Total SF :	10,644

		LOW	HIGH
Fully Enclosed Space	New Construction Total SF	Total Cost at \$335.00 Per SF	Total Cost at \$411.50 Per SF
A Administrative Areas	3,788		
B Medical Clinic	-		
C Animal Housing - Interior	2,865		
D Animal Support Areas - Interior	2,246		
Subtotals:	8,900	\$ 2,981,433	\$ 3,662,268
Exterior Space	Total SF	\$234.50 Per SF	Total Cost at \$288.05 Per SF
E Animal Housing - OUTDOOR COVERED	1,244		
F Animal Support Areas - Exterior - UNFINISHED SPACE	500		
Subtotals:	1,744	\$ 408,968	\$ 502,359
Building - Sub-Totals:	10,644	\$ 3,390,401	\$ 4,164,627
Site Work & Parking	Low High 10% 15%	\$ 339,040	\$ 624,694
Total Construction Cost		\$ 3,729,441	\$ 4,789,321
Total Cost / SF		\$ 350	\$ 450

Consider Budgeting for the following:

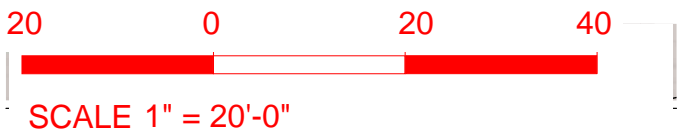
Soft Costs	15%		
(AE Fees, Civil Engineering, Surveying, Soil Tests, Construction Materials Testing, Air Balancing, Furnishing, Loose Equipment, Computers & Phone System, etc.)		\$ 559,416	\$ 718,398
Contingency	5%	\$ 214,443	\$ 275,386
Approximate Escalation for 2025	3%	\$ 111,883	\$ 143,680
Estimated Total Project Cost		\$ 4,615,183	\$ 5,926,785

*Note: 1. This does not include the cost of land.

2. Please note, the Opinion of Probable Cost provided is based on historical costs of other animal shelter projects, but the construction market is extremely unpredictable at this time.

PROPOSED STOP-GAP RENOVATION PLAN

4/22/24



EXISTING DOG KENNEL BUILDING
APPROX. 1,994 SF

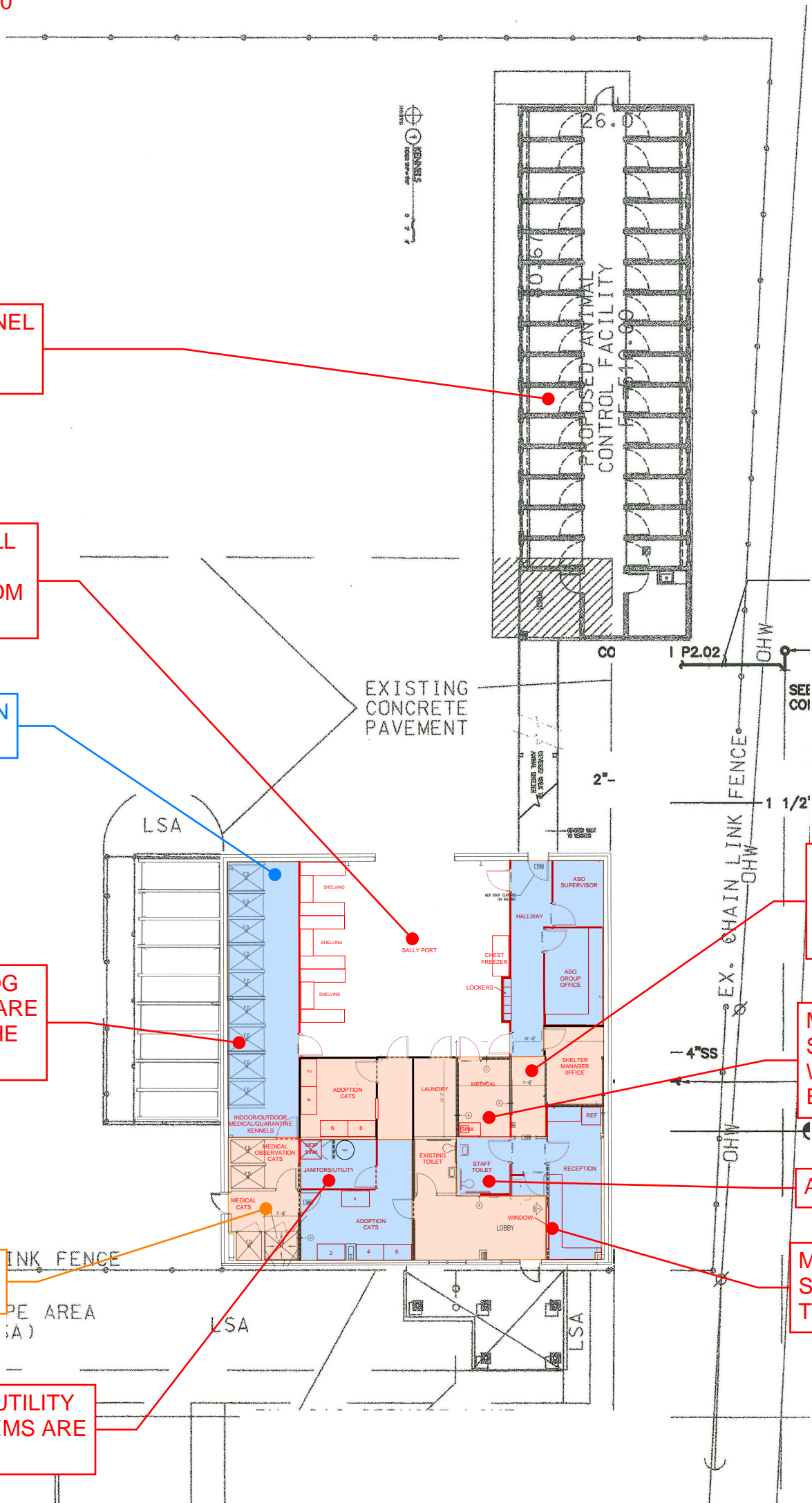
THE SALLY PORT WILL
HAVE WALLS ADDED
TO SEPARATE IT FROM
OTHER FUNCTIONS

HEAVY RENOVATION
APPROX. 1,469 SF

IMPROVE THESE DOG
KENNELS SO THEY ARE
MORE USABLE IN THE
SHORT TERM

LIGHT RENOVATION
APPROX. 1,028 SF

CREATE A JANITOR/UTILITY
ROOM SO THESE ITEMS ARE
NOT THE CAT ROOM



CREATE A CORRIDOR
FROM THE EXISTING
LOBBY TO THE EXISTING
DOG BUILDING

MOVE THE MEDICAL ROOM
SO A SINK CAN BE ADDED
WHERE THERE IS
EXISTING PLUMBING.

ADD A STAFF TOILET

MOVE CUSTOMER
SERVICE WINDOW TO
THIS WALL

OPINION OF PROBABLE COST - STOP-GAP REMODEL

4/22/2024

City of Wylie Animal Shelter

SPA Comm No 1329

	SF	Low End		High End	
		Cost/SF	Cost	Cost/SF	Cost
Renovation of Existing Building (AC Space) - Heavy (Using Job Order Contracting)	1,469	\$200	\$ 293,800	\$300	\$ 440,700
Renovation of Existing Building (AC Space) - Light (Using Job Order Contracting)	1,028	\$100	\$ 102,800	\$200	\$ 205,600
Total Building Area	1,469				
Building Cost - Sub-Total			\$ 396,600		\$ 646,300
Site Work & Parking	Low: 0% High: 0%		\$ -		\$ -
Total Construction Cost			\$ 396,600		\$ 646,300

Consider Budgeting for the following:

Soft Costs	20%		\$ 79,320	\$ 129,260
AE Fees, Civil Engineering, Surveying, Soil Tests, Construction Materials Testing, Air Balancing, Furnishing, Loose Equipment, Computers & Phone System, etc.				
Contingency	5%		\$ 23,796	\$ 38,778
Estimated Total Project Cost			\$ 499,716	\$ 814,338

*Note: Please note, the construction market is extremely unpredictable at this time.

EXHIBIT F

Arlington Animal Services Arlington, TX



Project Information:

- Public Bid
- Project Delivery Method: CSP
- Type of Construction: Steel Frame
- Flooring in Dog Kennels: Epoxy Resinous
- Dog Kenneling: Glazed CMU divider walls. All kenneling is galvanized chain link
- HVAC System: 100% Outside Air for Animal Areas
- Project Size: 20,000 SF
- Site Size: 4 acres
- Quality: High

PROBABLE CONSTRUCTION COST IN 2024, DALLAS, TX DOLLARS \$383/SF

This is a City owned facility that features an “Adoption Mall” concept and a full animal hospital. The facility houses 131 Dogs and 128 Cats.

Arlington Animal Services Arlington, TX



Brown County Humane Society

Nashville, IN

Project Information:

- Privately Bid
- Project Delivery Method: Competitive
- Type of Construction: Wood Frame
- Flooring in Dog Kennels: Epoxy Resinous
- HVAC System: 100% of Outside
Air for Animals
- Project Size: 10,082 SF
- Site Size: 6 acres
- Quality: Medium



PROBABLE CONSTRUCTION COST IN 2024, DALLAS, TX DOLLARS **\$338/SF**

Brown County Humane Society is a non-profit animal shelter that serves Brown County, IN. The site is adjacent to a creek and most of it is in a floodplain, so the area where the new building and parking is located is filled to bring it up out of the flood plain. The facility is designed to house 24 Dogs and 46 Cats.



Marshall Texas Animal Shelter

Marshall, TX



Project Information:

- Public Bid
- Project Delivery Method: Design-Build
- Type of Construction: Wood Frame front building and CMU walls in dog housing
- Dog Kenneling Material: CMU and Welded Stainless Steel kenneling
- Flooring in Dog Kennels: Epoxy Resinous
- HVAC System: 100% of Outside Air for Animals
- Project Size: 7,320 SF
- Site Size: 2.7 acres
- Quality: Medium

PROBABLE CONSTRUCTION COST IN 2024, DALLAS, TX DOLLARS **\$325/SF**

This is a City owned facility that houses 31 Dogs and 32 Cats.

Marshall Texas Animal Shelter

Marshall, TX



Montgomery County Animal Adoption & Care Center Christiansburg, VA



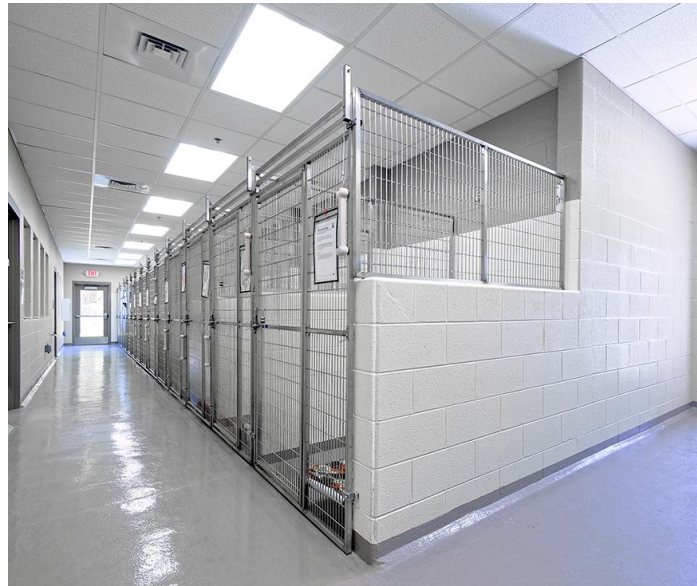
Project Information:

- Public Bid
- Project Delivery Method: Competitive
- Type of Construction: Wood Frame
- Flooring in Dog Kennels: Epoxy Resinous
- HVAC System: 100% of Outside Air for Animals
- Project Size: 16,733 SF
- Site Size: 3 acres
- Quality: High—Medium

PROBABLE CONSTRUCTION COST IN 2024, DALLAS, TX DOLLARS **\$339/SF**

This is a County owned facility that will be operated by a local non-profit. The facility features a clinic for shelter animals that a local non-profit plans to also use for a high volume spay and neuter clinic. This facility is designed to house 69 Dogs and 64 Cats.

Montgomery County Animal Adoption & Care Center Christiansburg, VA



Universal City Animal Care & Adoption Center

Universal City, TX

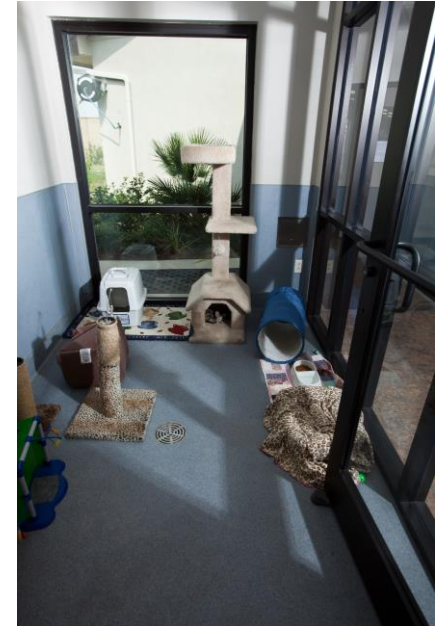


Project Information:

- Publicly Bid
- Project Delivery Method: Competitive
- Type of Construction: Wood Frame
- Suspended Foundation on piers (expensive)
- Flooring in Dog Kennels: Epoxy Resinous
- Dog Kenneling: Aluminum
- HVAC System: 50% outside air in Animal Area
- Project Size: 7,000 SF
- Site Size: 1.5 acres
- Quality: High

PROBABLE CONSTRUCTION COST IN 2024, DALLAS, TX DOLLARS **\$413/SF**

This is a City owned facility with a courtyard design. The facility features an animal receiving area, dog kennels, cat rooms, staff offices, laundry room, food storage and animal kitchen. The facility is designed to house 31 Dogs and 40 Cats.



**Project Information:**

- Public Bid
- Project Delivery Method: Design-Build
- Type of Construction: Pre-Engineered Metal Building
- Flooring Type in Dog Kennels: Sealed Concrete
- Dog Kenneling: Chainlink
- Countertops: Plastic Laminate
- HVAC System: Dog Kennels have heat and ventilation only, no air-conditioning
- Project Size: 5,500 SF
- Site Size: 0.25 acres
- Quality: Low

PROBABLE CONSTRUCTION COST IN 2024, DALLAS, TX DOLLARS **\$240/SF***

*10% mark up is added to the construction cost since the Owner provided much of the sitework.

This is a County owned facility that was built on a tight budget and had to meet the local flood requirements since this site is in an area subject to flooding. The facility features ACO offices, a large conference room, and medical clinic. The facility is designed to house 38 Dogs and 12 Cats.

