

City of Norman Animal Welfare

Animal Shelter Feasibility Study

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City of Norman Oklahoma: Animal Welfare Facility

**Program Evaluation
Building Assessment
Cost Estimate**

Prepared by
Tevis Architects pa

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Project #: 207126





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Introduction

Project Scope:

The Norman Animal Welfare feasibility study and master plan constitutes a complete building needs and cost analysis as prepared by Tevis Architects. The feasibility study for Norman, Oklahoma will assess the current and future needs to accommodate the increasing animal population, as well as assess the existing facility from a functional and disease control aspect.

In early 2008, Tevis was selected to complete the following three-part analysis: 1) *Collect and Analyze Data*, 2) *Develop solutions*, 3) *Document preparation and presentation with completion of the analysis in the spring of 2008*.

Phase One: Collect and Analyze Data

1. Planning Team Organization
2. Goals and Objectives
3. Define Facility Program
4. Program Meetings – Design charrette

Phase Two: Develop Solutions

1. Preliminary Design
2. Schematic Design
3. Cost Estimate

Phase Three: Document preparation and presentation

1. Review and confirm expectations
 2. Conduct Public Forum
 3. Prepare final feasibility study
- 1) The **Executive Summary** precedes the study as a synopsis of recommendations with a program for implementation of the study findings. It will outline the goals, intentions, and criteria used to develop the overall facility needs.
 - 2) The **Program** is a summary of the individual departments space needs. Following the program requirements are a series of **Design Sketches**, which show conceptual solutions including a site plan, elevation studies, and space relationships for individual components of the building.





- 3) **Cost Estimates** show projected overall project costs, with separate breakdowns for each particular project component.
- 4) The **Appendix** lists supplementary information provided by the design team that was used to develop various aspects of the program and project cost.

Method of Approach:

This report is based on data gathered by both the Norman Oklahoma Animal Welfare building committee and Tevis Architects, through tours and evaluations of several facilities located in the Midwest, and through additional resources, such as HSUS publications. The tours and resources have been used to establish benchmarks standards for determining space, operation, and program needs. Space, operations, and program needs are also based on the current and planned future staffing requirements as determined by City of Norman and the current and estimated animal populations for the Norman, Oklahoma area.

After Tevis Architects' initial analysis of the preliminary information, bi-weekly meetings were held with the building committee members.

From these discussions and an analysis of historical data, overall square footage requirements and adjacencies were developed for the facility including proposed building expansions. These findings were presented to the committee and refined through ongoing work sessions until the final analysis was in line with the goals and expectations of the building committee, oversight committee, city council, and other participating agencies.



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Executive Summary

Purpose and Vision:

The purpose of this study is to assess the overall needs of the Norman area, in order to provide an animal impound and holding facility and an adoption facility that will serve the area's growing requirements through the year 2025. We anticipate the design and development of a new shelter facility which will interact with the current adoption facility. The proposed welfare facility will provide housing and care of stray or impounded animals and will function alongside the adoption center for the adoption of pets.

The following is a list of goals that are to be met by the new facility:

- 20-year development plan serving an estimated population of 135,000 in the city of Norman by the year 2025.
- Providing a single facility to satisfy both the impounding and adoption holding needs of animal control, enforcement, and sheltering components, ensuring the best care and outcome possible for the animals in the city.
- Provide additional animal holding areas to allow for the containment of disease cross contamination.
- Provide reorganized program spaces to increase efficiency, accommodate increased flow and strengthen disease control.
- Provide an animal sheltering environment that is in line with the recommendations of the Humane Society of the United States and other governing agencies.





Current Animal Sheltering Status:

The current sheltering facility consists of two distinct buildings, both in appearance and function. The adoption facility was constructed approximately five years prior to this study and is in relatively good operating condition. Adjacent to the adoption building is an aged structure that houses the stray animals for the Norman Oklahoma Animal Welfare Department. While the adoption center seems to provide an acceptable facility for its required needs, the stray holding area is deficient in several critical areas. The overall structural integrity appears to be sufficient at this time. The overall animal and human flow for the employees is inefficient and not conducive to disease control. The technology and setup of the existing caging system is no longer adequate or appropriate, and updating is needed for the mechanical and plumbing systems of the facility. While all of these deficiencies need to be addressed, the overall size and allowable animal population is the primary problem for this facility.

Currently, the building has the capacity for approximately 55 dogs and 25 cats. Based on the average annual intake by the facility over the past three years, combined with the required hold periods for animals, the allowable population of this building is barely adequate for dogs, and is only approximately 60% of that needed for cats. On an annual basis, nearly 40% of dogs and 60% of cats impounded are euthanized each year. It is projected that the animal population will increase between 135% and 145% over the next 20 years. If the current holding facility does not change to accommodate this growth, it can be assumed that the euthanasia rates will increase similar to these amounts. Other alternatives, in lieu of increased euthanasia, would be minimized ordinances, increase dangerous loose animals, and limited pet ownership.

Issues to be addressed:

- Capacity: Overall capacity is inadequate to serve both the current animal population, much less any future population growth in both the welfare and adoption buildings.
- Dog Kennels: The current arrangements of stacked dog runs are difficult in use and are not conducive of a healthy psychological and physical environment for the animals. Furthermore, additional strain is placed on the staff responsible for placing large animals into the upper runs. The current cage size is also too small for containment per HSUS recommendations.
- Mechanical System: The current mechanical system is not adequate to provide the necessary air flow of a healthy animal environment or to provide proper odor control. Further investigation will be needed to address this item. Building mechanical systems shall be in conformance with the International Mechanical Code as it pertains to animal holding facilities.





- Sound Control: Insufficient sound insulation is currently provided within the dog containment area. The sound level is not conducive to a comfortable or healthy physical or psychological environment for both humans and animals.
- Work Flow: Work flow is inefficient. There is no designated point of entry for the delivery of animals to the facility, and the check-in process of these animals occurs on the opposite side of the facility. No temporary containment areas for animals being delivered are provided. Stray dogs with unknown illnesses are being directly deposited into the healthy animal population.
- Isolation/Quarantine Area: No sick or isolation areas are provided for animals that may be contagious to other animals. No disease control is provided.
- Outdoor Play Areas: No enclosed outdoor run or exercise areas are currently provided for the stray holding facility.
- Training Area: No training, for either human or animal, is provided in the current facilities.





Facility Goals:

In addition to the overall size and functional expectations and requirements listed above, the following goals have been identified and must be provided in the design of this facility.

Overall Building – It is preferred by the city of Norman that the facility, both inside and out, has walls constructed from materials that shall require minimum maintenance, are impervious to moisture, have excellent corrosion resistance, are energy efficient, and resist damage from, or injury to, housed animals

Animal Containment Area –

- The structural strength of the canine containment areas should be capable of being maintained in order to protect the animals from injury, to contain them, and to prevent exposure to other animals
- The dog containment areas have to be of sufficient size to accommodate a variety of dogs
- Interior surfaces of the facilities shall be constructed to be impervious to moisture, easily cleaned and sanitized
- Walls in kennel areas shall be of waterproof and easily cleanable materials
- Drains in the animal areas must be equipped with flush apparatus for the disposal of waste
- HVAC shall be designed per local code and as to allow for the exchange of fresh air for odor control and for the best possible removal of animal scents from the facility air

Other Construction Considerations –

- Offices and public areas shall be designed with separate HVAC systems from that in the animal areas
- The offices need to be equipped with data cabling for connectivity to the city networks
- Interior parking for off-loading of animals is also provided. This area should be able to be closed off for containment of animals while being transferred to evaluation and kennel areas
- The overall facility design, including utilities, ingress, egress, safety and all other considerations shall take into consideration the specialized nature of an animal shelter and shall include, at minimum, infrastructure to support the equipment necessary for the operation of both programs of the facility.





Recommendations:

The existing animal adoption facility is to be expanded and will act as the “front door” for both buildings on the site. The renovated and expanded impound shelter will be an extension of this facility, and will connect directly to it. The proposed scope of the project can be divided into six general areas:

- **Stray Hold** (priority one)
- **Isolation and Quarantine Hold** (priority one)
- **Delivery** (priority one)
- **Miscellaneous**
- **Adoption Building Expansion** (priority two)
- **Training Center** (priority three)

The proposed new and renovated areas will allow for increased capacity to accommodate the projected demand of 2025, provide increased efficiency and disease control, and provide building amenities necessary to provide a safe and healthy environment for both humans and animals.

The organization of these spaces has been carefully considered to provide maximum functionality and efficiency allowed by maintaining the existing structure. Each area has been further dissected to provide necessary space adjacencies and separations designed to protect the health of the animals in the facility.

The intent of this design is to provide a facility that will be constructed in one overall construction project. The building is projected to be constructed between 2009 and 2010, but the facility needs of the building have been based on 2025 requirements.

Cost Summary:

A detailed cost estimate is provided in section 3 in the feasibility study and master plan. The following is a summary of the estimated costs.

Program Area (Hard Costs)	
Animal Delivery	\$140,000.00
Isolation and Quarantine	\$170,000.00
Stray Holding	\$760,000.00
Misc	\$110,000.00
Adoption Expansion	\$325,000.00
Training Center	\$165,000.00
Building Construction Cost	\$1,670,000.00
Additional Costs (Soft Costs)	
Site Development Total	\$130,000.00
FFE Total	\$320,000.00
Design and Contractor Fee	\$290,000.00
Design and Construction Contingency	\$180,000.00
Total Project Cost (2008)	\$2,590,000.00



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Program

Approach & Understanding

The facility space needs were divided into four separate areas for this evaluation. Each area was then analyzed against current staffing needs and amenities, projected staffing needs and amenities, historical program data, current animal loads, projected animal loads, and the desired vision for the building and the amenities required to accommodate that vision. From that analysis, relationships were established with respect to the amount of floor space required for each function per animal housed in the facility. As animal counts have the most direct effect on space needs of the animal holding portion of the facility, projected animal occupancy was used as the basis of comparison and area determination. In office and training areas, human occupancy was used as the determining factor for space needs.

Explanation of additional factors

Each chart contains two area multipliers (contingency and circulation) at the bottom. These are meant to provide a more accurate representation of the required space by allowing for areas that cannot be quantified in the chart itself.

Circulation/Other – This factor allows space for the necessary facility halls and circulation paths. Also included in this factor would be any wall thickness and required utility chase space that was not accounted for in the chart tabulation.

Contingency – This factor accounts for any changes and/or calculation adjustments that may be necessary as the project develops further.





Building Population

The following table represents the different animal holding areas to be provided in the proposed plan. Also indicated are the designed animal populations of each area compared to the current animal population status. The designed animal population numbers are based on single occupancy in each individual kennel or cage, with the exception of kitten cages (2 ea) and puppy runs (2 ea). Currently, there is no population information for the Puppy Quarantine, Dog and Cat isolation, and Kitten Quarantine because no there is no capacity allowed for these areas in the current building. The recommendations of this study propose that these spaces be provided, and an assumed population has been provided below.

Number of Animals by Holding Area

Dog Stray

- Current Capacity - 54
- 2007 Daily Average – 53-58
- 2025 Population Projection – 66-73
- **Designed Population Capacity – 82 (40runs, 32 cages, and 10 long hold runs)**

Puppy Quarantine

- Current Capacity - 0
- 2007 Daily Average – N/A
- 2025 Population Projection – N/A
- **Designed Population Capacity – 6**

Dog Isolation/Quarantine

- Current Capacity - 0
- 2007 Daily Average – N/A
- 2025 Population Projection – N/A
- **Designed Population Capacity – 11**

Cat Stray

- Current Capacity - 28
- 2007 Daily Average – 25-28
- 2025 Population Projection – 49-54
- **Designed Population Capacity – 56 (84 if three tier cages are used)**

Cat Isolation/Quarantine

- Current Capacity - 0
- 2007 Daily Average – N/A
- 2025 Population Projection – N/A
- **Designed Population Capacity – 24**

Kitten Quarantine

- Current Capacity - 0
- 2007 Daily Average – N/A
- 2025 Population Projection – N/A
- **Designed Population Capacity – 16**





Dog Adoptions

- Current Capacity - 20
- 2007 Daily Average – 20
- 2025 Population Projection – 28-32
- **Designed Population Capacity – 32**

Kitten Quarantine

- Current Capacity - 20
- 2007 Daily Average – 20
- 2025 Population Projection – 28-32
- **Designed Population Capacity – 36-44**





Area Calculations by General Building Area

Animal Delivery

Garage/Animal Delivery (1 @ 400sf)	380
Animal Wash (1 @ 40sf)	40
Bulk Storage (1 @ 100sf)	100
Triage/Temp Animal Hold (1 @ 200sf)	200
Feral Cat Hold (1 @ 80sf)	80
Subtotal	800
Circulation (+25%)	200
Contingency (+10%)	80
Animal Delivery Total	1080

Isolation and Quarantine

Habitat Rooms (3 @ 100sf)	300
Cat Isolation (24 @ 8sf)	192
Dog Isolation (11 @ 25sf)	275
Tech Station/Janitor (1 @ 60sf)	60
Food Prep and Storage (2 @ 100sf)	200
Puppy Hold (6 @ 25sf)	150
Kitten Hold (16 @ 6sf)	96
Subtotal	1273
Circulation (+30%)	382
Contingency (+10%)	127
Animal Delivery Total	1782

Stray Animal Holding

Cat Stray (84 @ 6sf)	504
Dog Stray – Runs (40 @ 28sf)	1120
Dog Stray – Cages (32 @ 20)	640
Long Term Dog Hold (10 @ 25sf)	250
K-9 Boarding (3 @ 100sf)	300
Outdoor Runs (11 @ 24sf)	264
Outdoor Play (1 @ 320sf)	320
General Storage (1 @ 80sf)	80
Tech Station (1 @ 60sf)	60
Mechanical (1 @ 160sf)	160
Janitor (1 @ 60sf)	60
Food Prep and Storage (1 @ 140sf)	140
Subtotal	3898
Circulation (+32%)	1247
Contingency (+10%)	390
Animal Delivery Total	5535





Misc

Laundry (1 @ 120sf)	120
Storage (1 @ 80sf)	80
Utility (1 @ 120sf)	120
Mechanical (1 @ 120sf)	120
Euthanasia (1 @ 120sf)	120
Cremation Yard (1 @ 750sf)	750
Break (1 @ 120sf)	120
Toilets with Shower (1 @ 80sf)	80
Changing and Locker Area (1 @ 80sf)	80
Work Room (1 @ 140sf)	140
Subtotal	1730
Circulation (+25%)	433
Contingency (+10%)	173
Animal Delivery Total	2336

Adoption Building Expansion

Expanded Lobby (1 @ 200sf)	200
Office (1 @ 150sf)	150
Cat Adoption Cages (20 @ 12sf)	240
Dog Adoption Runs (14 @ 55sf)	700
Outdoor Play Area (1 @ 500sf)	500
Meet and Greet Room (1 @ 100sf)	100
Food Prep and Storage (1 @ 100sf)	100
Subtotal	1950
Circulation (+25%)	488
Contingency (+10%)	195
Animal Delivery Total	2633

Training Center

Training Room (45 @ 15sf)	675
Toilets (2 @ 60sf)	120
Storage (1 @ 120sf)	120
Subtotal	915
Circulation (+25%)	229
Contingency (+10%)	92
Animal Delivery Total	1235

Building Area Totals

Animal Delivery	1080
Isolation and Quarantine	1782
Stray animal Holding	5535
Misc	2336
Adoption Expansion	2633
Training Center	1235

New and Renovated Facility Total 14601

Existing Building Area	6000	(approx 4000sf renovated)
New Building Area (incl. play areas)	11000	
New Approximate Building Area	17000	(approx 15000sf new/renovated)





List of Program Areas

Delivery and Animal Receiving – This area will serve as the primary delivery area for both facilities, as well as the primary delivery area for animals into the animal impound portion of the facility. Critical adjacencies include the stray holding and isolation and quarantine areas. Functions that are to be included within the stray holding area include:

- **Garage/Animal Delivery:** Large drive-through garage. Area to provide direct adjacencies to animal check in/temporary animal holding/triage, dog wash area, and bulk storage. Space and equipment shall be provided within the garage for truck cleaning and sanitization.
- **Animal Wash:** Small area off of delivery garage for animal washing and sanitizing.
- **Bulk Storage:** Large storage room used for delivery and general storage.
- **Triage/Temp Animal Hold:** Room adjacent to garage for animal check-in and examination, temporary animal holding until checked in and inserted into the stray population, and for immediate care and exam of delivered animals. Room to provide four, 2'x2' stainless steel cages and two, 4'x2' stainless steel cages. Area to be mechanically separated from remainder of building. Work counters and cabinets, storage cabinets, and an exam table also to be provided.
- **Feral cat hold:** Cage bank off of garage area for temporary hold of delivered feral cats.

Isolation and Quarantine Holding Area – This area serves as a support function for the main stray holding population. It will be composed of primarily isolated holding areas for animal isolation and quarantine, along with several key support areas. Critical adjacencies include the delivery area, stray holding, and the adoption center. Functions that are to be included within the stray holding area include:

- **Habitat Rooms:** 3 habitat rooms will be provided. A portion of the existing breeze-way between the two buildings will be in-filled to allow for these rooms. Direct visual access will be provided from the front entry for any prospective adoption patrons. These rooms are to serve the adoption facility.
- **Cat isolation area:** Two rooms that hold twelve, 2'x2' two-tier stainless steel cages in each. Room to be mechanically isolated from remainder of building. Cages should be arranged so that they are not directly facing each other.
- **Dog isolation area:** Room to hold three, 3'8x8'0 dog runs including central trench drain plumbing system with flushable floor sink and grinder at end. Room to also contain eight, 4'0x4'0 two-tier stacked cage system with integral plumbing system (flushable floor sink with grinder to be provided at cage plumbing termination). Room shall be mechanically separated from remainder of building.





- **Kitten quarantine area:** Room to hold eight, 2'x4' two-tier stainless steel cages. Room to be mechanically isolated from remainder of building. Cages should be arranged so that they are not directly facing each other.
- **Puppy quarantine area:** Room to hold three, 4'0x4'8 dog runs including central trench drain plumbing system with flushable floor sink and grinder at end. Room shall be mechanically separated from remainder of building.
- **Janitor room/ Tech Work area:** Small room with a wok counter and storage cabinets for data entry. This area will also have a small janitor sink and misc cleaning supplies.
- **Food prep and food storage:** Work room with counter and storage cabinets. Sink and dishwasher to be provided. Two rooms are required. One will serve the cat and dog isolation rooms. One will serve the kitten and puppy quarantine areas.

Stray Holding Area – This area serves the main purpose of the facility. It will be composed of primarily large open holding areas, along with several key support areas. Critical adjacencies include the delivery area, isolation and quarantine area, and the adoption center. Functions to be included within the stray holding area include:

- **Cat holding area:** Room will hold fifty-six, 2'x2' two-tier stainless steel cages (or eighty-four, 2'x2' three-tier stainless steel cages). Room is to be mechanically isolated from remainder of building. Cages should be arranged so that they are not directly facing each other.
- **Dog holding area:** Room to hold twenty-four, 3'8x8'0 dog runs and sixteen, 3'8x6'8 dog runs, including central trench drain plumbing system with flushable floor sink and grinder at end. Room will also contain thirty-two, 4'0x4'0 two-tier stacked cage system with integral plumbing system (flushable floor sink with grinder to be provided at cage plumbing termination). Room shall be mechanically separated from remainder of building.
- **Long Term/Bite holding Area:** Room to hold ten, 3'8x8'0 dog runs including central trench drain plumbing system with flushable floor sink and grinder at end. This area shall be adjacent and connected to the stray hold population, but shall be an isolated room. Room shall be mechanically separated from remainder of building, but can share mechanical system with stray hold population.
- **K-9 boarding area:** Room to hold four, 3'8x8'0 dog runs including central trench drain plumbing system with flushable floor sink and grinder at end. This area shall be adjacent and connected to the stray hold population, but shall be an isolated room. Room shall be mechanically separated from remainder of building. Room shall have direct access from delivery garage and have access to exterior runs or outside play.
- **Outdoor Runs:** Exterior dog runs that are covered by a roof for weather protection. These areas will back up to the long term hold runs to all allow for these animals to access the outside.





- **Outdoor Play:** This is an exterior area that is paved, fenced, and covered by a roof and will provide the impounded animals a location for outside exercise.
- **General storage area:** A small general storage area shall be provided in the animal holding area for toys, blankets, and other miscellaneous items.
- **Tech Work area:** Work space adjacent to both dog and cat holding areas for staff work and data entry
- **Janitor room:** Adjacent to both cat and dog holding area
- **Mechanical:** this room serves as the main utility room for the kennel area. Included in this room will be the pumps for the central wash down system, and any other equipment required.
- **Food prep and food storage:** Work room with counter and storage cabinets. Sink and dishwasher to be provided. Room to be adjacent to both cat and dog holding areas.

Miscellaneous – These are functions that are critical to the function of the facility, but have no specific association to the other defined areas or distinct adjacencies. Functions include:

- **Laundry Room:** Utility room with commercial washer and dryer, upper and lower casework for storage, and large countertops.
- **General Storage Room:** General purpose storage for the facility.
- **Mechanical and Utility rooms:** General purpose room to house the various mechanical and plumbing requirements of the new facility.
- **Euthanasia room:** Room with counter, lower and upper lockable cabinets, and an exam table. Direct access to exterior cremation area. Access to storage room with room for future deep freezer.
- **Break room:** Direct access to showers and changing areas. Area to be provided for volunteer work area. Exterior access to be provided. This room will act as a training room for the facility.
- **Toilets:** Unisex toilet room with shower.
- **Changing and locker area:** Adjacent to toilet room and break area. Area to contain metal lockers for staff storage.
- **Workshop:** General purpose room with tool storage and work bench.

Adoption Building Expansions – Several expansions are proposed to increase capacity in the cat and dog holding areas, as well as the front reception and waiting areas.

- **Expanded Lobby:** Room to be enlarged to accommodate a gathering of people. An interactive information center is proposed in this area.
- **Office:** One office will be relocated to allow for a larger lobby area.
- **Cat Adoption Cages:** The existing cat room will be expanded to allow for approximately 20 additional cages.
- **Dog Adoption Area:** The dog adoption room will be expanded to allow for approximately 14 more runs and additional circulation space.
- **Outdoor Play Area:** This is an exterior area that is paved, fenced, and covered by a roof and will provide the adoptable animals a location for outside exercise.



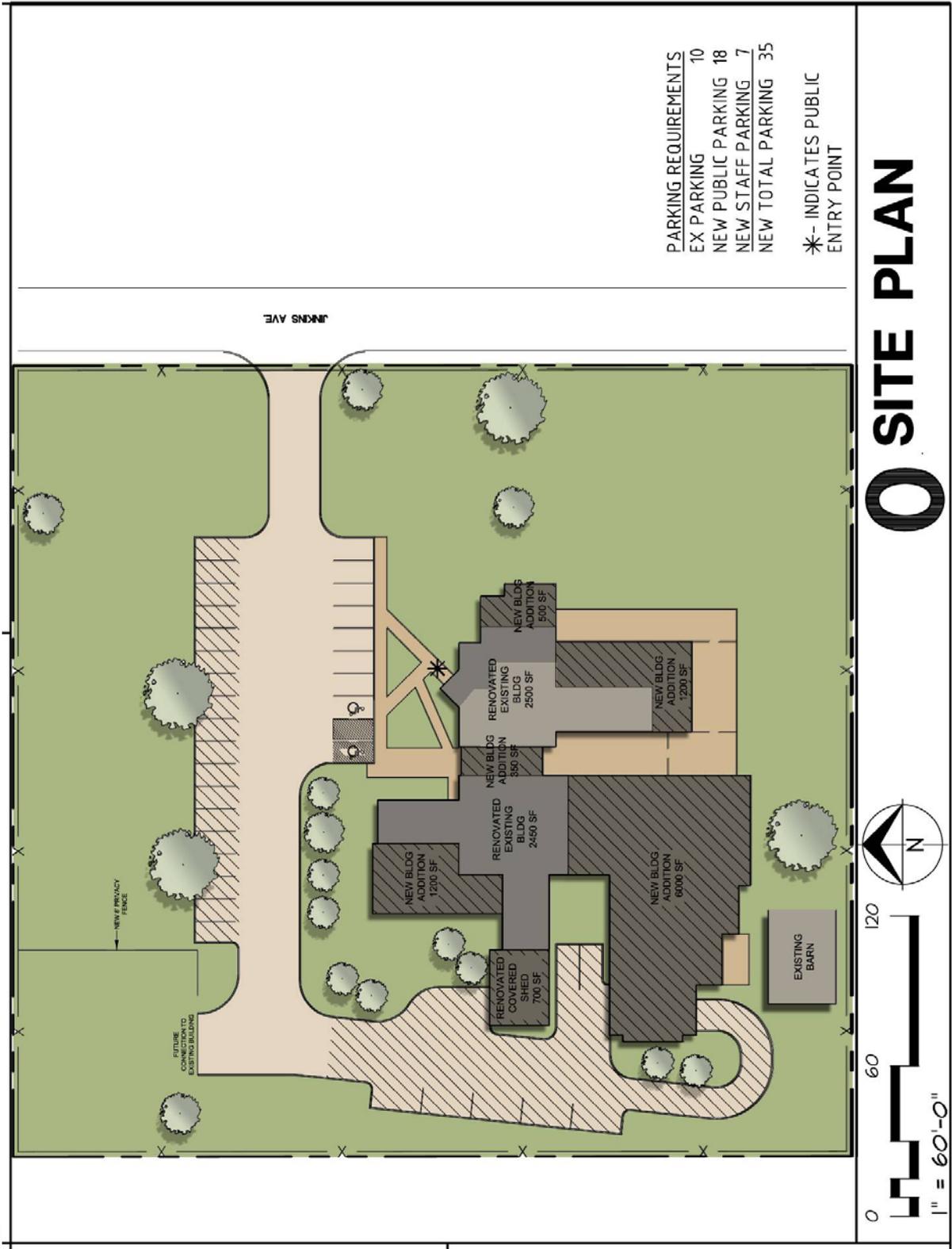


- **Meet and Greet Rooms:** Small room in the adoptable dog area that allows a patron to socialize with a dog. Adoption counseling can also occur in this room.
- **Food prep and food storage:** Work room with counter and storage cabinets. Sink and dishwasher to be provided.

Training Center – The training center will provide a place for public and animal training, as well as offer a place for larger functions or meetings.

- **Training Room:** Large, flexible room to allow for gathering of both humans and animals. Separate access will be provided to allow for meeting to occur when the shelter is closed.
- **Toilets:** One toilet room will be provided for each sex directly off of the training room.
- **Storage:** A large storage room will be provided for the storage of furniture and other equipment needed for the training room.

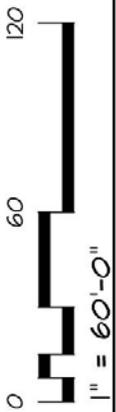
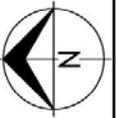


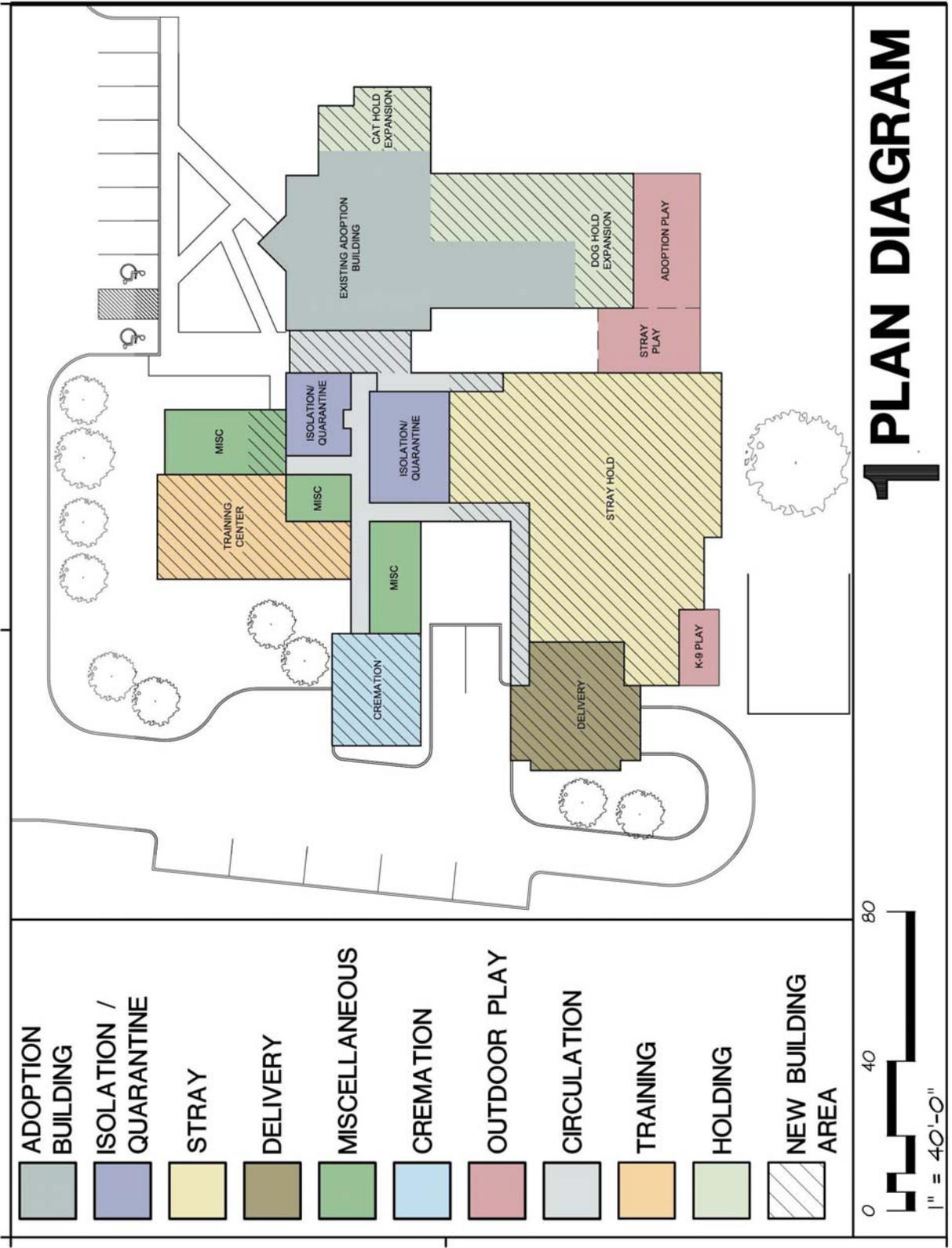


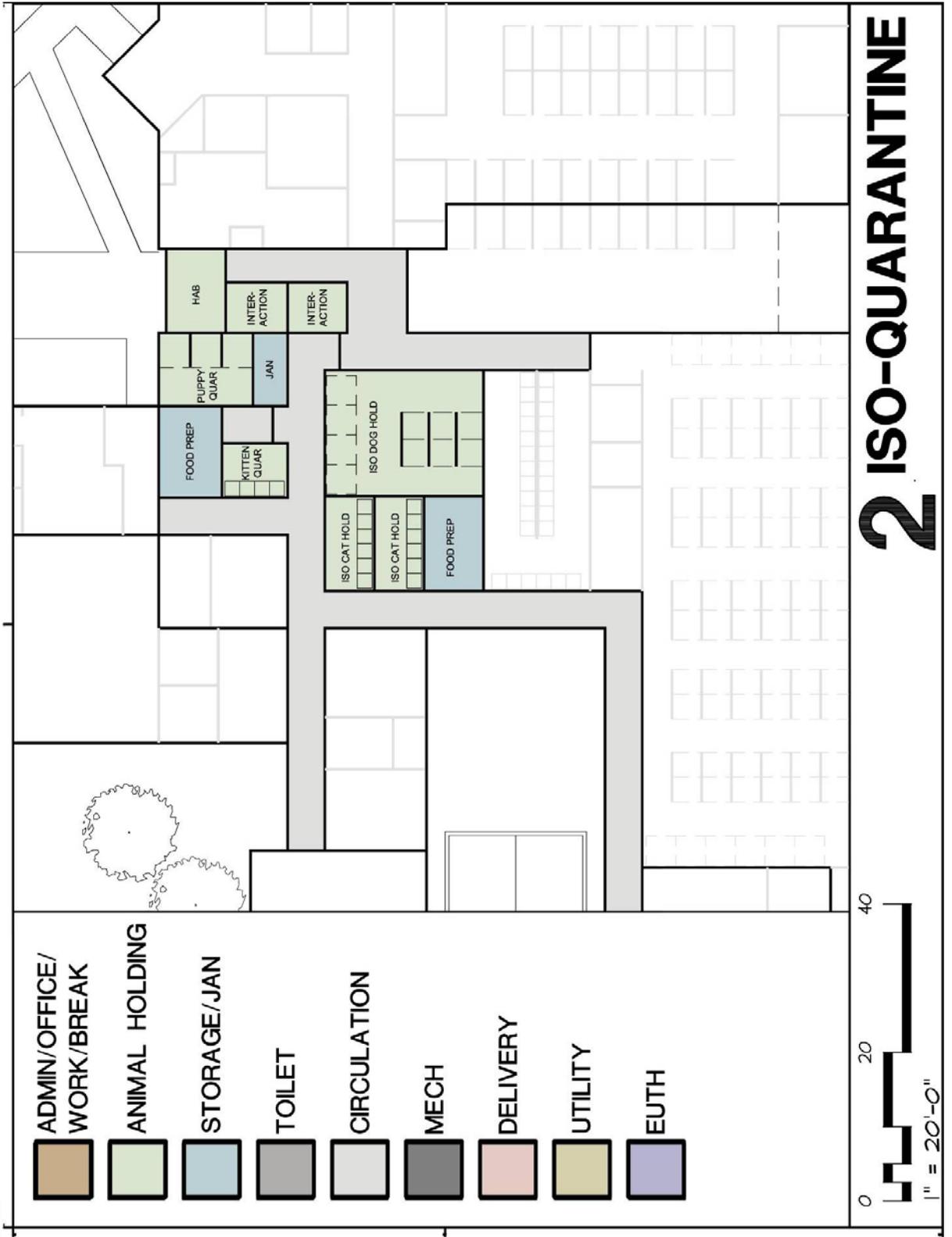
PARKING REQUIREMENTS	
EX PARKING	10
NEW PUBLIC PARKING	18
NEW STAFF PARKING	7
NEW TOTAL PARKING	35

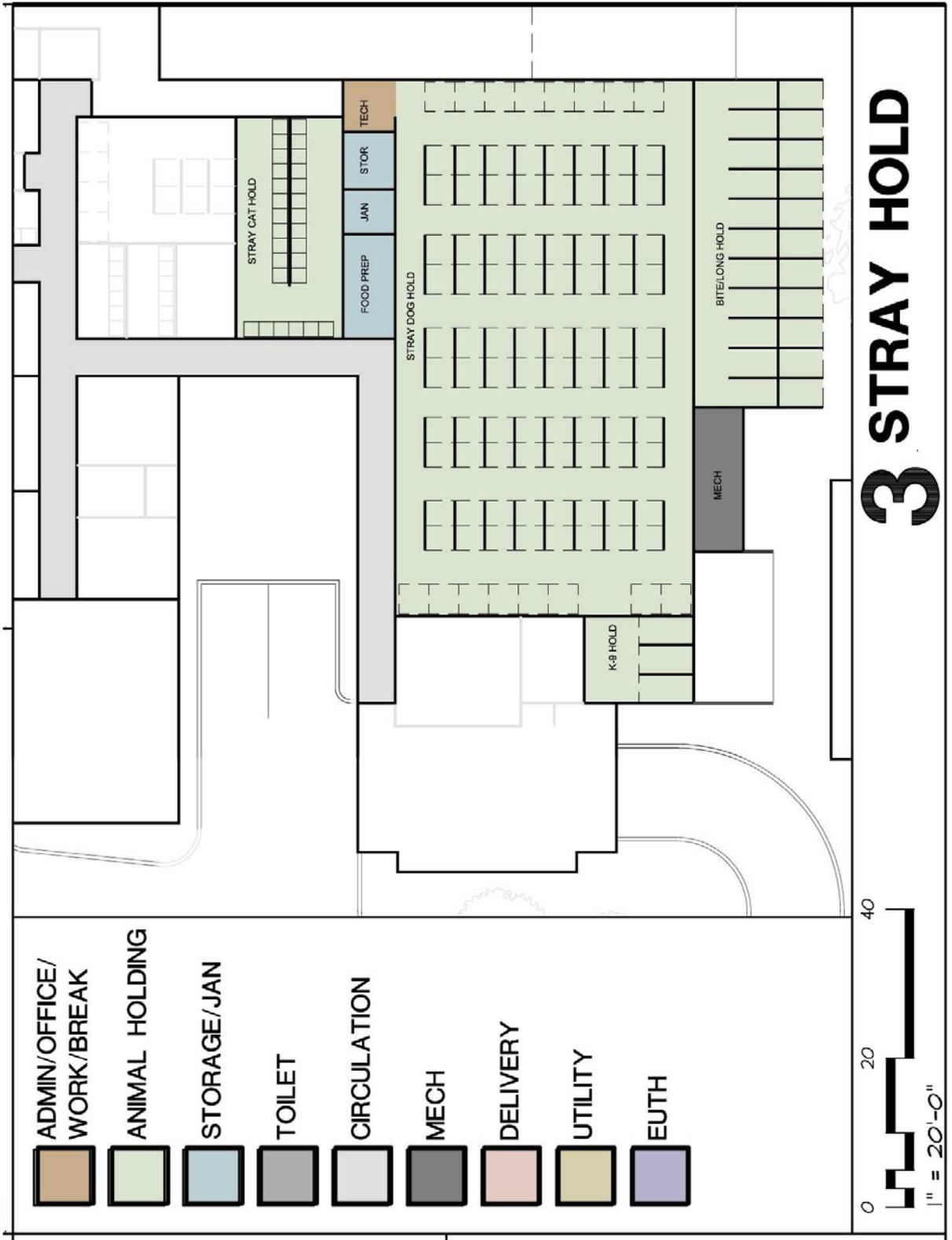
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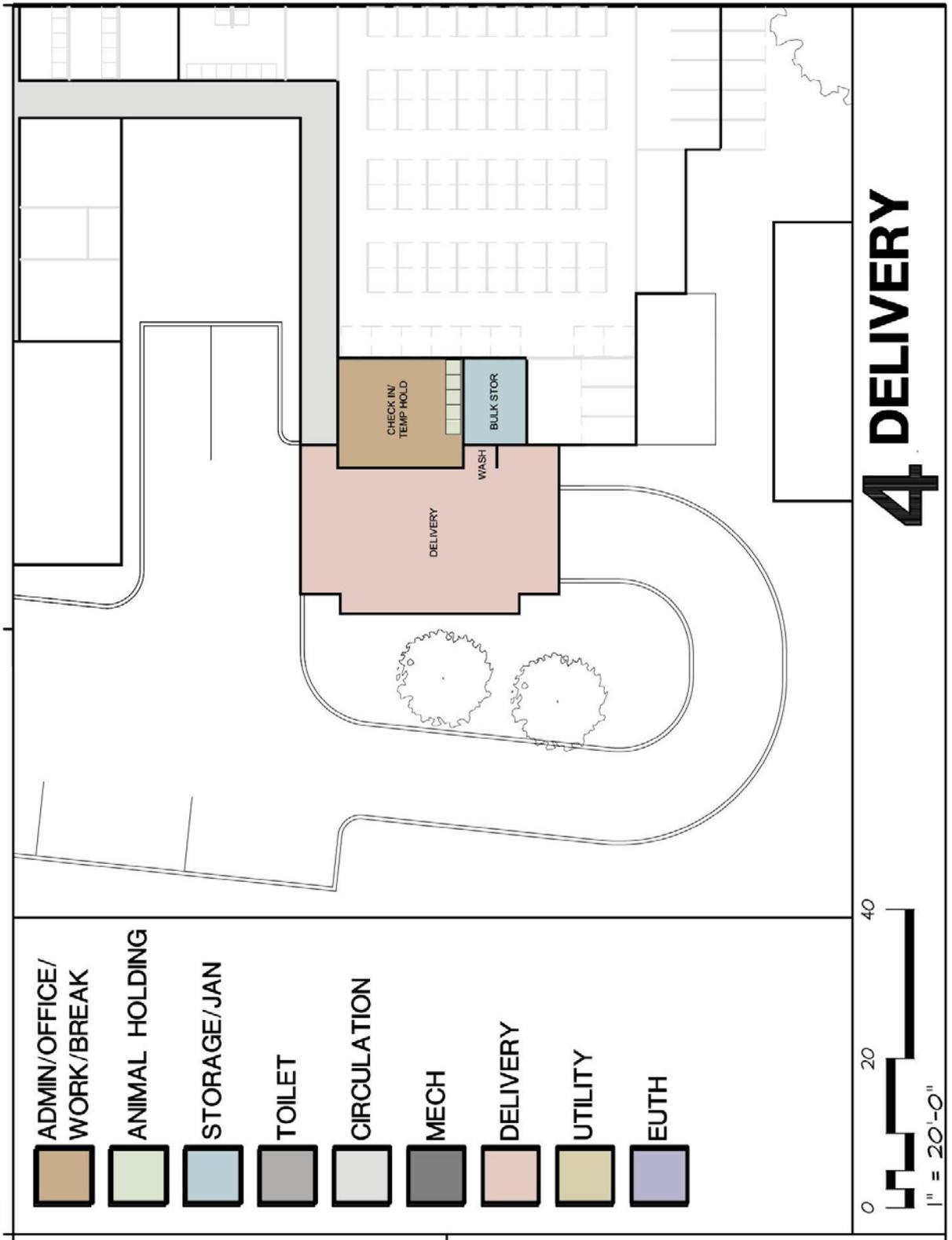
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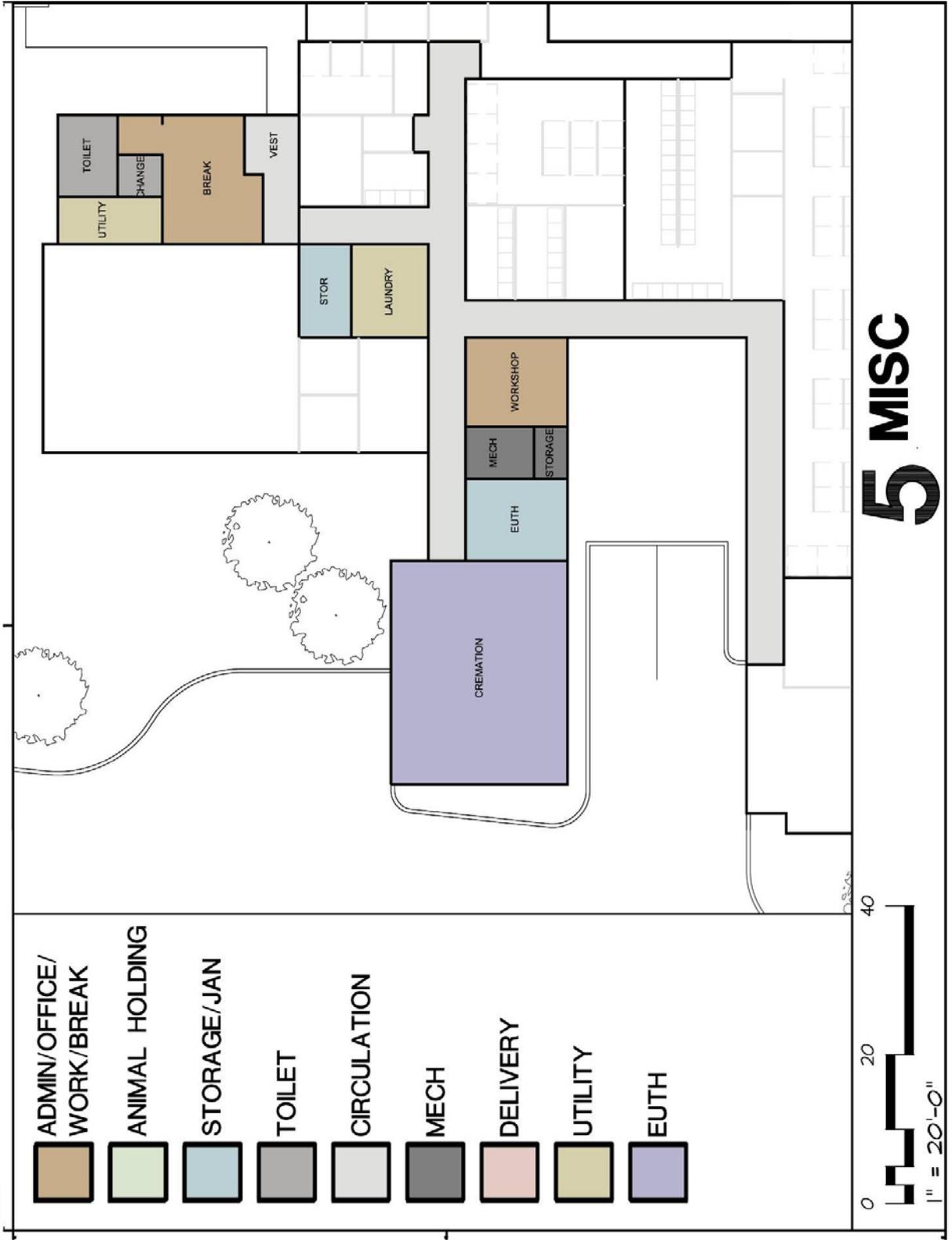


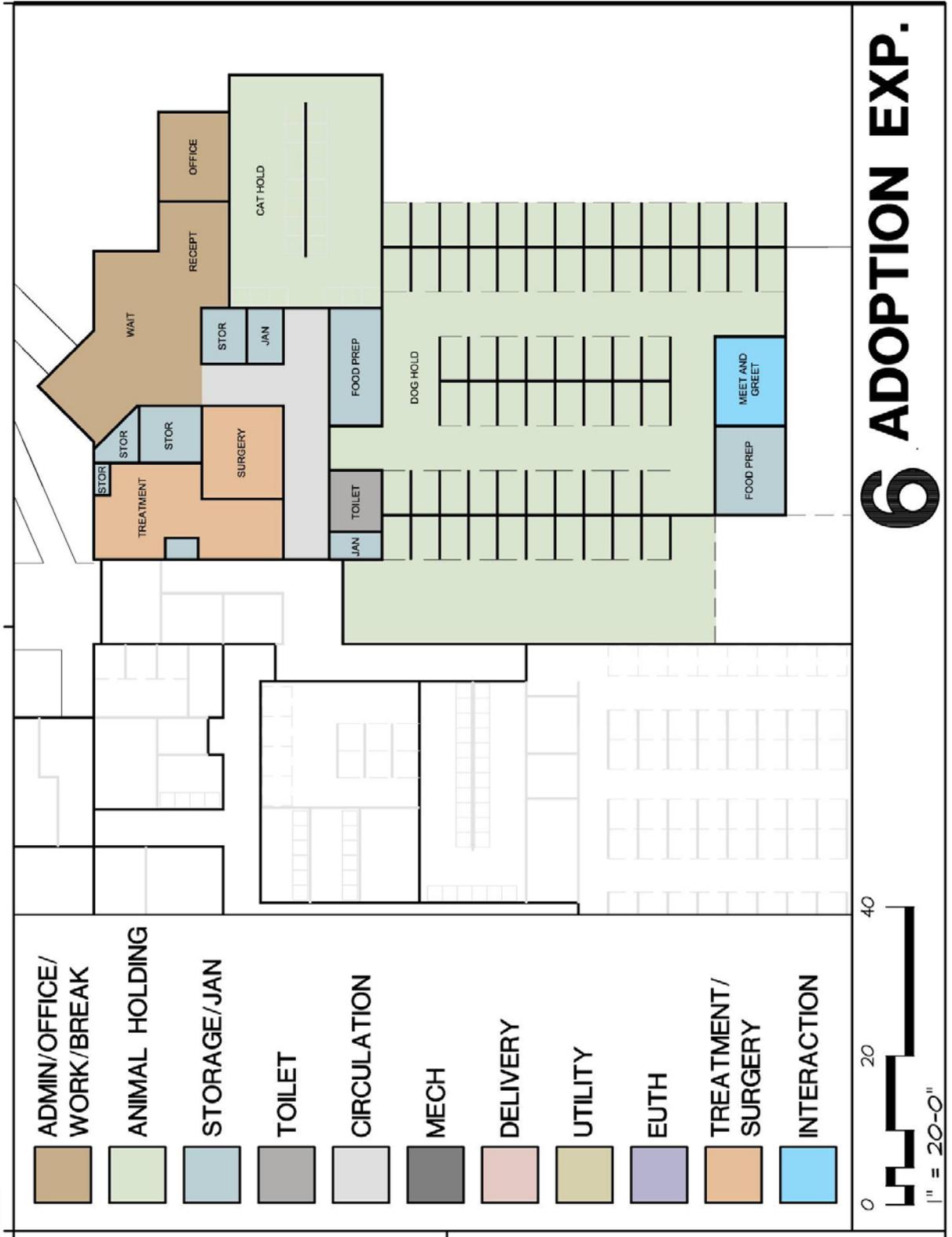


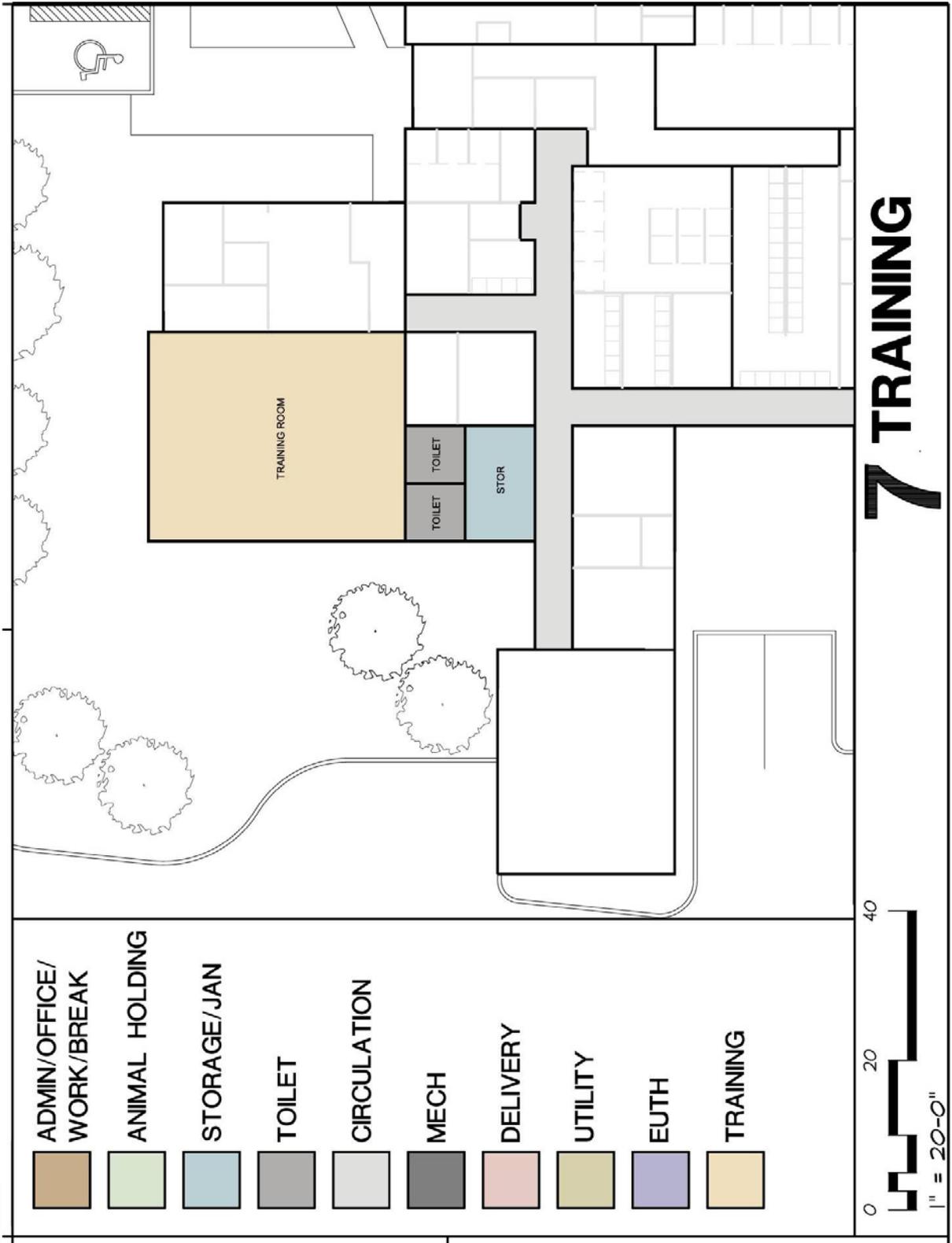
















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Cost Estimate

Approach & Understanding

The following cost estimate has been created using a combination of historical data from similar facilities, both local and from around the country, and general construction costs as they pertain to the Norman, Oklahoma area. The estimate has been calculated using current dollar (2008) amounts, but has been adjusted to account for inflation. Historically, the inflation rate averages around 4%, but recently, these averages have been slightly higher. While this estimate is preliminary, it has been based off of actual construction and design solutions.

In addition to construction cost, this estimate has included site development, site amenities, land costs, furniture, fixtures and equipment, design and contractor's fees, and a contingency factor. With these factors included, a more accurate "total" project cost can be provided.

Explanation of additional factors

Parking requirements – For the purpose of this study, a factor of three parking stalls per 1000 square foot of new occupied building area has been used to develop total parking requirements. Historically, a per parking stall cost can be assessed to each stall to develop the total cost for the parking lot (\$2750).

Site Utilities/Other – A factor of 4% has been provided for site development, such as utilities, fencing, landscaping, sidewalks, etc.

FFE/Animal Equipment – Between 8% and 25% of the construction budget has been allocated for the purchase of furniture, fixtures, equipment, and animal equipment. These items can range from desks and chairs in offices to the cages and kennels for the animals.

Design and Contractor Fee – 17% of the construction cost has been allocated to the necessary fees for the general contractor and design professional. For this size facility, this percentage would be considered typical.

Contingency (design and construction) -15% of the construction cost has been allocated to the contingency for the project. This allows for any unforeseen and/or any unexpected changes that may arise.





Norman, Oklahoma Animal Impound Facility						
Renovation of existing building and building addition						
Program space need	Units	SF per unit	Total SF	Cost/SF	Total Cost	
Animal Delivery						
Garage/Animal delivery/Truck Sanitize	1	380	380	\$ 140.00	\$ 53,200.00	
Animal Wash	1	40	40	\$ 120.00	\$ 4,800.00	
Bulk Storage	1	100	100	\$ 120.00	\$ 12,000.00	
Triage/Temp Animal Hold	1	200	200	\$ 120.00	\$ 24,000.00	
Ferrell Cat Hold	1	80	80	\$ 120.00	\$ 9,600.00	
Sub Total			800	\$ 129.50	\$ 103,600.00	
Circulation/Other	25%		200		\$ 25,900.00	
Contingency	10%		80		\$ 10,360.00	
Animal Delivery			1080		\$ 139,860.00	
Site Development						
Site Utilities/Other	2/1000 sf		2	\$ 2,750.00	\$ 5,500.00	
Site Total	4%		2		\$ 5,814.40	
					\$ 11,314.40	
FFE						
Design and Construction Fees	8%				\$ 12,093.95	
Design and Construction Contingency	17%				\$ 25,699.65	
Design and Construction Contingency	15%				\$ 22,676.16	
Phase Total				\$ 195.97	\$ 211,644.16	





Norman, Oklahoma Animal Impound Facility						
Renovation of existing building and building addition						
Program space need	Units	SF per unit	Total SF	Cost/SF	Total Cost	
Isolation/Quarantine						
Habitat Rooms	3	100	300	\$ 120.00	\$ 36,000.00	
Cat Isolation	24	8	192	\$ 100.00	\$ 19,200.00	
Dog Isolation	11	25	275	\$ 100.00	\$ 27,500.00	
Janitor/Tech Workstation	1	60	60	\$ 60.00	\$ 3,600.00	
Food Prep and Storage	2	100	200	\$ 80.00	\$ 16,000.00	
Puppy Hold	6	25	150	\$ 80.00	\$ 12,000.00	
Kitten Hold	16	6	96	\$ 80.00	\$ 7,680.00	
Sub Total			1273	\$ 95.82	\$ 121,980.00	
Circulation/Other			382		\$ 36,594.00	
Contingency			127		\$ 12,198.00	
Isolation/Quarantine Total			1782		\$ 170,772.00	
Site Development			0	\$ 2,750.00	\$ -	
Site Utilities/Other					\$ 6,830.88	
Site Total			0		\$ 6,830.88	
FFE					\$ 44,400.72	
Design and Construction Fees		25%			\$ 30,192.49	
Design and Construction Contingency		17%			\$ 26,640.43	
Phase Total				\$ 156.46	\$ 278,836.52	





Norman, Oklahoma Animal Impound Facility						
Renovation of existing building and building addition						
Program space need	Units	SF per unit	Total SF	Cost/SF	Total Cost	
Stray Hold						
Cat Stray	84	6	504	\$ 120.00	\$ 60,480.00	
Dog Stray - Ruins	40	28	1120	\$ 160.00	\$ 179,200.00	
Dog Stray - Cages	32	20	640	\$ 160.00	\$ 102,400.00	
Long Term Hold/Bite Hold	10	25	250	\$ 160.00	\$ 40,000.00	
K-9 Hold w/Outdoor Play	3	100	300	\$ 160.00	\$ 48,000.00	
Outdoor Ruins	11	24	264	\$ 80.00	\$ 21,120.00	
Outdoor Play	1	320	320	\$ 80.00	\$ 25,600.00	
General Storage	1	80	80	\$ 120.00	\$ 9,600.00	
Tech Work	1	60	60	\$ 120.00	\$ 7,200.00	
Mech	1	160	160	\$ 120.00	\$ 19,200.00	
Janitor	1	60	60	\$ 120.00	\$ 7,200.00	
Food Prep and Storage	1	140	140	\$ 120.00	\$ 16,800.00	
Sub Total			3898	\$ 137.71	\$ 536,800.00	
Circulation/Other	32%		1247		\$ 171,776.00	
Contingency	10%		390		\$ 53,680.00	
Stray Hold Total			5535		\$ 762,256.00	
Site Development	3/1000 sf		17	\$ 2,750.00	\$ 45,710.78	
Site Utilities/Other	4%		17		\$ 32,318.67	
Site Total			17		\$ 78,029.45	
FFE						
Design and Construction Fees	25%				\$ 190,564.00	
Design and Construction Contingency	17%				\$ 129,583.52	
Design and Construction Contingency	15%				\$ 114,338.40	
Phase Total				\$ 230.30	\$ 1,274,771.37	





Norman, Oklahoma Animal Impound Facility						
Renovation of existing building and building addition						
Program space need	Units	SF per unit	Total SF	Cost/SF	Total Cost	
Misc						
Laundry	1	120	120	\$ 60.00	\$ 7,200.00	
Storage	1	80	80	\$ 40.00	\$ 3,200.00	
Utility Room	1	120	120	\$ 40.00	\$ 4,800.00	
Mechanical/Utility	1	120	120	\$ 60.00	\$ 7,200.00	
Euthanasia	1	120	120	\$ 60.00	\$ 7,200.00	
Cremation Yard	1	750	750	\$ 40.00	\$ 30,000.00	
Break	1	120	120	\$ 80.00	\$ 9,600.00	
Toilets with Shower	1	80	80	\$ 60.00	\$ 4,800.00	
Changing and locker area	1	80	80	\$ 40.00	\$ 3,200.00	
Workshop	1	140	140	\$ 40.00	\$ 5,600.00	
Sub Total			1730	\$ 47.86	\$ 82,800.00	
Circulation/Other	25%		433		\$ 20,700.00	
Contingency	10%		173		\$ 8,280.00	
Misc Total			2336		\$ 111,780.00	
Site Development	0/1000 sf		0	\$ 2,750.00	\$ 4,471.20	
Site Utilities/Other	4%		0		\$ 4,471.20	
Site Total						
FFE	8%				\$ 8,942.40	
Design and Construction Fees	17%				\$ 19,002.60	
Design and Construction Contingency	15%				\$ 16,767.00	
Phase Total				\$ 68.92	\$ 160,963.20	





Norman, Oklahoma Animal Impound Facility						
Renovation of existing building and building addition						
Program space need	Units	SF per unit	Total SF	Cost/SF	Total Cost	
Adoption Additions/Renovations						
Expanded Lobby	1	200	200	\$ 40.00	\$ 8,000.00	
Office	1	150	150	\$ 140.00	\$ 21,000.00	
Cat Adoption Cages	20	10	200	\$ 160.00	\$ 32,000.00	
Dog Adoption Runs	14	50	700	\$ 160.00	\$ 112,000.00	
Outdoor Play Area	1	500	500	\$ 80.00	\$ 40,000.00	
Meet and Greet Room	1	100	100	\$ 140.00	\$ 14,000.00	
Food Storage and Preparation	1	100	100	\$ 140.00	\$ 14,000.00	
Sub Total			1950	\$ 123.59	\$ 241,000.00	
Circulation/Other	25%		488		\$ 60,250.00	
Contingency	10%		195		\$ 24,100.00	
Alternates Total			2633		\$ 325,350.00	
Site Development	2/1000 sf		0	\$ 2,750.00	\$ 1,100.00	
Site Utilities/Other	4%				\$ 13,058.00	
Site Total			0		\$ 14,158.00	
FFE	15%				\$ 48,802.50	
Design and Construction Fees	17%				\$ 55,309.50	
Design and Construction Contingency	15%				\$ 48,802.50	
Phase Total				\$ 187.06	\$ 492,422.50	





Norman, Oklahoma Animal Impound Facility						
Renovation of existing building and building addition						
Program space need	Units	SF per unit	Total SF	Cost/SF	Total Cost	
Training Center						
Training Room	45	15	675	\$ 140.00	\$ 94,500.00	
Toilets	2	60	120	\$ 120.00	\$ 14,400.00	
Storage	1	120	120	\$ 120.00	\$ 14,400.00	
Sub Total			915	\$ 134.75	\$ 123,300.00	
Circulation/Other	25%		229		\$ 30,825.00	
Contingency	10%		92		\$ 12,330.00	
Alternates Total			1235		\$ 166,455.00	
Site Development	3/1000 sf		4	\$ 2,750.00	\$ 10,201.01	
Site Utilities/Other	4%				\$ 7,066.24	
Site Total			4		\$ 17,267.25	
FFE						
Design and Construction Fees	8%				\$ 13,316.40	
Design and Construction Contingency	17%				\$ 28,297.35	
	15%				\$ 24,968.25	
Phase Total				\$ 202.63	\$ 250,304.25	





Norman, Oklahoma Animal Impound Facility						
Renovation of existing building and building addition						
Program space need	Units	SF per unit	Total SF	Cost/SF	Total Cost	
Animal Delivery						
Isolation/Quarantine			1,080	\$ 129.50	\$ 139,860.00	
Stray Hold			1,782	\$ 95.82	\$ 170,772.00	
Misc			5,535	\$ 137.71	\$ 762,256.00	
Adoption Additions and Renovations			2,336	\$ 47.86	\$ 111,780.00	
Training Center			2,633	\$ 123.59	\$ 325,350.00	
			1,235	\$ 134.75	\$ 166,455.00	
Building Construction Total				\$ 114.82	\$ 1,676,473.00	
Site Development Total				\$ 9.05	\$ 132,071.19	
FFE Total				\$ 21.79	\$ 318,119.97	
Design and Contractor Fee Total				\$ 19.73	\$ 288,085.11	
Design and Construction Contingency				\$ 12.36	\$ 180,421.99	
Project Cost Total			14,601	\$ 177.74	\$ 2,595,171.26	
		2008				
		2009	14,601	\$ 184.85	\$ 2,698,978.11	
		2010	14,601	\$ 192.25	\$ 2,806,937.23	



City of Norman Animal Welfare

Animal Shelter Feasibility Study



tevis architects, p.a.

8725 Rosehill Road Suite 400
Lenexa, Kansas 66215
(913) 599-3003





Appendix

Additional Resources

The following pages contain additional information that pertains to animal population projections, human population projections, and current and past statistics for the impound facility. Also indicated are a list of referenced resources that were used in the development of this study. Several of the critical resources have been included in this appendix.

Guidelines

The following lists the resources that were considered for the assessment and recommendations for the City of Norman Animal Welfare Facility:

- Humane Society of the United States (HSUS): Shelter Design Part One
- Humane Society of the United States (HSUS): Guidelines for the Operations of an Animal Shelter
- Humane Society of the United States (HSUS): Guidelines for Animal Shelter Policies
- Royal Society for the Prevention of Cruelty to Animals (RSPCA): Guidelines for the Design and Management of Animal Shelters
- Animal Sheltering Magazine: The right Stuff. Eight Essential Elements
- Animal Sheltering Magazine: A Not-So-Quiet Riot: Shelter Noise Levels and Canine Stress
- Animal Sheltering Magazine: Getting New Digs: Five Shelter's Tales of the Highs and Lows of Shelter Design
- Animal Sheltering Magazine: Shelter Speak: Coping with Outdated Facilities

Toured Facilities

The following facilities were toured either with the design committee or independently throughout the study process. Each were assessed and evaluated against the needs and requirements of the Norman Oklahoma Animal Welfare Department to better establish flow, holding conditions, and overall requirements and desires. These facilities were:

- Animal Haven: *Merriam, Kansas*
- No More Homeless Pets KC: *Merriam, Kansas*
- PAWS Chicago: *Chicago, Illinois*
- The Anti-Cruelty Society: *Chicago, Illinois*
- Wisconsin Humane Society: *Milwaukee, Wisconsin*
- Wayside Waifs Humane Society: *Kansas City, Missouri*
- Oklahoma City Animal Welfare Facility: *Oklahoma City, Oklahoma*
- Edmond Animal Welfare Facility: *Edmond, Oklahoma*
- Second Chance Animal Sanctuary: *Norman, Oklahoma*





Animal Shelter Yearly Statistics

(as indicated on the Animal Shelter Division Preliminary Report Forms)

FY2004

DOGS:

Number Impounded	1931
Number redeemed	411
Number Sold to Public	630
Number Dead upon Pickup	141
Number Euthanized	711
Number of Misc	23

CATS:

Number Impounded	1184
Number redeemed	21
Number Sold to Public	356
Number Dead upon Pickup	268
Number Euthanized	478
Number of Misc	31

FY2005

DOGS:

Number Impounded	1910
Number redeemed	446
Number Sold to Public	576
Number Dead upon Pickup	136
Number Euthanized	734
Number of Misc	28

CATS:

Number Impounded	1122
Number redeemed	23
Number Sold to Public	268
Number Dead upon Pickup	228
Number Euthanized	534
Number of Misc	55

FY2006

DOGS:

Number Impounded	2114
Number redeemed	450
Number Sold to Public	585
Number Dead upon Pickup	144
Number Euthanized	848
Number of Misc	139

CATS:

Number Impounded	1039
Number redeemed	15
Number Sold to Public	277
Number Dead upon Pickup	170
Number Euthanized	456
Number of Misc	127

FY2007

DOGS:

Number Impounded	2156
Number redeemed	453
Number Sold to Public	611
Number Dead upon Pickup	128
Number Euthanized	892
Number of Misc	63

CATS:

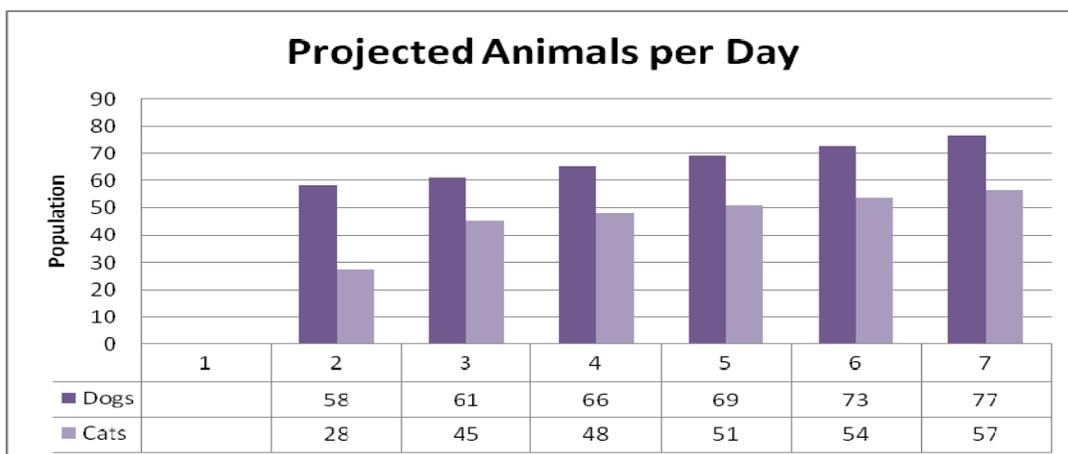
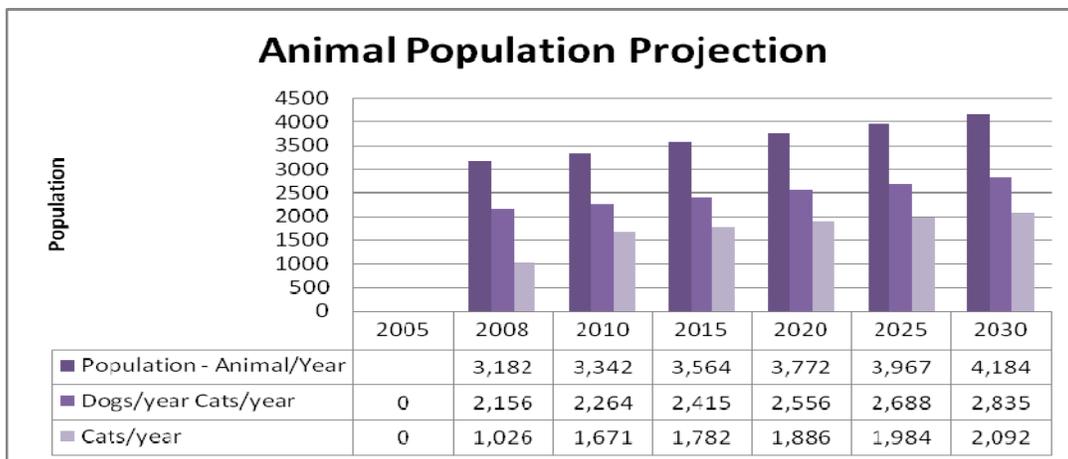
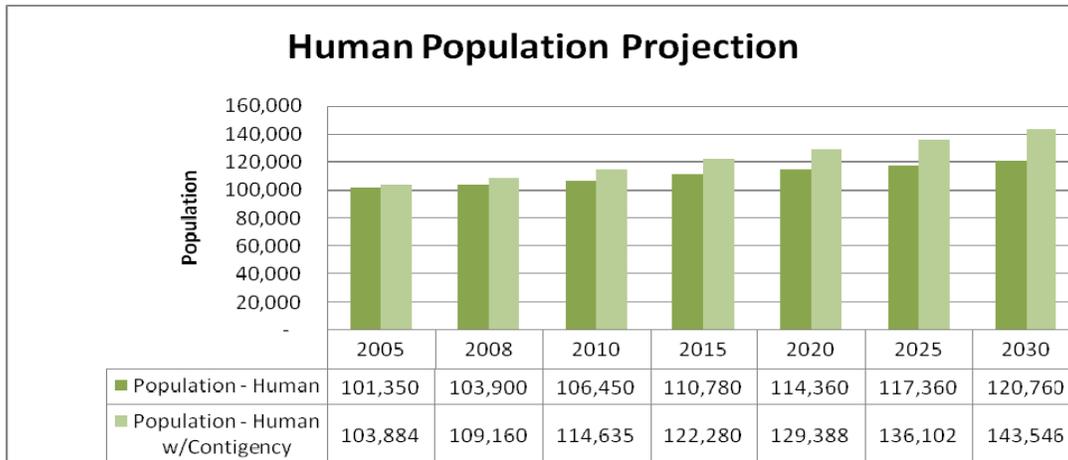
Number Impounded	1026
Number redeemed	24
Number Sold to Public	234
Number Dead upon Pickup	182
Number Euthanized	511
Number of Misc	82





Animal Population Projections

(Population projections are based on information from the Oklahoma State Data Center. A contingency has been added to adjust for actual growth from 2005 to 2008, provided a more accurate projection.)





Public Forum Comments

The following list represents concerns, interests, and ideas discussed during the public meeting held on March 24, 2008.

Norman Animal Welfare Oversight Committee
Public Meeting
Regarding
New Animal Shelter
Monday, March 24, 2008
7:00 p.m.

Tevis explained to group that they had provided estimated numbers of animals up to 2025 that could be impounded. Dr. Otto asked questions regarding changes to the adoption center. Tevis explained they had not looked into making changes at the adoption center however, they had went into the building and made a few suggestions.

Citizens discussed the drainage system and cleaning system. They were interested in how this would work especially in the cat area. Citizens were concerned about cross contamination in the cat area.

Citizens inquired about the PowerPoint presentation being put on a website so if they had further questions they could go in and look at it. Tevis explained that it would be available at a later date. Citizens inquired about emailing further questions and concerns and where they would do that. Major Maisano gave his email address to the citizens.

Tevis explained to the citizens that as soon as everything was done and final they would provide a book that everyone could look at. They will also have a handout and do at this time but it is not of a final product. Tevis would like to come back and present their presentation to other groups.

Tevis explained to the citizens that they were going to do a study session with the City Council on April 1, 2008. Citizens inquired about the spaying & neutering of animals and what this change would do to that program. Tevis explained this would have nothing to do with that program or the adoption center except for possibly some rooms added onto the adoption center and play areas. Discussion over the adoption overflow going into the extra rooms added onto the adoption center until there was room in the actual adoption center.

Citizens inquired about the euthanasia and cremation area and if it would remain in the same location. Tevis replied that it would basically be located in the same area just with a bigger area.

Citizens inquired about the feral cats being held in the holding garage and being scared by the barking dogs. The citizens would like the cats to be put somewhere else for their last hours. Tevis explained these drawings are not final that the areas can be moved if needed. Major Maisano stated that with Ferrell cats we don't give them medical treatment so they could be contagious and by putting them inside the shelter it could contaminate other animals.

Dr. Otto inquired about the usage of the old facility. Could the old building be used or would it need to be completely destroyed. Tevis explained that the inside of the building would be





guttered but the structure itself was pretty sound. They did explain that there would need to be new air systems and new roof put on the building.

Citizens would like to see a TV in the lobby of the center to educate people on the center and the guidelines for animals going through the process of adoption, impoundment and so forth.

Dr. Otto inquired about there being a training room put in the building to have classes to educate people. He would like to see classes set up for younger people so that they could learn about spay and neuter. Tevis explained that the break room was currently used for that and with the expansion of this room they could probably use this room or could move some other areas around to make a small training area.

The use of cameras was discussed by a citizen. Tevis explained they don't do security but they could recommend where to place the cameras. Citizen thought it would be a good idea to place camera out to show animals out in play area to help with the adoption of these animals.

Citizens talked about animals being adopted off the internet. They also talked about having stray or impounded animal's pictures taken and placed on the internet.

Tevis and citizens spoke about there being no real off-leash area for the dogs to run and play at this time. There will be a new play area added onto the adoption center if it is approved.

There were comments made about the cross contamination between the buildings and that was the reason for the breezeway being put in between them. Tevis explained that there will be two separate environments between the two buildings. Any animal suspect of being sick could be taken directly to the isolation area from the garage area.

Citizens spoke of the website and the handouts being available for everyone so that it could actually help the people in the community understand the whole situation.

Incorporated Public Comments

The following comments have been integrated into the recommendations of this study.

- This study will incorporate the expansion of the adoption facility to allow for additional cat and dog capacity.
- This study will incorporate the addition of a new training room and multipurpose space for city and community use.
- Covered outdoor play yards have been included for stray, adoption, and long term holding areas.





POLICIES and GUIDELINES

 e-mail this page

HSUS Guidelines for the Operation of an Animal Shelter

I. PLANNING YOUR FACILITY

A. Housing

1. Stress reduction and disease control are your goals when determining how to separate animals.
2. Separate animals as follows:
 - a. dogs from cats
 - b. sick or injured animals from healthy animals
 - c. puppies and kittens from adult animals (unless the puppies and kittens are nursing)
 - d. males from females (especially those in season)
 - e. aggressive animals from all others
 - f. nursing mothers and their young from all others
3. Animals who are stressed or recuperating from injuries or illness must have a quiet place to rest during their recovery period. If kept awake, stressed, or forced to be on guard because of close proximity to barking dogs, their recovery period may be lengthened or otherwise compromised.

B. Floors

1. Floors should slope toward drains to prevent the accumulation of water in the runs.
2. Floors should be made of concrete that has been sealed (making it nonporous) or some other nonporous material that can be disinfected.

C. Walls

1. Walls between kennels should be at least 4 feet high and should prevent water and waste material from flowing from kennel to kennel.
2. For walls between kennels, use one of the following materials:
 - a. cinder block, sealed and painted with epoxy to make it nonporous
 - b. metal embedded in a concrete base
 - c. a fiberglass kennel unit, including floor, sides, and gate
 - d. tile or glass block
3. Chain-link fencing or wire mesh should extend at least 2 feet above kennel walls. Runs should be covered with fence fabric or wire mesh to contain dogs who might jump or climb fences or who are in season, are aggressive, or are quarantined.

D. Drainage

1. The shelter must have drainage and plumbing adequate to handle the heavy load of daily cleaning.
2. Drainage for each run should prevent cross-contamination of other runs by urine or feces.

E. Heating and Cooling

1. Heating elements embedded in kennel floors are ideal. The temperature at floor level for infant, sick, or injured animals should be at least 75°F; for healthy adult animals, 65-70°F.
2. Heating, cooling, and humidity-control systems should be used for the comfort of the animals, the staff, and the visiting public.





3. A means of circulating the air must be in operation in all kennel areas. Ideally, the air in the building should be exchanged with outside air eight to twelve times per hour.

F. Security

1. Install a security system to protect the building. Some examples are perimeter fencing, an alarm system, or at a minimum, deadbolt locks for all outside runs in combination with outside lighting.
2. Secure all controlled drugs in a manner that, at a minimum, meets both federal and state laws and regulations.
3. Install a fire-alarm system and institute an emergency plan to prepare your staff for a potential evacuation of animals from the shelter.

G. Dogs

1. Dogs confined in either cages or kennels should have room to move about normally.
2. Stainless-steel or custom-made individual cages for indoor holding should follow these minimum size guidelines:
 - a. large dogs (more than 50 pounds): at least 4 feet by 6 feet, or 24 square feet
 - b. medium-sized dogs (36-50 pounds): at least 4 feet by 5 feet, or 20 square feet
 - c. small dogs (10-35 pounds): at least 3 feet by 4 feet, or 12 square feet
3. Dogs confined in cages should be exercised in runs at least 4 feet by 10 feet twice daily or walked on a leash for at least 20 minutes twice daily.
4. Kennels with runs, whether fully enclosed or indoor/outdoor, should follow these minimum size guidelines:
 - a. kennels—4 feet by 6 feet
 - b. runs—4 feet by 8 feet
5. Ideally, each dog should have his or her own kennel. Animals who share kennels must be evaluated for compatibility and monitored closely. Each should have ample room to stand, lie down, turn around, and sit normally. This requires a minimum area of 4 feet by 4 feet for each dog. A shared 5-foot by 10-foot kennel should hold no more than two large, two medium, or three small dogs.
6. Enclosures should be equipped as follows:
 - a. Potable water must be available at all times. Water containers should be cleaned and disinfected regularly (and always before a new animal is put into the cage or run). Water containers should be mounted so that animals cannot tip them over or urinate in them.
 - b. If self-feeders are used, they should be cleaned daily and disinfected regularly (particularly before a new animal is put into the cage or run). In addition, they must be mounted so that dogs cannot urinate or defecate in them. Food should be clean and dry at all times.
 - c. If kennel floors are not heated, provide resting boards or beds. Even with heated floors, beds should be provided for nursing mothers, injured animals, sick animals, and animals being held for an unusually long time (for example, in cruelty cases). Cardboard boxes and other enclosures or platforms that can be disposed of, changed, or easily disinfected may be used, and blankets or towels that can be disinfected may be used for bedding.

H. Cats





1. Individual cages should be made of stainless steel, fiberglass, or other impervious material and should follow these guidelines:
 - a. Provide an area of at least 9 square feet (usually 3 feet by 3 feet) for each cat.
 - b. Supply each cage with a cat litter pan.
 - c. Ensure that each cat has constant access to water and dry food.
 - d. House no more than one cat in a cage, except for nursing mothers, young litters of kittens, or pairs of adult cats who have been admitted to the shelter from the same household.
2. If colony cages are used to house cats, follow the guidelines listed below.
 - a. Cats whose vaccination history is unknown should be evaluated for health and behavior, vaccinated, and isolated for at least 24 hours for observation before being placed in cat-colony cage rooms.
 - b. Separate unsterilized males from females.
 - c. Separate nursing mothers from all others.
 - d. Separate young kittens from adult cats (except for their mothers).
 - e. House no more than fifteen adult cats or twenty kittens in a 10-by-15-foot room.
 - f. Include one 12-inch by 18-inch cat litter pan for every three cats or five kittens.
 - g. Have water and dry food available at all times (when giving fresh food, use one dish per cat).
 - h. Equip colony rooms with shelves or resting boxes; provide cages with open doors for animals who prefer to be isolated.





THE BUILDING – LAYOUT

When deciding the layout of your shelter, preventing the spread of disease must be your first priority. Incoming animals must be quarantined away from animals that are ready for rehoming. Isolation and quarantine areas must not be accessible to the general public.

STAFF AND PUBLIC SPACES

1. **RECEPTION AREA:** You must consider every procedure and activity regularly undertaken here, including the traffic flow of people using this area. The reception area should give a good first impression and will therefore need to communicate a sense of order, and be light and clean.
2. **ADMINISTRATIVE OFFICE:** This is the control centre for the shelter, and it should have direct access both to the reception area and the animal quarters. You will need to keep accurate records of all animals entering and leaving your shelter, so you must allow sufficient space for the storage of records, including future growth.
3. **MEDICAL/EUTHANASIA ROOM:** This should be adjacent to the isolation/quarantine facility to allow the easy movement of sick and recovering animals. There should be a separate entrance from outside and clear access for vehicles. There should be a separate ventilation system for this area, and there should be isolation units that prevent any physical contact between animals.
4. **CARCASS ROOM/COLD STORAGE:** This should be adjacent to the euthanasia room – a cold room, refrigerator or freezer may be required. Before deciding on the method that you will use to dispose of carcasses, you must check with the local authorities for any health and pollution regulations that may affect your choice. If you are going to have a crematorium on site, then a dedicated space must be set aside for this purpose. If disposal is to take place off the premises, then a larger cold storage room will be needed.
5. **ANIMAL FOOD PREPARATION:** This area will require a sink with hot and cold running water and a refrigerator. You should ensure that there is an area to disinfect feeding bowls, and that you have sufficient counter space on which to place the bowls. The food storage should be adjacent, and all food should be stored off the floor in vermin-proof containers.
6. **HYGIENE AREA:** Staff will require a wash area and toilets, together with a shower area if possible.

ANIMAL SPACE

1. **FLOORS:** To guard against infection, all floors should have a smooth impervious surface e.g. tiles. Concrete can be used if it is hardened and treated to be impervious. In outside areas, gravel flooring is preferable to grass or earth, but must be thoroughly washed frequently. Wood is not advised as it deteriorates and paving is also difficult to keep clean.
2. **WALLS:** These should be sealed e.g. with chlorinated rubber paint, so that they can be properly cleaned. There should be no gaps or cracks that can harbour disease.
3. **DRAINAGE:** Floors should slope towards a drain that is outside the animal living areas. A drain opening of not less than 20cm diameter is recommended and it should be covered by a strainer grid. The provision of mains sewers, a cesspit or septic tank is essential.

DOGS

The following are minimum standards based on RSPCA experience.

1. **INDIVIDUAL OR QUARANTINE KENNELS:** Each dog should have a minimum of 2m² covered and draft-free accommodation. It should have a raised bed surface. The minimum temperature is 10°C and the maximum is 26°C. Sleeping quarters must be ventilated and have both natural and supplementary light.

Each dog requires a minimum of 2.5–3.5m² of open exercise run. Fencing should be at least 2m high and be made of weld mesh. It should slope inwards at the top to stop dogs climbing. Animals must always have a view outside the kennel.

2. **GROUP HOUSING:** This is not suitable for ill, injured or nursing animals, or in shelters with a high turnover. Minimum space requirements for dogs in group housing are the same as in individual kennels per dog. Dogs should only be put into group housing after spending 10 days in quarantine. Care must be taken to match compatible animals. In group housing you must have a policy of sterilisation or strict separation of the sexes.

Attractive kennel buildings can improve rehoming rates – example shown is from a shelter in Poland



RSPCA INTERNATIONAL





CATS

The following are minimum standards based on RSPCA experience.

1. Quarantine or individual cages: Cubicles plus exercise area should be a minimum of 2.2m² with an open mesh front. Each cubicle should have a bed, a dirt/litter tray and space for food and water bowls. Good ventilation is essential and where cubicles face each other, they should be separated by at least 2m to prevent the spread of disease.
2. Group housing: Good ventilation is even more important in group housing. Cats need access to covered, draft-free accommodation with a bed space. Bedding is not required, nor is it recommended because of the spread of infection. The minimum temperature is 10°C and the maximum should not exceed 26°C. The outdoor space must be totally enclosed in weld mesh, but can have a solid roof. A sufficient number of dirt/litter trays to allow one per cat are required. The absolute maximum size of a group is 50, but much smaller groups are recommended. In group housing you must have a policy of sterilisation or strict separation of the sexes.

LARGE ANIMALS

You may occasionally be called upon to take large animals such as horses. However, unless you have staff who are trained to deal with large animals, horses should only be accepted in an emergency, and kept for as short a time as possible before being taken to an alternative site where more specialised care is available. You will therefore need to identify specialists nearby that would be able to help you by 'fostering' large animals.

When making arrangements make sure you:

- check the standard of care provided will be adequate
- agree the price you will be charged
- discuss whether you will be responsible for transporting the animal to the specialist, or if they can collect
- draw up a legal contract covering all the points discussed.

MISCELLANEOUS SMALL ANIMALS

Most shelters find that they receive a variety of small animals other than cats and dogs. A multi-purpose block can be built, but bear in mind that since it is not a specialist unit, the length of time animals stay should be as short as possible. You should try and avoid having to provide this additional accommodation by identifying people who are prepared to 'foster' these animals until new homes can be found for them. The same conditions for fostering should apply as for large animals.

The small animals block will need to be equipped with appropriate food and equipment, e.g. cages.





Proposed Animal Holding Equipment

The following represents examples of the equipment that was used in determining the sizes, use, and accessibility of the animal holding fixtures within the facility.

Dogs

Stray Dog Runs/Dog Isolation Runs – The stray and isolation dog runs will be made of either concrete block or glazed face masonry units on three sides. The public face will be in filled with a prefabricated gate. The gate frame will be made of stainless steel and will have a fence-like insert. Runs will be able to be divided into two sections by use of a guillotine door to allow for cleaning and additional capacity.





Stray Dog Cages/Dog Isolation Cages – Small stray dogs will be housed in double tier cages. Cages will be able to be divided into two sides for cleaning and additional capacity.



Puppy Isolation – The puppy runs will be made of either concrete block or glazed face masonry units on three sides. The public face will be in filled with a prefabricated gate. The gate frame will be made of stainless steel and will have a fence-like insert.





Cats

Cat Stray/Kitten Quarantine/Cat Isolation – The housing for these cats will be in double tier, stainless steel cages. Options are available for a third row if additional capacity is required, however this may not be conducive to the well being of the cats. A resting shelf shall be provided in each.



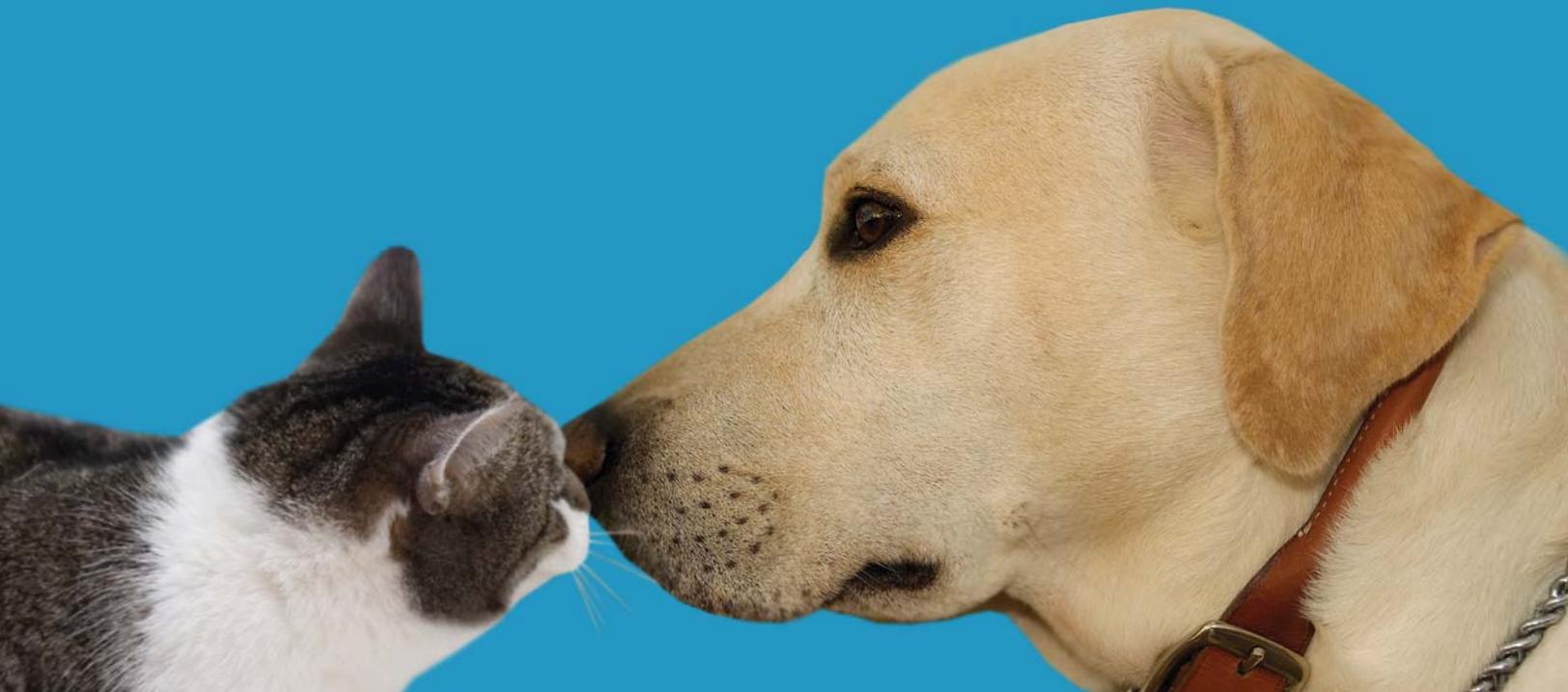
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