City of Santa Fe, New Mexico

2025-10037
1111 Ocate Road
Attachment E

Applicant Submittals

Application Letter including:

- Archeological Survey & Monitoring Plan
- Prairie Dog Clearance Letter

Traffic Impact Analysis

Development Plan Drawings

Infrastructure / Civil Drawings

REVISED March 31, 2025

Development Plan Report

Ocate Apartments

1111 Ocate Road

Santa Fe New Mexico

Santa Fe Civic Housing Authority

664 Alta Vista

Santa Fe, NM 87505

Liaison Planning Services Inc.

P.O. Box 1835

Santa Fe, NM 87504

(505) 920-6839

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Project Description

The application for the Ocate Apartments is being submitted on behalf of the Santa Fe Housing Civic Housing Authority for a Development Plan for a multifamily apartment complex for consideration by the Planning Commission. In addition, the applicant will be submitting an application to vacate the roadway easement shown on the attached Legal Lot of Record. The property is located at 1111 Ocate Road, Santa Fe, NM. The application consists of 84 affordable dwelling units in 3 buildings targeted to families with children. The project is located on approximately 5.643 acres of land.

Vicinity Map



Site Plan



Unit Mix

Building	1 Bedroom Units	2 Bedroom Units	3 Bedroom Units		TOTAL
A	10	35	15		60
B	6	18	0		24
TOTAL	**16**	**53**	**15**		**84**

Building A includes a manager's office, computer area, community space, and a community kitchen. Exterior amenities include tot lots, a large turf play area, sitting areas, community gardens. and patios

Vacation of Easement

There is an existing easement on the site for which an application has been submitted to the City of Santa Fe to vacate it as its original purpose is no longer applicable.

Utility Access

The project will be served by City of Santa Fe Water and Sewer and Electricity will be provided by Public Service Company of New Mexico (PNM) as shown on the Master Utility Plan shown on sheet 7-2.

Sewer

The site is served by the City's sewer system. Sewer lines within Ocate Road have capacity to serve the site and will be extended to serve the site.

Water

The site is served by the City's water system. Existing water lines within Ocate Road have capacity to serve the site and will be extended to serve the site

Electricity

The site is served by Public Service Company of New Mexico (PNM). There is an existing electrical pole just north of the northern property line that will serve the project.

Natural Gas

No natural gas will be used in the project.

Requested Approval

This application is for development plan approval. No variances are required for this project.

Zoning

The parcel is zoned C-2, General Commercial District, which allows for range of non-residential uses and multifamily residential development that are part of a planned development.

Required	**Provided**
No maximum density of residential units per Table 14-7.3-1	84 units / 5.643 acres = about 15 units per acre
Common open space of 250 sf per ground floor units: 250 sf x 24 units = 6,000 sf required	110,706 SF provided
Maximum lot coverage 60%	53% provided

The project must also meet the following dimensional standards:

- Minimum 15 Foot Street Setback
- Minimum 0 Foot Side Setback
- Maximum 45 Foot building Height

Development Plan Approval Criteria **(per SFCC §14-3.8(D)(1))**

(a) that it is empowered to approve the plan under the section of Chapter 14 described in the application

SFCC §14- 2.3 (C)(1) states, "…the planning commission shall review and approve or disapprove various specific development plans, requests, and subdivision plats. When specifically authorized by Chapter 14, the decision of the planning commission is final, subject to any appeal right provided in this chapter."

(b) that approving the development plan will not adversely affect the public interest.

Approval of the proposed project will benefit the public interest by providing needed affordable rental housing. The City's recently published draft 5-Year Affordable Housing Strategic Plan found 53% of renters are cost-burdened, spending more than 30% of household income on housing. 15% of renters are severely cost burdened, spending more than 50% of household income on housing. This project will provide 84 affordable housing units to help address this cost burden.

(c) that the use and any associated buildings are compatible with and adaptable to buildings, structures and uses of the abutting property and other properties in the vicinity of the premises under consideration

The current uses on property include two abandoned metal buildings. Within 200 feet is developed includes a mobile home park to the west, some vacant land and a New Mexico State parking/storage yard to the north; a remote automobile storage lot to the east; and vacant land and a corner of an automobile dealership to the south. The buildings will be 3-stories. The project will create a buffer between the mobile homes to the west with the commercial uses to the east.

Open Space

Open space required in the C-2 zoning district for residential development is 250 sf of common open space per ground floor unit. Common open space is defined in the City Code as "The outdoor area accessible to all residents within a development, which may be owned in undivided interest by all the residents of the development, and it may remain in its natural state or may be landscaped or improved for passive or active recreational activities."

Open Space Calculation

Building	# of Ground Floor Units	Common Open Space Required
1	16	
2	8	
TOTAL	**24**	**6,000 SF**

Access & Traffic

Ocate Road is a dead-end road that intersects with Cerrillos Road. All vehicular access is via that intersection. There will be two access driveways that connect internally. Additional information is included in the Traffic Impact Assessment which is included in engineering information that is part of the submittal.

Fire Protection and Emergency Access

The project includes fire sprinklers and fire hydrants have sufficient capacity to serve the project as shown in the Fire Plan.

Terrain and Stormwater Management

The site is relatively flat with an average slope of about 2% with the lower end of the slope on the south and the higher end on the north. No retaining walls are proposed. Low stem walls on the buildings will be provided. We are mitigating the excess runoff for the new impervious area by surface ponds which drain within 24 hours by use of pervious pavement in certain locations.

A Storm Water Pollution Prevention Plan is included in plans to control erosion during and after construction.

Stormwater will be detained and slowed to reflect pre-development drainage pattern by use of surface ponds and pervious pavement.

Flood Regulations

There are no 100- nor 500-year flood zones on or near the project site.

Landscaping and Site Design

Landscaping is required per SFCC §14-8.4. The required open space is 6,000 per the table above. The landscaping and irrigation plans are shown on sheets LS 101 – LS 103 of this submittal. Landscaping must meet the standards:

<u>Open space landscaping requirements:</u>

- Trees are required at a rate of 1 tree for every 500 sf of required open space. 25% of required trees must be evergreen.

- Shrubs are required at a rate of 2 shrubs for every 500 sf of required open space. 25% of required shrubs must be evergreen.

Turf L imitations:

Per SFCC §14-8.4(F)(3), turf grass shall not contain more than 25% Kentucky Bluegrass. Furthermore, per SFCC §14-8.4(F)(4), cool season grass cannot be used on more than 25% of the required open space. This project requires 6,000 SF of common open space which limits the use of cool season greases to 1500 SF.

Street Trees:

Per SFCC §14-8.4(G), street trees are required at a rate of one tree an average of every 25 to 35 feet adjacent to the property line with the road. They must be planted in swales or basins to collect runoff; 15 feet or more from light poles and fire hydrants; and deciduous species selected so as not to come within 5 feet of overhead utility lines at maturity but shall provide shade to the street. The landscape plan on page LS 101 of thus submittal provides for 13 street trees as required.

Irrigation:

Irrigation is provided on sheet LS 102 of the drawings included n this submittal. Additionally, the following irrigation standards apply to this project:

- zoned by each plants watering needs.
- Backflow prevention device
- Automatic, digital, multi-programmable controller
- Irrigation systems operation information, including monthly and seasonal schedules and water budgets,
- Designed for site topography, orientation, microclimate, prevailing winds, soil type, and to prevent water waste.
- Planting beds shall be swaled, sloped, or recessed
- Irrigation systems shall be zoned by levels of water use
- Overhead spray irrigation can only be used on turf and ground cover

Walls and Fences

The project includes a site 6-foot-high wrought iron fences and driveway gates at both vehicular driveway entries. These meet the requirements of SFCC §14-8.5 for walls and fences.

Off-Street Parking

SFCC Table 14-8.6-1 provides the parking requirements for multifamily housing over 5 units as follows:

Attached dwelling unit (over 5 units): Less than 800 square feet of heated floor area	1 assigned space and .25 unassigned space per dwelling unit

Attached dwelling unit (over 5 units): 800-1,200 square feet of heated floor area	1 assigned space and 0.5 unassigned space per dwelling unit
Attached dwelling unit (over 5 units): More than 1,200 square feet of heated floor area	1 assigned space and 1 unassigned space per dwelling unit

Units by size and Off-Street Parking Requirement:

Size category	Number of Units in each size Category	Required Spaces per Unit Size	Parking Spaces Required
Under 800 HSF	16	1.25	20
800-1200 HSF	53	1.5	80
Over 1200 HSF	15	2	30
TOTAL			**130**

Parking Lot Landscaping:

Perimeter Screening is required from public streets and adjacent properties. By a continuous wall or berm four (4) feed or more in height, a hedge a minimum of four (4) feet height at maturity, or other vegetative screen appropriate to the landscape design.

Interior parking lot landscaping is required when forty or more off-street parking spaces are provided. The project includes 140 parking spaces and must provide parking lot landscaping that meets the following criteria:

Accessible Parking

Accessible parking spaces are required the New Mexico Building Code 2021, based on the number of parking spaces provided. The total number of parking spaces provided is 150. Therefore, 8 accessible parking spaces are required, of which 2 are required to be van accessible.

Bicycle Parking

Bicycle parking is required based on the number of vehicle parking spaces required. Per Table 14-8.6-3, since 130 vehicle parking spaces are required, 12 bicycle spaces are required. 36 bicycle parking spaces are provided.

Architectural Design Review

Per SFCC Table 14-8.7-1, projects in the C-2 zoning district must achieve 205 points in the Architectural Design Standards and Point Allocations Table 14-8.7-2. The points that this project qualifies for are shown on Sheet A3.10

Outdoor Lighting

Per SFCC §14-8.9 outdoor illumination levels and uniformity shall be in accordance with the current recommended practices of the Illuminating Engineering Society of North America (IESNA). Additionally, outdoor luminaires (bulbs) shall be designed, installed, located, and maintained such that nuisance glare onto adjacent properties or streets shall be minimized to the greatest extent practicable. Disabling glare onto adjacent properties or streets is not allowed. Accent lighting shall be directed onto the building or object and not toward the sky or onto adjacent properties. Direct light emissions must not be visible above the roof line or beyond the building edge.

The maximum average maintained horizontal footcandles at grad shall not exceed the following table:

Maximum Average Footcandles at Grade

Area	**Commercial**	**Residential**
Sidewalks	1.0	0.2
Pedestrian Areas	2.0	0.5
Parking Lots	1.0	-
Building Entrances	5.0	-
Building Grounds	1.0	-
Public Spaces	3.0	-
The maximum illumination at any point shall not exceed the allowed average by more than 1.5 Footcandles.		

In all cases the average maintained footcandles at residential property lines shall be zero.

Sheet DRT2.0 of the submitted plan set shows the outdoor lighting analysis.

Signs

SFCC §14-8.10 applies to all signs intended to be read from off the premises. The project has two driveway accesses. The signs proposed for this project are shown on Sheet DRB 1.0. Signs that are intended to be read from off the premises include one monument sign stating the development name at the easternmost driveway, closest to Cerrillos Road. There are also 18" high aluminum cast building signs with grouped unit number that are lit from dusk to dawn, some of which may be visible off premises but are meant to be read once on the premises, directing people to the correct building and entry for their destination.

In addition, vehicular “stop” and “yield to pedestrian” signs are proposed within the development and at the driveway entries. The stop signs for vehicles exiting the site are shown on the public right-of-way. These signs are shown on the Signing and Striping Plan.

Santa Fe Homes Program

SFCC §14-8.11 requires residential development provide 15% of the units at an affordable cost. This project is 100% affordable under the terms of the Santa Fe Homes Program, therefore, no other affordable housing requirements apply.

Relocation of Gunnison’s Prairie Dogs

SFCC §14-8.12 requires that a certified prairie dog trapper/relocator determine if prairie dogs exist on the site and, if so, that they be relocated prior to construction. City staff reviewed the site and provided a letter indicating that they did not find evidence of prairie dogs on the site. The letter is included as Exhibit B. Therefore, there is no requirement to relocate them.

Development Water Budget

SFCC §14-8.13 requires a water budget be developed to determine the amount of water that will be used by the development in a development plan. Water rights must then be either purchased from the City’s Water Conservation Credit Program or water rights be transferred to the City for the entire amount the project is projected to use. However, this requirement is waived for affordable housing. Since this is a 100% affordable housing project, no water rights are required to be either purchased or transferred for this project.

Impact Fees

Impact fees are waived for this project as it qualifies as a rental apartment complex where 100% of the apartments are Low-Priced Dwelling Units built by a qualifying nonprofit affordable housing organization.

Low-priced rental dwelling units shall meet the following criteria:

(1) Rental rates affordable to a household with an income at or below one hundred percent (100%) of the area median income, using a standard four-person household for buyers and a three-person household for renters, according to the procedures established in the Santa Fe homes program;

(2) Renters who do not earn more than one hundred twenty percent (120%) of the area median income, adjusted for household size;

(3) A city-placed lien against the property for the value of all fee waivers or reductions given by the city, to be repaid to the city when the unit and/or property is refinanced or sold, with proceeds from the lien repayment being deposited into the city's affordable housing trust fund; and

(4) At the time of initial occupancy of the low-priced dwelling unit, meeting the following minimum household size, unless the city's office of affordable housing approves a smaller household size upon the request of the nonprofit affordable housing organization or the renter of the low-priced dwelling unit.

Since this project is being built by a nonprofit affordable housing organization, the organization shall place a lien against the property to capture any value between the actual sales price and the appraised price. This lien shall be in last place and any proceeds realized from the sale shall be used for affordable housing and shall be reported to the city's office of affordable housing.

School Requirements

Notice was sent to the Santa Fe School District and included as an attachment to Exhibit C of this report. As of submittal of this application, no response has been received by the Santa Fe School District.

Archaeology

An Archaeological Monitoring Plan has been submitted to the City of Santa Fe Archaeological Review Board and is included as Exhibit B of this report.

Accessibility

The Americans with Disabilities Act (ADA) requires multifamily developments to be accessible by people with mobility disabilities. The accessible paths in this project are shown on the ADA Access Plan included in the drawings submitted as part of this application.

Early Neighborhood Notification

An Early Neighborhood Notification (ENN) meeting was held on April 16, 2024. No neighbors attended the meeting. Thie ENN application packet and notes from the ENN meeting are included as Exhibit C of this report.

Exhibits

A. Prairie Dog Clearance Letter
B. Archaeological Monitoring Plan
C. ENN Packet and Notes

EXHIBIT A

PRAIRIE DOG CLEARANCE LETTER

City of Santa Fe, New Mexico

200 Lincoln Avenue, P.O. Box 909, Santa Fe, N.M. 87504-0909
www.santafenm.gov

Alan Webber, Mayor

Councilors:
Signe I. Lindell, Mayor Pro Tem, District 1
Renee Villarreal, District 1
Michael J. Garcia, District 2
Carol Romero-Wirth, District 2
Lee Garcia, District 3
Chris Rivera, District 3
Jamie Cassutt, District 4
Amanda Chavez, District 4

August 2nd, 2024

Liaison Planning
Liasonplanning@gmail.com

SUBJECT: Humane Relocation of Gunnison's Prairie Dogs

Dear Dolores Vigil

Per your request, on August 1st, an inspection of the property located at 111 Ocate Rd. Santa Fe NM, 87508 was conducted with the objective of determining the existence of Gunnison's Prairie Dogs. Please be advised that the site does not exhibit any existing mounds of past prairie dog dens and no evidence of live Gunnison's Prairie Dogs inhabitation, therefore, no further action is required.

Condition: If Gunnison Prairie Dogs do inhabit the area you will be required by code to safely have them removed and relocated before and during the project.

Should you have questions, please feel free to contact me at mjsandoval@santafenm.gov

Sincerely,

Maxine Sandoval
City of Santa Fe
Planner/Tech
Technical Review Division
Planning & Land Use Department

EXHIBIT B

NOTICE OF ARCHAEOLOGICAL ACTION LETTER

Archaeological Review Committee

Application for Project Review

DISTRICT

Historic Downtown____ River and Trails____ Suburban_✓_

APPLICATION

Monitoring Plan_✓_ Reconnaissance Report____ Preliminary Treatment Report____ Archaeologist/Historian Listing____

Monitoring Report____ Treatment Plan____ Final Treatment Report____ Other____

Report Name AN ARCHAEOLOGICAL INVENTORY AND MONITORING PLAN OF 5.643 ACRES, FOR THE SANTA FE CIVIC HOUSING AUTHORITY'S PROPOSED DEVELOPMENT OF LOT A-2, 1111 OCATE ROAD, IN SANTA FE, NEW MEXICO

NMCRIS# 155976

PROJECT

Project Name SAME AS REPORT

Project Location 1111 OCATE ROAD, SANTA FE, NEW MEXICO

Project Surface Disturbance (sq. ft.) _____ Development Acreage 5.643

Utility Type SEWER, WATER, ELECTRICAL, TELEPHONE, GAS Utility length 1,800'

APPLICANT

RON WINTERS 109 CALLE PAULA, SANTA FE, NM 87505 505-670-6952
Archaeological Consultant Address Phone

DAVE MARTINEZ, SANTA FE CIVIC HOUSING AUTHORITY, 664 ALTA VISTA ST. SANTA FE, NM 87505
Applicant Address Phone

SFCHA
Owner (if different) Address Phone

I certify that the documents submitted herein to the Archaeological Review Committee meet the minimum standards set forth in the Archaeological Ordinance, Section 14-5.3 and applicable policies. Failure to meet these standards, policies, or incomplete submissions may result in a delay processing this application.

Ron Winters JULY 9, 2024
Signature of Archaeological Consultant or Applicant Date

FOR OFFICIAL USE ONLY

Date Received_____ Case_____ Hearing Date_____

An Archaeological Inventory and Monitoring Plan of 5.643 Acres, for the Santa Fe Civic Housing Authority's Proposed Development of Lot A-2, 1111 Ocate Road, in Santa Fe, New Mexico

NMCRIS No. 155976

by:

Ron Winters, M.A., RPA



Prepared for:

Dave Martinez
Deputy Director
Santa Fe Civic Housing Authority
664 Alta Vista St.
Santa Fe, New Mexico 87505

Submitted By:

Ron Winters
109 Calle Paula
Santa Fe, NM 87505

July 9, 2024

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INTRODUCTION

At the request of Dave Martinez of the Santa Fe Civic Housing Authority, the archaeologist has prepared this monitoring plan, for an archaeological survey and monitoring of proposed new sewer and water lines, and a joint trench for electrical/telephone/gas lines, at 1111 Ocate Road in Santa Fe, New Mexico. Because the project location is on both private and city land, the construction activities must comply with the requirements of the Suburban Archaeological Review District as stipulated in *City of Santa Fe Ordinance 14-3.13, Archaeological Clearance Permits and 4.10.17 NMAC Standards for Monitoring*. The monitoring will be conducted under General Archaeological Investigation Permit NM-24-141.

Project Location

The project is located within Santa Fe, Santa Fe County, New Mexico. The project area is in Zone 13, Township 16N, Range 9E, Section 18, NMPM; USGS 7.5' Turquoise Hill NM quadrangle map, 2002 (Figures 1 and 2).

Scope of Work

The project will begin by conducting a 100 percent pedestrian survey of the entire 5.643-acre project parcel (Lot A-2), located at 1111 Ocate Road (Figure 2). When that is complete, and the construction schedule set, the archaeologist will monitor the approximate 1,800' of trench excavations for new sewer and water lines and a joint trench for electrical/telephone/gas lines (Figure 3).

As the trenches are excavated, the backdirt and trench walls will be examined for evidence of cultural resources, including features and cultural deposits. Any cultural resources that are exposed will be documented within the trench. Once the trench excavations and any cultural resource documentation is completed, a representative section of the trench will be profiled. The trenches will then be backfilled.

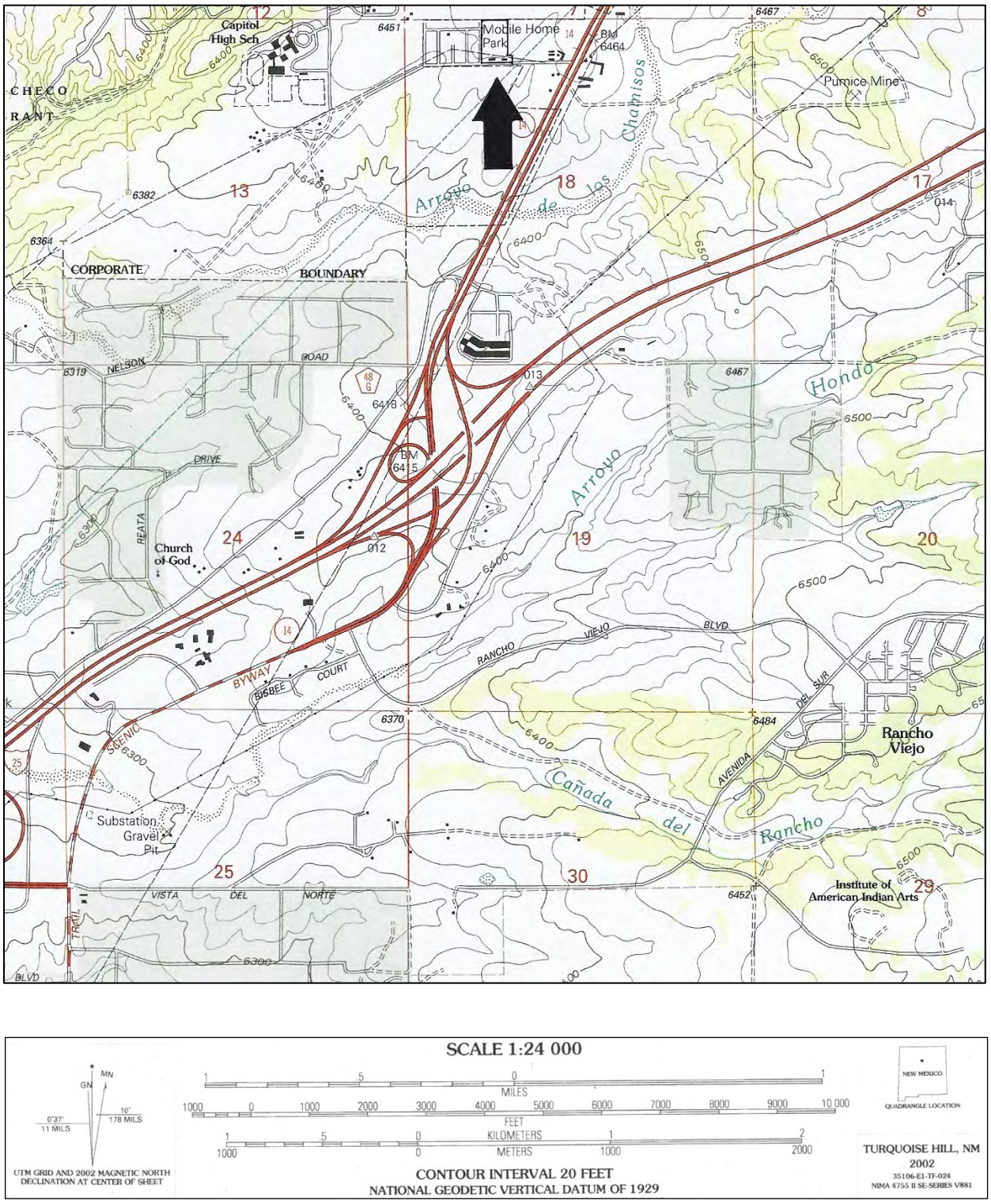
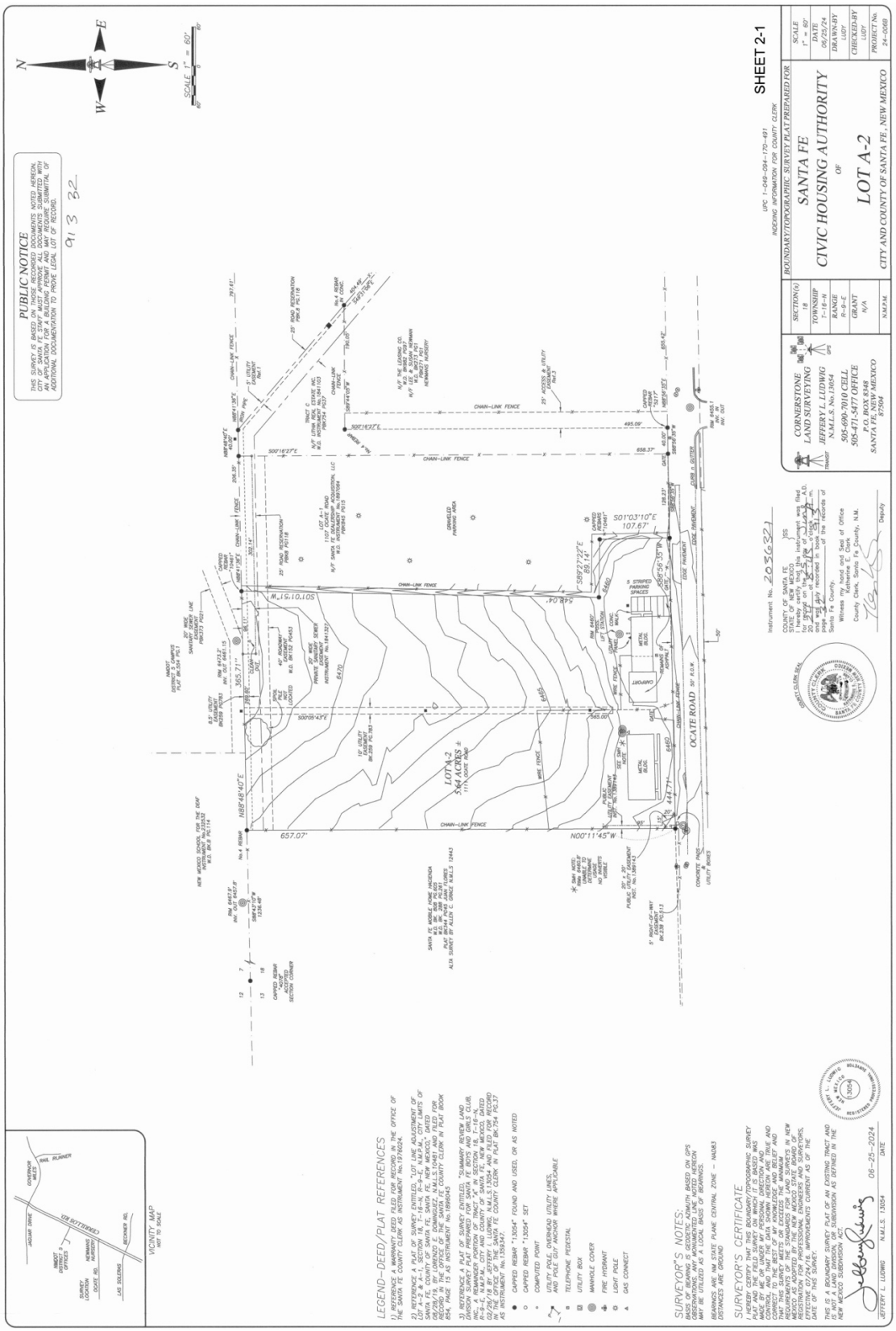


Figure 1: Project Location Map (USGS 7.5' Turquoise Hill Quadrangle, 2002)


PUBLIC NOTICE
THIS SURVEY IS BASED ON THOSE RECORDED DOCUMENTS NOTED HEREON. CITY OF SANTA FE MAY REQUIRE ADDITIONAL DOCUMENTATION WITH ANY APPLICATION FOR A BUILDING PERMIT AND MAY REQUIRE SUBMITTAL OF ADDITIONAL DOCUMENTATION TO PROVE LEGAL LOT OF RECORD.
91 3 32
VICINITY MAP
NOT TO SCALE
LEGEND-DEED/PLAT REFERENCES
SURVEYOR'S NOTES:
SURVEYOR'S CERTIFICATE
SANTA FE
CIVIC HOUSING AUTHORITY
OF
LOT A-2
CITY AND COUNTY OF SANTA FE, NEW MEXICO
CORNERSTONE LAND SURVEYING
JEFFERY L. LUDWIG
N.M.L.S. No.13054
505-690-7010 CELL
505-471-5477 OFFICE
P.O. BOX 8348
SANTA FE, NEW MEXICO 87504
SECTION(S) 18
TOWNSHIP 17N
RANGE 9E
GRANT N/A
N.M.P.M.
BOUNDARY/TOPOGRAPHIC SURVEY PLAT PREPARED FOR
SCALE 1" = 60'
DATE 06/25/24
DRAWN BY LUDY
CHECKED BY LUDY
PROJECT No. 24-0068
SHEET 2-1
INDEXING INFORMATION FOR COUNTY CLERK
UPC 1-049-094-170-491
Instrument No. 2056321
LOT A-1
5.84 ACRES ±
LOT A-2
5.84 ACRES ±
OCATE ROAD
S89°27'27"E 89.14'
S01°03'10"E 107.67'
N00°11'45"W 657.07'
N89°48'40"E 657.07'
S00°16'27"E 658.37'
S00°05'43"E 565.00'
N89°41'35"W 495.09'
N89°48'40"E 365.71'
N89°41'35"E 392.14'
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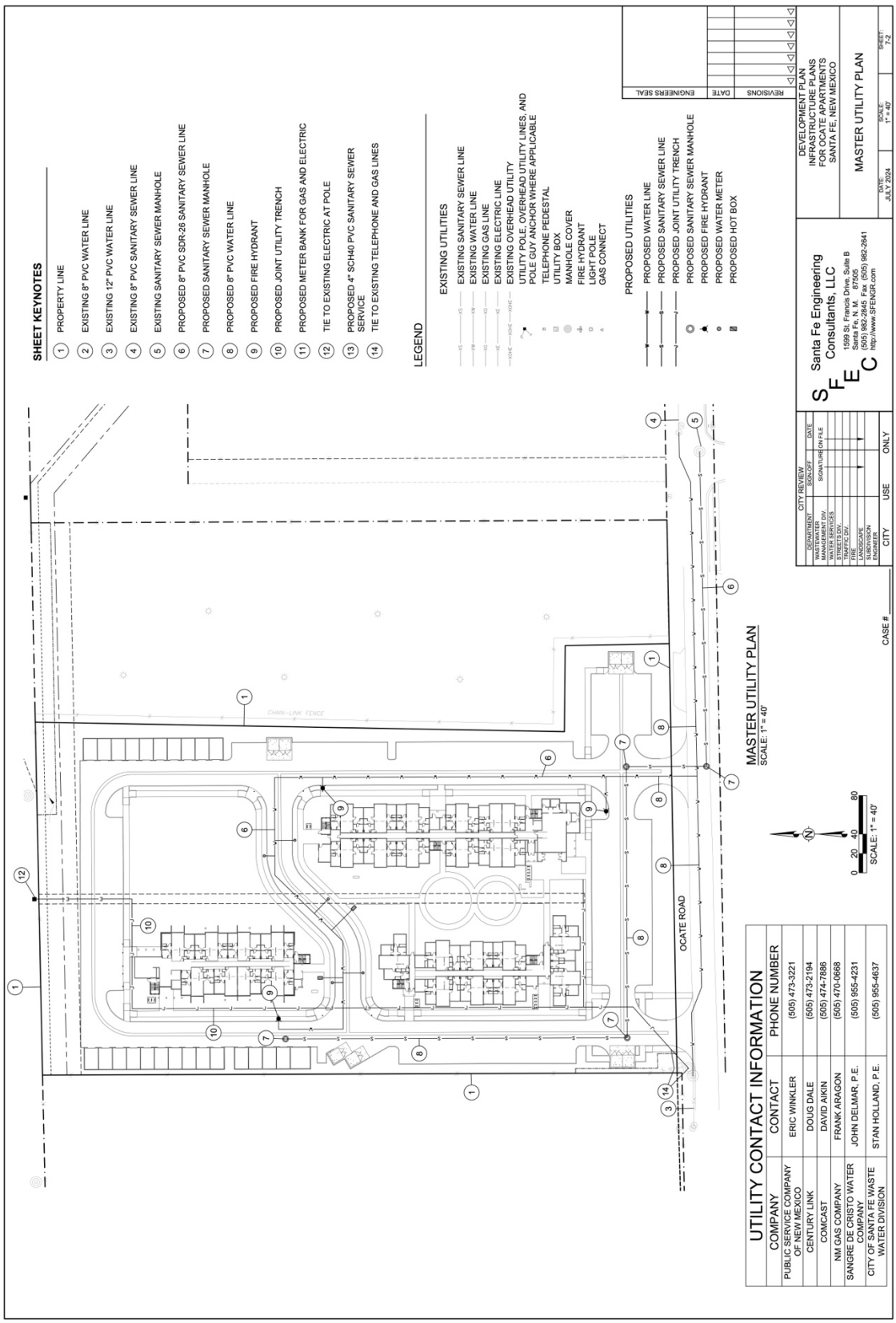


Figure 3: Plat Showing Proposed Development Master Utility Plan

PROJECT AREA AND ENVIRONMENT

The project area is located on the western edge of the Rocky Mountain Physiographic Zone within the Espanola Basin. The area is at the west edge of an alluvial plain which extends westward from the foothills of the Sangre de Cristo Mountains. The Arroyo de los Chamisos runs east and south of the project area. The project area elevation is 6,477'.

The soils within and surrounding the project area are: Zozobra-Jaconita complex (101), 5 to 25 percent slopes, Khapo sandy loam (102), 3 to 8 percent slopes, Zepol silt loam (103), 0 to 2 percent slopes, flooded, Chupe-Riverwash complex (104), 1 to 3 percent slopes, Zia fine sandy loam (108), 0 to 2 perecnt slopes, Panky-Urban land complex (115), 1 to 4 percent slopes, Arents-Urban land-Orthents complex (116), 1 to 60 percent slopes, Agua Fria-Paraje complex (117), 1 to 8 percent slopes, Urban land (207), Dondiego loam (216), 1 to 3 percent slopes, and Ohke sandy loam (217), 1 to 3 percent slopes (NRCS 2024) (Appendix A).

The vegetation consists of Desert Grassland with an occasional juniper. The flora of the project area includes juniper, grama, ring muhly, dropseed grasses, rabbitbrush, snakeweed and wolfberry. Cholla, prickly pear and narrow leaf yucca are also present. Local fauna includes lizard, desert cottontail and Gunnison's prairie dog. A complete list of flora and fauna can be found in Kelley (1980).

The area has a semiarid climate. Annual precipitation averages approximately fourteen inches (36 cm.), with most occurring as intense summer thunderstorms that produce severe runoff and reduce usable moisture. Annual snowfall (included in annual precipitation) averages 33 inches. The annual mean yearly temperature is approximately 50 degrees F (10 degrees C). The last spring frost usually occurs in the first week of May and the first fall frost occurs around the middle of October. The growing season averages 165 days a year.

Modern disturbances surrounding the project area include commercial development. The project area has been impacted by the existence of a two-track road, illegal dumping and modern trash. Much of the project area is disturbed.

CULTURAL HISTORY AND SETTING

The summary of the culture history in the vicinity of the project area has been adapted from Post and C. T. Snow (1992). Other regional syntheses include Cordell (1979), Peckham (1984), and Stuart and Gauthier (1981).

Paleoindian Period

People first inhabited the American Southwest during the Paleoindian period (9500 BC to 6000 BC). Paleoindians are typically characterized as big game hunters, given the greater archaeological visibility of big game kill sites associated with this period. However, Cordell (1979) suggests that along with large mammal hunting, their subsistence likely also included foraging for plants and hunting or trapping smaller animals. Most major Paleoindian sites known to date are in wide grassy basins or plains, near playa lakes or other water sources, and tend to afford good visibility of the surrounding area. However, a Clovis period site was discovered in the Jemez Mountains, suggesting that Paleoindians also used montane environments, where large game would also be available (Acklen 1997; Acklen et al. 1990). Other known Paleoindian sites or isolated remains in the region north of the Rio Grande and Rio Puerco valleys are in a variety of environments and elevations.

Evidence for Paleoindian occupation in the Santa Fe area is meager. There are two known isolated Cody complex occurrences, one from the Galisteo Reservoir (Honea 1971) and one from the Galisteo Basin in the vicinity of San Cristobal (Lang 1977). A few Paleoindian finds are also documented for the Tesuque area, the lower basin of Arroyo de los Frijoles, and the Canada Ancha drainage. Overall, little is known about this period of human activity around the current project. Cordell (1979) surmises that the paucity of Paleoindian remains is more likely related to issues of visibility rather than an absence of human occupation. Paleoindian sites could easily be overlain with later occupations and/or be deeply buried such that surficial indications are lacking using traditional pedestrian survey methods.

Archaic Period

The Archaic period occupation of the Santa Fe area occurred between 5500 BC and AD 600. They created more permanent structures, diversified their resource acquisition through hunting and gathering, and for the first time, cultivating domesticates. Researchers of the Archaic period archaeology of the Rio Grande valley and environs have postulated that Archaic populations' changing settlement and subsistence strategies were the result of the complex interacting influences of changing environmental conditions, increasing population, increased aggregation and sedentism, and agricultural domestication.

Fifty-seven Archaic period components identified so far in the greater Santa Fe area (ARMS Site Records) attest to the increase in population of the Santa Fe area throughout this period. Changes in settlement and population during this period correspond to a period of gradual climatic warming and drying of the area. Artifacts, features and deposits of this period are mostly clustered on

benches above drainages between 7,100 and 7,400 feet (Lang 1980; Schmader 1994) as in the Las Campanas Project (Post 1994) immediately adjacent both to the wet valley bottoms as well as the grazing areas of herd animals. There is also archaeological evidence outside of population clusters. Elliot reports that most of the Archaic period sites recorded in the Santa Fe area included some features in rock shelter or under over-hangs as well as artifact scatters on highlands away from major drainages, with little or no evidence of structures. These limited activity sites could be the result of people accessing resources in the hinterlands from more permanent settlements or evidence of travel through the area.

Early and middle Archaic period sites are still relatively few. However, Elliott and others have suggested that the high percentage of sites recorded in the Santa Fe area that are aceramic, and often include lithics, burned rock and/or staining, but no diagnostics, are very likely Archaic period occupations that could not be positively identified as such from surface analysis or testing.

Pueblo Period

Developmental Period (AD 600-1200)

The Developmental Period (Wendorf and Reed 1955) is divided into early (AD 600-900), middle (AD 900-1000), and late (AD 1000 to 1200) sub-periods. This temporal framework roughly corresponds to the Pecos Classification system developed by Kidder (1924).

Early Developmental period sites are uncommon in the Northern Rio Grande (Wendorf and Reed 1955). Archaeological survey at Cochiti Reservoir found only 12 sites that could be assigned to this period (Biella and Chapman 1977). McNutt (1969) located no early Developmental period components north of La Bajada and White Rock Canyon. In the eastern Galisteo Basin only five components may date to this period (Lang 1977). The lack of evidence for sedentism suggests that there was a long-term pattern of hunting and gathering in the Northern Rio Grande. This continued focus on hunting and gathering may be in part attributed to the rich resource diversity of the Northern Rio Grande Valley, forestalling an early reliance on small-scale farming (Cordell 1979) Years of archaeological survey and excavation projects completed in compliance with city and county codes have failed to provide information for alternate interpretations of Developmental period occupation. From existing evidence, it is increasingly clear that sedentary-Pueblo-like settlement did not occur before AD 800. Evidence continues to point to a hunting and gathering pattern that is very similar to the En Medio or Basketmaker II pattern. Radiocarbon dates from excavations in Tierra Contenta strongly support this empirical observation (Schmader 1994).

During the middle Developmental period (AD 900 to 1000), site frequency increased in the Northern Rio Grande area. Excavations in the Santa Fe and Tesuque River valleys revealed pithouses associated with contiguous surface rooms, and perhaps a kiva (Honea 1971; McNutt 1969). The pottery was mineral painted in the Red Mesa Style and neckbanded utility wares occurred. The appearance of these sites does not necessarily suggest that population increased. Instead, the settlement and subsistence pattern had shifted from one of mobility, which left ephemeral archaeological remains, to a more sedentary lifestyle, which left more structural

remains and artifact accumulations. The general pattern was still one of low population density. Along the Santa Fe River middle Developmental period settlement is very limited.

During the late Developmental period (AD 1000 to 1200), the first population increase occurred in the Santa Fe area, as inferred from increased site numbers and size (Wendorf and Reed 1955). Larger village size suggests year-round residential occupation. The predominant pottery was Kwahe'e Black-on-white, originally identified by Mera (1935) as a local Rio Grande variant of Chaco-style pottery. Occurrence of this pottery style coincided with the growth of the Chaco system in the San Juan Basin in northwestern New Mexico. Site size in the Northern Rio Grande area ranges from 1 to 100 rooms. Known sites in the project area include LA114 (Arroyo Negro), LA 15969 (Wiseman 1978), and a minor component at Pindi Pueblo (LA1) (Stubbs and Stallings 1953). The Pindi Pueblo component shows that some large Coalition period sites had their origins in this period (Stubbs and Stallings 1953).

Arroyo Negro (LA114) was originally recorded by Mera in the 1920s. It has seven small (less than 10 rooms) to medium (11-25) room blocks constructed of adobe with cobble foundations. In 1934, W. S. Stallings collected 95 tree-ring samples from pothunted rooms and four kivas (Smiley et al. 1953). The tree-ring dates indicate an occupation span between AD 1050 and 1150, with less reliable AD 950 to 1000 dates for Kiva C. Two construction episodes occurred between the AD 1050s and AD 1130 to 1145 (Smiley et al. 1953). Identified pottery types at LA 114 included Kwahe'e Black-on-white, Santa Fe Black-on-white, Socorro Black-on-white, and Wingate Black-on-red.

LA 15969 was identified by Wiseman (1978) on top of the gravel terrace overlooking the north prehistoric floodplain of the Santa Fe River. The site included a U-shaped 14-room structure with a kiva. It is estimated to have been occupied between AD 1100 and 1150, making it contemporaneous with the later occupation of LA 114.

The late Developmental component at Pindi Pueblo (LA 1) had two jacal structural remnants, a pithouse, and sparse refuse (Stubbs and Stallings 1953). The refuse was in the central portion of the site on a knoll. Identified pottery types included Red Mesa Black-on-white, Kwahe'e Black-on-white, and Puerco and Wingate Black-on-red (Stubbs and Stallings 1953). Stubbs and Stallings observed that the pre-Pindi material was very sparse, and the deposit ranged from 2 to 50 cm deep (1953). These deposits were underneath the later Coalition period occupation.

More recently in downtown Santa Fe, were the excavations of three sites that date between the late 10th and early 13th centuries. The KP (Kearney Partners) site (Wiseman 1989) is a Late Developmental Period pit house with associated surface rooms. The site was occupied between AD 1047 and AD 1093. Southwest Archaeological Consultants excavated the Diker site (Scheick 2005b) just north of the downtown area. The site consisted of a small adobe roomblock with several associated pit structures and trash middens. Radiocarbon dates place the occupation of the site between AD 990 and AD 1190. Southwest Archaeological Consultants also excavated the Federal Courthouse site (Scheick 2005a), which among other things revealed a Late Developmental-Early Coalition Period pit house that dated from AD 1195 to AD 1240.

Coalition Period (AD 1200-1325)

The Coalition period is marked by three major changes in the archaeological record in the Northern Rio Grande: (1) a significant increase in the size and numbers of sites, suggesting an increase in population and an extension of the early village level organization noted in the late Developmental period; (2) pithouses as domiciles were replaced by contiguous arrangements of adobe and masonry surface rooms; and (3) a change in pottery-making technology from mineral paint to organic-based painted pottery. These changes were sufficiently important to warrant a new period in the Northern Rio Grande cultural sequence that was divided into two phases: Pindi (AD 1220-1300) and Galisteo (AD 1300-1325) (Wendorf and Reed 1955). The decorated pottery was divided into Santa Fe Black-on-white and all its local variants (Stubbs and Stallings 1953) for the Pindi phase and Galisteo Black-on-white (Mera 1935) for the later phase. Most of the larger sites were established during the Pindi phase. The largest sites continued to grow into the Galisteo phase, anticipating the large villages of the Classic period. Site sizes ranged from 2 to 200 rooms; 15 to 30 rooms was the most frequent size (Stuart and Gauthier 1981). Site frequencies in all areas of the Northern Rio Grande increased enormously at this time (Biella and Chapman 1977; Orcutt 1991; McNutt 1969; Lang 1977).

In the Santa Fe River Valley, large villages on the prehistoric floodplain near the river channel were established during the early Coalition period. The only reported excavations are at Pindi Pueblo (LA1) (Stubbs and Stallings 1953) and the Agua Fria Schoolhouse site (LA 2) (Lang and Scheick 1989). LA 2, LA 109, LA 117, LA 118, and LA 119 have Santa Fe and Galisteo Black-on-white, and at least a small amount of glaze-paint pottery, suggesting that all six sites are roughly contemporaneous. These villages formed a large continuous community that was 3.2 km (2 miles) long. Sites in the Santa Fe River Valley recorded by Carter and Reiter (1933), but not by Mera, include CR (Carter Reiter) 178, 180, 182, 183, and 185. These sites may have Coalition and early Classic period components, since LA 1 (Pindi Pueblo) and LA 2 (Agua Fria Schoolhouse) were recorded by Carter and Reiter as historic sites.

Site data for the late Coalition period show a thriving community along the Santa Fe River. Farming along the Santa Fe River, the presence of freshwater springs, and the access to diverse environments for subsistence items and raw materials all contributed to successful settlement. So successful was settlement that while communities of the Four Corners area of the American Southwest were declining, the Santa Fe River community was growing.

Recent excavations of Coalition Period sites in Santa Fe include El Pueblo de Santa Fe (Lentz 2011) and the Federal Courthouse site (Scheick 2005a). Evidence suggests that both sites were occupied in the 12th and 13th centuries. The inhabitants of El Pueblo de Santa Fe appeared to have maintained relationships with the local pueblos such as Pindi and Arroyo Hondo.

Classic Period (AD 1325-1600)

Wendorf and Reed (1955) mark the beginning of this period (AD 1325-1600) by the appearance of Glaze A and locally manufactured red slipped pottery (see also Mera 1935; Warren 1979). Characterized by Wendorf and Reed (1955) as a "time of general cultural florescence," regional populations reached their maximum size and large communities with multiple plaza and roomblock complexes were established. Large villages of this period found in the Santa Fe vicinity include the Agua Fria Schoolhouse site (LA 2), Arroyo Hondo (LA 12), Cieneguilla (LA 16), LA 118, and LA 119. When Glaze B pottery appeared (ca. A.D. 1425), however, only Cieneguilla was still occupied by a large population. Dickson (1979) believes that abandonment of the large villages was due to the drought conditions revealed by tree-ring studies (Fritts 1965; Rose et al. 1981) and subsequent agricultural failure.

In the Santa Fe River Valley, LA 1 and LA 2 are the best-known Classic period sites. LA 1 was occupied between AD 1305 and 1350, which is the early part of the period (Stubbs and Stallings 1953). This may have been a time of population movement and village reorganization. Pindi Pueblo experienced a short interlude of decreased occupation before AD 1325, but by AD 1330 there was new construction and renewed use of older parts of the pueblo (Stubbs and Stallings 1953). A similar pattern was suggested for LA 12 (Arroyo Hondo Pueblo) (Lang and Scheick 1989). A change in kiva function may be indicated by a change in surface placement. Perhaps as kiva function became more specialized, the number decreased. Plazas were more conspicuous at this time, suggesting a more centralized social organization that may have required larger community areas for social or ceremonial functions. It is known that the large villages of the Galisteo Basin, the Rio Grande, and Rio Chama showed the same trends in the construction of fewer kivas and use of larger, more centrally located community space. The full florescence of the Classic period was not realized at Pindi Pueblo because it was abandoned in AD 1350, just as the larger villages were being established.

The limited excavation data for LA 2 suggests an occupation that lasted until AD 1420, which corresponds to Arroyo Hondo Pueblo and La Cieneguilla. Little is known about the early Classic period at LA 2. The abundance of Glaze A pottery suggests that the residents were engaged in regular social or economic interaction with the more southern Classic period villages (Lang and Scheick 1989). Lang and Scheick (1989) surmise that LA 2 was the largest village in the Santa Fe River Valley until AD 1420. If the village did house between 1,000 and 2,000 as suggested by Lang and Scheick (1989), then smaller surrounding villages (LA 117, LA 118, and LA 119) may have been abandoned by AD 1350 with the local population coalescing at LA 2. A road excavation management report was submitted in 2010 and excavations at the Agua Fria MDWCA water booster station were conducted in 2014/2015. Evidence of a Coalition compound dating from AD 1340 to AD 1430 was documented in a preliminary report (Cherie Scheick, personal communication).

After AD 1420, Santa Fe River Valley, east of Agua Fria, was mostly abandoned. The large settlement at La Cieneguilla increased in size and was still occupied by Native Americans until the Pueblo Revolt in AD 1680. The settlement pattern that prevailed throughout the Rio Grande, Rio

Chama, and Galisteo Basin was a decrease in small villages or large farmsteads. The remaining large villages dramatically increased in size (Stuart and Gauthier 1981). Presumably these large villages had extensive subsistence catchment basins and extensive networks of social and economic interaction. The pattern of few or no Native American sites dating between AD 1420 and 1680 is graphically reflected in the survey results from large parcels near the Santa Fe River Valley (Hannaford 1986; Maxwell 1988; Wiseman 1978).

The Historic Period (AD 1540 to 1940)

The Historic period in the Santa Fe area spans more than 400 years of interaction among Native American, Spanish, and Anglo-American cultures. A detailed summary of historical events and trends for the Middle Rio Grande and the Santa Fe area is beyond the scope of this report. Interested readers are referred to the many sources that detail the events and patterns of the historical period (Kessell 1979; Cordell 1984; de Buys 1991; Elliot 1988c; Ingersoll 1979; Simmons 1988). Historic information that pertains to the project area is provided in the Archival Research and Property History section of this report.

The historic period begins with the exploration of the Spaniards in 1539 under Francisco Coronado and the eventual founding of the Villa de Santa Fe by Pedro de Peralta in 1610. The historic period can be divided into seven segments: Exploration (1540-1598); Colonization (1598-1690); Pueblo Revolt and Reconquest (1680-1692); Spanish Colonial (1692-1821); Mexican (1821-1846); Territorial (1850-1912) and Statehood (1912 onward).

Although there had been numerous pueblo sites along the Santa Fe River, the ones in the immediate area of Santa Fe had been abandoned before the arrival of the Spaniards in the area. The Santa Fe River Valley supported Hispanic farming, and the surrounding grasslands were used for sheep herding until the Pueblo Revolt of 1680 when the Spaniards were ousted from northern New Mexico for 12 years. After the reconquest in 1692 by Don Diego de Vargas, settlements increased in number along the Santa Fe River and around Galisteo, La Ciénega and Agua Fria, reflecting the population increase in the eighteenth century. Over 140 land grants were awarded in the middle and upper Rio Grande Valley between 1692 and 1821.

The Mexican period lasted from AD 1821 to 1846. This period was a short interlude with major changes in New Mexico economic and political life. Most importantly it marked the initiation of trade with the United States over the Santa Fe Trail, the longest-used trading trail in US history. The trail itself was one of three blazed by Pedro Vial in the late eighteenth century to connect the outlying points of the Spanish Empire in an east-west direction. The trade, however, started with William Becknell, a native of Franklin, Missouri in November 1821. Economically down on his luck, Becknell decided to try Santa Fe, even though the reception by Spanish officials varied from one moment to another. New Mexicans welcomed Becknell at the dawn of Mexican independence because he brought simple consumer goods at prices well below those imposed by the Chihuahuan merchants. In this quarter-century, New Mexico began to look east for a variety of goods, services and other resources.

In 1846, economic hegemony no longer satisfied President James K. Polk's vision of manifest destiny, so he declared war on Mexico. Without firing a shot and with little prelude, the US took over the huge territory of New Mexico when Gen. Stephen W. Kearny obtained the surrender of New Mexican forces at Las Vegas, NM.

Despite the 1848 Treaty of Guadalupe-Hidalgo, which promised that property rights legally held under Mexican law would be respected by the US and governed by Mexican law, the federal government made no attempt to appoint an official or a board to clarify land title problems for six years until 1854 when Congress established the Office of Surveyor General. During its existence, this office was more interested in expanding and consolidating the public domain in New Mexico and in solving Pueblo land grant problems than in exploring and settling Hispanic land grant problems. Its chief stated duty was the extension of the federal land survey system to this new vast territory by township, ranges, and sections. As a result, the Surveyor General's office approved approximately only 22 out of 212 grants submitted to it during its entire existence (deBuys 1991; Westphall 1965).

By the 1880s, speculation in land grants and the public domain had reached the point of a national scandal. The government responded to public outcry and private capitalist pressure by creating the Court of Private Land Claims in 1891. The court's goal was to facilitate the settlement of the land grant question, and thus, to ensure marketable titles. The court consisted of three individuals, presumably making it more difficult for someone to use personal and political influence to gain a favorable judgment or to speed up the process. Because of the strict construction of the grants, however, the Count of Private Land Claims only confirmed six percent of the land grants brought before it between 1890 and 1919 (deBuys 1991; Westphall 1965; Bowden 1969).

Despite the uncertainty of land grant titles, the Territorial period continued the expansion of the Anglo-American social, economic, and political system into the American Southwest that had begun with the opening of the Santa Fe Trail. The Territorial period ended with statehood in 1912. From statehood to World War II (AD 1912 to 1945), New Mexico slowly and erratically became more integrated into the national political, economic, and social system. With the coming of World War II, New Mexico became a trendsetter in many arenas, including science. There was increased education and economic opportunity both inside and outside New Mexico, and a steady flow of Anglo-Americans into New Mexico. These factors combined to crystallize the tri-cultural traditions that are a recognized part of New Mexico past and present.

PREVIOUS RESEARCH

A file search was conducted at the New Mexico Historic Preservation Division, Archaeological Records Management Section to locate any previous studies or written information regarding the project area. The results of the site file search indicate that a total of 16 previous cultural resource investigations have been conducted within a one-half mile radius of the current project location (Table 1) (Appendix B). Those studies are summarized below, providing a context of previous research for the current investigation. In addition, 13 previously recorded archaeological sites and three historic properties are located within one-half mile of the project area (Table 2) (Appendix B).

Table 1: Summary of Previous Research within a One-Half Mile Radius of Project Area

NMCRIS Project #	Reference	Project Name	Sites Recorded (LA)	Acres
16429	Doleman, Oakes and Dart 1979	Archaeological clearance Investigations Along Seismic Testing Corridors in the Galisteo Basin Area, Santa Fe County, New Mexico, for Teledyne Exploration Company	14823-14829	753.92
17350	Hannaford 1986	Archaeological Survey of the Tierra Contenta Subdivision, Santa Fe County, New Mexico	54741-54785	1481.00
26028	Harlan 1988	An Archaeological Survey of Approximately 5000 Feet of Water Pipe Line Right-of-Way for the Sangre de Cristo Water Company	0	22.96
46955	Marshall 1994	A Cultural Resource Survey for the Cerrillos Road Reconstruction Project, Santa Fe County, New Mexico	106196	55.75
51392	Eakin 1995	A Cultural Resource Inventory at Temporary Construction Permit and Turnout Locations for the Cerrillos Road Reconstruction Project in Santa Fe County	0	0.67
53618	Post 1996	An Archaeological and Historical Study of 50 Acres for the Arroyo Chamiso Interceptor, Capital Improvement Program Project No. XXX, City of Santa Fe and Santa Fe County, New Mexico	0	50.00
65472	Post 1999	An Archaeological and Historical Study of 13.489 Acres at the Planned Intersection of Governor Miles and Cerrillos Roads, Santa Fe, New Mexico	0	13.49

NMCRIS Project #	Reference	Project Name	Sites Recorded (LA)	Acres
99453	McIntosh, Kuru'es and Snow 2006	Report on Archaeological Reconnaissance, Tierra Contenta Subdivision near the Confluence of Arroyo de los Chamisos and Arroyo Hondo, 26 Hectares (65 Acres) in the Suburban Archaeological District	152979, 153024-153027,153030,153031 Revisited 54780, 54781	65.00
100991	Abbott 2006	Results of Archaeological and Historical Investigations, 11.7 Acres for the Proposed Lexus of Santa Fe, Santa Fe County, New Mexico	0	11.70
101132	Walley 2006	Cultural Resource Survey of the 520-Acre Las Soleras Development in Santa Fe County, New Mexico	154640, Revisited 100954, 100955, 106196	520.00
119527	Winters 2011	An Archaeological Inventory of 11.50 Acres for the Proposed S-1 Pipeline Alignment on South Meadows and Jaguar Drive, Santa Fe, New Mexico	0	11.50
126262	Byszewski 2012	A Cultural Resources Survey for the Interstate 25/New Mexico 14 (Cerrillos Road) Interchange Project (CN S100140)	HCPI131564, 175293, 175294 Revisited 6986, 106196, 106198, 145653, 145659	376.00
131662	Wallace and Funkhouser 2014	Cultural Resource Survey for Proposed Improvements to the New Mexico Department of Transportation (NMDOT) District 5 Office Complex Located at 7315 Cerrillos Road, Santa Fe County, Santa Fe, New Mexico	HCPI134287	1.58
134599	Marron and Associates 2015	No Information Given	HCPI139841, 183797	7.78
136146	Goar 2016	A Cultural Resource Survey for Sewer Line Crossing for CarMax, Suburban District, Santa Fe, Santa Fe County, New Mexico	0	0.25
141216	Winters 2018	An Archaeological Inventory of 8.28 Acres for the Proposed Development of Tract C, at 7401 Cerrillos Road in Santa Fe County, New Mexico	0	8.28

Table 2: Previously Recorded Sites Within a One-Half Mile Radius of Project Area

LA#	Description	Cultural Affiliation
54742	Historic Trash Scatter, Hearth	Hispanic, US Territorial (1846 AD) to US Territorial (1912 AD)
54743	Lithic Artifact Scatter	Unknown
54778	Lithic Debitage, Groundstone Tools	Unknown (9500 BC) to Unknown (1993 AD)
54779	Lithic Debitage, Groundstone Tools (Site Not Relocated, Possibly Destroyed)	Unspecific/Other Prehistoric (3500 BC) to Unspecific/Other Historic (1850 AD)
54780	Fence, Milled Lumber Structure, Well	Anglo, NM Statehood-WWII (1912 AD) to NM Statehood-WWII (1945 AD) (Report not accepted by ARC, NMCRIS 99453)
54781	Lithic Debitage	Unknown (9500 BC) to Unknown (1993 AD) (Report not accepted by ARC, NMCRIS 99453)
152979	Lithic Scatter, Isolated Room, Rock Alignment (3)	Archaic, Unspecific Archaic (5500 BC) to Unspecific Archaic (200 AD) (Report not accepted by ARC, NMCRIS 99453)
153024	Lithic and Ceramic Scatter	Anasazi, Classic (1325 AD) to Classic (1600 AD) (Report not accepted by ARC, NMCRIS 99453)
153025	Lithic and Ceramic Scatter	Anasazi, Developmental (600 AD) to Classic (1600 AD) (Report not accepted by ARC, NMCRIS 99453)
153026	Lithic Debitage, Groundstone Tools, Rock Alignment, Undefined (Site Not Relocated)	Unspecific/Other Prehistoric (9500 BC) to Unspecific/Other Historic (1850 AD)
153030	Chipped Stone Tools, Stone Tool Manufacturing Items, Groundstone Tools	Unspecific/Other Prehistoric (9500 BC) to Unspecific/Other Historic (1800 AD)
153031	Lithic Debitage, Groundstone Tools, Prehistoric Ceramics	Unspecific/Other Prehistoric (9500 BC) to Unspecific/Other Historic (1850 AD)
183797	No Information Given	Historic

Table 3: Previously Recorded NM Registered Properties Within a One-Half Mile Radius of Project Area

ID#	Site	Address
HCPI 31564	Structure 5660	No Address Given
HCPI 38247	Building HB#1	7315 Cerrillos Road
HCPI 39841	Building	Cerrillos Road

RESEARCH GOALS

The Archival Research

The purpose of the historical research is to identify ownership and use of the subject property. When possible, archival research methods will be used to determine ownership, length of ownership, function, and significance of the project area. The records of the Surveyor General and the Court of Private Land Claims as well as maps will be consulted at the New Mexico Records Center and Archives (NMSRCA). Files available at the State Historic Preservation Office and reports at the Archaeological Records Management (ARMS) section of the Museum of New Mexico will also be consulted. Other maps and published reference works will be viewed at the State of New Mexico, Office of the State Engineer; deeds and plats, at the Santa Fe County Offices (SFCO); and State of New Mexico District Court (SFDC) records.

Archaeological Survey

The research goals for prehistoric cultural resources are to assign dates to newly discovered sites if possible and to determine site function, so that any new sites recorded can be integrated with previously collected data from the Santa Fe area.

Prehistoric and historic sites are defined as a locus at which physical evidence of human activity is present. Physical evidence includes artifacts of the same type in scatters or concentration numbering greater than ten, (unless they are fragments of one object) in or not in association with a feature. A feature is defined as remains of a human construct, including but not limited to hearths, check dams, structural remains, a pit, etc. A collection of features without associated artifacts may also be a site. An isolated occurrence is defined as a scatter or concentration of less than ten artifacts of the same type or an isolated feature lacking associated artifacts.

CULTURAL-HISTORICAL EXPECTATIONS

A NMCRIS file search revealed several projects and archaeological sites within a one-half mile radius of the project area (see the Previous Research section that follows).

Based on the data available from the volume of archaeological work that has been completed along the Santa Fe River and its environs, a wide variety of archaeological sites could be expected. Sites that were occupied between 1800 BC and AD 1930 are abundant along the Santa Fe River reflecting the importance of water and biotic diversity for all prehistoric, historic, and modern populations.

Archaic period sites are rarely identified in the Santa Fe River floodplain. This is largely due to the destructive nature of floods that remove all but the most abundant or fortuitously placed cultural deposits. Archaic cultural deposits might be present on the first terrace above the ancient floodplain but could be difficult to differentiate from later deposits without temporally diagnostic artifacts. An Archaic site (LA152979) was purportedly identified within one-quarter mile south of the project area. Isolated Archaic period artifacts may occur on later sites as recycled or curated items.

The Santa Fe River and floodplain were an important settlement focus for ancestral Pueblo populations because of the opportunity for floodwater and akchin farming. As a result of 200 years of farming, field houses or seasonal residences were established on the terraces above the ancient floodplain. These small field structures or locations would be outside the destructive effects of floods, and therefore, might be archaeologically visible in areas that have sustained minor historic disturbance.

As is possible throughout the Santa Fe area, given the intensity of past prehistoric use, isolated occurrences could be present. This distribution of the isolated artifacts may reflect hunting and gathering activities and travel between residential sites and resource areas.

Historic settlement along the Santa Fe River and surrounding it occurred at different rates and intensities between 1608 and the early 1900s. Archaeological features and deposits at these sites may be extensive, as described in the previous section. In addition to intensively occupied residential space, the nearby farmlands and sustaining lands may show evidence of long-term activities. Small structure remains, artifact scatters, acequias, and isolated artifacts may be expected from all historic periods.

MONITORING AND FIELD METHODS

The following methods for monitoring and field procedures have been adapted from Post (2013).

Prior to construction, Ron Winters will conduct a 100 percent pedestrian survey of the entire 5.643-acre project parcel (Lot A-2), located at 1111 Ocate Road. Property boundaries are clearly visible in the field with fencelines to the north, east, and west, and Ocate Road to the south. Thus, complete coverage of the property will be assured.

Sites and Isolated Occurrences will be recorded if found. They will be described according to artifact type and material. Universal Transverse Mercator coordinates will be taken of the sites and isolated occurrences with a Garmin Oregon 600t handheld GPS unit. Artifact analysis will be conducted in the lab and field and photographs taken of the Isolated Occurrences. Overviews of the project area will be photographed with an iPhone 12 camera.

After the survey is complete, the project will start with the contractor for the Santa Fe Civic Housing Authority marking the trench alignments. The alignments are expected to follow the routes shown on the project graphic included in this monitoring plan (Figure 3). On-site mapping will document any deviations from the proposed alignment. The trenches extent and any feature and stratigraphic profile locations will have Universal Transverse Mercator (UTM) coordinates taken with a Garmin 600t handheld GPS unit.

During the trench excavations the archaeologist will be present to monitor all ground disturbance. The archaeologist will monitor the approximate 1,800’ of trench excavations for the new sewer lines, water lines and a joint utility trench for electrical/telephone/gas lines.

The four trenches will have a total length of approximately 1,800 feet. Mechanical excavation will proceed in 20 cm levels until the relationship between natural stratigraphy and any exposed cultural deposits is established. If discovered and once the depth of the cultural material-bearing deposits is reached, excavation will be allowed to proceed at a quicker pace through the natural deposits. As the fill is removed from the trench, it will be visually examined for indications of cultural deposits or features. If deposits containing cultural materials are mixed with fill, the archaeologist will note the presence of the cultural materials and allow the contractor to proceed while continuing to monitor the excavation.

Determinations of fill integrity and information potential will be based on the age and nature of the cultural materials and physical characteristics of the fill. Artifacts from mixed or modern deposits will be noted and incorporated into stratigraphic descriptions. Modern deposits are those cultural material-bearing strata with artifacts that are less than 75 years old. If no intact cultural deposits or features are encountered, the trench will continue to be excavated to its required depth. As sections of the trench are cleared, the trench walls will be scraped to define stratigraphic layers. Once the trench is completely excavated, a stratigraphic profile of a representative section of one wall will be drawn, described, and photographed. Elevation control will be maintained from below the modern ground surface.

If *in situ* prehistoric or historic cultural deposits or features are encountered, the contractor will expose the top and horizontal extent of the cultural deposit or feature or excavate through the deposit to expose it in profile. The direction and amount of mechanical excavation will be determined by the nature, density, and abundance of artifacts present. Hand excavation will then be conducted within the deposit to recover a controlled sample of artifacts from any discrete strata that may be present.

Establishing the horizontal or vertical extent of features and deposits will allow for determination of the amount of area that will be hand excavated with a systematic recovery of artifacts and sample collection. Mechanical excavation may temporarily stop to allow for hand excavation, artifact recovery and documentation if the feature is less than a meter in length. If a feature is more than a meter, mechanical excavation may continue outside of the feature limits. The feature will be documented once the planned segment of the trench excavation is completed.

The first feature will be assigned an LA number and subsequent features associated with the first or a new LA number will be assigned based on feature proximity to the initial first and on feature type. If architectural or other features are encountered, the feature will be defined and excavated to the features extent.

If acequia channel segments are discovered, the trench will be excavated to its full depth exposing the profile. A stratigraphic profile will be drawn showing the different sediment layers differentiated by color, texture, and inclusions. The acequia segment will be plotted on the trench and site maps. The entire length of the acequia profile will be recorded allowing for identification of modifications and presence of laterals. This information is important in understanding the history of the acequia and the processes through which it was changed and abandoned. If refuse-filled features are found within the acequia they will be treated as described for other features and deposits.

If a feature is highly sensitive or significant a more detailed excavation may be necessary. Should such features or deposits be encountered, excavation will stop and the client, the City of Santa Fe Historic Preservation Division Staff and the New Mexico State Historic Preservation Office will be notified and consulted to determine a course of action.

Each feature will have a number assigned, and the artifact content, stratigraphy, morphology, construction methods and age will be recorded. Following the completion of the excavation, the archaeologist will draw a stratigraphic profile of the excavated trench segment showing the feature. Strata will be described according to color, texture, composition, origin, and any cultural inclusions. Feature fill will be excavated in 10cm arbitrary levels and screened through 1/8-inch mesh.

All field recording will be documented on standard feature and excavation forms under the provisions of General Archaeological Investigation Permit NM-24-141.

Recovered artifacts and samples from each level will be recorded on related excavation forms and bags and the catalogued. If burned deposits are encountered C14 and flotation samples will be collected to help date and characterize the nature of the deposit. Two-liter flotation samples will be collected for laboratory flotation processing and archaeobotanical analysis.

Human Remains

If an unmarked human burial or unmarked burial grounds are encountered, the archaeologist shall cease any activity that may disturb that burial or burial ground, or any object or artifact associated with that burial or burial ground and shall notify the local law enforcement agency having jurisdiction in the area. The local law enforcement agency shall notify the Medical Investigator (Ml) and the New Mexico State Historic Preservation Office (NMSHPO). The local law enforcement agency may choose not to notify the SHPO in cases in which it is manifestly evident that the burial is recent, and death was caused by a criminal act.

Articulated and *in situ* human remains will be excavated by this permitted archaeologist. Procedures are on file with NMSHPO. Disarticulated remains will be recovered, identified, collected and their disposition consulted on with the Deputy SHPO. The location of each find will be plotted on the project field map. Documentation of disarticulated remains will include stratigraphic relationships, field observations, an estimation of the era of interment and potential cultural or ethnic affiliation. All disarticulated remains will be subjected to an in-field osteological analysis. This will include anatomical element and position, condition, pathological and taphonomic anomalies, age, and sex.

LABORATORY ANALYSES

Laboratory analysis will be conducted in accordance with previously established laboratory procedures included in the permit on file with NMSHPO for this archaeologist. Artifacts recovered from the excavation will be cleaned, inventoried, and catalogued prior to analysis. Analytic methods for each material type are discussed below.

Stone Artifacts

Stone artifacts will be examined for interrelationships among function, morphology, material type/source, and subsistence strategies. The variability of stone artifacts through time will also be addressed if sufficient data is collected. The analysis consisted of three basic components: (1) identifying the methods and sequences of production of chipped-stone and groundstone tools; (2) assessing the ways in which people acquired raw materials and/or finished stone artifacts, especially as these affected the distributions of lithic artifacts through time; (3) determining the function of lithic tools in order to determine the kinds of activities that occurred through time.

The study of lithic production, procurement strategies, and tool function can illuminate the social and economic integration of a prehistoric community, substantially increasing our understanding of prehistory. A great deal of information about prehistoric social and economic practices can be gained by determining how people procured their raw stone materials, made their stone tools, or determining how these tools were used and how they may have been recycled or disposed of.

The study of stone artifacts will involve specific analyses of four artifact classes. The four artifact classes are (1) chipped-stone debitage, (2) chipped-stone tools, (3) groundstone tools, and (4) pecked-stone objects. Each artifact class will be analyzed utilizing a series of attributes. The chipped-stone analyses will be directed toward the identification of raw materials, manufacturing techniques, and tool/flake type and function, controlled for chronology.

Flaked Stone Artifacts

To maintain compatibility with previous research conducted in the local region, analysis of chipped-stone artifacts employed the following categories and definitions, modeled after the Office of Archaeological Studies (OAS 1994a).

Primary Flakes: These are flakes that display cortex on 50 percent or more of the dorsal surface, excluding the striking platform.

Secondary Flakes: These are flakes that display cortex on less than 50 percent of the dorsal surface, excluding the striking platform, but must still display at least some cortex material.

Tertiary Flakes: These are flakes that exhibit no cortex on the ventral or dorsal surfaces.

Angular Shatter: This category includes small flakes and shatter fragments that are byproducts of flake manufacturing efforts. Thus, they contain no flake characteristics (e.g., striking platforms, bulb of percussion, use surfaces). Generally, these artifacts are angular in shape, frequently displaying sharp edges, and may occasionally show flake scars.

Cores: These are items that bear negative flake scars. Some cores feature an occasional platform and exhibit crushing or step-fractures at the point of percussion. Core fragments are included in this category.

Utilized Cores: These are cores that feature an edge or protrusion that displays evidence of being utilized.

Hammerstone: These are artifacts that bear scars derived from battering or hammering activities (e.g., pitting, crushing, hinge fracturing, step fractures). Slight grinding wear may also be discernible along prominent edges.

Use-wear Modified: This category denotes items that display evidence of use, such as conchoidal flake scars, step, or hinge fractures on one or more edges, or a protuberance. In the analysis, use-wear is differentiated from retouch by the size and regularity of flake scars, with use-wear often being very small and irregular in size, shape, and occurrence frequency.

Facial/Marginal Retouch: This category denotes artifacts that are bifacially or unifacially flaked with clearly discernible retouch patterns present around their edges. Retouch is differentiated from use-wear by the size and regularity of flake scars, with retouch often being large and regular in size, shape, and occurrence frequency.

Analysis

First a rough sort will be used to separate formal finished tools from flakes. Then items that displayed evidence of retouch and use-wear will be separated from those artifacts exhibiting natural edge damage. A 10-power hand lens will be used to examine the stone's edges and striking platform. If the resolution of the 10-power hand lens is insufficient to clearly discern edge wear/damage or retouch attributes, a microscope will be utilized. Material type, such as chert, obsidian, quartzite, and basalt will also be specified.

Three primary classes of lithic attributes will be examined: morphological, technological, and functional. Clearly these attribute sets are not mutually exclusive. The first step in morphological studies is to define several critical morphological classes, such as utilized flakes, unused flakes, formal tools, composite tools, cores, utilized cores, shatter, and secondary tools (defined as artifacts whose secondary function superseded the primary or original function. Morphological attributes to be considered included raw material type, tool/flake classifications, and artifact completeness. Technological attributes recorded included manufacturing techniques and stage of reduction (such as primary, secondary, tertiary, shatter), distal termination, general flake shape and size (length, width, thickness, total size), weight, method of flake production, platform characteristics, bulb of percussion characteristics, core characteristics (if applicable), and angle of flake detachment.

As with the studies of the morphological and technological attributes, functional attributes will be recorded for both cores and flakes. Functional attributes recorded for this analysis will be selected to allow for the identification of tool and flake use. Attributes to record include wear patterns, presence, or absence of retouch, flaking characteristics (such as unifacial, bifacial, or multifacial),

edge curvature, edge angle, and length/shape of each working edge. Following the procedures typical for such lithic analyses, each working element will be given a separate designation for analysis but within a single case (i.e., tool/flake)

Material Types

The nature and quality of material selected for lithic reduction and tool manufacture plays a critical role in the general characteristics of the overall tool assemblage and its effectiveness in serving the needs of a particular society. Factors such as the fracturability, texture, tenacity, and structure of the lithic material can make it suitable for reduction and suitable for use as any tool. For this analysis, the archaeologist will attempt to define the specific material type(s) used for various flake assemblages and tool forms and identify the various ranges of material types found at each feature, and if possible, correlate these with temporal periods.

Groundstone Analysis

The groundstone analysis is based on the concepts developed by the Office of Archaeological Studies (OAS 1994b). Initial sorting and visual analysis for groundstone will follow the general characteristics and procedures as noted above for flaked-stone artifacts.

The study will also record how the groundstone artifacts were produced, such as by grinding or pecking. Besides the standard measurements typically recorded for such objects, use-wear patterns will be noted and worked/ground surfaces. Further, an effort will be made to determine whether wear on manos reflected plant grinding as opposed to hide-processing functions.

Ceramic Analysis

Traditional ceramic typologies will be used to classify ceramic artifacts. Typologies for ancestral Puebloan pottery that may be utilized include the Rio Grande, Jemez, Pajarito, Galisteo and Pecos series (Habicht-Mauche 1993) for matte-paint pottery. For ancestral Puebloan and early historic Pueblo-period glaze ware, the Rio Grande glaze ware series as defined by Mera (1940) and refined by Warren (1979). For late ancestral and historic Pueblo matte-paint pottery traditions, the Tewa series will be used (McKenna and Miles 1991). Besides ceramic type, attributes that will be examined including temper composition, paint type, surface manipulation and vessel form. Ceramic analysis will be subcontracted to C. Dean Wilson.

Historic Artifact Analysis

Historic artifacts are objects that were not available in the area prior to the establishment of European settlements in the sixteenth century. Assemblages of these types of artifacts include a variety of artifact classes such as bottle glass, can or metal fragments and wheel thrown ceramics. Historic artifact analysis will follow the format and procedures developed over the last 20 years based on Boyer et al. (1994). This analysis is particularly sensitive to New Mexico assemblage variability found in sites dating from the sixteenth to the twentieth centuries. Recorded analysis attributes include artifact category, type, function, material, fragment, condition, begin date, end date, manufacturer, brand, method of manufacture, shape, seams, opening/closure, color, paste, ware, decoration, dimensions, and weight.

Faunal Analysis

Faunal remains will be sorted by morphological characteristics into categories of mammal or bird. The remains will be examined for evidence of burning, butchering, and gnawing (agents of the last including rodent, carnivore, and human, and thus, analysis was both pre- and post-depositional). Faunal analysis will be subcontracted to Gwyneth Duncan.

The analysis of the faunal remains will be conducted in two stages, a quantification of the animal remains, followed by an interpretation of the assemblage. Quantification of this zooarchaeological assemblage will be conducted using combined NISP/MNI values as proposed by Klein and Cruz-Uribe (1984). The term NISP refers to the Number of Identified Specimens, while MNI refers to the Minimum Number of Individuals. Calculation of NISP is a count of identified bone fragments in an assemblage, while MNI is calculated by taking the most common skeletal element per taxon in each provenience and assuming that at least one individual of that taxon must be present to account for the number of elements.

The reason for combining the two values to quantify a faunal assemblage is to compensate for weaknesses inherent in each value when used alone. For example, NISP values do not consider the degree of fragmentation of a bone sample, so intersite comparisons of samples would be impossible if NISP values were used alone. A problem with the computation of MNI values is that the resulting number will be a function of how the researcher has aggregated the assemblage. The way in which proveniences on a site are combined or separated will affect the minimum number of individuals of each taxon. This problem is especially important in cases where site proveniences are defined arbitrarily (i.e., grid squares excavated in arbitrary levels).

Klein and Cruz-Uribe (1984) note in which cases NISP values are weak or strong, and correspondingly where the MNI values are weak or strong, and they believe that the combination of these two values result in a more accurate quantification of faunal assemblages. This approach focuses on discrete traits instead of continuous variables, and it is free of underlying assumptions about faunal assemblage's characteristic of other quantification methods (i.e., meat weights, utility indices, etc.) (Klein and Cruz-Uribe 1984). For these reasons it appears to be the most accurate and replicable method for the quantification of the animals that compose a bone assemblage.

Pollen and Flotation Analyses

It is the archaeologist belief that the pollen and flotation data can yield some of the most significant information regarding both prehistoric and protohistoric settlement and subsistence practices for this area and perhaps, for the region. Thus, it was imperative that well-collected samples be taken. Overall, sampling will be undertaken in any location (1) from which botanical remains might be recovered, or (2) from selected feature localities where pollen and flotation data would support better interpretation of the feature.

Pollen Sampling and Analysis

Pollen will be collected as scatter samples taken from across a floor or use-surface, or as block samples from and under metates, manos, and large stone flakes, and from or around features such as hearths or pits. Specific areas *not* sampled included disturbed strata (e.g., areas of rodent or root penetration) and damp or excessively wet loci.

Pollen samples will be collected using a clean trowel to avoid contamination and will not be collected when it is raining or from areas that had recently been exposed to rain. Collecting samples when wind and dust were blowing will be avoided. The samples will be placed in clean pollen envelopes, and all seams of the envelopes completely sealed with masking tape to avoid contamination.

Chemical extraction by flotation will be used to remove pollens from any large volume of sand, silt, or clay with which they were mixed. This process was developed for extraction of pollen from soils where preservation has been less than ideal and pollen density is low.

Hydrochloric acid (10 percent) will be used to remove calcium carbonates present in the soil, after which the samples will be screened through 150-micron mesh. The samples will be rinsed in a beaker until neutral by adding water, letting the samples stand for two hours, and then pouring off the supernatant. A small quantity of sodium hexametaphosphate will be added to each sample once it reaches neutrality. Then the beaker will be again filled with water and allowed to stand for two hours. The samples will again be rinsed until neutral, filling the beakers only with water. This step will be added to remove clay prior to heavy liquid separation. The samples will next dried and then gently pulverized. Sodium polytungstate (density 2.1) will be used for the flotation process. The samples will be mixed with sodium polytungstate and centrifuged at 2,000 rpm for 5 minutes to separate organic from inorganic remains. The supernatant containing pollen and organic remains will then be decanted. Sodium polytungstate will be added again to the inorganic fraction to repeat the separation process. The supernatant will be decanted into the same tube as the supernatant from the first separation. This supernatant will then be centrifuged at 2,000 rpm for 5 minutes to allow any silica remaining to be separated from the organics. Following this, the supernatant will be decanted into a 50-milliliter conical tube and diluted with distilled water. These samples will be centrifuged at 3,000 rpm to concentrate the organic fraction in the bottom of the tube. After rinsing the pollen-rich organic fraction obtained by this separation, all samples will receive a short (10- to 15-minute) treatment in hot hydrofluoric acid to remove any remaining inorganic particles. The samples will then be acetolated for three minutes to remove any extraneous organic matter.

A light microscope will be used to count the pollen to a total of 100 to 200 pollen grains at a magnification of 500x. Comparative reference material will be used to identify the pollen to the family, genus, and species level, where possible.

Pollen aggregates will be recorded during identification of the pollen. Aggregates are clumps of a single type of pollen and may be interpreted to represent pollen dispersal over short distances or the introduction of portions of the plant represented into an archaeological setting. Aggregates will be included in the pollen counts as single grains as is customary.

Indeterminate pollen includes pollen grains that are folded, mutilated, and otherwise distorted beyond recognition. These grains will be included in the total pollen count as they are part of the pollen record. Linda Scott Cummings of Paleo Research Institute will conduct the pollen study.

Flotation Sampling and Analysis

Samples for flotation sampling will be collected as block deposits from areas such as hearths, postholes, pits, and fill deposits, with an occasional scatter sample taken from significant stratigraphic horizons within selected features. Flotation sample size will generally be 2-liter. Areas where flotation samples *will not be taken* coincided directly with those listed above for pollen samples. When flotation samples are taken, the archaeologist will always use a clean trowel to avoid contamination and always place the collected soil in a clean measuring container. The archaeologist will attempt to remove all visible artifacts from these samples prior to bagging. The sample will then be placed inside a clean paper bag and sealed tightly. As with the pollen samples, the archaeologist will avoid collection of flotation samples when it is windy or rainy.

The macrofloral samples will be floated. Each sample will be added to approximately 3 gallons of water and then stirred until a strong vortex formed. The floating material (light fraction) will be poured through a 150-micron-mesh sieve. Additional water will be added, and the process repeated until all floating material is removed from the sample (a minimum of five times). The material that remains in the bottom (heavy fraction) will be poured through a 0.5-millimeter-mesh screen. The floated portions will then be allowed to dry.

The light fractions will be weighed and then passed through a series of graduated screens (U.S. standard sieves with 2-millimeter, 1-millimeter, 0.5-millimeter, and 0.25-millimeter openings) to separate charcoal debris and to initially sort the remains. The contents of each screen will then be examined. Charcoal pieces larger than 2, 1, or 0.5 millimeter in diameter will be separated from the rest of the light fraction, and the total charcoal weighed.

Samples from archaeological sites commonly contain both charred and uncharred remains. Many ethnobotanists follow a basic rule that unless there is a specific reason to believe otherwise, only charred remains should be considered prehistoric. It is presumed that once seeds have died, decomposing organisms act to decay the seeds. Sites in caves, water-logged areas, and in very arid areas, however, can contain uncharred prehistoric remains. Interpretation of uncharred seeds to represent presence in the prehistoric record is considered on a sample-by-sample basis. Extraordinary conditions for preservation are required. Linda Scott Cummings of Paleo Research Institute will supervise and conduct the flotation analysis.

Chronometric Dating

Chronometric samples may be collected and used to define the occupation sequence, if other means fail to provide sufficient data. Absolute dating methods that may be used in this project include dendrochronology, archeomagnetism, optically stimulated thermoluminescence and radiocarbon assays. The chronometric studies will be performed by qualified contractors. Relative dating studies, such as ceramic stylistic and technological variation and historic artifact manufacture dates will be conducted as part of Native ceramic and Euroamerican artifact analysis.

RESEARCH RESULTS AND CURATION

A final report will describe the results of the monitoring activities. It will provide analysis results, interpretive summaries, and cultural resource recommendations. The report will also include an archival history chapter that will detail the nature, age and extent of any historic cultural deposits that are encountered. The report will include graphics including but not limited to a site map, soil profiles and photographs of the excavation. All original field recording forms, maps and photographs will be filed with the Archaeological Records Management Section (ARMS) of the New Mexico Historic Preservation Division. Artifacts will be curated at the Museum of Indian Arts and Culture, Archaeological Research Collections Unit in Santa Fe, New Mexico. A NMCRIS Information Abstract Form and LA forms will be completed if necessary and submitted to ARMS.

SCHEDULE AND PERSONNEL

Work will begin on the project as soon as the monitoring plan is approved, and the construction schedule is set. Depending on the presence and extent of any cultural deposits or features, a final report will be submitted for review by the ARC and NMSHPO within 45 days of completion of the fieldwork.

The monitoring plan described in this report will be implemented by Ron Winters, who will serve as principal investigator, perform the monitoring, conduct select laboratory analysis and complete the final report writing tasks.

Native American ceramic analysis will be subcontracted to C. Dean Wilson. Faunal analysis will be subcontracted to Gwyneth Duncan. Ethnobotanical analysis will be subcontracted to Linda Scott Cummings of the Paleo Research Institute in Golden, Colorado.

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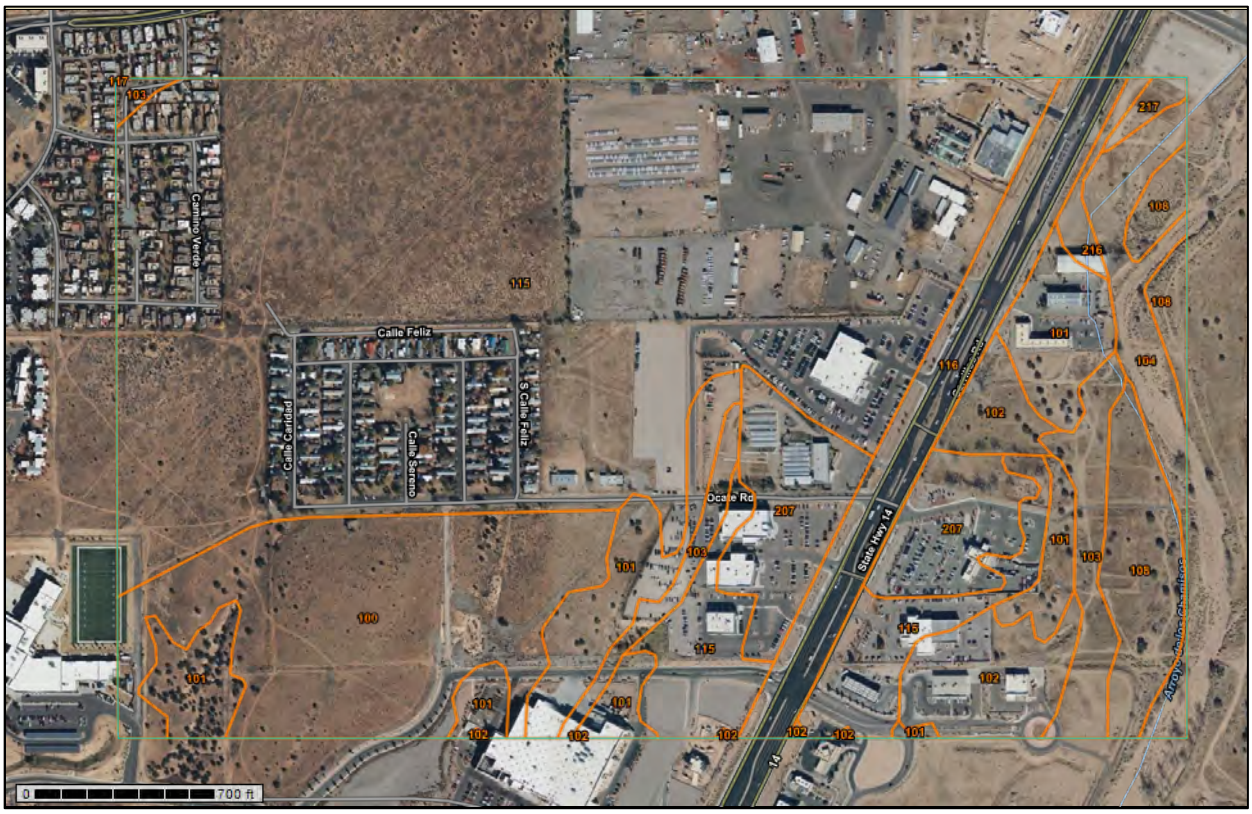
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APPENDIX A

Web Soil Survey



101	Zozobra-Jaconita complex, 5 to 25 percent slopes	19.7	8.0%
102	Khapo sandy loam, 3 to 8 percent slopes	9.1	3.7%
103	Zepol silt loam, 0 to 2 percent slopes, flooded	7.8	3.2%
104	Chupe-Riverwash complex, 1 to 3 percent slopes, flooded	7.3	3.0%
108	Zia fine sandy loam, 0 to 2 percent slopes	9.9	4.0%
115	Panky-Urban land complex, 1 to 4 percent slopes	134.3	54.7%
116	Arents-Urban land-Orthents complex, 1 to 60 percent slopes	13.2	5.4%
117	Agua Fria-Paraje complex, 1 to 8 percent slopes	0.0	0.0%
207	Urban land	13.9	5.7%
216	Dondiego loam, 1 to 3 percent slopes	1.3	0.5%
217	Ohke sandy loam, 1 to 3 percent slopes	0.8	0.3%
Totals for Area of Interest		245.4	100.0%

APPENDIX B

NMCRIS Mapserver Map Check

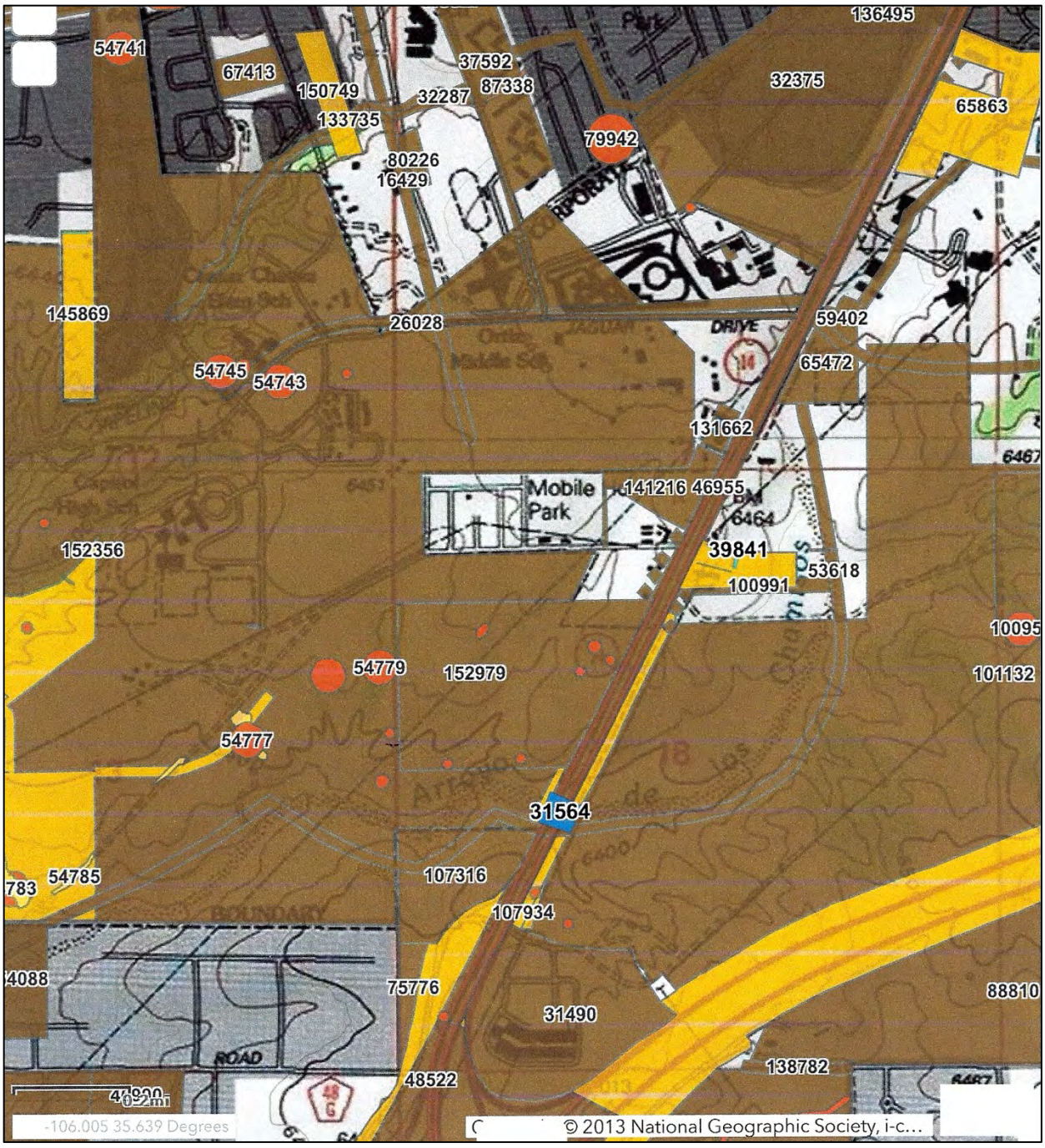

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67413
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65863
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54743
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131662
Mobile
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-106.005 35.639 Degrees
© 2013 National Geographic Society, i-c...

EXHIBIT C

EARLY NEIGHBORHOOD NOTIFICATION PACKET AND NOTES

EARLY NEIGHBORHOOD NOTIFICATION MEETING

Request for Staff Attendance

Project Information

Project Name: OCATE SANTA FE APARTMENTS

Address: 1111 OCATE ROAD Parcel Size: 5.64 AC.

Zoning: C-2 Future Land Use: COMMUNITY COMMERCIAL

Preapplication Conference Date: 2/22/2024

Detailed Project Description: NEW CONSTRUCTION APARTMENTS PHASE I 60 UNITS

Property Owner Information

Name: SANTA FE CIVIC HOUSING AUTHORITY

Address: 664 ALTA VISTA SANTA FE, NM 87501

Phone: (505) 321-1689 E-mail Address: davidm@sfcha.com

Applicant/Agent Information (if different from owner):

Name: LIAISON PLANNING SERVICES INC

Address: PO BOX 1835 SANTA FE NM 87504

Phone: (505) 920-6839 E-mail Address: liaison-planning@gmail.com

Agent Authorization (if applicable):

I am/We are the owner(s) and record title holder(s) of the property located at: 1111 OCATE ROAD

I/We authorize to act as my/our agent to execute this application

Signed: SEE AUTHORIZATION LETTER Date: 3/21/2024

Signed: Date: 3/21/2024

Proposed ENN Meeting Dates:

Provide 2 options:	Preferred Option	Alternative
DATE	4/15/2024	4/16/2024
TIME	5:30 PM	5:30 PM
LOCATION	ZOOM MEETING	ZOOM MEETING

City of Santa Fe

Land Use Department

200 Lincoln Avenue

Santa Fe, NM 87501

Re: Letter of Authorization for 1111 Ocate Road, Santa Fe NM

To Whom It May Concern:

This letter shall serve as authorization for Liaison Planning Services, Inc. to act on our behalf with respect to the referenced property regarding land use applications to be submitted to the City of Santa Fe.

Thank you,

Sincerely,

David Martinez

David Martinez, Deputy Director

Santa Fe Civic Housing Authority


LOT LINE ADJUSTMENT
OF
LOT A-2 & LOT A-1
SECTION 18, T.16N., R.09E., N.M.P.M.
CITY LIMITS OF SANTA FE, COUNTY OF SANTA FE
STATE OF NEW MEXICO
SANTA FE
SITE
VICINITY MAP
PUBLIC UTILITY EASEMENTS (PUE)
DEDICATION / AFFIDAVIT
LEGEND
REFERENCE AND BASIS OF BEARINGS
SURVEYOR'S CERTIFICATE
NOTES
EASEMENTS
LOT A-2
LOT A-1
CERRILLOS ROAD
CITY OF SANTA FE APPROVAL
NOTES & CONDITIONS

ENN GUIDELINES

Applicant Information

Project Name: **Ocate Santa Fe Apartments**

Name: **Santa Fe Civic Housing Authority**
Last *First* *M.I.*

Address: **664 Alta Vista**
Street Address *Suite/Unit #*

Santa Fe **NM** **87507**
City *State* *ZIP Code*

Phone: **(505) 321-1689** E-mail Address: **davidm@sfcha.com**

Please address each of the criteria below. Each criterion is based on the Early Neighborhood Notification (ENN) guidelines for meetings, and can be found in Section 14-3.1(F)(5) SFCC 2001, as amended, of the Santa Fe City Code. A short narrative should address each criterion (if applicable) in order to facilitate discussion of the project at the ENN meeting. These guidelines should be submitted with the application for an ENN meeting to enable staff enough time to distribute to the interested parties. For additional detail about the criteria, consult the Land Development Code.

(a) EFFECT ON CHARACTER AND APPEARANCE OF THE SURROUNDING NEIGHBORHOODS ***For example: number of stories, average setbacks, mass and scale, landscaping, lighting, access to public places, open spaces and trails.***

The 5.64 acre property is located on Ocate Road west of Cerrillos Road and within the C-2 (General Commercial) zoning district. The proposed project is an affordable multi-family residential community targeted towards households with children.

Ocate SF is a new construction apartment project with 60 units (phase 1). The 60 units will have 10 one-bedroom units, 35 two-bedroom units, and 15 three-bedroom units. The apartment building of Ocate SF is designed around a central double loaded corridor and a central entrance and elevator in the corner. This central corner becomes the primary building entrance. It houses the manager's office and social services coordinator's office, a computer area, a community space and a community kitchen area. The exterior amenities will include tot lots, large turf play area, sitting areas, community gardens, and patios.

This development, as well as the subsequent phase, will share the same building patterns, colors, massing, and details. Combined, the two structures will create a pueblo surrounding a central plaza. The outside edges of the buildings create a buffer between the surrounding neighborhood and automobile circulation and parking. The softer interior building edges of the plaza form a central activity area and it houses the playgrounds tot lots, play areas, sitting areas, community gardens, and patios. Much like traditional plazas, this central area will be largely vegetated.

Landscape and open space will be provided in accordance with all code requirements.

(b) EFFECT ON PROTECTION OF THE PHYSICAL ENVIRONMENT ***For example: trees, open space, rivers, arroyos, floodplains, rock outcroppings, escarpments, trash generation, fire risk, hazardous materials, easements, etc.***

The proposed development will protect the physical environment by meeting all development standards. There are no arroyos on the property nor does the property sit in a floodplain. Open space will be included within the site, landscaping throughout and stormwater mitigation will be provided. These combined will meet the requirements within the code.

(c) IMPACTS ON ANY PREHISTORIC, HISTORIC, ARCHAEOLOGICAL OR CULTURAL SITES OR STRUCTURES, INCLUDING ACEQUIAS AND THE HISTORIC DOWNTOWN ***For example: the project's compatibility with historic or cultural sites located on the property where the project is proposed.***

The property will not impact any prehistoric, historic, archeological, or cultural sites and structures including acequias and is located outside of the historic downtown. The property is located in the Suburban Archeological Review District. Since the site is less than 10 acres an archeological clearance permit is not required.

(d) RELATIONSHIP TO EXISTING DENSITY AND LAND USE WITHIN THE SURROUNDING AREA AND WITH LAND USES AND DENSITIES PROPOSED BY THE CITY GENERAL PLAN ***For example: how are existing City Code requirements for annexation and rezoning, the Historic Districts, and the General Plan and other policies being met.***

Approving this application will not adversely affect the public interest. The Project will benefit the public interest by providing much needed housing for Santa Fe residents with close proximity to public transportation and employments centers. The Project is also close to many amenities such as grocery stores, pharmacies, restaurants, and medical services. The term "Public Interest" is not defined in Chapter 14; however, the Governing Body has implemented the General Plan and Chapter 14 in order to establish minimum standards for health, safety and welfare affecting land uses and developments as a means to protect the public interest. This development proposal will provide residences that will supplement much needed housing for the City of Santa Fe. The City's 1999 General Plan supports infill development in urban centers where feasible, and to "Promote a compact urban form and encourage sensitive/compatible infill development" (Section 1. 7.9).

(e) EFFECTS ON PARKING, TRAFFIC PATTERNS, CONGESTION, PEDESTRIAN SAFETY, IMPACTS OF THE PROJECT ON THE FLOW OF PEDESTRIAN OR VEHICULAR TRAFFIC AND PROVISION OF ACCESS FOR THE DISABLED, CHILDREN, LOW-INCOME AND ELDERLY TO SERVICES ***For example: increased access to public transportation, alternate transportation modes, traffic mitigation, cumulative traffic impacts, pedestrian access to destinations and new or improved pedestrian trails.***

The applicant proposes to provide adequate ingress and egress to meet the minimum requirements for development. The proposed application will maintain adequate road standards, will provide access to public transportation and pedestrian trails. A Traffic study is being compiled that will identify cumulative traffic impact to the surrounding neighborhoods.

(f) IMPACT ON THE ECONOMIC BASE OF SANTA FE ***For example: availability of jobs to Santa Fe residents; market impacts on local businesses; and how the project supports economic development efforts to improve living standards of neighborhoods and their businesses.***

While new developments are frequently perceived to create a negative impact on existing property owners in the immediate vicinity, that impact must be weighed against the benefit to the public, or the expense to the public, of not building the development. The development of this property, as proposed, would provide reasonably priced, infill housing close to shopping, and employment. The public interest of increasing the supply of market rate and affordable housing is served by this project.

(g) EFFECT ON THE AVAILABILITY OF AFFORDABLE HOUSING AND AVAILABILITY OF HOUSING CHOICES FOR ALL SANTA FE RESIDENTS ***For example: creation, retention, or improvement of affordable housing; how the project contributes to serving different ages, incomes, and family sizes; the creation or retention of affordable business space.***

According to section 1.7.1 within the General Plan affordable housing is encouraged for all incomes throughout the City and should be provided close to jobs to encourage to promote transit use. The proposed development will provide affordable housing in a setting that is in need of such development. The project is targeted towards households with children.

(h) EFFECT UPON PUBLIC SERVICES SUCH AS FIRE, POLICE PROTECTION, SCHOOL SERVICES AND OTHER PUBLIC SERVICES OR INFRASTRUCTURE ELEMENTS SUCH AS WATER, POWER, SEWER, COMMUNICATIONS, BUS SYSTEMS, COMMUTER OR OTHER SERVICES OR FACILITIES ***For example: whether or how the project maximizes the efficient use or improvement of existing infrastructure; and whether the project will contribute to the improvement of existing public infrastructure and services.***

Public water and sewer are readily available at this site and have sufficient capacity to handle the additional load from this development. All other outside utility providers agree that this site is well served by existing infrastructure, with all dry utilities either already on, adjacent to, or in close proximity to the property. Dry utilities are of sufficient capacity to serve the project at full development. While Public Works staff acknowledges that all development has an incremental impact on public roadway networks, they concur with the Consulting Engineer's conclusion that the roadway network will continue to operate at an acceptable Level of Service (LOS) based on transportation standards for intersection operation.

(i) IMPACTS UPON WATER SUPPLY, AVAILABILITY AND CONSERVATION METHODS ***For example: conservation and mitigation measures; efficient use of distribution lines and resources; effect of construction or use of the project on water quality and supplies.***

The development will be served by City Water and City Sewer. Conservation methods will be incorporated into the project as required by Code.

(j) EFFECT ON THE OPPORTUNITIES FOR COMMUNITY INTEGRATION AND SOCIAL BALANCE THROUGH MIXED LAND USE, PEDESTRIAN ORIENTED DESIGN, AND LINKAGES AMONG NEIGHBORHOODS AND RECREATIONAL ACTIVITY AND EMPLOYMENT CENTERS ***For example: how the project improves opportunities for community integration and balance through mixed land uses, neighborhood centers and/or pedestrian-oriented design.***

The property is surrounded by residential to the west, vacant lots to the north and south and commercial to the east. The proposed project will clearly improve the site and will be designed to easily integrate with surrounding developments. The applicant proposes a site that compliments the streetscape to ensure compatibility with adjacent properties and the Future Land Use Map/ Transitional Mixed Use.

(k) EFFECT ON SANTA FE'S URBAN FORM ***For example: how are policies of the existing City General Plan being met? Does the project promote a compact urban form through appropriate infill development? Discuss the project's effect on intra-city travel and between employment and residential centers.***

The lot on which the development is proposed is presently underutilized. Infill development of this type is supported by the Plan in reference to this Section 1. 7.11, because it calls for new development to be "oriented from established neighborhoods to urban context and promotes active street and outdoor life". The proposed design will provide connectivity with the surrounding neighborhoods

LIAISON Planning Services Inc.

P O Box 1835 Santa Fe, NM 87504 (505) 920-6839 liaisonplanning@gmail.com

March 21, 2024

Re: Early Neighborhood Notification Meeting
Development Plan Approval for 1111 Ocate Road, Santa Fe NM

Dear Neighbor,

The property owner for the above referenced address is requesting development plan approval on a 5.64-acre parcel to be developed as a phased multi-family residential community. In accordance with the requirements of the City of Santa Fe's Early Neighborhood Notification ordinance, this is to inform you that a ZOOM meeting is scheduled for:

Liaison Planning is inviting you to a scheduled Zoom meeting.
Topic: ENN Meeting for Ocate Santa Fe Apartments
Time: Apr 15, 2024 05:30 PM Mountain Time (US and Canada)
Join Zoom Meeting
https://us02web.zoom.us/j/82221120530?pwd=Vk12eW1KaFJ0MDgvNks5aUY1UlVLZz09
Meeting ID: 822 2112 0530
Passcode: 994704
Find your local number: https://us02web.zoom.us/u/kdPITIJEFF

The Early Notification ordinance provides for an exchange of information between perspective applicants for development projects and the project's neighbors before the application becomes too firm to respond meaningfully to community input.

Attached, please find a vicinity map outlining the project area and proposed site plan. If you have any questions or comments, please contact Liaison Planning Services Inc., (505) 920-6839.

Sincerely,

Dolores I. Vigil

Attachments: Vicinity Map
Proposed Site Plan

Special Note: Persons with disabilities in need of special accommodations or the hearing impaired in need of an interpreter please contact the Land Use Office (505) 6920 5 days prior to the hearing or meeting date.


CALLE VICTORIA
CALLE ALEGRE
OCATE RD
SITE
OCATE RD
CERRILLOS RD

GENERAL NOTES:

- Site shall be developed in accordance with the Federal Clean Water Act and EPA best practices.
- Site Grading and drainage shall be configured to drain away from buildings with ground water recharge as a goal.
- Retention basins shall be landscaped and made safe and attractive.
- The total number of parking spaces provided exceeds the minimum off-street parking requirements of the City of Santa Fe Zoning Ordinance.
- Accessible Units (Type A accessible units as described by the ANSI A117.1) are to be provided at the ratio of 5% of the total number of units for a total of three units(3) and shall be dispersed among the various unit types.
- All remaining units shall be Type B adaptable, shall have zero step access, shall be located on an accessible route, and shall include 36" entry doors.
- Storm water shall be directed away from the buildings through the use of gutters, downspouts, and roof drains.
- Water shall be directed away from building edges and foundations by sloping grade to landscape areas for onsite water retention and evaporation into ground water supply. A complete grading and drainage plan using best practices engineering shall be developed. Ponding areas shall be minimal depth and shall be landscaped. See Landscaping Plan for additional landscaping requirements.
- Buildings and Units to be individually marked with contrasting color signage. Signs shall be lit from dusk to dawn with the use of building and site lighting. Site Lighting package shall be Energy Star qualified.

KEYED NOTES:

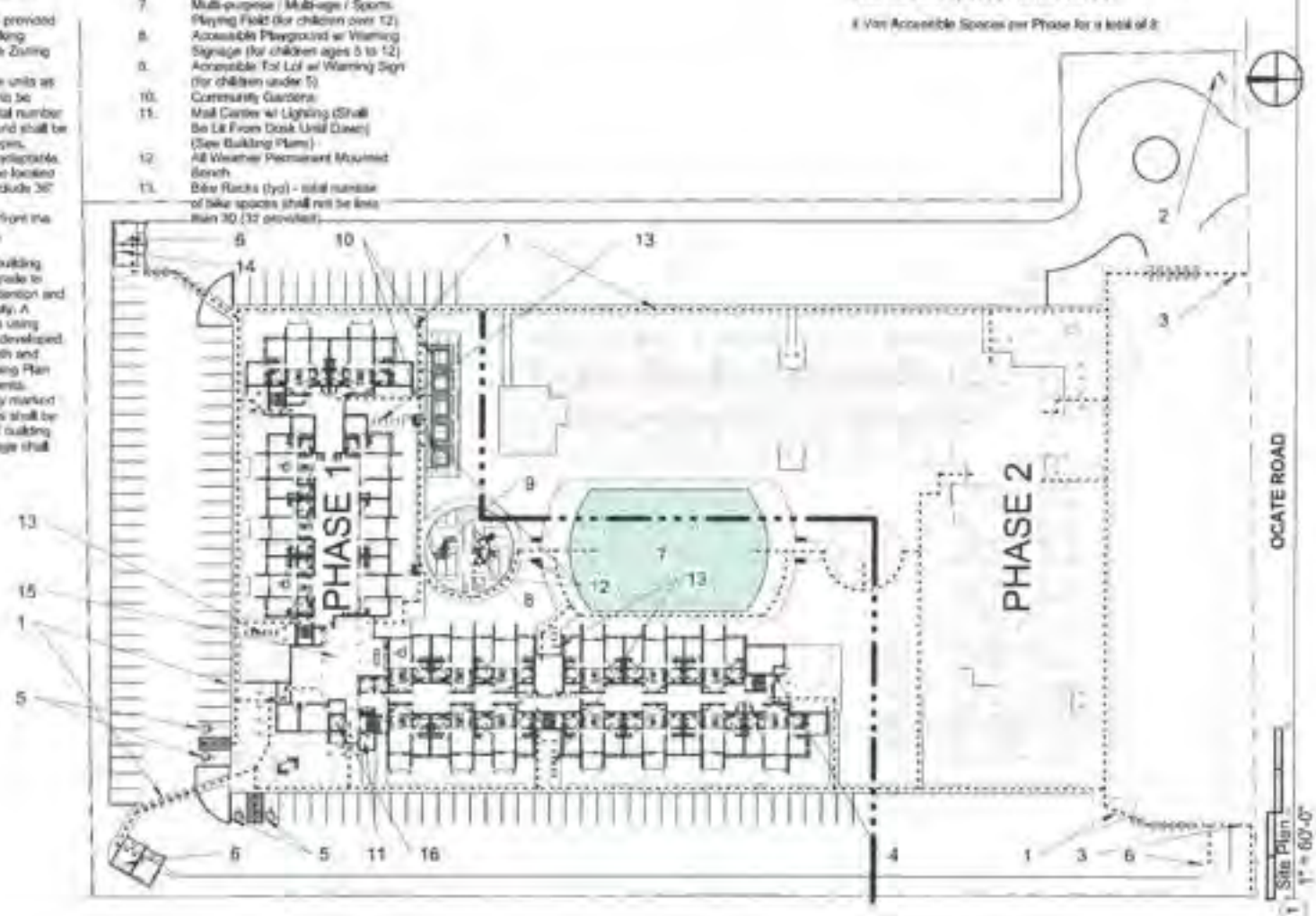
1. Accessible Route
2. Monument Sign with Building Address
3. Accessible Route From Project Site To Public Sidewalk
4. Fire Riser Room
5. Van Accessible Parking Space
6. Garbage Enclosure with Gates
7. Multi-purpose / Multi-age / Sports Playing Field (for children over 12)
8. Accessible Playground w/ Warning Signage (for children ages 5 to 12)
9. Accessible Tot Lot w/ Warning Sign (for children under 5)
10. Community Gardens
11. Mail Center w/ Lighting (Shall Be Lit From Dusk Until Dawn) (See Building Plans)
12. All Weather Permanent Mounted Bench
13. Bike Racks (typ) - total number of bike spaces shall not be less than 30 (32 provided)
14. Recycling Center Enclosure
15. Community Room (See Building Plans)
16. Elevator

Parking Requirements per Santa Fe Zoning Ordinance:

PHASE 1
1 BR = 10 UNITS @ 1.25 spaces per unit = 12.5
2 BR = 35 UNITS @ 1.5 spaces per unit = 52.5
3 BR = 15 UNITS @ 2.0 spaces per unit = 15.0
95 spaces required for Phase 1

Total Parking Requirement for Both Phases = 190 spaces
Total number of spaces provided 230 > 190

4 Van Accessible Spaces per Phase for a total of 8



JEEDS & ZUZU, LLC
ARCHITECTS & CONTRACTORS
PLANNING PRIVATE CLUBS

OCATE RD
OCATE RD.
SANTA FE, NM 87507

A1

Santa Fe Public Schools

Santa Fe Public Schools

Property & Asset Management
Residential Development Impact Information Form
School Notification as required by City Ordinance 14-8.18 AFCC 1987

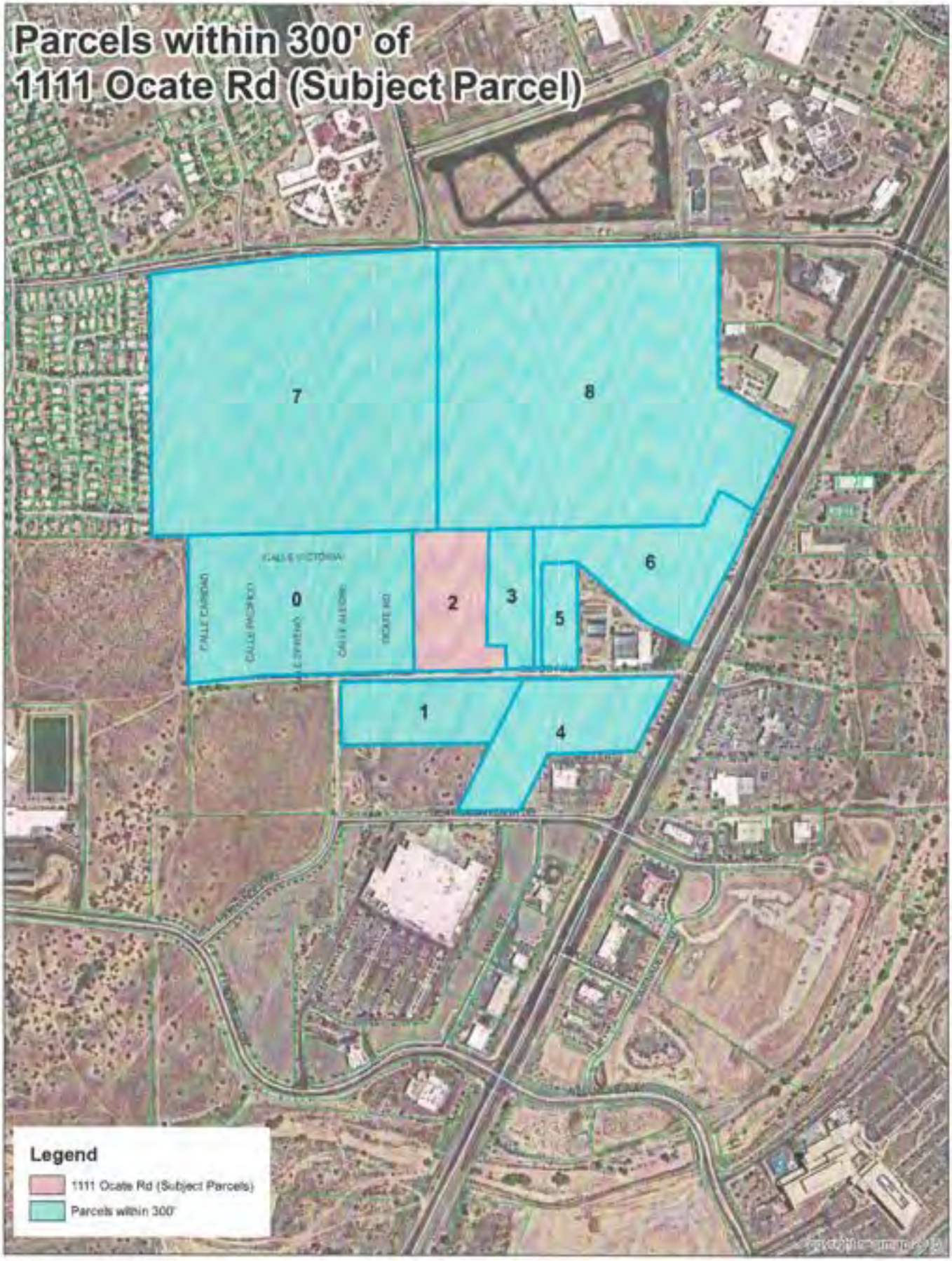
1. Project Name: OCATE SANTA FE APARTMENTS
2. Location of Property: 1111 OCATE ROAD
3. Owner/Agent Name: LIAISON PLANNING SERVICES INC.
   Mailing Address: PO BOX 1835 SANTA FE, NM 87504
   Phone & Fax: (505) 920-6839
4. Unit Matrix

PROJECT EFFECT ON STUDENT POPULATION		
Unit Type	Unit Quantity	Average Price
Single Family (detached) Single Family (attached) Townhouse/ Apartment Multi-Family Commercial	60 PHASE I	

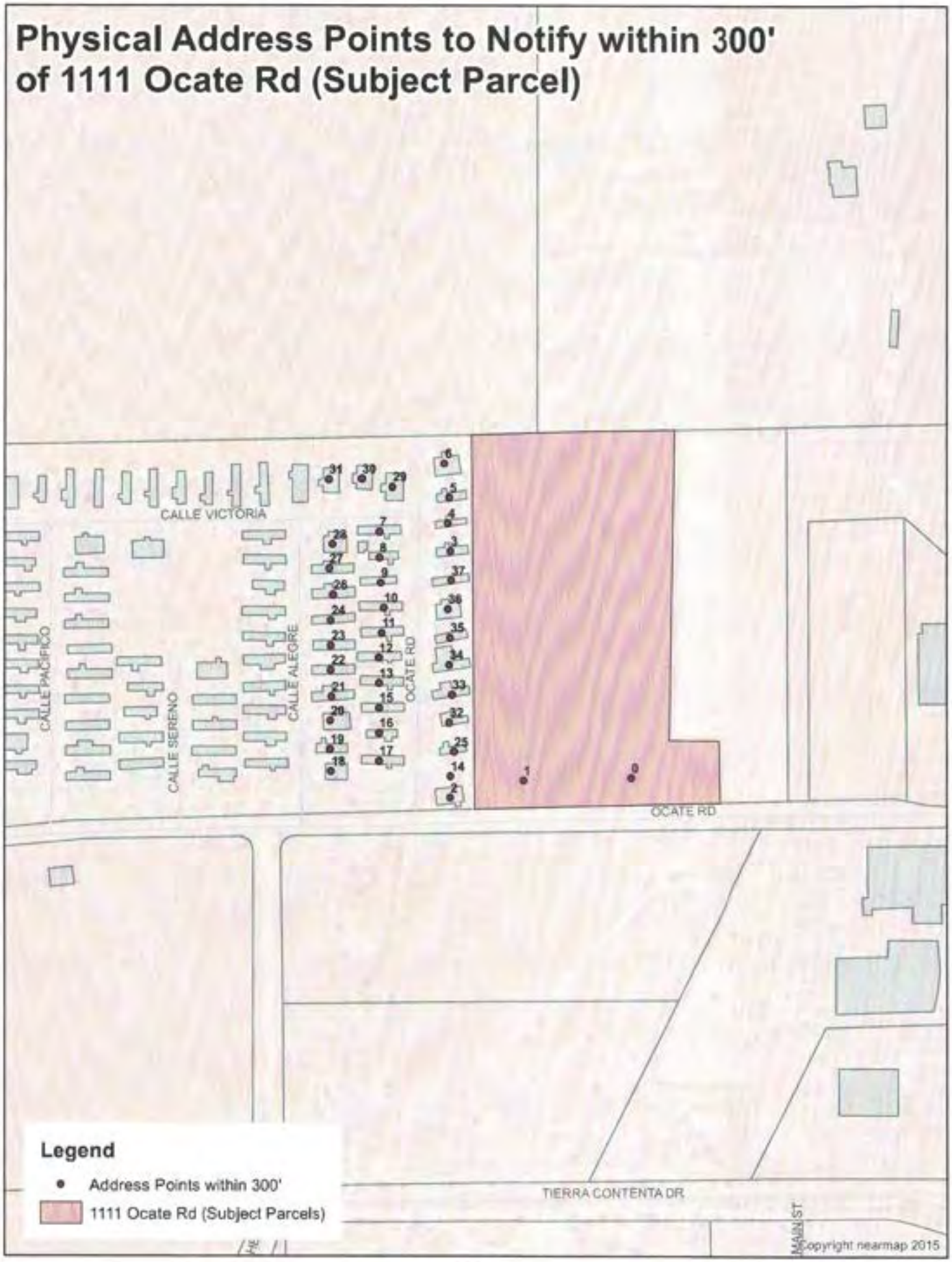
5. Elementary School Zone for Proposed Development: CESAR CHAVEZ
6. Middle School Zone for Proposed Development: ORTIZ
7. High School Zone for Proposed Development: CAPITAL
8. Build out Rates (Years; #/yr): 10 YRS

Educational Services Center
610 Alta Vista
Santa Fe, NM 87505
Telephone (505) 467-2000
www.sfps.info

For questions & submittal contact:
Santa Fe Public Schools: Property & Asset Management
2195 Zia Road, Santa Fe NM 87505
505 467 3400


Parcels within 300' of
1111 Ocate Rd (Subject Parcel)
7
8
6
2
3
5
0
1
4
CALLE VICTORIA
CALLE CARIDAD
CALLE INOCENCIO
CALLE ESPERANZA
CALLE ASUNCION
OCATE RD
Legend
1111 Ocate Rd (Subject Parcels)
Parcels within 300'

Physical Address Points to Notify within 300' of 1111 Ocate Rd (Subject Parcel)



SANTA FE MOBILE HOME HACIENDA
P.O. BOX 167928
IRVING, TX 75016-7928

HERNANDEZ, JOSEPH L & DOROTHY
CRISTINA FELDEWERT
16 PASEO DEL CABALLO
SANTA FE, NM 87508

SANTA FE CIVIC HOUSING AUTHORITY
INC
664 ALTA VISTA
SANTA FE, NM 87505-4149

SANTA FE DEALERSHIP ACQUISITION
LLC
1800 E AIRPORT FWY
IRVING, TX 75062-4827

FC AUTOMOTIVE REAL ESTATE, LP ATTN:
JERRY FREEMAN, JR
1800 E AIRPORT FWY
IRVING, TX 75062

THE LEASING COMPANY
7501 CERRILLOS RD
SANTA FE, NM 87507

LITHIA REAL ESTATE, INC
150 N BARTLETT ST
MEDFORD, OR 97501-6032

N M SCHOOL FOR THE DEAF
UNASSIGNED
SANTA FE, NM 87501

STATE OF NEW MEXICO HIGHWAY AND
TRANSPORTATION DPT
1120 CERRILLOS RD
SANTA FE, NM 87505

Current Resident/Owner
1107 OCATE RD
SANTA FE, NM 87507

Current Resident/Owner
1111 OCATE RD
SANTA FE, NM 87507

Current Resident/Owner
1115 OCATE RD SP 1
SANTA FE, NM 87507

Current Resident/Owner
1115 OCATE RD SP 10
SANTA FE, NM 87507

Current Resident/Owner
1115 OCATE RD SP 11
SANTA FE, NM 87507

Current Resident/Owner
1115 OCATE RD SP 12
SANTA FE, NM 87507

Current Resident/Owner
1115 OCATE RD SP 12A
SANTA FE, NM 87507

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1115 OCATE RD SP 14
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SANTA FE, NM 87507

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SANTA FE, NM 87507

Current Resident/Owner
1115 OCATE RD SP 22
SANTA FE, NM 87507

Current Resident/Owner
1115 OCATE RD SP 23
SANTA FE, NM 87507

Current Resident/Owner
1115 OCATE RD SP 24
SANTA FE, NM 87507

Current Resident/Owner
1115 OCATE RD SP 25
SANTA FE, NM 87507

FID	OwnerName	Owner_Line	Owner_City	Owner_Stat	Owner_Zip
0	SANTA FE MOBILE HOME HACIENDA	P.O. BOX 167928	IRVING	TX	75016-7928
1	HERNANDEZ, JOSEPH L & DOROTHY CRISTINA FELDEWERT	18 PASEO DEL CABALLO	SANTA FE	NM	87508
2	SANTA FE CIVIC HOUSING AUTHORITY INC	664 ALTA VISTA	SANTA FE	NM	87505-4149
3	SANTA FE DEALERSHIP ACQUISITION LLC	1800 E AIRPORT FWY	IRVING	TX	75062-4827
4	FC AUTOMOTIVE REAL ESTATE, LP ATTN: JERRY FREEMAN, JR.	1800 E AIRPORT FWY	IRVING	TX	75062
5	THE LEASING COMPANY	7501 CERRILLOS RD	SANTA FE	NM	87507
6	LITHIA REAL ESTATE, INC	150 N BARTLETT ST	MEDFORD	OR	97501-6032
7	N M SCHOOL FOR THE DEAF	1060 Cerrillos Rd.	SANTA FE	NM	87505
8	STATE OF NEW MEXICO HIGHWAY AND TRANSPORTATION DPT	1120 CERRILLOS RD	SANTA FE	NM	87505
0	Current Resident/Owner	1107 OCATE RD	SANTA FE	NM	87507
1	Current Resident/Owner	1111 OCATE RD	SANTA FE	NM	87507
2	Current Resident/Owner	1115 OCATE RD SP 1	SANTA FE	NM	87507
3	Current Resident/Owner	1115 OCATE RD SP 10	SANTA FE	NM	87507
4	Current Resident/Owner	1115 OCATE RD SP 11	SANTA FE	NM	87507
5	Current Resident/Owner	1115 OCATE RD SP 12	SANTA FE	NM	87507
6	Current Resident/Owner	1115 OCATE RD SP 12A	SANTA FE	NM	87507
7	Current Resident/Owner	1115 OCATE RD SP 13	SANTA FE	NM	87507
8	Current Resident/Owner	1115 OCATE RD SP 14	SANTA FE	NM	87507
9	Current Resident/Owner	1115 OCATE RD SP 15	SANTA FE	NM	87507
10	Current Resident/Owner	1115 OCATE RD SP 16	SANTA FE	NM	87507
11	Current Resident/Owner	1115 OCATE RD SP 17	SANTA FE	NM	87507
12	Current Resident/Owner	1115 OCATE RD SP 18	SANTA FE	NM	87507
13	Current Resident/Owner	1115 OCATE RD SP 19	SANTA FE	NM	87507
14	Current Resident/Owner	1115 OCATE RD SP 2	SANTA FE	NM	87507
15	Current Resident/Owner	1115 OCATE RD SP 20	SANTA FE	NM	87507
16	Current Resident/Owner	1115 OCATE RD SP 21	SANTA FE	NM	87507
17	Current Resident/Owner	1115 OCATE RD SP 22	SANTA FE	NM	87507
18	Current Resident/Owner	1115 OCATE RD SP 23	SANTA FE	NM	87507
19	Current Resident/Owner	1115 OCATE RD SP 24	SANTA FE	NM	87507
20	Current Resident/Owner	1115 OCATE RD SP 25	SANTA FE	NM	87507
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22	Current Resident/Owner	1115 OCATE RD SP 27	SANTA FE	NM	87507

23	Current Resident/Owner	1115 OCATE RD SP 28	SANTA FE	NM	87507
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35	Current Resident/Owner	1115 OCATE RD SP 7	SANTA FE	NM	87507
36	Current Resident/Owner	1115 OCATE RD SP 8	SANTA FE	NM	87507
37	Current Resident/Owner	1115 OCATE RD SP 9	SANTA FE	NM	87507

ENN ZOOM MEETING NOTES

OCATE APARTMENTS

4/16/2024

Attendance:

Dolores I Vigil, Liaison Planning Services Inc.

Mike Gomez, Consultant for the Applicant Santa Fe Engineering

Ed Romero, David Martinez, Applicant/ Property Owner Santa Fe Civic Housing Authority

David Hickman, Architect Jeebs and Zuzu

City Staff Members:

Carly Venditti, Planner Senior

Jason Kluke, Land Use Director

Margaret Moore, Planning Manager

Neighbors:

No Neighbors Attended

Discussion Topics:

DRT Application Schedule

Discussion regarding affordability and clarification.

Vehicular entrance and exit 2 points of entry.

Discussion regarding playground audit – CPSI Certification good for 3 years

Santa Fe Engineering Consultants, LLC

Civil and Traffic Engineering
Construction Management
Land Development

TRAFFIC IMPACT ANALYSIS
FOR
DEVELOPMENT PLAN APPROVAL
OCATE APARTMENTS
1111 OCATE ROAD
SANTA FE, NEW MEXICO

Prepared For:

The Santa Fe Civic Housing Authority
664 Alta Vista Street
Santa Fe NM 87505

Prepared By:

Santa Fe Engineering Consultants, LLC.
1599 S. St. Francis Drive, Suite B
Santa Fe, New Mexico 87505

August 2024

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TRAFFIC IMPACT ANALYSIS
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SANTA FE, NEW MEXICO

EXECUTIVE SUMMARY

The Santa Fe Housing Authority is proposing to develop 84 residential apartments to be located on 1111 Ocate Road, Santa Fe, NM. The project is to be located on a 5.64 ± acre mostly vacant site on the north side of Ocate Road. Access to the site is via Ocate Road.

A scoping meeting was held with representatives from the Public Works department of the City of Santa Fe, Wilson, and Company (City Traffic Engineering Consultant), Liaison Planning, and Santa Fe Engineering Consultants LLC, on March 13, 2024. The scope of the project is to focus on the intersection of Cerrillos Road / Ocate Road / CarMax Driveway and the site access driveways on Ocate Road.

An Early Neighborhood Notification (ENN) Meeting was conducted on April 16, 2024. No traffic concerns were discussed at the ENN meeting. The Ocate Road Apartments project will be completed in one phase. It is anticipated that construction will begin in 2025 and be fully developed and occupied by the year 2027. The Implementation Year is 2027. The project is not phased, the Horizon Year is 2037. The site is zoned C-2. Multi-Family housing is an allowable use in a C-2 zone.

Ocate Road is a road that is in transition. For decades Ocate Road has been the access to the Santa Fe Mobile Home Hacienda. It is shown in the Google Earth Historical Imagery, in their earliest image (1985), it is believed to have been developed in the 1970's. Ocate Road was a rural road. In about 2015, the Honda / Subaru dealership was constructed. The Honda development constructed curb and gutter, landscaping, and sidewalk improvements on their (south side) of Ocate Road, along their property. The remainder of the road is a rural road with a 22-foot wide paved surface, no bicycle lanes, nor curb and gutter, or sidewalk.

Ocate Road is unclassified, according to the "Recommended Changes to the Function Classification of Roadways in the Santa Fe MPO Planning Area," approved by the Santa Fe MPO Transportation Policy Board on March 27, 2014. Functionally Ocate Road acts as a minor collector. According to the SFCC 14-9.2, based upon the ADT it would be Classified as a collector.

There are no known developments in the area that are currently seeking City approvals. The Tierra Contenta development is located around much of the periphery of the Ocate Apartments. The vacant land to the south is owned by the Hernandez Family and is part of the Tierra Contenta development. The vacant land to the north is owned by the New Mexico School for the Deaf the other property is also part of Tierra Contenta and the NMDOT District 5 headquarters. The Hernandez properties are zoned R-21 (apartments), I-1 Light Industrial, and C-2 General Commercial. The New Mexico School for the Deaf is Zoned PRC,- Planned Community. They are likely be developed at some time in the future. However, it is not known when or what actual development may occur.

The Santa Fe Metropolitan Planning Organization (MPO) Future Roadway Network Map shows several future roadways in the area that may impact the site. The map shows a developer lead road extension of Ocate Road to Tierra Contenta Drive; however, it shows an alignment

through the Nina Otero Community School. It also shows a study for a future road intersection through the Santa Fe Mobile Home Hacienda, and through the New Mexico School for the Deaf property. These maps were reviewed with the MPO staff. The MPO staff stated that the Future Roadway Map will be updated in August 2025. In the update, the connection from Ocate Road to Paseo del Sol will be along the northern side of the school. The extension of Hernandez Drive will terminate at Ocate Road and will not go through the Santa Fe Mobile Home Hacienda. Instead, other connections west of the Santa Fe Mobile Home Hacienda are possible. In any case, the Ocate Apartments do not impact any planned future roads.

Cerrillos Road / Ocate Road / CarMax Driveway is a two way stop controlled intersection. There are existing failures at the intersection of Cerillos Road / Ocate Road / The CarMax Driveway. On the Ocate Road and the CarMax leg of the intersection, the left / thru / right movement fails because of the left turn movement. The CarMax leg of the intersection also fails because of the left turn. There is a large open area in the median opening at the intersection on Cerillos Road which promotes a two stage crossing technique. The eastbound left turn onto Cerrillos Road is accomplished in two stages. The first stage is to find a gap in the southbound traffic and cross the three southbound lanes; then stop and wait for a gap in the northbound traffic to accomplish the left turn. The intersection was evaluated using the two stage approach, and the failures were not corrected .

Crash data was obtained from the NMDOT from 2016 to 2022. The crash data shows that in the seven-year period from 2016 to 2022, there were a total of 19 crashes at the intersection of Cerrillos Road / Ocate Road / CarMax Driveway. The crashes per year vary from a high of 4 in 2016 to a low of 1 in 2018. There were no crashes that involved fatalities. Of the 19 crashes, 10 crashes involved another vehicle and 8 crashes with a description that was left blank and 1 crash that involved a parked car. The severity of injuries ranged from suspected serious injuries to no apparent injuries. It is significant to note the low volume of crashes considering the high volume of traffic on this six lane facility.

A warrant analysis was prepared for the existing conditions. The intersection meets the warrants for a traffic signal. According to Table 18.C-1 for a principal arterial with a speed limit of 45 MPH, the minimum spacing between signalized intersections is 2,640 feet. The signalized intersection of Cerrillos Road / Ocate Road / CarMax Driveway is located 2,230 feet from the upstream signal at Cerrillos Road / Jaguar Drive / Governor Miles Road intersection. The next signal downstream, is 800 feet to the intersection of Cerrillos Road / Las Soleras Drive / Tierra Contenta Drive. A traffic signal at the intersection of Cerrillos Road / Ocate Road / CarMax Driveway does not meet the spacing requirements as presented in SAMM, Table 18.C-1, "Access Spacing Standards for Intersections and Driveways."

The intersection meets warrants for a traffic signal, but does not meet the spacing requirements. In order to correct the issue, the following options were considered:

1. Do nothing.

   The existing left turn fails, however, considering the volume of the traffic, crashes are relatively low. However, the "Do nothing" alternative is not feasible because of safety.

2. Close the left turn movements from Ocate Road and CarMax and provide indirect left turns.

   The Ocate Road leg of the intersection would be made into a right turn in / right turn out entrance. Indirect left turns on Cerrillos Road would need to be developed. There are several studies that show that indirect left turns are safer than direct left turns.

3. Construct a new traffic signal on Cerrillos Road / Ocate Road / CarMax Driveway intersection.

The intersection meets warrants; however, it does not meet spacing requirements. In order to build a signal, a progression study would be required to show that the new signal does not adversely affect bandwidth.

Since the City does not have a traffic model, it would require traffic counts at all intersections on Cerrillos Road from Beckner Road to Airport Road and development of a new traffic model. If it can be shown that the new signal will not adversely affect progression, then a signal could be constructed. A progression study and traffic signal are beyond the economic ability of this 84 unit affordable housing project. Such an effort would require Public Works to develop a project for a signal.

4. Build alternate roads to disperse traffic from Ocate Road.

The construction of Hernandez Road from Ocate Road to Tierra Contenta Drive would provide the needed relief for left turns on Ocate Road at the Cerrillos Road / Ocate Road / CarMax Driveway intersection. The existing Cerrillos Road / Tierra Contenta Drive / Las Soleras Drive and Cerrillos Road / Herrera Drive right turn signal could be used for left turns. The connection would be a direct route to the Nina Otero Community School, Capitol High School, the Cesar Chavez Elementary School, and NM 599. The connection would help to reduce traffic on Cerrillos Road. The Right of Way for the extension from Tierra Contenta Drive to Ocate Road has already been dedicated to the City. The roadway has been rough graded, and some utilities have been installed. With this alternative the right in and right out Ocate Road will still be required.

There may be other mechanisms to fund these road improvements. The Santa Fe Housing authority is pursuing funding from other sources.

The project is scheduled to be opened and occupied by 2027. The option to "Do Nothing" is not feasible. The 84 unit affordable apartment project does not have funding to study and construct a traffic signal. The 84 unit apartments do not have the funding to construct Hernandez Road.

It appears that the most reasonable solution for the 84 unit apartments is to close the left turn movements on Ocate Road and instead develop indirect left turns. This would be in place for the foreseeable future. It is assumed that the Hernandez Road extension would be constructed by 2037. This results in relief to the entire area road network that the intersection of Cerrillos Road / Ocate Road / The CarMax Driveway operates satisfactory, except for the north bound left which fails. This occurs at virtually every northbound left turn on Cerrillos Road. The failures occur because of the heavy southbound, three lanes of traffic. The Public Works Department should develop a policy to deal with these failures

TRAFFIC IMPACT ANALYSIS
FOR
DEVELOPMENT PLAN APPROVAL
OCATE APARTMENTS
1111 OCATE ROAD
SANTA FE, NEW MEXICO

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TRAFFIC IMPACT ANALYSIS
FOR
DEVELOPMENT PLAN APPROVAL
OCATE APARTMENTS
1111 OCATE ROAD
SANTA FE, NEW MEXICO

I. INTRODUCTION

A. Purpose

The Santa Fe Housing Authority is proposing to develop 84 residential apartments to be located on 1111 Ocate Road, Santa Fe, NM. The project is to be located on a 5.64 + acre, mostly vacant site on the north side of Ocate Road. Access to the site is via Ocate Road.

The purpose of this report is to examine the existing traffic conditions, to estimate the traffic generated by the proposed development, to determine the impact of the development on the existing roadway infrastructure and to provide recommendations for improvements to meet City of Santa Fe requirements. This report has been prepared in accordance with the New Mexico Department of Transportation (NMDOT) State Access Management Manual (SAMM).

A scoping meeting was held with representatives from the Public Works department of the City of Santa Fe, Wilson, and Company (City Traffic Engineering Consultant), Liaison Planning, and Santa Fe Engineering Consultants LLC on March 13, 2024. The scope of the project is to focus on the intersection of Cerrillos Road / Ocate Road / CarMax Driveway and the site access driveways on Ocate Road.

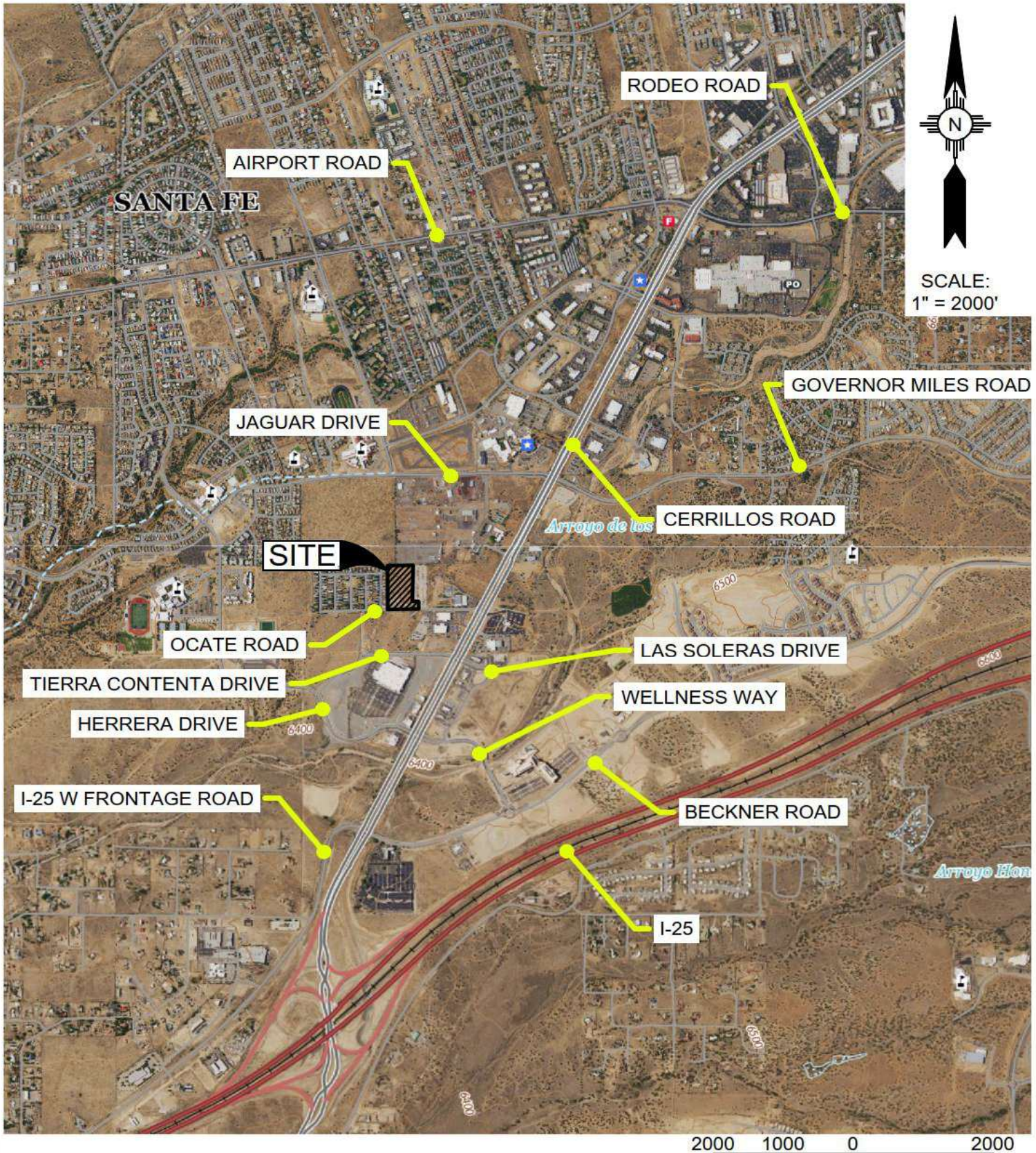
An Early Neighborhood Notification (ENN) Meeting was conducted on April 16, 2024. No traffic concerns were discussed at the ENN meeting.

B. Project Location

The project is located within the City of Santa Fe in Section 18, Township 16 North, Range 9 East, N.M.P.M. The coordinates are Latitude 35°37'24" North and Longitude 106°01'54" West.

C. Vicinity Map

The Vicinity Map is presented in Figure 1.



REFERENCE:
U.S.G.S. QUADRANGLE MAPS ENTITLED "AGUA FRIA, NM" AND "TURQUOISE HILL, NM" ALL DATED 2020

VICINITY MAP
FIGURE 1

II. DESCRIPTION OF PROPOSED DEVELOPMENT

A. Land Use and Intensity

The site is currently mostly vacant. There are several small vacant buildings on the south side of the parcel that will be demolished. The legal lot of record is presented in Figure 2. The proposed Ocate Road Apartments project will consist of 84 apartments. The Apartments are a mix of apartment types as presented in Tables 1 and 2. This is a 100% affordable, "work force" housing project.

TABLE 1
OCATE APPARTMENTS
APARTMENT MIX SUMMARY

Description	Dwelling Units (DU)
1 Bedroom Unit	16
2 Bedroom Unit	53
3 Bedroom Unit	15
Total	**84**

TABLE 2
OCATE APPARTMENTS
APARTMENT MIX SUMMARY

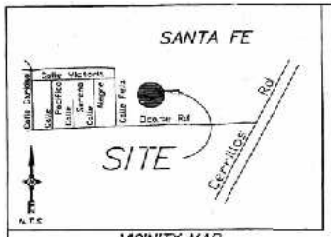
Description	Dwelling Units (DU)
Building A	33
Building B	27
Building C	24
Total	**84**

B. Phasing and Timing

The Ocate Road Apartments project will be completed in one phase. It is anticipated that construction will begin in 2025 and be fully developed and occupied by the year 2027. The Implementation Year is 2027. The project is not phased, therefore as per SAMM the Horizon Year is 2037.

LOT LINE ADJUSTMENT
OF
LOT A-2 & LOT A-1
SECTION 18, T.16N., R.09E., N.M.P.M.
CITY LIMITS OF SANTA FE, COUNTY OF SANTA FE
STATE OF NEW MEXICO

854 15



VICINITY MAP



SCALE: 1"=50'

PUBLIC UTILITY EASEMENTS (PUE)

PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT ARE GRANTED FOR THE COMMON AND JOINT USE OF:

PUBLIC SERVICE COMPANY OF NEW MEXICO (PNM): FOR INSTALLATION, MAINTENANCE, AND SERVICE OF OVERHEAD AND UNDERGROUND ELECTRICAL LINES, TRANSFORMERS, AND OTHER EQUIPMENT AND RELATED FACILITIES REASONABLY NECESSARY TO PROVIDE ELECTRICAL SERVICE.

NEW MEXICO GAS COMPANY (NMGC): FOR INSTALLATION, MAINTENANCE, AND SERVICE OF NATURAL GAS LINES, VALVES AND OTHER EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE NATURAL GAS.

QWEST: FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF SUCH LINES, CABLE, AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE CABLE TV SERVICE.

INCLUDED, IS THE RIGHT TO BUILD, REBUILD, CONSTRUCT, RECONSTRUCT, LOCATE, RELOCATE, CHANGE, REMOVE, REPLACE, MODIFY, RENEW, OPERATE AND MAINTAIN FACILITIES FOR PURPOSES DESCRIBED ABOVE, TOGETHER WITH FREE ACCESS TO, FROM, AND OVER SAID EASEMENTS, INCLUDING SUFFICIENT WORKING AREA SPACE FOR ELECTRIC TRANSFORMERS, WITH THE RIGHT AND PRIVILEGE TO TRIM AND REMOVE TREES, SHRUBS OR BUSHES WHICH INTERFERE WITH THE PURPOSES SET FORTH ABOVE. NO BUILDING, POOL (ABOVEGROUND OR SUBSURFACE), HOT TUB, CONCRETE OR WOOD POOL DECKING OR OTHER STRUCTURE SHALL BE ERECTED OR CONSTRUCTED ON SAID EASEMENTS, NOR SHALL ANY WELL BE DRILLED OR OPERATED THEREON. PROPERTY OWNERS SHALL BE SOLELY RESPONSIBLE FOR CORRECTING ANY VIOLATIONS OF NATIONAL ELECTRICAL SAFETY CODE BY CONSTRUCTION OF POOLS, DECKING, OR ANY STRUCTURES ADJACENT TO OR NEAR EASEMENTS SHOWN ON THIS PLAT.

EASEMENTS FOR ELECTRIC TRANSFORMER/SWITCHGEARS, AS INSTALLED, SHALL EXTEND TEN (10) FEET IN FRONT OF TRANSFORMER/SWITCHGEAR DOORS AND FIVE (5) FEET ON EACH SIDE.

DISCLAIMER
IN APPROVING THIS PLAT, PNM & NMGC DO NOT CONDUCT A TITLE SEARCH OF THE PROPERTIES SHOWN HEREON. CONSEQUENTLY, PNM DOES NOT HAVE OR RELEASE ANY EASEMENT OR EASEMENT RIGHTS WHICH MAY HAVE BEEN GRANTED BY OTHER PLAT, REPLAT OR OTHER DOCUMENT AND WHICH ARE NOT SPECIFICALLY DESCRIBED AND SHOWN ON THIS PLAT.

DEDICATION / AFFIDAVIT:

KNOW ALL MEN BY THESE PRESENTS:

THAT THE UNDERSIGNED OWNER HAS CAUSED THE FOREGOING LOT LINE ADJUSTMENT OF LAND AS SHOWN HEREON. THIS LOT LINE ADJUSTMENT IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE WISHES AND DESIRES OF THE SAID OWNER. EASEMENTS ARE HEREBY GRANT FOR ALL EXISTING UTILITIES. THESE LAND LIE WITH IN THE PLANNING AND PLATTING JURISDICTION OF THE CITY OF SANTA FE, SANTA FE COUNTY, STATE OF NEW MEXICO.

BOYS & GIRLS CLUB - (REPRESENTATIVE)

OFFICIAL SEAL
Victoria M. Dalton
NOTARY PUBLIC - STATE OF NEW MEXICO
My Commission Expires: 5/23/23

STATE OF NEW MEXICO)
) SS
COUNTY OF SANTA FE)

ON THIS 28 DAY OF August, 2019, THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY THE PERSON(S) SIGNED NAME(S) ABOVE.

NOTARY PUBLIC

LEGEND

- ● EXISTING REBAR
- ○ CAPPED REBAR SET THIS SURVEY.
- ⊕ MONUMENT FOUND AS NOTED
- ⊕ CITY OF SANTA FE MONUMENT.
- (W) WATER METER
- (G) GAS METER
- (E) ELECTRIC METER
- → EXISTING OVERHEAD UT. LINE WITH POWER POLE

REFERENCE AND BASIS OF BEARINGS:

PLAT OF SURVEY ENTITLED "SUMMARY REVIEW LAND DIVISION PLAT PREPARED FOR SANTA FE BOYS AND GIRLS CLUB, INC. OF REMAINDER PORTION OF TRACT "A" CITY AND COUNTY OF SANTA FE, NEW MEXICO", PREPARED BY JEFF L. LUCERO L.S. 13604 FILED FOR RECORD IN THE SANTA FE, NEW MEXICO COUNTY CLERK'S OFFICE IN PLAT BOOK 841 AT PAGE 25.

BEARINGS AND DISTANCES IN PARENTHESIS FROM ABOVE MENTIONED PLAT OF SURVEY.

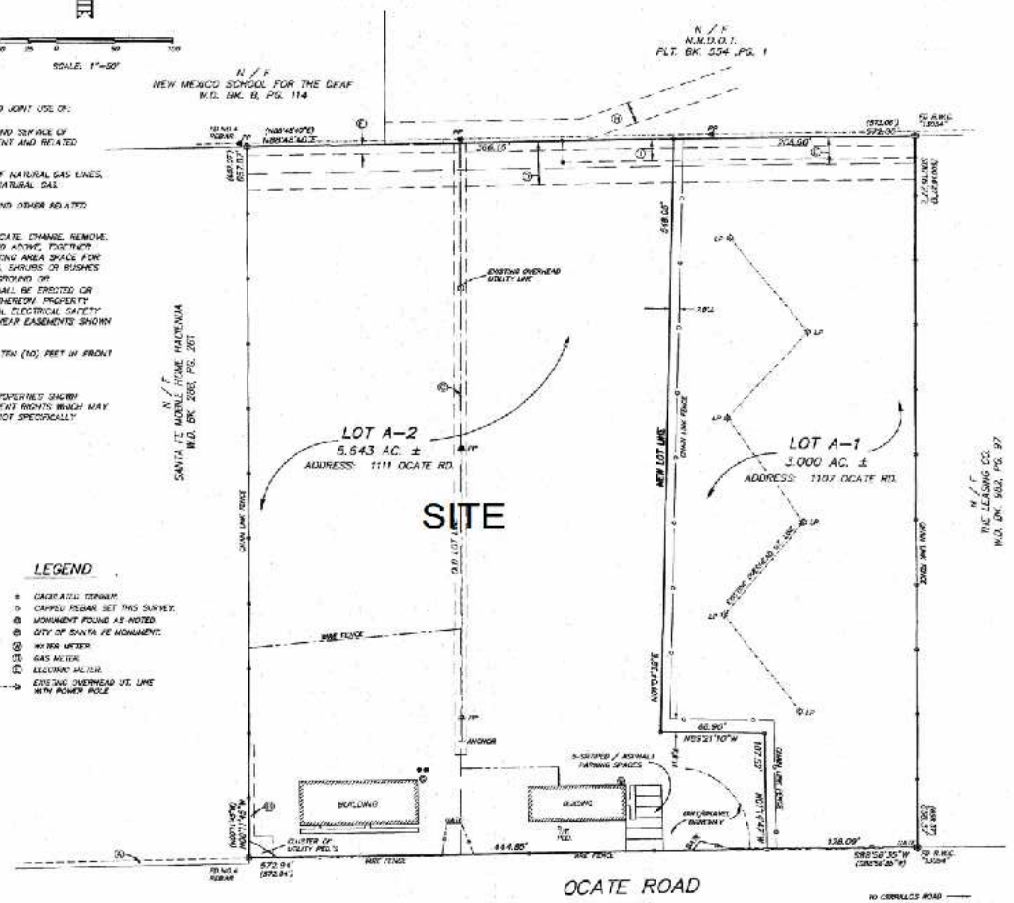
SURVEYOR'S CERTIFICATE

ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, I HEREBY CERTIFY THAT THIS PLAT IS AN ACCURATE DELINEATION OF A SURVEY COMPLETED UNDER MY SUPERVISION ON AUGUST 1, 2019.
I FURTHER CERTIFY THAT THIS SURVEY MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR LAND SURVEYS IN NEW MEXICO, ADOPTED BY THE NEW MEXICO STATE BOARD OF PROFESSIONAL ENGINEERS AND SURVEYORS.

LORENZO D. DOMINGUEZ
P.S. 19481
DATE 8/28/19

EAST MOUNTAIN SURVEYING CO.
P.O. BOX 1507
MORIARTY, NM 87035
(505) 450-1087

STATE OF NEW MEXICO
19481
LORENZO E. DOMINGUEZ



NOTES:

THE SURVEY SHOWN IS BASED ON THE HEREON REFERENCED DOCUMENTS. SURVEYOR HAS MADE NO ATTEMPT IN A TITLE SEARCH.

THIS TRACT OR PARCEL OF LAND MAY BE SUBJECT TO RESTRICTIONS AND/OR EASEMENTS OF RECORD.

THIS TRACT OR PARCEL OF LAND MAY CONTAIN UTILITIES & UNDERGROUND DUCTS THAT ARE NOT CENTERED HEREON.

THESE TRACTS OR PARCELS OF LAND AS SHOWN HEREON ARE SUBJECT TO ALL NOTES & CONDITIONS OF PRIOR SURVEYS APPROVED BY THE THE CITY OF SANTA FE LANDUSE DEPARTMENT.

EASEMENTS:

- (A) EXISTING 8' WIDE R.O.W. ESMT. PLT. BK. 841, PG. 25
- (B) EXISTING PUBLIC UTILITY ESMT. PLT. BK. 841, PG. 25
- (C) EXISTING 10' WIDE UTILITY ESMT. PLT. BK. 841, PG. 25
- (D) EXISTING 40' WIDE ROADWAY ESMT. PLT. BK. 841, PG. 25
- (E) EXISTING 25' WIDE ROAD RESERVATION. PLT. BK. 841, PG. 25
- (F) EXISTING 8.5' WIDE UTILITY ESMT. PLT. BK. 841, PG. 25
- (G) EXISTING 20' WIDE SANITARY SEWER ESMT. PLT. BK. 841, PG. 25
- (H) EXISTING 20' WIDE PRIVATE SANITARY SEWER ESMT. PLT. BK. 841, PG. 25

CITY OF SANTA FE APPROVAL:

City Engineer for Land Use — DATE 9/5/19

City Planner — DATE 9/5/19

NOTES & CONDITIONS:

CONNECTION TO THE CITY PUBLIC SEWER SYSTEM IS MANDATORY FOR LOT A-1 & LOT A-2 WHEN THE PROPERTY IS BEING DEVELOPED OR IMPROVED PRIOR TO THE DEVELOPMENT OF IMPROVEMENT OF THE PROPERTY, OWNERS AND DEVELOPERS OF THE PROPERTY SHALL OBTAIN A TECHNICAL SEWER EVALUATION REVIEW BY THE CITY OF SANTA FE WASTEWATER DIVISION.

AN AGREEMENT FOR METERED SERVICE (AMS) FROM CITY WATER DIVISION WILL BE REQUIRED TO INSTALL NEW SERVICES.

AT THE DEVELOPMENT STAGE, THE LOT SPLIT AT 1107/1111 OCATE ROAD SHALL COMPLY WITH ALL APPLICABLE STANDARDS FOR DESIGN & DEVELOPMENT AND THEIR INTERMIXTURE OF SAID LOT(S) AS DETERMINED WITHIN THE CITY OF SANTA FE CITY CODE. ALL SITE DESIGN SHALL INCLUDE LANDSCAPING, WATER CONSERVATION, STORM WATER & OPEN SPACE MANAGEMENT AND ALL OTHER APPLICABLE REQUIREMENTS AND STANDARDS FOR BUILDING AND DEVELOPMENT WITHIN THE THE CITY OF SANTA FE.

FIRE DEPARTMENT SHALL HAVE 150 FEET DISTANCE TO ANY PORTION OF THE BUILDING OR ANY NEW CONSTRUCTION (IFC 2009 SECTION 503.1.1).

SHALL HAVE WATER SUPPLY THAT MEETS FIRE FLOW REQUIREMENTS AS PER IFC (APPENDIX B).

SHALL COMPLY WITH SECTION D102.1 ACCESS AND LOADING (75,000 LBS).

SHALL MEET THE 150 FEET DRIVEWAY REQUIREMENTS AS PER IFC OR INEMERGENCY TURN-AROUND THAT MEETS THE IFC REQUIREMENTS SHALL BE PROVIDED. (APPENDIX D TABLE D103.4).

SHALL COMPLY WITH IFC 2009 SECTION D103.2 GRADE. FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 10 PERCENT IN GRADE.

FIRE APPARATUS ACCESS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET EXCLUSIVE OF SHOULDER AND AN UNOBSTRUCTED VERTICAL CLEARANCE OF NOT LESS THAN 13 FT 6 IN (FC2009 SECTION 503.2.1).

SHALL COMPLY WITH IFC 2009 SECTION D103.6 FIRE APPARATUS ACCESS ROADS GATES (LOTS A-1 AND A-2).

SHALL MEET THE IFC CODE REQUIREMENTS 2009 EDITION OR THE MOST CURRENT EDITION THE GOVERNING BODY HAS ADOPTED AT THE TIME OF PERMITTING.

WASTEWATER UTILITY EXPANSION CHARGES (USC) FOR EACH LOT SHALL BE DUE AT TIME OF BUILDING PERMIT APPLICATION.

SIDEWALKS MUST BE CONSTRUCTED ALONG OCATE ROAD AND INCLUDED IN THE PROPOSED WORK WHEN A PERMIT IS ISSUED FOR ANY WORK ON EITHER LOT.

ACCORDING TO FEMA FIRM PANELS No. 350420 0008 & 350420 0003E, THIS PROPERTY LIES WITHIN DESIGNATED FLOOD ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, EFFECTIVE DATE OF 12/6/12.

EACH LOT SHALL BE SERVED BY SEPARATE SEWER AND WATER SERVICES INCLUDING SEPARATE METER SERVICE ACCOUNTS.

PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH THE PROVISIONS OF EACH CITY OF SANTA FE ORDINANCE ADOPTED PRIOR TO PLAT AND/OR DEVELOPMENT PLAN RECORDING WITH THE COUNTY CLERK.

BUILDABLE AREAS FOR PLATTED PARCELS WILL BE DETERMINED AT THE TIME OF BUILDING PERMIT APPLICATION AS DEFINED IN THE LAND DEVELOPMENT CODE.

STORMWATER AGREEMENT: STORMWATER EASEMENTS AND ANY OTHER DRAINAGE IMPROVEMENTS ON PRIVATE PROPERTY WILL BE MAINTAINED AND KEPT FUNCTIONAL AS ORIGINALLY DESIGNED AND CONSTRUCTED WITHIN PRIVATE PROPERTY BOUNDARIES. THE CITY HAS THE RIGHT OF ACCESS FOR INSPECTION OF SAID IMPROVEMENTS. THE CITY HAS THE RIGHT IN THE EVENT OF DRAINAGE FACILITY MAINTENANCE DEFICIENCY AND AFTER TEN (10) DAYS WRITTEN NOTICE TO THE RESPECTIVE PROPERTY OWNER, TO ENTER AND INSPECT FULL FUNCTIONAL CAPACITY OF THE DRAINAGE IMPROVEMENTS AND TO LIEN THE PROPERTY FOR BOTH DIRECT AND INDIRECT COST ASSOCIATED WITH SAID WORK. BY SIGNATURE AFFIXED TO THIS INSTRUMENT, THE PROPERTY OWNER(S) ARTHUR AND AGREE THAT THIS AGREEMENT IS BINDING PERPETUALLY, REMAINS WITH THE LAND, ON PRESENT AND FUTURE OWNERS, HEIRS AND ASSIGNS.

COUNTY TREASURER — DATE 9/3/19

Instr# 1816045
COUNTY OF SANTA FE)ss.
STATE OF NEW MEXICO)

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED FOR RECORD ON THIS 5TH DAY OF September A.D. 20 19 AT 3:46 O'CLOCK P.M. AND WAS DULY RECORDED IN BOOK 854 PAGE 15 OF THE RECORDS OF SANTA FE COUNTY.

WITNESS MY HAND AND SEAL OF OFFICE
GERALDINE SALAZAR
COUNTY CLERK, SANTA FE COUNTY, NM

DEPUTY

COUNTY CLERK SANTA FE COUNTY NEW MEXICO

FIGURE 2

INDEXING INFORMATION FOR COUNTY CLERK

OWNER(S): SANTA FE BOYS & GIRLS CLUB, INC.
RECORDED DOCUMENT(S): PLT. BK. 841, PG. 25
SEC.(S), TOWNSHIP(S), RANGE(S): SEC. 18, T.16N., R.09E., N.M.P.M.
LAND GRANT(S): N/A
UPC #: 1-049-094-170-481
PROJECT NO.: B&G CLUB-2019

C. Zoning

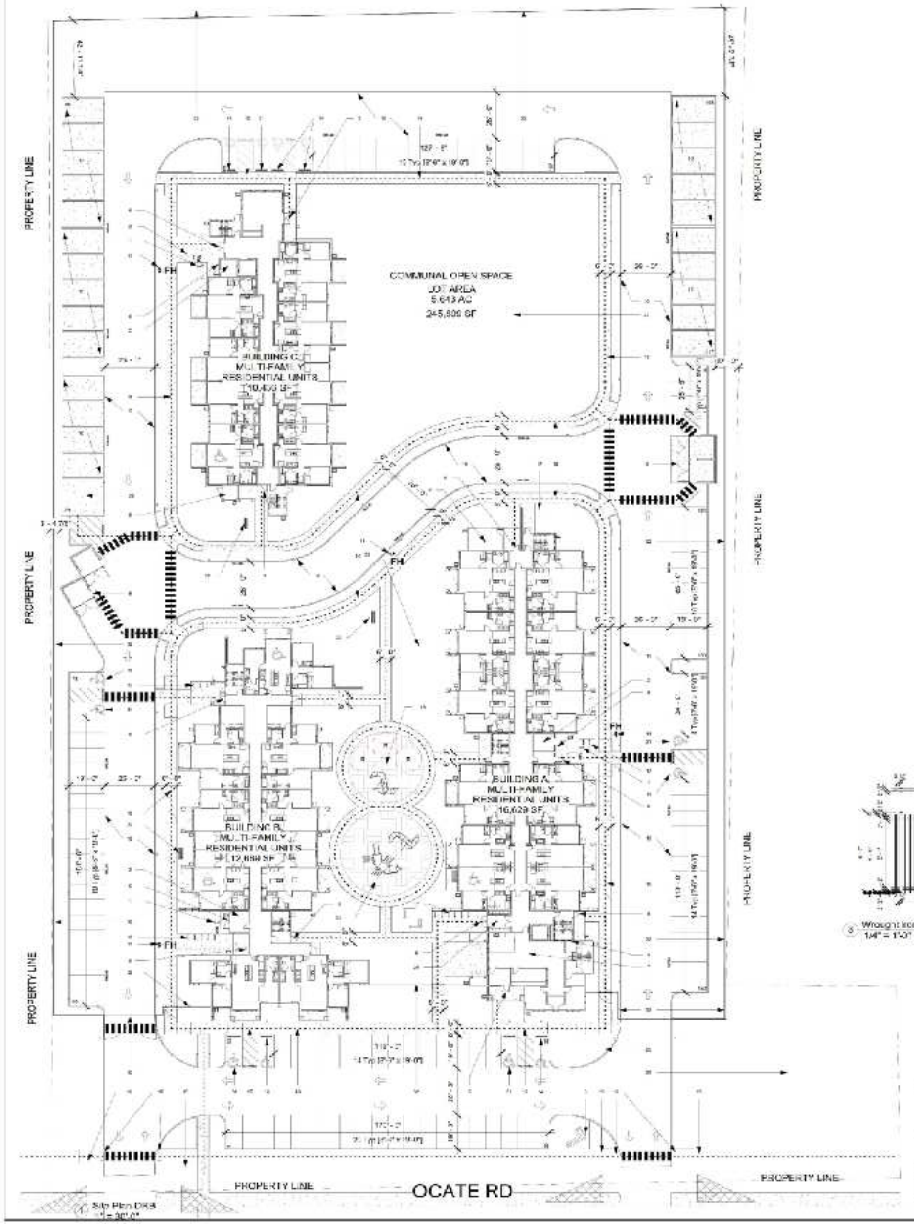
The site is zoned C-2. Multi-Family housing is an allowable use in a C-2 zone.

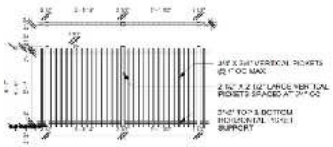
D. Access Points

Access to the site is provided by two driveways via Ocate Road. Two driveways are proposed to meet the fire code.

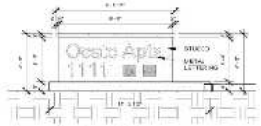
E. Site Plan

The Development Plan is presented in Figure 3.

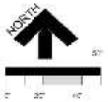




3 Wrought Iron Fence Detail
1/4" = 1'-0"



2 Monument Sign-Front Elevation
1/2" = 1'-0"



1 Site Plan Detail
1" = 30'-0"

BUILDING AREA

	UNITS	GROSS	TOTAL UNIT SF
BUILDING A			
FIRST FLOOR			
1 BR	4 UN TS	595 SF	2,378 SF
2 BR	6 UN TS	775 SF	4,650 SF
			10,353 SF FIRST FLOOR
SECOND FLOOR			
1 BR	3 UN TS	740 SF	2,220 SF
2 BR	6 UN TS	975 SF	5,850 SF
			8,097 SF SECOND FLOOR
THIRD FLOOR			
1 BR	5 UN TS	597 SF	2,622 SF
2 BR	7 UN TS	975 SF	6,825 SF
			4,976 SF THIRD FLOOR
	TOTAL UNITS		BUILDING A
	BUILDING A		TOTAL UNIT FLOOR SF
1 BR	12 UNITS		7,970 SF
2 BR	25 UNITS		23,475 SF
	37 UNITS TOTAL		31,445 SF

MINIMUM REQUIRED OPEN SPACE SF
(# OF UNITS FIRST FLOOR ONLY x 200)

4 x 200 SF =	800 SF	
5 x 200 SF =	1,000 SF	
=	1,800 SF	

	UNITS	GROSS	TOTAL UNIT SF
BUILDING B			
FIRST FLOOR			
2 BR	4 UN TS	975 SF	11,700 SF
2 BR	5 UN TS	1,215 SF	15,795 SF
			27,495 SF FIRST FLOOR
SECOND FLOOR			
2 BR	4 UN TS	975 SF	11,700 SF
2 BR	5 UN TS	1,215 SF	16,425 SF
			28,125 SF SECOND FLOOR
THIRD FLOOR			
2 BR	4 UN TS	975 SF	11,700 SF
2 BR	5 UN TS	1,215 SF	16,425 SF
			28,125 SF THIRD FLOOR
	TOTAL UNITS		MULTI-FAMILY
	BUILDING B		TOTAL UNIT FLOOR SF
2 BR	12 UNITS		39,300 SF
2 BR	13 UNITS		54,750 SF
	25 UNITS TOTAL		94,050 SF

MINIMUM REQUIRED OPEN SPACE SF
(# OF UNITS FIRST FLOOR ONLY x 200)

4 x 200 SF =	800 SF	
5 x 200 SF =	1,200 SF	
=	2,000 SF	

	UNITS	GROSS	TOTAL UNIT SF
BUILDING C			
FIRST FLOOR			
1 BR	2 UN TS	595 SF	1,190 SF
2 BR	6 UN TS	775 SF	4,650 SF
			7,840 SF FIRST FLOOR
SECOND FLOOR			
1 BR	2 UN TS	595 SF	1,190 SF
2 BR	6 UN TS	797 SF	4,778 SF
			7,968 SF FIRST FLOOR
THIRD FLOOR			
1 BR	2 UN TS	595 SF	1,190 SF
2 BR	6 UN TS	797 SF	4,778 SF
			7,968 SF FIRST FLOOR
	TOTAL UNITS		BUILDING C
	BUILDING C		TOTAL UNIT FLOOR SF
1 BR	6 UNITS		4,238 SF
2 BR	15 UNITS		17,112 SF
			21,349 SF

TOTAL BUILDING UNIT SF

	UNITS	TOTAL UNIT SF	TOTAL MINIMUM OPEN SPACE PER UNIT
1 BR	18 UNITS	28,208 SF @ BUILDING	1,800 SF
2 BR	53 UNITS	69,062 SF @ BUILDING	2,200 SF
2 BR	13 UNITS	21,349 SF @ BUILDING	1,800 SF
	84 UNITS TOTAL	118,619 SF TOTAL	7,300 SF TOTAL

BUILDING AREA

	HEATED	BALCONIES	TOTAL FLOOR SF
BUILDING A			
FIRST FLOOR	9,941 SF	1,000 SF	= 10,941 SF
SECOND FLOOR	10,481 SF	1,000 SF	= 11,481 SF
THIRD FLOOR	11,073 SF	918 SF	= 11,991 SF
	TOTAL BUILDING AREA		= 34,413 SF

	HEATED	BALCONIES	TOTAL FLOOR SF
BUILDING B			
FIRST FLOOR	11,805 SF	734 SF	= 12,539 SF
SECOND FLOOR	11,691 SF	734 SF	= 12,425 SF
THIRD FLOOR	11,691 SF	734 SF	= 12,425 SF
	TOTAL BUILDING AREA		= 36,387 SF

	HEATED	BALCONIES	TOTAL FLOOR SF
BUILDING C			
FIRST FLOOR	9,009 SF	721 SF	= 9,730 SF
SECOND FLOOR	8,999 SF	721 SF	= 9,720 SF
THIRD FLOOR	8,999 SF	721 SF	= 9,720 SF
	TOTAL BUILDING AREA		= 29,170 SF
	TOTAL BUILDINGS AREA		= 99,970 SF

MAXIMUM LOT COVERAGE CALCULATION

LOT AREA	245,809 SF
BUILDING FOOTPRINT:	
BUILDING A FIRST FLOOR	10,941 SF
BUILDING B FIRST FLOOR	12,539 SF
BUILDING C FIRST FLOOR	9,730 SF
COVERED GARAGES	8,031 SF
TOTAL LOT COVERAGE:	41,241 SF
CONCRETE SIDEWALKS:	23,170 SF
ASPHALT DRIVEWAY:	73,460 SF
TOTAL LOT FOOTPRINT	137,871 SF
TOTAL LOT COVERAGE OF AREA = 137,871 SF / 245,809 SF =	56%

USEABLE OPEN SPACE CALCULATIONS

TOTAL LOT AREA = 245,809 SF x .20 =	49,162 SF REQUIRED
WITHIN THE C-2 ZONING DISTRICT, OPEN SPACE IS REQUIRED 200 SF MINIMUM FOR EACH GROUND FLOOR DWELLING UNIT, ONLY FOR GROUND LEVEL FLOORS.	
PLEASE REFER TO TOTAL MINIMUM OPEN SPACE PER UNIT TOTAL FOR CALCULATIONS.	
TOTAL MINIMUM REQUIRED OPEN SPACE PER UNIT	7,300 SF REQUIRED
TOTAL MINIMUM REQUIRED OPEN SPACE =	49,162 SF REQUIRED
USEABLE OPEN SPACE PROVIDED:	
BALCONIES	2,645 SF
[illegible]	166,780 SF
	169,780 SF PROVIDED
16,557 SF LITTLE GRACE TROVIDED = 49,162 - 32,733	

TOTAL # OF REQUIRED PARKING SPACES PER UNIT

1 BEDROOM UNITS		
2 BEDROOM UNITS		
3 BEDROOM UNITS		
TOTAL UNIT & APARTMENT MIX:		
18 UNITS	1.5 x 1.25 SPACES =	22 SPACES
2 BEDUNITS	2.0 x 1.25 SPACES =	67 SPACES
3 BED UNITS	2.5 x 1.25 SPACES =	0 SPACES
TOTAL # OF REQUIRED PARKING SPACES =		89 SPACES
1 SPACE PROVIDED PER 1 BEDROOM UNIT =		18 SPACES
1.5 SPACE PROVIDED PER 2 BEDROOM UNIT =		51 SPACES
2 SPACES PROVIDED PER 3 BEDROOM UNIT =		0 SPACES
TOTAL # OF PARKING SPACES PROVIDED =		69 SPACES
ADA 1% SPACES REQUIRED (1 ADA UNIT)		
ADA PARKING SPACES REQUIRED		2 SPACES
MINIMUM TABLE 1106.1 = 1 SPACE PER 25 SPACES UNTIL 100		
ADA PARKING SPACES PROVIDED		3 SPACES
VAN ACCESSIBLE PARKING SPACES PROVIDED		3 SPACES
COVERED PARKING SPACES PROVIDED		23 SPACES

PROJECT INFORMATION:

LEGAL DESCRIPTION:	LOT A-2, 5.64 AC, 246,716 SQ FT
TYPE OF CONSTRUCTION:	TYPE VA
LOT SPACES:	245,810 SF 5.643 ACRES
ZONING:	C2 - GENERAL COMMERCIAL DISTRICT
ENTIRE BUILD USE:	DWELLING UNITS MULTI FAMILY (84 UNITS)
MAXIMUM HEIGHT:	45' - 0"

FIGURE 3

JEEBS & ZUZU, LLC.
Architecture
Construction
Design-Build
5524 NAVAJO AVENUE NE SUITE A
ALBUQUERQUE, NM 87113
P: 505-797-1318
www.jeebsandzuzu.com
easy as pie

job no:
drawn: KAC
checked: JDH
date: 1/10/24

Ocate Apartments
1111 Ocate Rd.
Santa Fe, NM 87507

DRB-SITE PLAN

sheet no:
DRB1.0

III. STUDY AREA CONDITIONS

A. Study Area

The Existing Roadway Network Map is presented in Figure 4. Based upon the scoping meeting, the study area consists of the following intersections:

- Cerrillos Road / Ocate Road / CarMax Driveway
- Ocate Road / Proposed Driveways into the Ocate Apartments

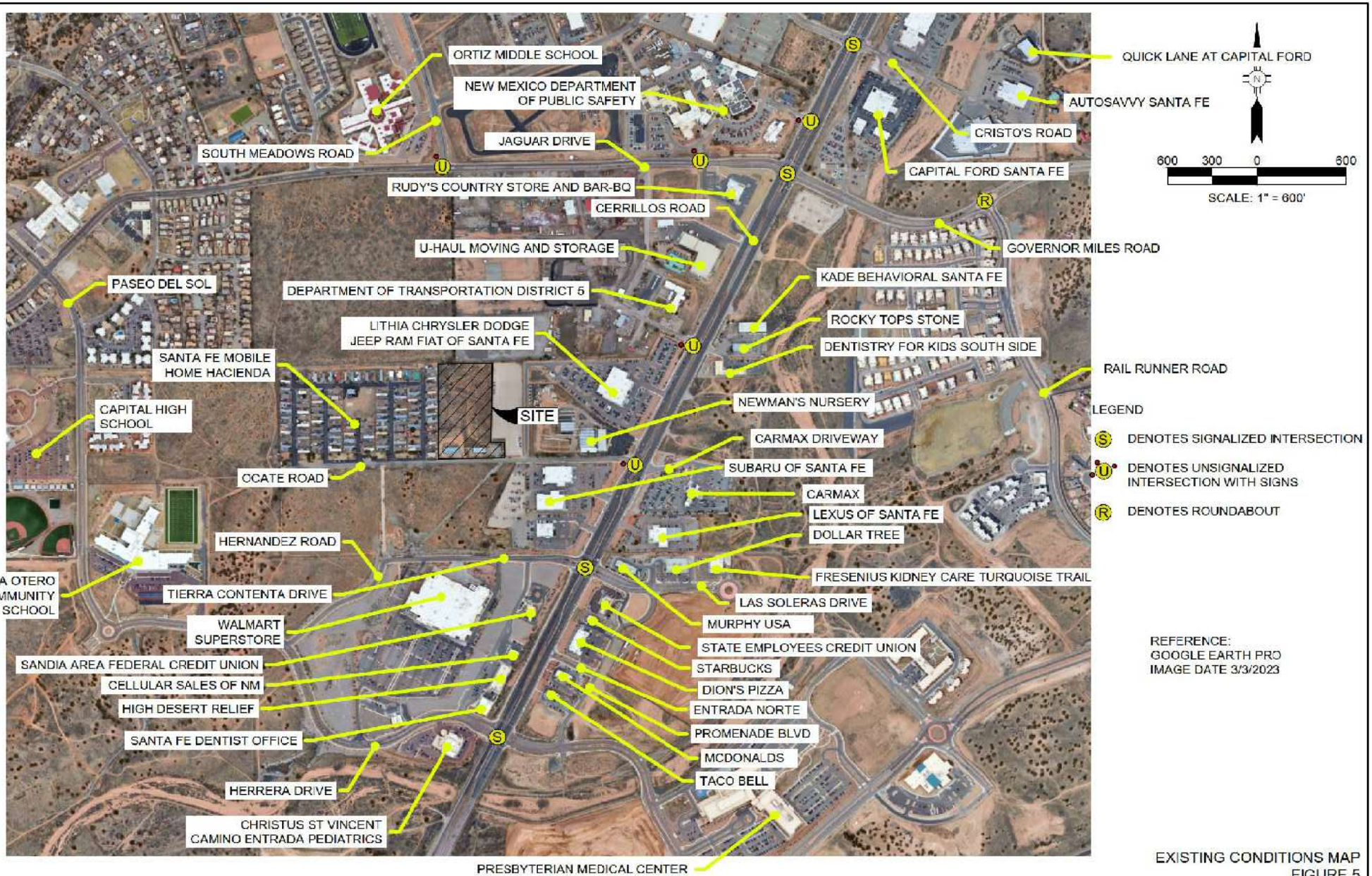
B. Existing Land Use

The site is mostly vacant land with several small vacant commercial buildings, which will be demolished. The property is almost rectangular in shape, roughly 657 feet x 445 feet wide. There is an existing overhead electric utility easement which roughly bisects the property. The north side of the parcel is encumbered by a 40 foot and 25 foot wide roadway easement and a 20 foot wide, water and sanitary sewer easement.

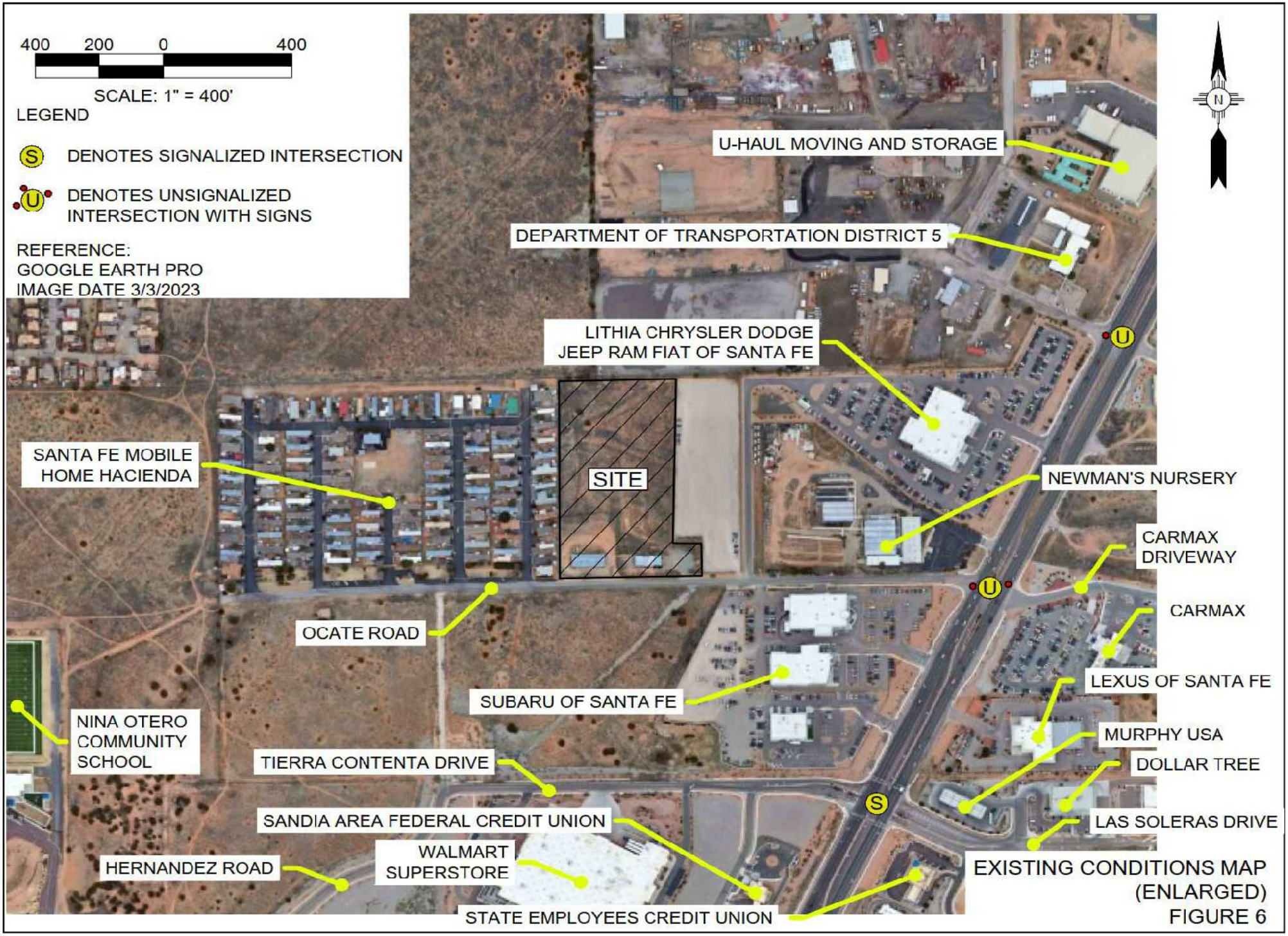
The existing land uses in the immediate area include the Santa Fe Mobile Home Hacienda, on the west; vacant land to the north (New Mexico School for the Deaf and NMDOT property); a parking lot for the Honda / Subaru Dealership and Newman's Nursery on the east: and on the south by Ocate Road Right of Way (ROW) and vacant land (owned by the Hernandez family) that has been zoned R-21 (apartments), I-1 Light Industrial, and C-2 General Commercial. Other uses in the area include Wal-Mart, Nina Otero Community Elementary School, Capital High School, Cesar Chavez Elementary School and NMDOT District 5 Headquarters.

The Existing Conditions Map is presented in Figure 5. An enlarged view of the Existing Conditions map is presented in Figure 6. It should be noted that the future extension of Hernandez Road has already been graded for the construction of utilities. It is anticipated that this road will be constructed when the Hernandez property is developed.


LEGEND
DENOTES SIGNALIZED INTERSECTION
DENOTES UNSIGNALIZED INTERSECTION WITH SIGNS
DENOTES ROUNDABOUT
CAMINO ENTRADA
AIRPORT ROAD
SOUTH MEADOWS ROAD
N
CRISTO'S ROAD
PASEO DEL SOL
JAGUAR DRIVE
CERRILLOS ROAD
GOVERNOR MILES ROAD
SITE
CARMAX DRIVEWAY
TIERRA CONTENTA DRIVE
OCATE ROAD
LAS SOLERAS DRIVE
HERNANDEZ ROAD
WELLNESS WAY
HERRERA DRIVE
I-25
I-25 FRONTAGE ROAD
BECKNER ROAD
1000 500 0 1000
SCALE: 1" = 1000'
REFERENCE: GOOGLE EARTH PRO IMAGE DATE 3/3/2023
EXISTING ROAD NETWORK
FIGURE 4



EXISTING CONDITIONS MAP
FIGURE 5


400 200 0 400
SCALE: 1" = 400'
LEGEND
S DENOTES SIGNALIZED INTERSECTION
U DENOTES UNSIGNALIZED INTERSECTION WITH SIGNS
REFERENCE:
GOOGLE EARTH PRO
IMAGE DATE 3/3/2023
N
U-HAUL MOVING AND STORAGE
DEPARTMENT OF TRANSPORTATION DISTRICT 5
LITHIA CHRYSLER DODGE JEEP RAM FIAT OF SANTA FE
SANTA FE MOBILE HOME HACIENDA
SITE
NEWMAN'S NURSERY
CARMAX DRIVEWAY
CARMAX
OCATE ROAD
LEXUS OF SANTA FE
SUBARU OF SANTA FE
NINA OTERO COMMUNITY SCHOOL
MURPHY USA
TIERRA CONTENTA DRIVE
DOLLAR TREE
SANDIA AREA FEDERAL CREDIT UNION
LAS SOLERAS DRIVE
WALMART SUPERSTORE
HERNANDEZ ROAD
STATE EMPLOYEES CREDIT UNION
EXISTING CONDITIONS MAP (ENLARGED)
FIGURE 6

C. Other Known Development Activity

There are no known developments in the area that are currently seeking City approvals. The Tierra Contenta development is located around much of the periphery of the Ocate Apartments. The vacant land to the south is owned by the Hernandez Family and is part of the Tierra Contenta development. The New Mexico School for the Deaf property is also part of Tierra Contenta. The Hernandez properties are zoned R-21 (apartments), I-1 Light Industrial, and C-2 General Commercial. The New Mexico School for the Deaf is Zoned PRC- Planned Community. They are likely be developed at some time in the future. However, it is not known when or what actual development may occur.

D. Existing Roadway System Characteristics

The Ocate Apartments impact Ocate Road and Cerrillos Road. The existing road network is presented in Figure 4.

1. Ocate Road

Ocate Road is a road that is in transition. For decades Ocate Road has been the access to the Santa Fe Mobile Home Hacienda. It is shown in the Google Earth Historical Imagery, in their earliest image (1985), it is believed to have been developed in the 1970's. Ocate Road was a rural road. In about 2015, the Honda / Subaru dealership was constructed. The Honda development constructed curb and gutter, landscaping, and sidewalk improvements on their (south side) of Ocate Road. The remainder of the road is rural road with one 11-foot wide lane in each direction, no bicycle lanes, curb and gutter, or sidewalk. The posted speed limit on Ocate Road in the vicinity of the project is 25 MPH. The intersection geometrics are presented in Figure 7.

Ocate Road is unclassified, according to the "Recommended Changes to the Function Classification of Roadways in the Santa Fe MPO Planning Area," approved by the Santa Fe MPO Transportation Policy Board on March 27, 2014. Functionally Ocate Road acts as a minor collector. According to the SFCC 14-9.2, based upon the ADT it would be Classified as a collector.



NOTE: DIMENSIONS SHOWN ARE NOT SURVEYED.
THEY WERE OBTAINED BY QUICK MEASUREMENTS MADE IN THE FIELD USING TAPE MEASURE AND MEASURING WHEEL. THE DIMENSIONS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED FOR ACCURACY.

INTERSECTION GEOMETRICS
OCATE ROAD
/SITE DRIVEWAYS
FIGURE 7

REFERENCE:
GOOGLE EARTH PRO IMAGE DATE 3-3-2023

This typical section would consist of two 10-foot lanes, 4-foot-wide bicycle lanes, curb and gutter along with a 5-foot-wide landscape buffer, with a 5-foot-wide sidewalk.

2. Cerrillos Road

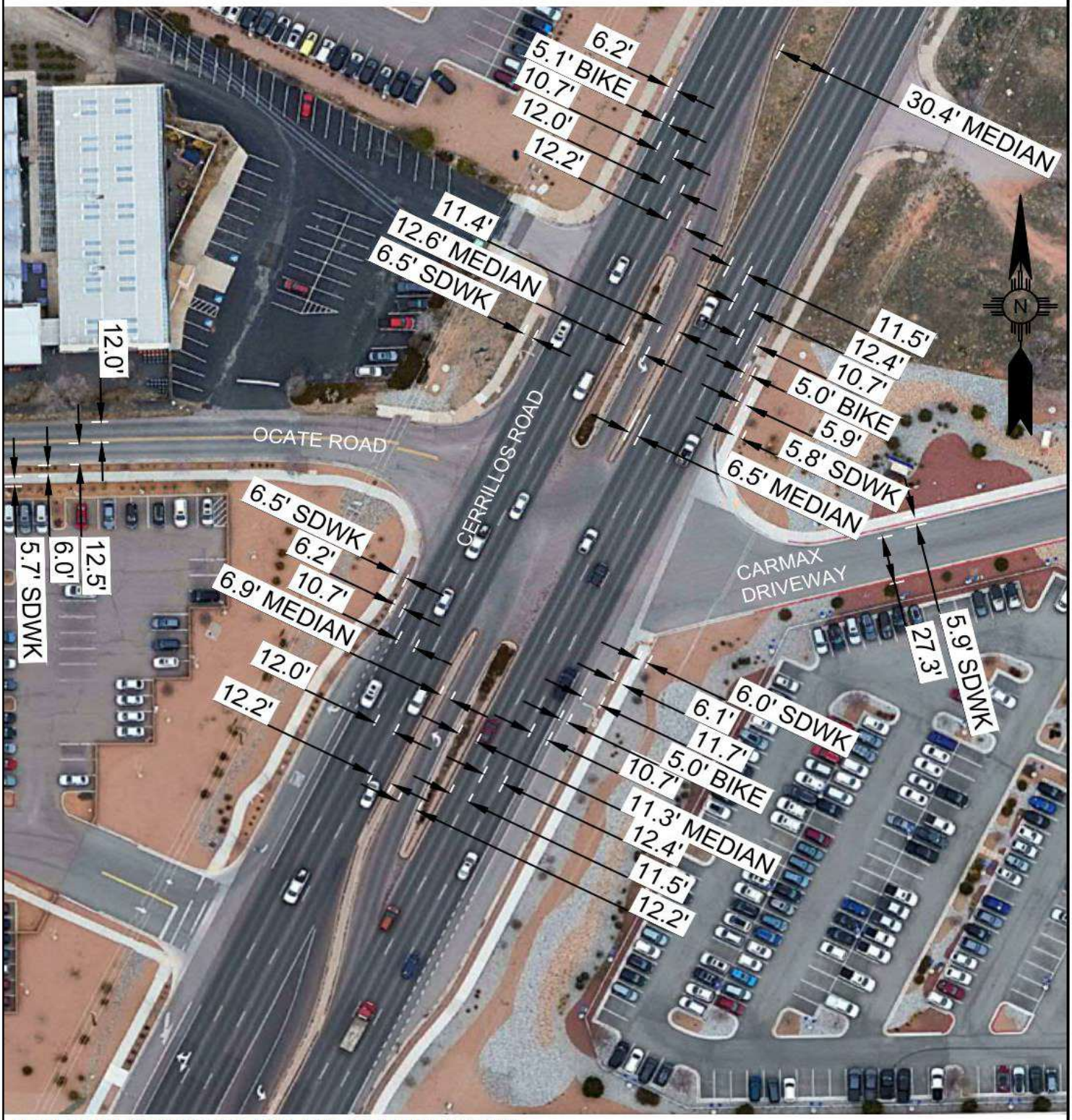
Cerrillos Road is classified as an urban principal arterial, according to the "Recommended Changes to the Function Classification of Roadways in the Santa Fe MPO Planning Area," approved by the Santa Fe MPO Transportation Policy Board on August 27, 2015. This portion of Cerrillos Road consists of a six lane, divided, two-way, multilane urban highway. The roadway includes raised medians, curb and gutter, and sidewalks. The posted speed limit on Cerrillos Road in the vicinity of Ocate Road is 45 MPH.

The intersection of Cerrillos Road / Ocate Road / CarMax Driveway is an unsignalized, two ways stop controlled intersection with stop control on Ocate Road and on the CarMax driveway. Left turn storage bays are provided on Cerrillos Road. The northbound left turn lane is approximately 225 feet long. The southbound left turn lane into CarMax is approximately 215 feet long. There is no southbound right turn deceleration lane into Ocate Road. A northbound right turn lane into the CarMax driveway is provided with a 225-foot-long deceleration lane. The intersection geometrics are presented in Figure 8.

3. Pedestrian Survey

A Pedestrian Walkability Survey was performed. The survey includes photos and is presented in Appendix C. The survey was developed by the National Highway Traffic Safety Administration. According to the rating system, this neighborhood is "A disaster for walking."

It is crucial to note that New Mexico has had the highest pedestrian crash rates per capita in the United States, for the past seven years in a row. This is an existing problem which requires additional infrastructure to add sidewalks, pedestrian crossing, and trails. This is especially important with the close proximity to the Nina Otero Community School, Capitol High School, and the Cesar Chavez Elementary School. The necessary infrastructure is dependent on the development of the Hernandez Family property.



NOTE: DIMENSIONS SHOWN ARE NOT SURVEYED. THEY WERE OBTAINED BY QUICK MEASUREMENTS MADE IN THE FIELD USING TAPE MEASURE AND MEASURING WHEEL. THE DIMENSIONS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED FOR ACCURACY.

REFERENCE:
GOOGLE EARTH PRO IMAGE DATE 3-3-2023

INTERSECTION GEOMETRICS
CERRILLOS ROAD
/OCATE ROAD
/DRIVEWAY
FIGURE 8

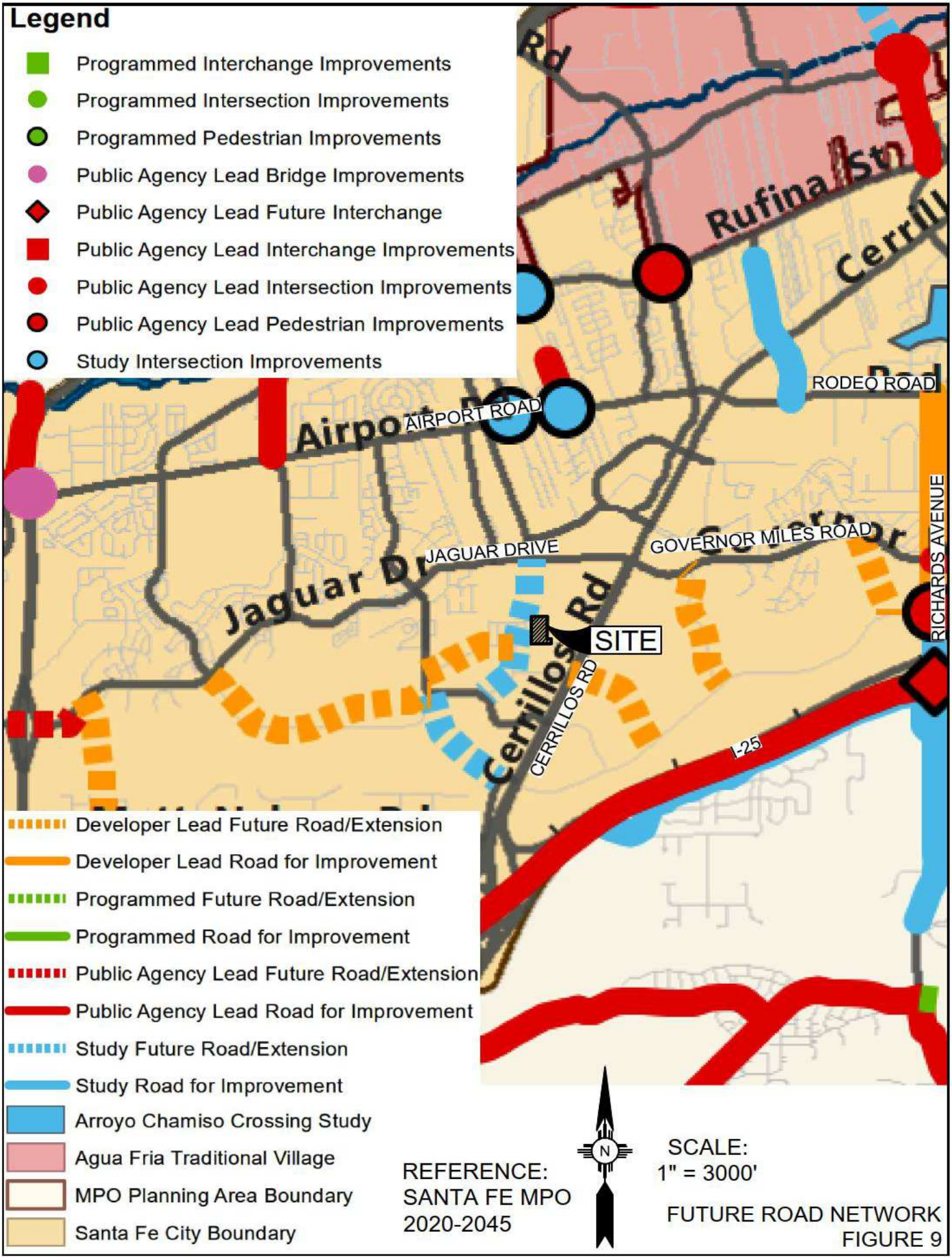
E. Programmed Transportation Improvements

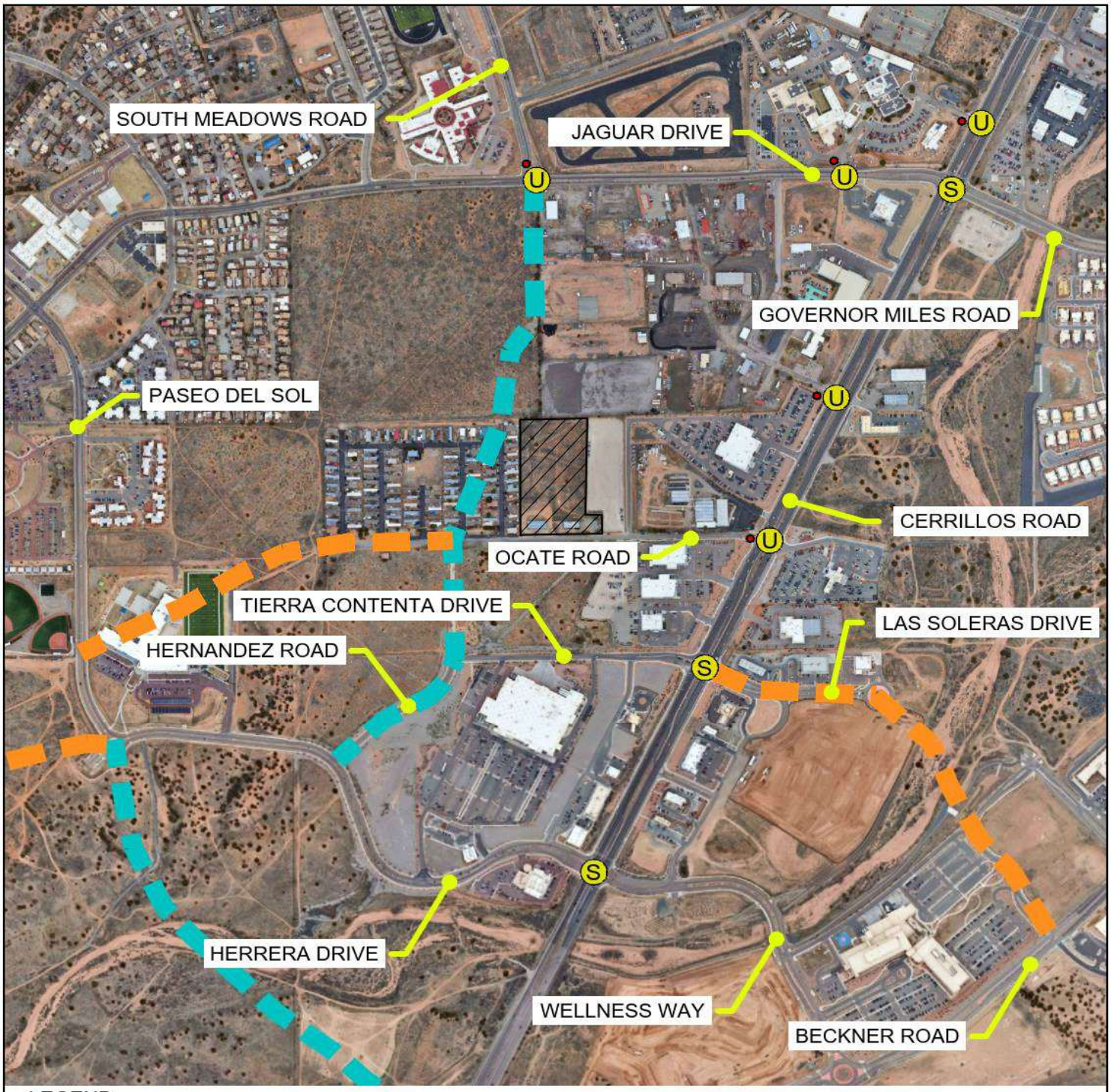
The Santa Fe Metropolitan Planning Organization (MPO) Future Roadway Network Map is presented in Figure 9. The map shows several future roadways in the area that may impact the site. The plan shows the alignment of Herrera Drive and Jaguar Drive, but does not show Las Soleras Drive / Ocate Road, Ocate Road or the portion of Hernandez Road that was constructed as part of the Walmart Project. In order to better understand the map, it was superimposed on a Google Earth image. The image is presented in Figure 10.

The map shows a developer lead road extension of Ocate Road to Tierra Contenta Drive; however, it shows an alignment through the Nina Otero Community School. It also shows a study for a future road intersection through the Santa Fe Mobile Home Hacienda, and through the New Mexico School for the Deaf property. These maps were reviewed with the MPO staff. The MPO staff stated that the Future Roadway Map will be updated in August 2025. In the update, the connection from Ocate Road to Paseo del Sol will be along the northern side of the school. The extension of Hernandez Drive will terminate at Ocate Road and will not go through the Santa Fe Mobile Home Hacienda. Instead, other connections west of the Santa Fe Mobile Home Hacienda are possible. In any case, the Ocate Apartments do not impact any planned future roads.

F. Alternative Travel Modes

Bus service is provided on Cerrillos Road. However, for conservative analysis for this report, there will be no reduction or adjustment of trip generation numbers due to alternative modes of travel.


Legend
Programmed Interchange Improvements
Programmed Intersection Improvements
Programmed Pedestrian Improvements
Public Agency Lead Bridge Improvements
Public Agency Lead Future Interchange
Public Agency Lead Interchange Improvements
Public Agency Lead Intersection Improvements
Public Agency Lead Pedestrian Improvements
Study Intersection Improvements
AIRPORT ROAD
RODEO ROAD
JAGUAR DRIVE
GOVERNOR MILES ROAD
RICHARDS AVENUE
CERRILLOS RD
I-25
SITE
Developer Lead Future Road/Extension
Developer Lead Road for Improvement
Programmed Future Road/Extension
Programmed Road for Improvement
Public Agency Lead Future Road/Extension
Public Agency Lead Road for Improvement
Study Future Road/Extension
Study Road for Improvement
Arroyo Chamiso Crossing Study
Agua Fria Traditional Village
MPO Planning Area Boundary
Santa Fe City Boundary
N
REFERENCE:
SANTA FE MPO
2020-2045
SCALE:
1" = 3000'
FUTURE ROAD NETWORK
FIGURE 9



LEGEND

STUDY FUTURE ROAD/EXTENSION

DEVELOPER LEAD FUTURE ROAD/EXTENSION

REFERENCE:
GOOGLE EARTH PRO
IMAGE DATE 3/3/2023

N

800 400 0 800

SCALE: 1" = 800'

FUTURE ROAD NETWORK (ENLARGED)
FIGURE 10

IV. ANALYSIS OF EXISTING CONDITIONS

A. Daily Peak Hour Traffic Volumes

Traffic counts were conducted to sample typical background traffic for the existing condition. The traffic counts were performed on Tuesday, May 21, 2024, between 7:30AM and 5:30 PM. Tabulated traffic counts are presented in Appendix A. Existing traffic volumes are presented in Figure 11.

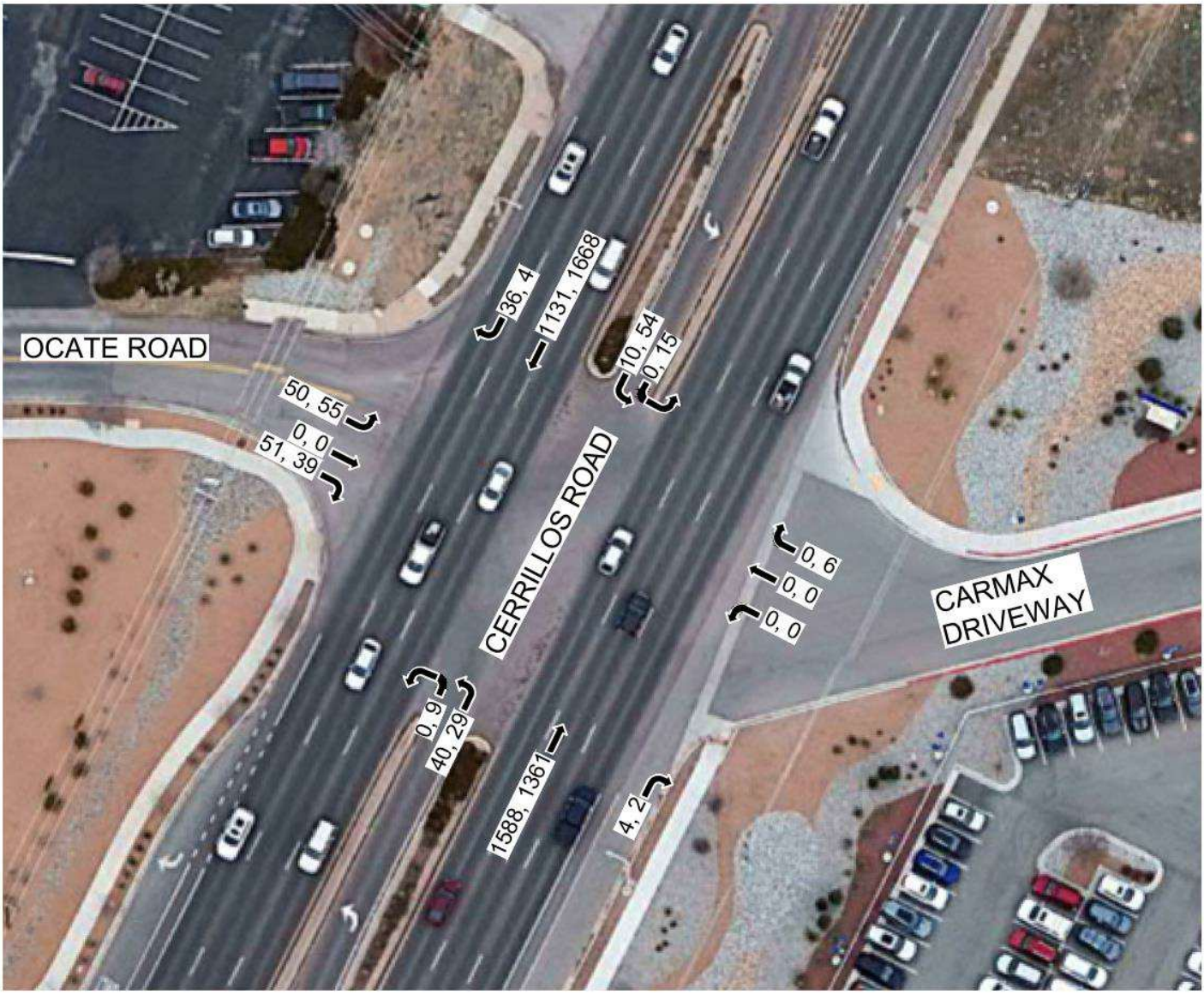
B. Level of Service Criteria

According to Table 15.C-1, "Minimum Acceptable Level of Service Standards," of the State Access Management Manual, the minimum acceptable level of service is D for urban principal arterials, urban major arterials, and urban collectors at signalized and unsignalized intersections. A level of service F shall not be accepted for individual movements.

C. Existing Level of Service

The Cerrillos Road Traffic signals are on a coordinated, interconnected system. The City of Santa Fe Public Works Staff has indicated that the city does not have a traffic model for Cerillos Road. In addition, the Public Works Staff is developing a new timing plan for Cerrillos Road using "alternative techniques," rather than modeling. Data that was available from the city is presented in Appendix B, Pertinent Data.

The existing capacity of the intersections of Cerrillos Road / Ocate Road / CarMax Driveway was calculated using Highway Capacity Software 2023, Version 8.3. The existing conditions capacity calculations were performed using the site-specific traffic counts and the HCS two way stop control module during the AM and PM. There were zero cars making the westbound left turn from the CarMax driveway. In order to obtain a LOS calculation one car was added making the westbound left turn. HCS Capacity reports are presented in Appendix D and are summarized in Table 3.



PEAK HOURS FOR TRAFFIC COUNT DATED May 21, 2024 (Tuesday)	
AM	PM
7:30 AM to 8:30 AM	4:30 PM to 5:30 PM

N

50 25 0 50

SCALE: 1" = 50'

LEGEND

DENOTES PEAK HOUR TRAFFIC VOLUME AM, PM — 11, 23

DENOTES MOVEMENT — ←

EXISTING TRAFFIC VOLUMES
CERRILLOS ROAD
/OCATE ROAD
/DRIVEWAY
FIGURE 11

TABLE 3 SUMMARY OF LEVELS OF SERVICE EXISTING CONDITIONS 2024						
Movement	**AM Peak Hour**			**PM Peak Hour**		
	95% Queue (Ft)	**Delay (Veh/sec)**	**LOS**	**95% Queue (Ft)**	**Delay (Veh/sec)**	**LOS**
Cerrillos Road/ Ocate Road						
Eastbound Left / Thru / Right	83.2	47.2	E	289.8	959.2	F
Westbound Left / Thru / Right	2.5	59.7	F	2.5	20.1	C
Northbound Left	15.1	20.7	C	25.2	34.8	D
Northbound Thru	N/D	3.1	A	N/D	8.4	A
Southbound Left	5.0	29.4	D	32.8	26.4	D
Southbound Thru	N/D	2.0	A	N/D	7.6	A

N/D indicates no data.

There are existing failures, on the Ocate Road and the CarMax leg of the intersection. The left / thru / right movement fails because of the left turn movement. The CarMax leg of the intersection also fails because of the left turn.

There is a large open area in the median opening at the intersection on Cerrillos Road which promotes a two stage crossing technique. The eastbound left turn onto Cerrillos Road is accomplished in two stages. The first stage is to find a gap in the southbound traffic and cross the three southbound lanes; then stop and wait for a gap in the northbound traffic to accomplish the left turn. The intersection was evaluated using the two stage approach. HCS Capacity reports are presented in Appendix D and are summarized in Tables 4 and 5.

TABLE 4 SUMMARY OF LEVELS OF SERVICE EXISTING CONDITIONS 2024 – STAGE 1						
Movement	**AM Peak Hour**			**PM Peak Hour**		
	95% Queue (Ft)	**Delay (Veh/sec)**	**LOS**	**95% Queue (Ft)**	**Delay (Veh/sec)**	**LOS**
Cerrillos Road / Ocate Road / CarMax Driveway						
Eastbound Left / Thru / Right	75.6	42.4	E	257.0	601.6	F
Westbound Left / Thru / Right	0.0	11.3	B	0.0	9.8	A
Northbound Left	15.1	20.7	C	25.2	34.8	D
Northbound Thru	N/D	0.0	A	N/D	0.0	A
Southbound Left	0.0	8.1	A	5.0	8.1	A
Southbound Thru	N/D	0.1	A	N/D	0.5	A

TABLE 5 SUMMARY OF LEVELS OF SERVICE EXISTING CONDITIONS 2024 – STAGE 2						
Movement	**AM Peak Hour**			**PM Peak Hour**		
	95% Queue (Ft)	**Delay (Veh/sec)**	**LOS**	**95% Queue (Ft)**	**Delay (Veh/sec)**	**LOS**
Cerrillos Road / Ocate Road / CarMax Driveway						
Eastbound Left / Thru / Right	20.2	14.0	B	25.2	16.3	C
Westbound Left / Thru / Right	2.5	52.5	F	2.5	18.4	C
Northbound Left	2.5	8.2	A	2.5	8.1	A
Northbound Thru	N/D	0.3	A	N/D	0.3	A
Southbound Left	5.0	29.4	D	32.8	26.4	D
Southbound Thru	N/D	0.0	A	N/D	0.0	A

There is still an existing failure, on the Ocate Road leg of the intersection. The left / thru / right movement fails because of the left turn movement.

D. Safety Analysis

Crash data was obtained from the NMDOT for the years 2016 through 2022. The data is provided in Appendix B.

1. Cerrillos Road / Ocate Road / CarMax Driveway

The crash data is summarized in Figure 12. The crash data shows that in the seven-year period from 2016 to 2022, there were a total of 19 crashes at the intersection of Cerrillos Road / Ocate Road / CarMax Driveway.

The crashes per year vary from a high of 4 in 2016 to a low of 1 in 2018. There were no crashes that involved fatalities. Of the 19 crashes, 10 crashes involved another vehicle and 8 crashes with a description that was left blank and 1 crash that involved a parked car. The severity of injuries ranged from suspected serious injuries to no apparent injuries.

It is significant to note the low volume of crashes considering the high volume of traffic on this six lane facility.

E. Warrant Analysis

Cerrillos Road / Ocate Road / CarMax Driveway is a two way stop controlled intersection. A warrant analysis was prepared for the existing conditions. The warrant analysis is presented in Appendix D. The intersection meets the warrants for a traffic signal.

CRASHES NEAR THE INTERSECTION OF CERRILLOS ROAD AND OCATE ROAD AND DRIVEWAY, 2016 - 2022

FIGURE 1: CRASHES NEAR THE INTERSECTION OF CERRILLOS ROAD AND OCATE ROAD AND DRIVEWAY, 2016 - 2022

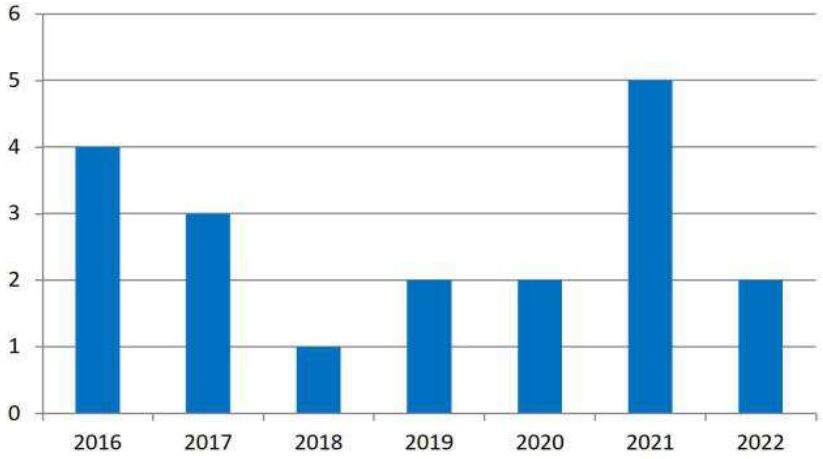


TABLE 1: CRASHES NEAR THE INTERSECTION OF CERRILLOS ROAD AND OCATE ROAD AND DRIVEWAY, 2016 - 2022

	FATAL CRASHES		INJURY CRASHES		PROPERTY DAMAGE ONLY CRASHES		TOTAL CRASHES	
YEAR	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT	COUNT	PERCENT
2016	0	0.0%	2	22.2%	2	20.0%	4	21.1%
2017	0	0.0%	0	0.0%	3	30.0%	3	15.8%
2018	0	0.0%	0	0.0%	1	10.0%	1	5.3%
2019	0	0.0%	0	0.0%	2	20.0%	2	10.5%
2020	0	0.0%	2	22.2%	0	0.0%	2	10.5%
2021	0	0.0%	4	44.4%	1	10.0%	5	26.3%
2022	0	0.0%	1	11.1%	1	10.0%	2	10.5%
GRAND TOTAL	0	0.0%	9	100.0%	10	100.0%	19	100.0%

SOURCE: NMDOT CRASH DATABASE AS OF MAY 20, 2024

NMDOT CRASH DATA
FIGURE 12

According to Table 18.C-1 for a principal arterial wall a speed limit of 45 MPH the minimum spacing between signalized intersections is 2,640 feet.

The signalized intersection of Cerrillos Road / Ocate Road / CarMax Driveway is located 2,230 feet from the upstream signal at Cerrillos Road / Jaguar Drive / Governor Miles Road intersection. The next signal downstream, is 800 feet to the intersection of Cerrillos Road / Las Soleras Drive / Tierra Contenta Drive. A traffic signal at the intersection of Cerrillos Road / Ocate Road / CarMax Driveway does not meet the spacing requirements as presented in SAMM, Table 18.C-1, "Access Spacing Standards for Intersections and Driveways."

F. Speed Change Lanes

Speed change lanes are not required for the existing driveway on Ocate Road because, the site is vacant.

G. Operational and Safety Deficiencies

The intersection of Cerrillos Road / Ocate Road / CarMax Driveway has failing movements. According to the existing condition calculations, the intersection of Cerrillos Road / Ocate Road / CarMax Driveway has failures due to the left turns. The intersection meets warrants for a traffic signal, and dose meet the spacing requirements. These operational and safety issues at the intersection of Cerrillos Road / Ocate Road / CarMax Driveway. In order to correct the issue, the following options were considered:

1. Do nothing.

The existing left turn fails, however, considering the volume of the traffic, crashes are relatively low. However, the "Do nothing" alternative is not feasible.

2. Close the left turn movements from Ocate Road and CarMax and provide indirect left turns.

The Ocate Road leg of the intersection would be made into a right turn in / right turn out entrance. Indirect left turns on Cerrillos Road would need to be developed. There are many studies that show that indirect left turns are safer than direct left turns.

3. Construct a new traffic signal on Cerrillos Road / Ocate Road / CarMax Driveway intersection.

The intersection meets warrants; however, it does not meet spacing requirements. In order to build a signal, a progression study would be required to show that the new signal does not adversely affect bandwidth.

Since the City does not have a traffic model, it would require traffic counts at all intersections on Cerrillos Road from Beckner Road to Airport Road and development of a new traffic model. If it can be shown that the new signal will not adversely affect progression, then a signal could be constructed. A progression study and traffic signal are beyond the economic ability of this 84 unit affordable housing project. Such an effort would require Public Works to develop a project for a signal.

4. Build alternate roads to disperse traffic from Ocate Road.

The construction of Hernandez Road from Ocate Road to Tierra Contenta Drive would provide the needed relief for left turns on Ocate Road at the Cerrillos Road / Ocate Road / CarMax Driveway intersection. The existing Cerrillos Road / Tierra Contenta Drive / Las Soleras Drive and Cerrillos Road / Herrera Drive right turn signal could be used for left turns. The connection would be a direct route to the Nina Otero Community School, Capitol High School, the Cesar Chavez Elementary School, and NM 599. The connection would help to reduce traffic on Cerrillos Road. The Right of Way for the extension from Tierra Contenta Drive to Ocate Road has already been dedicated to the City. The roadway has been rough graded, and some utilities have been installed. With this alternative the closure of Ocate Road will still be required.

There may be other mechanisms to fund these road improvements. The Santa Fe Housing authority is pursuing funding from other sources.

The project is scheduled to be opened and occupied by 2027. The option to "Do Nothing" is not feasible. The 84 unit affordable apartment project does not have funding to

study and construct a traffic signal. The 84 unit apartments do not have the funding to construct Hernandez Road.

It appears that the most reasonable solution for the 84 unit apartments is to close the left turn movements on Ocate Road and instead develop indirect left turns. This would be in place for the foreseeable future. It is assumed that the Hernandez Road extension would be constructed by 2037.

V. ANALYSIS OF IMPLEMENTATION YEAR CONDITIONS - 2027

The following conditions were analyzed for this project:

- Implementation Year without the Proposed Development – 2027 (No Build)
- Implementation Year with the Proposed Development – 2027 (Build)

A. Traffic Projections

1. Background Traffic

The City of Santa Fe Traffic Engineering Department has used the growth rate of 1% per year for traffic along Cerrillos Road. For this report it was assumed that traffic would increase at a rate of 1% per year compounded yearly.

2. Development Assumptions for Implementation Year Conditions

It is assumed that the proposed development will be completed in the year 2027.

3. Trip Generation

The traffic generated by a development is dependent on the size and type of the land use and its characteristic pattern. The proposed development will consist of 84 apartments.

Multifamily Housing (Low-Rise) (Land Use 220) will be used for this report. The ITE description for Multi-Family Housing (Low-Rise) is as follows:

> *"Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors(levels). Various configurations fit this description, including walkup apartment, mansion apartment, and stacked townhouse."*

There are only two independent variables available for projecting trip generations: the number of dwelling units and the number of residents. For this analysis, the number of dwelling units was used.

The trip generation calculations assumed no reductions for internal or pass-by traffic. The calculations are presented in Appendix F and are summarized in Table 6.

TABLE 6
SUMMARY OF TRIP GENERATION CALCULATIONS

Land Use 220– Low-Rise Multi-Family Housing	AM Peak		PM Peak	
	Entry	Exit	Entry	Exit
84 Dwelling Units	13	41	40	24
Total	13	41	40	24

Source: Institute of Transportation Engineers
Trip Generation, 11th Edition, 2021

4. Trip Distribution and Assignment

The directions from which traffic approaches and departs the site will be determined by their origins and destinations and the efficiency of the various streets serving the site. For the implementation year the left turn movement at the intersection of Cerrillos Road / Ocate Road / CarMax Driveway will be modified to be a right turn in and a right turn out. Left turns will be indirect left turns.

The AM and PM peak hours are being analyzed. During this time period, the majority of traffic will be to and from work. The directions of approach and return are based upon the traffic counts and the proposed improvements to correct the existing intersection failures.

The directions of approach and return for the development for the AM and PM Peak Hours are presented in Figure 13. The site-generated traffic is presented in Figure 14.



LEGEND

DENOTES PERCENTAGE OF TRAFFIC AM, PM 11%,11%

NOTE:
WHERE ONE PERCENTAGE IS SHOWN THIS DEPICTS BOTH AM AND PM TRAFFIC

DENOTES MOVEMENT ←

N

300 150 0 300

SCALE: 1" = 300'

REFERENCE:
GOOGLE EARTH PRO
IMAGE DATE 3/3/2023

IMPLEMENTATION YEAR
DIRECTIONS OF APPROACH
AND RETURN
FIGURE 13



LEGEND

DENOTES SITE GENERATED TRAFFIC AM, PM 11, 11

DENOTES MOVEMENT ←

REFERENCE:
GOOGLE EARTH PRO
IMAGE DATE 3/3/2023

N

300 150 0 300

SCALE: 1" = 300'

IMPLEMENTATION YEAR
SITE GENERATED TRAFFIC
FIGURE 14

5. Background Traffic without Proposed Development / No Build Conditions

The background traffic without the proposed development was calculated by increasing the existing traffic counts at a rate of 1% per year compounded yearly for all legs of the intersections analyzed in this report.

6. Proposed Development / Build Condition

The traffic generated by the proposed development was added to the background traffic.

B. Traffic Analysis

1. No Build and Build Conditions for Each Analysis Period.

The traffic was analyzed to determine the level of service at each intersection for each condition.

a. No Build Condition

The background traffic growth rate is assumed to increase at 1% per year to the year 2027. Capacity reports are presented in Appendix F and the results are summarized in Table 7.

TABLE 7
SUMMARY OF LEVELS OF SERVICE
NO BUILD 2027

Movement	AM Peak Hour			PM Peak Hour		
	95% Queue (Ft)	Delay (Veh/sec)	LOS	95% Queue (Ft)	Delay (Veh/sec)	LOS
Cerrillos Road / Ocate Road / CarMax Driveway						
Eastbound Left / Thru / Right	95.8	56.4	F	315	1220.7	F
Westbound Left / Thru / Right	2.5	66.4	F	2.5	21.3	C
Northbound Left	15.1	21.7	C	27.7	38.0	E
Northbound Thru	N/D	3.4	A	N/D	10.0	A
Southbound Left	5.0	31.1	D	35.3	28.5	D
Southbound Thru	N/D	2.3	A	N/D	8.8	A

For the implementation year, no build conditions the east and west left turn movements fail.

b. Build Condition

For the build condition, the site generated traffic was added to the 2027 background traffic. Capacity reports are presented in Appendix F and the results are summarized in Table 8.

TABLE 8
SUMMARY OF LEVELS OF SERVICE
BUILD 2027

Movement	AM Peak Hour			PM Peak Hour		
	95% Queue (Ft)	Delay (Veh/sec)	LOS	95% Queue (Ft)	Delay (Veh/sec)	LOS
Cerrillos Road / Ocate Road / CarMax Driveway						
Eastbound Left / Thru / Right	68.0	26.3	D	95.8	47.6	E
Westbound Left / Thru / Right	2.5	70.8	F	N/D	N/D	N/D
Northbound Left	20.2	22.5	C	52.9	56.4	F
Northbound Thru	N/D	4.1	A	N/D	18.6	C
Southbound Left	5.0	31.1	D	35.3	28.5	D
Southbound Thru	N/D	2.3	A	N/D	8.8	A
Ocate Road East Entrance						
Eastbound Left	N/D	7.4	A	N/D	7.4	A
Eastbound Thru	N/D	0.0	A	N/D	0.0	A
Ocate Road West Entrance						
Eastbound Left	N/D	7.4	A	N/D	7.3	A
Eastbound Thru	N/D	0.0	A	N/D	0.0	A
Southbound Thru	5.0	10.0	A	2.5	9.5	A

For the implementation year build conditions, the east and west left turn movements fail.

2. Intersections and Proposed Access Points

The proposed development is building two new driveways on Ocate Road. Two driveways are required to meet Fire Code. There are no other access points except for the driveways on Ocate Road. The driveway spacing on Ocate Road is presented in Figure 15. According to Table 18C-1, "Access Spacing Study for Intensity and Driveways" for an urban collector with a speed limit less than 30 MPH is 330 feet for full access a 150 feet for partial access. A review of the intersection spacing map indicates that all existing driveways on Ocate Road do not meet the spacing requirements.

3. Speed Change Lanes

The criteria for speed change lanes on Ocate Road were reviewed. Speed change lanes are not required..

4. Traffic Signal Warrant Review

The intersection of Cerrillos Road / Ocate Road / CarMax Driveway is currently unsignalized. The intersection meets warrants; however, it does not meet spacing requirements as allowed in Table 18.C-1, "Access Spacing Standards for Intersection and Driveways."

5. LOS Results, Identified Deficiencies, Proposed Improvements

a. Implementation Year 2027 – No Build

The intersection of Cerrillos Road / Ocate Road / CarMax Driveway has a failing movements for the Implementation Year 2027 No Build Conditions.

b. Implementation Year 2027- Build

The intersection of Cerrillos Road / Ocate Road / CarMax Driveway has a failing movements for the Implementation Year 2027 Build Conditions.

C. Impact Assessment

According to Table 15.C-1, "Minimum Acceptable Level of Service Standards," of the State Access Management Manual, for minor urban arterial and urban collector intersections, the minimum acceptable level of service is D at signalized and unsignalized intersections.

D. Access Design Specifications

1. Speed Lane Change Requirements

The entrance driveway on Ocate does not require speed change lanes.

2. Vehicle Storage needs

On site driveways will be designed to provide the calculated storage.

3. Sight Distance

The sight distance in the vicinity of Ocate Road is relatively flat, and the sight distance is good. There is vegetation within the ROW that may require trimming.

4. Site Access Improvements Modifications

Two new driveways will be constructed into the site on Ocate Road. The intersection of Cerrillos Road / Ocate Road / The CarMax Driveway could be modified to allow a right in / right out / left in configuration, as shown in Figure 15.

5. Pedestrian / Bicycle Considerations

Sidewalk will be provided along the frontage of the development. The City of Santa Fe Collector Road standard will be used.

VI. ANALYSIS OF HORIZON YEAR – 2037

In accordance with the State Access Management Manual, the following conditions were to be analyzed for this project:

- Horizon Year without the Proposed Development - 2037
- Horizon Year with the Proposed Development – 2037

A. Traffic Projections

1. Background Traffic

The City of Santa Fe Traffic Department has used the growth rate of 1% per year for traffic along Cerrillos Road. For this report it was assumed that traffic would increase at a rate of 1% per year compounded yearly.

2. Development Assumptions for Horizon Year Conditions

The Horizon Year will be 10 years after the Implementation Year. It is assumed that Hernandez Road will not be constructed.

3. Trip Generation

No additional Trip Generation calculations are needed.

4. Trip Distribution and Assignment

It is assumed that at the year 2037, the connection from Ocate Road to Tierra Contenta Drive will be constructed. The trip distribution and traffic assignment will change. The horizon year Directions of Approach and Return is presented in Figure 15. The site generated traffic is presented in Figure 16.

5. Background Traffic without Proposed Development / No Build Conditions

The background traffic without the proposed development was calculated by increasing the existing traffic counts at a rate of 1% per year compounded yearly for all legs of the intersections analyzed in this report.



LEGEND

DENOTES PERCENTAGE OF TRAFFIC AM, PM 11%,11%

NOTE:
WHERE ONE PERCENTAGE IS SHOWN THIS DEPICTS BOTH AM AND PM TRAFFIC

DENOTES MOVEMENT ←

REFERENCE:
GOOGLE EARTH PRO
IMAGE DATE 3/3/2023

N

400 200 0 400

SCALE: 1" = 400'

HORIZON YEAR
DIRECTIONS OF APPROACH
AND RETURN
FIGURE 15



LEGEND

DENOTES SITE GENERATED TRAFFIC AM, PM 11, 11

DENOTES MOVEMENT ←

REFERENCE:
GOOGLE EARTH PRO
IMAGE DATE 3/3/2023

N

300 150 0 300

SCALE: 1" = 300'

HORIZON YEAR
SITE GENERATED TRAFFIC
FIGURE 16

6. Proposed Development / Build Conditions

The traffic generated by the proposed development was added to the background traffic.

B. Traffic Analysis

1. No Build and Build Conditions

The traffic was analyzed to determine the level of service at each intersection for each condition.

a. No Build Condition

The background traffic was assumed to increase at 1% per year to the year 2037. Capacity reports are presented in Appendix G and the results summarized in Table 9.

TABLE 9
SUMMARY OF LEVELS OF SERVICE
NO BUILD 2037

Movement	AM Peak Hour			PM Peak Hour		
	95% Queue (Ft)	Delay (Veh/sec)	LOS	95% Queue (Ft)	Delay (Veh/sec)	LOS
Cerrillos Road / Ocate Road / CarMax Driveway						
Eastbound Left / Thru / Right	163.8	121.8	F	385.6	2679.5	F
Westbound Left / Thru / Right	5.0	100.9	F	5.0	26.8	D
Northbound Left	22.7	26.1	D	42.8	53.8	F
Northbound Thru	N/D	5.4	A	N/D	19.1	C
Southbound Left	7.6	38.8	E	52.9	38.1	E
Southbound Thru	N/D	3.9	A	N/D	15.2	C

For the Horizon year, no build conditions the east and west turns fail.

b. Build Condition

For the build condition, the measured traffic was increased at a rate of 1% per year for the background condition for the year 2037 and the site generated traffic was added. Capacity reports are presented in Appendix G and summarized in Table 10.

TABLE 10 SUMMARY OF LEVELS OF SERVICE BUILD 2037						
Movement	**AM Peak Hour**			**PM Peak Hour**		
	95% Queue (Ft)	**Delay (Veh/sec)**	**LOS**	**95% Queue (Ft)**	**Delay (Veh/sec)**	**LOS**
Cerrillos Road / Ocate Road / CarMax Driveway						
Eastbound Left / Thru / Right	90.7	33.9	D	138.6	76.2	F
Westbound Left / Thru / Right	5.0	107.9	F	7.6	52.3	F
Northbound Left	25.2	27.1	D	93.2	124.2	F
Northbound Thru	N/D	6.3	A	N/D	43.8	E
Southbound Left	7.6	38.8	E	52.9	38.1	E
Southbound Thru	N/D	3.9	A	N/D	15.2	C
Ocate Road East Entrance						
Eastbound Left	N/D	7.4	A	N/D	7.4	A
Eastbound Thru	N/D	0.0	A	N/D	0.0	A
Ocate Road West Entrance						
Eastbound Left	N/D	7.4	A	N/D	7.3	A
Eastbound Thru	N/D	0.0	A	N/D	0.0	A
Southbound Thru	5.0	10.1	B	2.5	9.6	A

95^{th} percentile volume exceeds capacity; queue may be longer.
Volume for 95^{th} percentile queue is metered by an upstream signal.

2. Intersections and Proposed Access Points

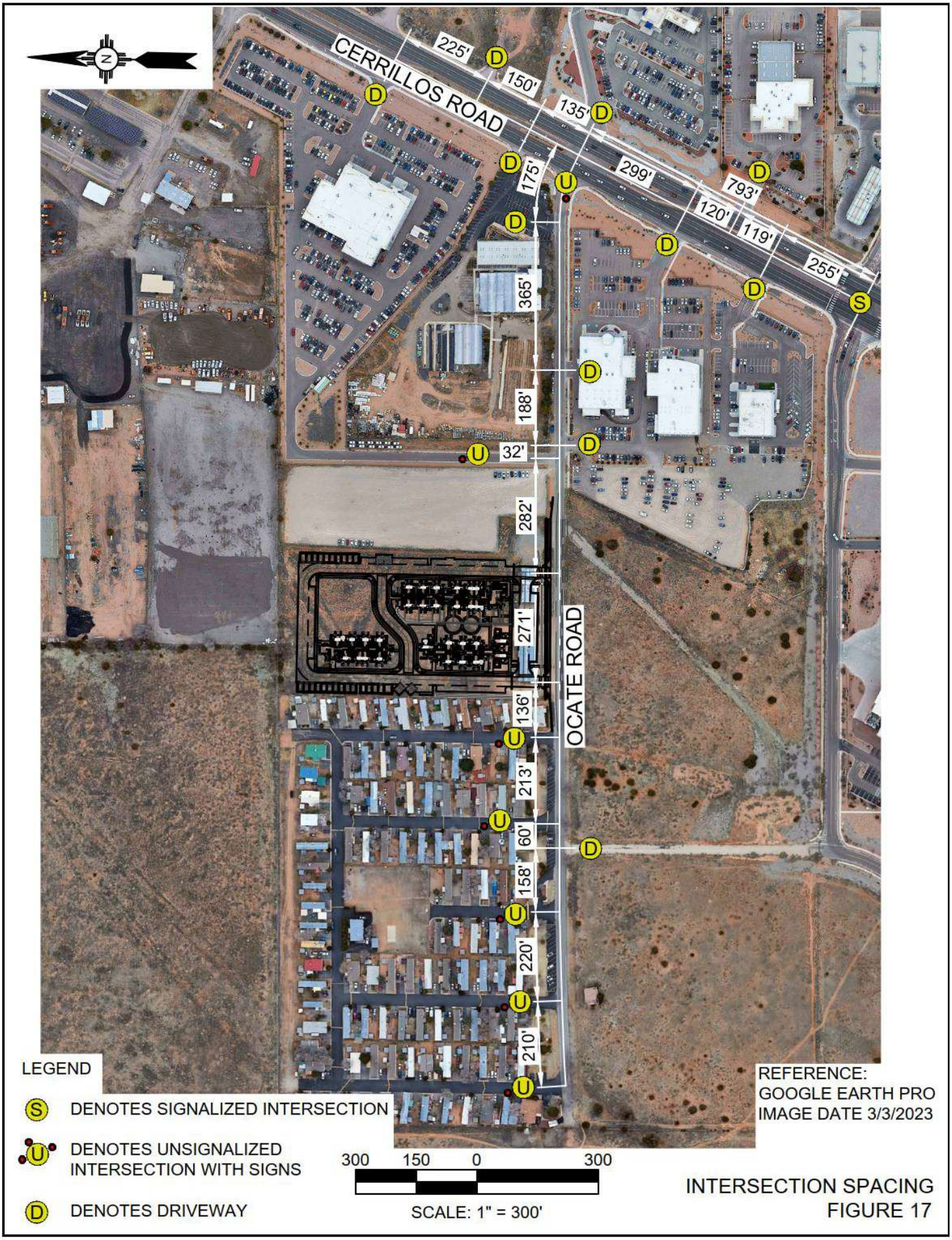
The proposed development is building two new driveways on Ocate Road. Two driveways are required to meet Fire Code. There are no other access points except for the driveways on Ocate Road. The driveway spacing on Ocate Road is presented in Figure 15. The intersection spacing on Ocate Road is presented in Figure 17.

3. Speed Change Lanes

The criteria for speed change lanes on Ocate Road were reviewed. Speed change lanes are not required..

4. Traffic Signal Warrant Review

The intersection of Cerrillos Road / Ocate Road / CarMax Driveway is currently unsignalized. The intersection meets warrants; however, it does not meet spacing requirements as allowed in Table 18.C-1, "Access Spacing Standards for Intersection and Driveways."


CERRILLOS ROAD
OCATE ROAD
225'
150'
135'
175'
299'
793'
120'
119'
255'
365'
188'
32'
282'
271'
136'
213'
60'
158'
220'
210'
LEGEND
DENOTES SIGNALIZED INTERSECTION
DENOTES UNSIGNALIZED INTERSECTION WITH SIGNS
DENOTES DRIVEWAY
300 150 0 300
SCALE: 1" = 300'
REFERENCE:
GOOGLE EARTH PRO
IMAGE DATE 3/3/2023
INTERSECTION SPACING
FIGURE 17

5. LOS Results, Identified Deficiencies, Proposed Improvements

The intersections of Cerrillos Road / Ocate Road / CarMax Driveway have a failing movement for the Implementation Year 2037 No Build.

C. Impact Assessment

According to Table 15.C-1, "Minimum Acceptable Level of Service Standards," of the State Access Management Manual, for minor urban arterial and urban collector intersections, the minimum acceptable level of service is D at signalized and unsignalized intersections. All intersections have adequate capacity. The proposed driveway operates at acceptable levels of service.

D. Access Design Specifications

1. Speed Lane Change Requirements

None required.

2. Vehicle Storage needs

On site driveways will be designed to provide the calculated storage.

3. Sight Distance

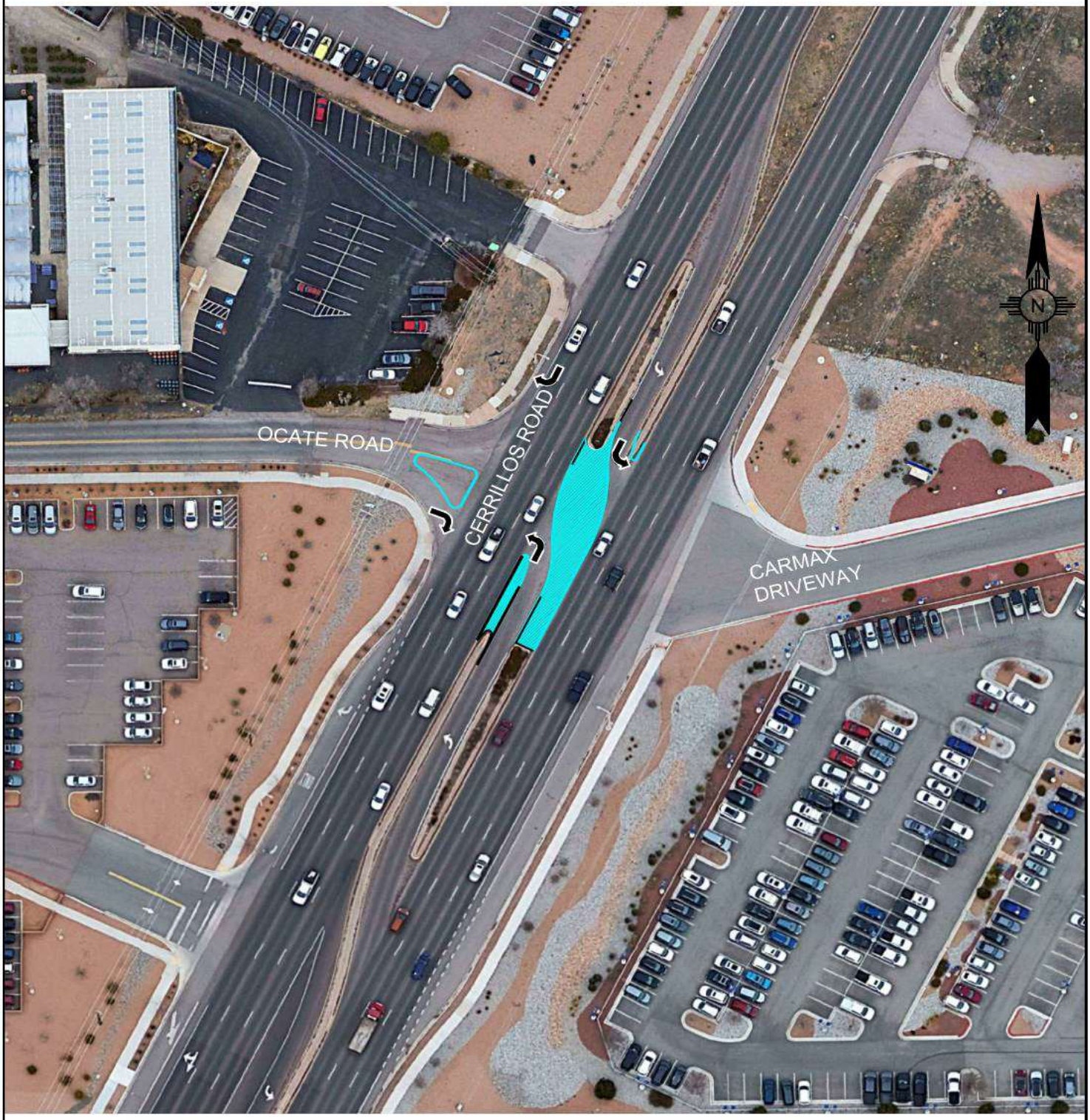
Sight distance is good.

4. Site Access Improvements Modifications

Site access improvement modifications are the same as in the Implementation Year. The proposed intersection improvements are presented in Figure 18.

5. Pedestrian / Bicycle Considerations

Sidewalk will be provided along the frontage of the development. The City of Santa Fe Collector Road standard will be used.



INTERSECTION IMPROVEMENTS
CERRILLOS ROAD
/OCATE ROAD
/DRIVEWAY
FIGURE 18

REFERENCE:
GOOGLE EARTH PRO IMAGE DATE 3-3-2023

VII. SUMMARY OF DEFICIENCIES, ANTICIPATED IMPACTS, RECOMMENDATIONS

A. Existing Conditions

At the intersection of Cerrillos Road / Ocate Road / CarMax Driveway, there are existing failing movements.

B. Implementation Year 2027 – No Build

At the intersection of Cerrillos Road / Ocate Road / CarMax Driveway there are failing movements.

At the intersection of Cerrillos Road / Ocate Road / CarMax Driveway the background increase in traffic at the Cerrillos Road / Ocate Road / CarMax Driveway intersection causes additional failures.

C. Implementation Year – Build 2027

At the intersection of Cerrillos Road / Ocate Road / CarMax Driveway there is are failing movements.

D. Horizon Year 2037 – No Build

There are failing movements, at the intersection of Cerrillos Road / Ocate Road / CarMax Driveway.

E. Horizon Year 2037 - Build

It is assumed that the Hernandez Road connection is constructed. This results in relief to the entire area road network that the intersection of Cerrillos Road / Ocate Road / The CarMax Driveway operates satisfactory, except for the north bound left which fails. This occurs at virtually every northbound left turn on Cerrillos Road. The failures occur because of the heavy southbound, three lanes of traffic. The Public Works Department should develop a policy to deal with these failures

F. Recommendation

It is recommended that the intersections of Cerrillos Road / Ocate Road / The CarMax Driveway be converted into right in / right out / left in configuration. It will be required even if the connection from Ocate Road to Hernandez Road is constructed.

APPENDIX A

TRAFFIC COUNTS

File Name: AM_CERRILLOS ROAD and OCATE ROAD and DRIVEWAY
Start Date: 5/21/2024
Peak Hour 7:30 to 8:30 AM
Person Counting: LYN ARTEAGA

	OCATE ROAD EASTBOUND						DRIVEWAY WESTBOUND						CERRILLOS ROAD NORTHBOUND						CERRILLOS ROAD SOUTHBOUND						
Start Time	Left	Thru	Right	Uturn	Truck	Peds	Left	Thru	Right	Uturn	Truck	Peds	Left	Thru	Right	Uturn	Truck	Peds	Left	Thru	Right	Uturn	Truck	Peds	Total
7:30 AM	12	0	17	0	0	0	0	0	0	0	0	0	9	355	1	0	5	0	4	238	6	0	2	1	642
7:45 AM	15	0	18	0	0	0	0	0	0	0	0	0	8	443	1	0	6	0	5	322	12	0	4	0	824
8:00 AM	13	0	13	0	0	0	0	0	0	0	0	0	15	448	0	0	2	0	1	305	9	0	3	1	804
8:15 AM	10	0	3	0	0	0	0	0	0	0	0	0	8	342	2	0	8	0	0	266	9	0	4	0	640
Total	50	0	51	0	0	0	0	0	0	0	0	0	40	1588	4	0	21	0	10	1131	36	0	13	2	2910
PHF	0.83		0.71										0.67	0.89	0.50				0.50	0.88	0.75				0.88

File Name: AM_CERRILLOS ROAD and OCATE ROAD and DRIVEWAY
Start Date: 5/21/2024
Start Time: 6:30:00 AM
Person Counting: LYN ARTEAGA

	OCATE ROAD EASTBOUND						DRIVEWAY WESTBOUND						CERRILLOS ROAD NORTHBOUND						CERRILLOS ROAD SOUTHBOUND							
Start Time	Left	Thru	Right	Uturn	Truck	Peds	Left	Thru	Right	Uturn	Truck	Peds	Left	Thru	Right	Uturn	Truck	Peds	Left	Thru	Right	Uturn	Truck	Peds	Total	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:30 AM	8	0	2	0	0	0	0	0	0	0	0	0	1	128	0	0	1	0	0	92	2	0	3	0	233	
6:45 AM	7	0	7	0	0	0	0	0	0	0	0	0	1	75	0	0	7	0	0	285	3	0	4	0	378	611
7:00 AM	1	0	4	0	0	0	0	0	0	0	0	0	1	319	0	0	3	0	3	32	1	0	2	0	361	972
7:15 AM	8	0	8	0	0	0	0	0	0	0	0	0	4	303	2	0	2	0	3	196	6	0	1	0	530	1502
7:30 AM	12	0	17	0	0	0	0	0	0	0	0	0	9	355	1	0	5	0	4	238	6	0	2	1	642	1911
7:45 AM	15	0	18	0	0	0	0	0	0	0	0	0	8	443	1	0	6	0	5	322	12	0	4	0	824	2357
8:00 AM	13	0	13	0	0	0	0	0	0	0	0	0	15	448	0	0	2	0	1	305	9	0	3	1	804	2800
8:15 AM	10	0	3	0	0	0	0	0	0	0	0	0	8	342	2	0	8	0	0	266	9	0	4	0	640	2910
8:30 AM	12	0	4	0	0	0	0	0	1	0	0	0	3	353	0	0	4	0	4	221	6	0	3	0	604	2872
8:45 AM	1	0	2	0	0	0	0	0	0	0	0	0	5	347	1	0	3	0	3	226	5	0	3	0	590	2638
Total	87	0	78	0	0	0	0	0	1	0	0	0	55	3113	7	0	41	0	23	2183	59	0	29	2	5606	

File Name: PM_CERRILLOS ROAD and OCATE ROAD and DRIVEWAY
Start Date: 5/21/2024
Peak Hour 4:30 to 5:30 PM
Person Counting: LYN ARTEAGA

	OCATE ROAD EASTBOUND						DRIVEWAY WESTBOUND						CERRILLOS ROAD NORTHBOUND						CERRILLOS ROAD SOUTHBOUND						
Start Time	Left	Thru	Right	Uturn	Truck	Peds	Left	Thru	Right	Uturn	Truck	Peds	Left	Thru	Right	Uturn	Truck	Peds	Left	Thru	Right	Uturn	Truck	Peds	Total
04:30 PM	7	0	9	0	0	0	0	0	1	0	0	0	9	280	1	0	1	0	14	480	1	7	2	1	809
04:45 PM	22	0	9	0	0	0	0	0	3	0	0	0	5	363	1	5	1	0	15	373	1	2	2	1	799
05:00 PM	11	0	9	0	0	0	0	0	2	0	0	1	9	413	0	2	0	1	14	439	0	6	1	0	905
05:15 PM	15	0	12	0	0	0	0	0	0	0	0	0	6	305	0	2	4	0	11	376	2	0	2	0	729
Total	55	0	39	0	0	0	0	0	6	0	0	1	29	1361	2	9	6	1	54	1668	4	15	7	2	3242
PHF	0.63		0.81						0.50				0.81	0.82	0.50				0.90	0.87	0.50				0.90

File Name: PM_CERRILLOS ROAD and OCATE ROAD and DRIVEWAY
Start Date: 5/21/2024
Start Time: 03:00 PM
Person Counting: LYN ARTEAGA

	OCATE ROAD EASTBOUND						DRIVEWAY WESTBOUND						CERRILLOS ROAD NORTHBOUND						CERRILLOS ROAD SOUTHBOUND							
Start Time	Left	Thru	Right	Utum	Truck	Peds	Left	Thru	Right	Utum	Truck	Peds	Left	Thru	Right	Utum	Truck	Peds	Left	Thru	Right	Utum	Truck	Peds	Total	
03:00 PM	4	0	11	0	0	0	0	0	1	0	0	0	11	309	0	3	2	1	8	330	5	5	5	1	687	
03:15 PM	7	0	10	0	0	0	0	0	7	0	0	0	13	341	2	3	3	0	7	306	4	14	3	0	714	
03:30 PM	15	0	8	0	0	0	0	0	6	0	0	0	12	352	0	4	3	0	9	389	5	10	2	0	810	
03:45 PM	8	0	8	0	0	1	0	0	6	0	0	0	4	311	2	9	2	1	19	335	6	5	2	0	713	2924
04:00 PM	4	0	20	0	0	0	0	0	2	0	0	0	7	336	1	3	4	3	14	375	4	4	2	0	770	3007
04:15 PM	10	0	7	0	1	0	0	0	2	0	0	0	4	338	1	4	5	0	17	299	1	6	2	0	689	2982
04:30 PM	7	0	9	0	0	0	0	0	1	0	0	0	9	280	1	0	1	0	14	480	1	7	2	1	809	2981
04:45 PM	22	0	9	0	0	0	0	0	3	0	0	0	5	363	1	5	1	0	15	373	1	2	2	1	799	3067
05:00 PM	11	0	9	0	0	0	0	0	2	0	0	1	9	413	0	2	0	1	14	439	0	6	1	0	905	3202
05:15 PM	15	0	12	0	0	0	0	0	0	0	0	0	6	305	0	2	4	0	11	376	2	0	2	0	729	3242
05:30 PM	11	0	8	0	0	0	1	0	5	0	0	0	5	327	3	2	1	0	10	358	0	1	5	0	731	3164
05:45 PM	9	0	6	0	0	0	2	0	5	0	0	0	5	284	0	2	4	1	11	346	6	1	3	0	677	3042
Total	123	0	117	0	1	1	3	0	40	0	0	1	90	3959	11	39	30	7	149	4406	35	61	31	3	9033	

APPENDIX B

PERTINENT DATA

WORKSHEET (TAB) NAME	DATA SOURCE	DATA CITATION	DATA NOTES	CHANGES TO 2020 AND LATER DATA
DR2622_CRASH	NMDOT CRASH FILE	NMDOT Traffic Crash Database as of 5/20/2024	Crashes in this dataset are based upon GIS data availability only.	The crash-level fields Classification and Analysis are being deprecated starting with 2020 crash data. Updates to the E July 2018 crash report resulted in the creation of the First Harmful Event fields. Any crash data that predates the new fields will have **Not Available** listed to note their unavailability. For additional details on new replacement data available, and other changes to old and new data elements please visit the updated data dictionary online (link under Data Sources).
DR2622_OCC	NMDOT OCCUPANT FILE			

DATA DISCLAIMER

NMDOT, UNM and GPS shall not be held liable for any errors found in the crash data. This includes errors in the content of the data or the relative and positional accuracy of the data. Source information used for these data may have inconsistencies.

NMDOT crash data is protected by Federal mandate Title 23 U.S.C. Section 409 which forbids the discovery and admission into evidence of reports, data, or other information compiled or collected for activities required pursuant to Federal highway safety programs, or for the purpose of developing any highway safety construction improvement project, which may be implemented utilizing federal-aid highway funds, in tort litigation arising from occurrences at the locations addressed in such documents or data.

CRASH REPORT NUMBER	CRASH DATE	CRASH YEAR	MONTH	TIME OF CRASH	HOUR OF CRASH	DAY OF WEEK	LAW ENFORCEMENT AGENCY	COUNTY	CITY
23473778	8/6/2017	2017	August	11:01	11 a.m.	Sunday	Santa Fe County Sheriffs Office	Santa Fe	Santa Fe
710126287	4/18/2016	2016	April	16:49	4 p.m.	Monday	Santa Fe Police Department	Santa Fe	Santa Fe
710313017	10/17/2016	2016	October	9:29	9 a.m.	Monday	Santa Fe Police Department	Santa Fe	Santa Fe
710313467	9/16/2016	2016	September	13:57	1 p.m.	Friday	Santa Fe Police Department	Santa Fe	Santa Fe
710317721	7/26/2017	2017	July	11:39	11 a.m.	Wednesday	Santa Fe Police Department	Santa Fe	Santa Fe
710318150	12/16/2017	2017	December	16:16	4 p.m.	Saturday	Santa Fe Police Department	Santa Fe	Santa Fe
710379784	12/24/2016	2016	December	18:45	6 p.m.	Saturday	New Mexico State Police (NMSP)	Santa Fe	Santa Fe
710590315	12/17/2018	2018	December	11:24	11 a.m.	Monday	Santa Fe Police Department	Santa Fe	Santa Fe
710591145	6/19/2019	2019	June	18:53	6 p.m.	Wednesday	Santa Fe Police Department	Santa Fe	Santa Fe
710591439	9/1/2019	2019	September	18:45	6 p.m.	Sunday	Santa Fe Police Department	Santa Fe	Santa Fe
710593419	1/12/2020	2020	January	13:29	1 p.m.	Sunday	Santa Fe Police Department	Santa Fe	Santa Fe
710596139	6/30/2020	2020	June	11:44	11 a.m.	Tuesday	Santa Fe Police Department	Santa Fe	Santa Fe
710748542	8/27/2021	2021	August	17:48	5 p.m.	Friday	Santa Fe Police Department	Santa Fe	Santa Fe
710749912	9/7/2021	2021	September	20:26	8 p.m.	Tuesday	Santa Fe Police Department	Santa Fe	Santa Fe
710750005	11/18/2021	2021	November	8:43	8 a.m.	Thursday	Santa Fe Police Department	Santa Fe	Santa Fe
710751377	6/14/2021	2021	June	9:00	9 a.m.	Monday	Santa Fe Police Department	Santa Fe	Santa Fe
710751411	7/27/2022	2022	July	16:14	4 p.m.	Wednesday	Santa Fe Police Department	Santa Fe	Santa Fe
710751704	3/7/2022	2022	March	8:12	8 a.m.	Monday	Santa Fe Police Department	Santa Fe	Santa Fe
710752210	11/4/2021	2021	November	16:58	4 p.m.	Thursday	Santa Fe Police Department	Santa Fe	Santa Fe

PRIMARY STREET	SECONDARY STREET	LANDMARK/LOCATION	GIS-DERIVED ROUTE NAME	GIS-DERIVED MILEPOST	CRASH DIRECTION	DIRECTION FROM INTERSECTION OR LANDMARK	DISTANCE FROM LANDMARK	DISTANCE FROM LANDMARK MEASUREMENT UNIT
CERRILLOS	OCATE ROAD		NM 14	48	N			
CERRILLOS RD	OCATE RD		NM 14	47	S			
CERRILLOS RD	OCATE RD	CERRILLOS RD AND OCATE	NM 14	47	N	N	30	FT
CERRILLOS RD	OCATE RD		NM 14	47	S			
CERRILLOS RD		CERRILLOS RD AND OCATE	NM 14	48	N	N	100	FT
OCATE RD	CERRILLOS RD		NM 14	48	W	W		
OCATE RD	NM 14		NM 14	47	N			
CERRILLOS RD	OCATE RD		NM 14	48	S			
CERRILLOS RD	OCATE RD	CERRILLOS RD AND OCATE RD	NM 14	48	N	S	131	FT
CERRILLOS RD		OCATE ROAD	NM 14	48	E			
CERRILLOS RD	OCATE RD		NM 14	48	NE			
CERRILLOS RD	OCATE RD	CERRILLOS ROAD/ OCATE ROAD	NM 14	48	NE	NE	2000	FT
CERRILLOS RD	OCATE RD		NM 14	48	S			
CERRILLOS RD	OCATE RD		NM 14	48	W	S		
OCATE RD		CERRILLOS ROAD	NM 14	48	E	W	600	FT
CERRILLOS RD	OCATE RD		NM 14	48	S	S		
CERRILLOS RD	OCATE RD	CERRILLOS RD AND OCATE RD	NM 14	48	S	S	20	FT
OCATE RD	CERRILLOS RD		NM 14	48	E			
CERRILLOS RD	OCATE RD		NM 14	48	S	S		

CRASH SEVERITY	NUMBER OF PEOPLE KILLED IN CRASH	NUMBER OF PEOPLE WITH SUSPECTED SERIOUS INJURIES (CLASS A) IN CRASH	NUMBER OF PEOPLE WITH SUSPECTED MINOR INJURIES (CLASS B) IN CRASH	NUMBER OF PEOPLE WITH POSSIBLE INJURIES (CLASS C) IN CRASH	NUMBER OF PEOPLE INJURED (CLASS A+B+C) IN CRASH	NUMBER OF PEOPLE NOT INJURED (CLASS O) IN CRASH
Property Damage Only Crash	0	0	0	0	0	5
Injury Crash	0	0	1	1	2	1
Injury Crash	0	0	0	1	1	1
Property Damage Only Crash	0	0	0	0	0	3
Property Damage Only Crash	0	0	0	0	0	2
Property Damage Only Crash	0	0	0	0	0	2
Property Damage Only Crash	0	0	0	0	0	3
Property Damage Only Crash	0	0	0	0	0	2
Property Damage Only Crash	0	0	0	0	0	3
Property Damage Only Crash	0	0	0	0	0	4
Injury Crash	0	0	0	1	1	1
Injury Crash	0	0	1	0	1	2
Injury Crash	0	0	1	1	2	0
Injury Crash	0	0	1	0	1	1
Injury Crash	0	0	0	3	3	0
Injury Crash	0	0	0	2	2	0
Property Damage Only Crash	0	0	0	0	0	3
Injury Crash	0	0	1	0	1	2
Property Damage Only Crash	0	0	0	0	0	2

TOTAL NUMBER OF PEOPLE IN CRASH	NUMBER OF VEHICLES, BICYCLES, AND PEDESTRIANS INVOLVED	NUMBER OF PEOPLE IN MOTOR VEHICLES	NUMBER OF PEOPLE NOT IN MOTOR VEHICLES	NUMBER OF MOTOR VEHICLES INVOLVED	FIRST HARMFUL EVENT OCCURRED	CRASH CLASSIFICATION
5	2	5	0	2	On Roadway	Other Vehicle
3	3	3	0	3	On Roadway	Other Vehicle
2	2	2	0	2	On Roadway	Other Vehicle
3	2	3	0	2	On Roadway	Other Vehicle
2	2	2	0	2	On Roadway	Other Vehicle
2	2	1	1	2	On Roadway	Parked Vehicle
3	2	3	0	2	On Roadway	Other Vehicle
2	2	2	0	2	On Roadway	Other Vehicle
3	2	3	0	2	On Roadway	Other Vehicle
4	2	4	0	2	On Roadway	Other Vehicle
2	2	2	0	2	On Roadway	Other Vehicle
3	2	3	0	2	On Roadway	Left Blank
2	2	2	0	2	On Roadway	Left Blank
2	2	2	0	2	On Roadway	Left Blank
3	2	3	0	2	On Roadway	Left Blank
2	2	2	0	2	On Roadway	Left Blank
3	2	3	0	2	On Roadway	Left Blank
3	2	2	1	1	On Roadway	Left Blank
2	2	2	0	2	On Roadway	Left Blank

CRASH ANALYSIS	FIRST HARMFUL EVENT	FIRST HARMFUL EVENT - ANALYSIS
Other Vehicle - Both Turn Left/Entering At Angle	Collision with Motor Vehicle	MV in Transport
Other Vehicle - From Same Direction/Rear End Collision	Collision with Motor Vehicle	MV in Transport
Other Vehicle - One Left Turn/Entering At Angle	Collision with Motor Vehicle	MV in Transport
Other Vehicle - One Right Turn/Entering At Angle	Collision with Motor Vehicle	MV in Transport
Other Vehicle - From Same Direction/Rear End Collision	Collision with Motor Vehicle	MV in Transport
Vehicle Parked in Proper Location	Collision with Motor Vehicle	Parked MV
Other Vehicle - One Left Turn/Entering At Angle	Collision with Motor Vehicle	MV in Transport
Other Vehicle - One Left Turn/Entering At Angle	Collision with Motor Vehicle	MV in Transport
Other Vehicle - From Opposite Direction/One Left Turn	Collision with Motor Vehicle	MV in Transport
Other Vehicle - Both Going Straight/Entering At Angle	Collision with Motor Vehicle	MV in Transport
Other Vehicle - One Left Turn/Entering At Angle	Collision with Motor Vehicle	MV in Transport
Left Blank	Collision with Motor Vehicle	MV in Transport
Left Blank	Collision with Motor Vehicle	MV in Transport
Left Blank	Collision with Motor Vehicle	MV in Transport
Left Blank	Collision with Motor Vehicle	MV in Transport
Left Blank	Collision with Motor Vehicle	MV in Transport
Left Blank	Collision with Motor Vehicle	MV in Transport
Left Blank	Collision with Person	Pedalcycle
Left Blank	Collision with Motor Vehicle	MV in Transport

FIRST HARMFUL EVENT – LOCATION	FIRST HARMFUL EVENT – MANNER OF IMPACT	FIRST HARMFUL EVENT – MANNER OF CRASH	WEATHER	ADDITIONAL WEATHER	LIGHTING	HIT AND RUN CRASH	ALCOHOL INVOLVEMENT	DRUG INVOLVEMENT
Not Available	Not Available	Not Available	Clear	Not Available	Daylight	No	Not Involved	Not Involved
Not Available	Not Available	Not Available	Raining	Not Available	Daylight	No	Not Involved	Not Involved
Not Available	Not Available	Not Available	Clear	Not Available	Daylight	No	Not Involved	Not Involved
Not Available	Not Available	Not Available	Clear	Not Available	Daylight	No	Not Involved	Not Involved
Not Available	Not Available	Not Available	Clear	Not Available	Daylight	No	Not Involved	Not Involved
Not Available	Not Available	Not Available	Clear	Not Available	Daylight	No	Not Involved	Not Involved
Not Available	Not Available	Not Available	Clear	Not Available	Dark-Lighted	No	Involved	Not Involved
Not Available	Not Available	Not Available	Clear	Not Available	Daylight	No	Not Involved	Not Involved
Not Available	Not Available	Not Available	Clear	Not Available	Daylight	No	Not Involved	Not Involved
Not Available	Not Available	Not Available	Clear	Not Available	Daylight	No	Not Involved	Not Involved
Left Blank	Left Blank	Left Blank	Clear	Left Blank	Daylight	No	Not Involved	Not Involved
On Roadway	Sideswipe	From Opposite Direction	Clear	Left Blank	Daylight	No	Not Involved	Not Involved
On Roadway	Front-to-Side	From Opposite Direction	Clear	Left Blank	Daylight	No	Not Involved	Not Involved
On Roadway	Front-to-Side	Intersecting Path (T-bone)	Clear	Left Blank	Dark-Lighted	No	Not Involved	Not Involved
On Roadway	Front-to-Front	From Opposite Direction	Clear	Left Blank	Daylight	No	Not Involved	Not Involved
On Roadway	Sideswipe	From Opposite Direction	Clear	Left Blank	Daylight	No	Not Involved	Not Involved
On Roadway	Front-to-Side	Intersecting Path (T-bone)	Raining	Left Blank	Daylight	No	Not Involved	Not Involved
On Roadway	Front to Side	Intersecting Path (T bone)	Clear	Left Blank	Daylight	No	Not Involved	Not Involved
On Roadway	Front-to-Side	From Same Direction	Clear	Left Blank	Daylight	No	Not Involved	Not Involved

PEDESTRIAN INVOLVEMENT	MOTORCYCLE INVOLVEMENT	PEDALCYCLE INVOLVEMENT	HEAVY TRUCK INVOLVEMENT	COMMERICAL MOTOR VEHICLE INVOLVEMENT	SCHOOL BUS DIRECT INVOLVEMENT	HAZARDOUS MATERIAL INVOLVEMENT	INVOLVEMENT OF NON-LOCAL DRIVER	STATE HIGHWAY DEPT. PROPERTY
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Both Local and Out Of State	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Both Local and Out Of State	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	
Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Not Involved	Local Drivers	

ROAD SYSTEM: URBAN, RURAL OR RURAL INTERSTATE	MAXIMUM VEHICLE DAMAGE	WORK ZONE	WORK ZONE - TYPE	WORK ZONE – LOCATION	ROAD CHARACTER	ROAD GRADE	INTERSECTION TYPE	RELATION TO JUNCTION	SECONDARY CRASH
Urban	Functional	Not Available	Not Available	Not Available	Straight	Level	Not Available	Not Available	Not Available
Urban	Disabling	Not Available	Not Available	Not Available	Straight	Level	Not Available	Not Available	Not Available
Urban	Functional	Not Available	Not Available	Not Available	Straight	Level	Not Available	Not Available	Not Available
Urban	Appearance	Not Available	Not Available	Not Available	Straight	Level	Not Available	Not Available	Not Available
Urban	Functional	Not Available	Not Available	Not Available	Straight	Level	Not Available	Not Available	Not Available
Urban	Appearance	Not Available	Not Available	Not Available	Straight	Level	Not Available	Not Available	Not Available
Urban	Disabling	Not Available	Not Available	Not Available	Straight	Level	Not Available	Not Available	Not Available
Urban	Functional	Not Available	Not Available	Not Available	Straight	Level	Not Available	Not Available	Not Available
Urban	Disabling	Not Available	Not Available	Not Available	Straight	Level	Not Available	Not Available	Not Available
Urban	Appearance	Not Available	Not Available	Not Available	Straight	Level	Not Available	Not Available	Not Available
Urban	Functional	Left Blank	Left Blank	Left Blank	Straight	Level	Left Blank	Left Blank	No
Urban	Disabling	Left Blank	Left Blank	Left Blank	Left Blank	Left Blank	Not an Intersection	Non-Junction	No
Urban	Disabling	Left Blank	Left Blank	Left Blank	Left Blank	Left Blank	Four-Way	Intersection	No
Urban	Disabling	Left Blank	Left Blank	Left Blank	Left Blank	Left Blank	Not an Intersection	Left Blank	No
Urban	Disabling	Left Blank	Left Blank	Left Blank	Left Blank	Left Blank	Not an Intersection	Non-Junction	No
Urban	Disabling	Left Blank	Left Blank	Left Blank	Left Blank	Left Blank	T-Intersection	Non-Junction	No
Urban	Disabling	Left Blank	Left Blank	Left Blank	Left Blank	Left Blank	Not an Intersection	Intersection	No
Urban	Functional	Left Blank	Left Blank	Left Blank	Left Blank	Left Blank	T Intersection	Non Junction	No
Urban	Functional	Zone – Construction	Lane Closure	rk Zone Warning Sign	Left Blank	Left Blank	Not an Intersection	Non-Junction	No

TRIBAL JURISDICTION	GIS-DERIVED RESERVATION	GIS-DERIVED STATE HIGHWAY TRANSPORTATION DISTRICT	GIS-DERIVED STATE POLICE DISTRICT	GIS-DERIVED STATE HIGHWAY MAINTENANCE DISTRICT	GIS-DERIVED UTM X COORDINATE	GIS-DERIVED UTM Y COORDINATE	GIS-DERIVED LATITUDE COORDINATE	GIS-DERIVED LONGITUDE COORDINATE	ORIGINAL LATITUDE
Left Blank		5	1	5	406935.6161	3942557.046	35.62242	-106.02769	
No		5	1	5	406935.6212	3942557.05	35.62242	-106.02769	
No		5	1	5	406954.3669	3942549.346	35.62235	-106.02748	
No		5	1	5	406935.6171	3942557.04	35.62242	-106.02769	
No		5	1	5	406935.6171	3942557.04	35.62242	-106.02769	
No		5	1	5	406935.6161	3942557.046	35.62242	-106.02769	
No		5	1	5	406935.6161	3942557.046	35.62242	-106.02769	35.622441
No		5	1	5	406935.6161	3942557.046	35.622422	-106.02769	
No		5	1	5	406935.6209	3942557.005	35.622422	-106.02769	
No		5	1	5	406935.6209	3942557.005	35.622422	-106.02769	
No		5	1	5	406935.6161	3942557.046	35.622422	-106.02769	
No		5	1	5	406935.6161	3942557.046	35.622422	-106.02769	
No		5	1	5	406935.6161	3942557.046	35.622422	-106.02769	
No		5	1	5	406935.6161	3942557.046	35.622422	-106.02769	
No		5	1	5	406935.6161	3942557.046	35.622422	-106.02769	
No		5	1	5	406935.6161	3942557.046	35.622422	-106.02769	
No		5	1	5	406935.6161	3942557.046	35.622422	-106.02769	
No		5	1	5	406935.6161	3942557.046	35.622422	106.02769	
No		5	1	5	406935.6161	3942557.046	35.622422	-106.02769	

ORIGINAL LONGITUDE	ORIGINAL UCR NUMBER	CASE NUMBER	STATION REPORT	TRACS DATA
		217011527	No	No
		710126287	Left Blank	Yes
		710313017	Left Blank	Yes
		710313467	Left Blank	Yes
		710317721	Left Blank	Yes
		710318150	Left Blank	Yes
-106.02793		710379784	Left Blank	Yes
		710590315	Left Blank	Yes
		710591145	Left Blank	Yes
		710591439	Left Blank	Yes
		710593419	Left Blank	Yes
		2020-007108	Left Blank	Yes
		21138980	Left Blank	Yes
		2021-009141	Left Blank	Yes
		21186709	Left Blank	Yes
		21090363	Left Blank	Yes
		2022-007680	Left Blank	Yes
		22033031	Left Blank	Yes
		21179751	Left Blank	Yes

APPENDIX C

PEDESTRIAN SURVEY

Take a walk and use this checklist to rate your neighborhood's walkability.

How walkable is your community?

Location of walk Ocate Road

Rating Scale: 1 awful · 2 many problems · 3 some problems · 4 good · 5 very good · 6 excellent

1. Did you have room to walk?

☐ Yes ☒ Some problems:

- ☒ Sidewalks or paths started and stopped
- ☐ Sidewalks were broken or cracked
- ☐ Sidewalks were blocked with poles, signs, shrubbery, dumpsters, etc.
- ☒ No sidewalks, paths, or shoulders
- ☐ Too much traffic
- ☐ Something else _____

Locations of problems: _____

Rating: (circle one)
(1) 2 3 4 5 6

2. Was it easy to cross streets?

☐ Yes ☒ Some problems:

- ☐ Road was too wide
- ☐ Traffic signals made us wait too long or did not give us enough time to cross
- ☒ Needed striped crosswalks or traffic signals
- ☐ Parked cars blocked our view of traffic
- ☒ Trees or plants blocked our view of traffic
- ☒ Needed curb ramps or ramps needed repair
- ☐ Something else _____

Locations of problems: _____

Rating: (circle one)
(1) 2 3 4 5 6

3. Did drivers behave well?

☒ Yes ☐ Some problems: Drivers...

- ☐ Backed out of driveways without looking
- ☐ Did not yield to people crossing the street
- ☐ Turned into people crossing the street
- ☐ Drove too fast
- ☐ Sped up to make it through traffic lights or drove through traffic lights?
- ☐ Something else _____

Locations of problems: _____

Rating: (circle one)
1 2 3 4 5 (6)

4. Was it easy to follow safety rules? Could you and your child...

☐ Yes	☒ No	Cross at crosswalks or where you could see and be seen by drivers?
☒ Yes	☐ No	Stop and look left, right and then left again before crossing streets?
☐ Yes	☒ No	Walk on sidewalks or shoulders facing traffic where there were no sidewalks?
☐ Yes	☒ No	Cross with the light?

Locations of problems: _____

Rating: (circle one)
(1) 2 3 4 5 6

5. Was your walk pleasant?

☐ Yes ☒ Some unpleasant things:

- ☒ Needed more grass, flowers, or trees
- ☐ Scary dogs
- ☐ Scary people
- ☒ Not well lighted
- ☒ Dirty, lots of litter or trash
- ☐ Dirty air due to automobile exhaust
- ☐ Something else _____

Locations of problems: _____

Rating: (circle one)
(1) 2 3 4 5 6

How does your neighborhood stack up? Add up your ratings and decide.

1. _____
2. _____
3. _____
4. _____
5. X

Total 10

26–30	Celebrate! You have a great neighborhood for walking.
21–25	Celebrate a little. Your neighborhood is pretty good.
16–20	Okay, but it needs work.
11–15	It needs lots of work. You deserve better than that.
5–10	It's a disaster for walking!

Now that you've identified the problems, go to the next page to find out how to fix them.

Walkability Survey
Ocate Road Apartments
July 9, 2024



Photo 1: This image is on Ocate Road looking east on to Cerrillos Road. Note the absence of an ADA ramp and cracked sidewalk.



Photo 2: This is Ocate Road facing east, it is evident that there is no sidewalk present. Additionally, note the area is marred by litter and overgrown weeds along the roadside.

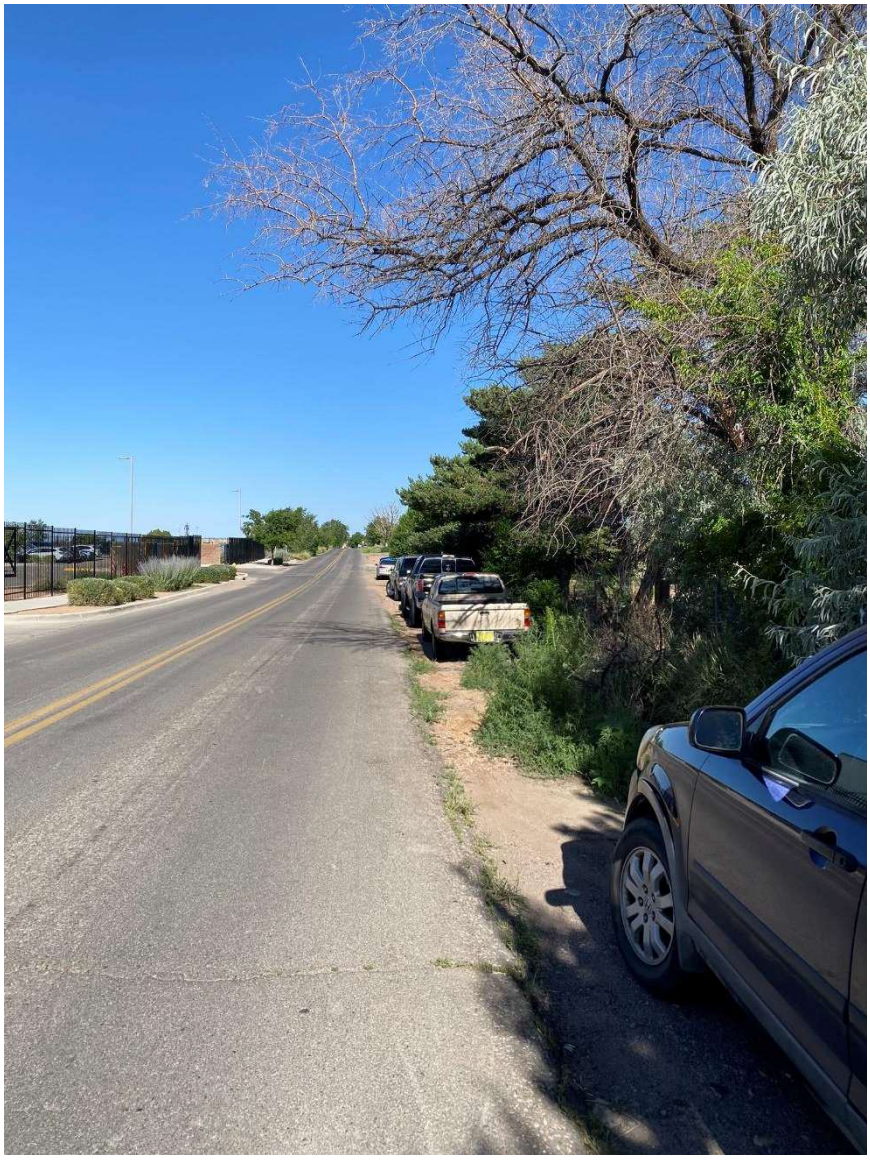


Photo 3: This image captures Ocate Road looking west, highlighting the presence of parked cars along the roadside. Making it a challenge for safe passage.



Photo 4: This image captures Ocate Road further down looking west, note the pedestrians walking directly on the road heading east.



Photo 5: This image captures the western end of Ocate Road, showing damaged fencing along a trail that seems to lead towards Nina Otero Community School.



Photo 6: This is Ocate Road looking south, note the pedestrian maneuvering around damaged fencing walking towards Walmart on the opposite side.



Photo 7: This image is on Ocate Road looking south showing openings on the fence and several trials.



Photo 8: This is Ocate Road facing east, note the absence of sidewalk, curb and gutter on the right-hand side as well.



Photo 9: This image is Ocate Road looking west, note the end of the sidewalk along the Honda of Santa Fe dealership.



Photo 10: This image is on Ocate Road looking east on to Cerrillos Road.

Walkability Checklist

How walkable is your community?

Take a walk with a child and decide for yourselves.

Everyone benefits from walking. These benefits include: improved fitness, cleaner air, reduced risks of certain health problems, and a greater sense of community. But walking needs to be safe and easy. Take a walk with your child and use this checklist to decide if your neighborhood is a friendly place to walk. Take heart if you find problems, there are ways you can make things better.





Getting started:

First, you'll need to pick a place to walk, like the route to school, a friend's house or just somewhere fun to go.

The second step involves the checklist. Read over the checklist before you go, and as you walk, note the locations of things you would like to change. At the end of your walk, give each question a rating. Then add up the numbers to see how you rated your walk overall.

After you've rated your walk and identified any problem areas, the next step is to figure out what you can do to improve your community's score. You'll find both immediate answers and long-term solutions under "Improving Your Community's Score..." on the third page.

Partnership for a Walkable America

Pedestrian and Bicycle Information Center

U.S. Department of Transportation

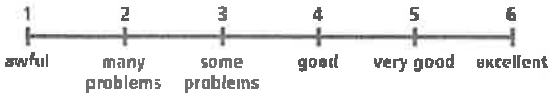
Take a walk and use this checklist to rate your neighborhood's walkability.

How walkable is your community?

Location of walk _____

_____

Rating Scale:



1. Did you have room to walk?

☐ Yes ☐ Some problems:

- ☐ Sidewalks or paths started and stopped
- ☐ Sidewalks were broken or cracked
- ☐ Sidewalks were blocked with poles, signs, shrubbery, dumpsters, etc.
- ☐ No sidewalks, paths, or shoulders
- ☐ Too much traffic
- ☐ Something else _____

Locations of problems: _____

Rating: (circle one)
1 2 3 4 5 6

2. Was it easy to cross streets?

☐ Yes ☐ Some problems:

- ☐ Road was too wide
- ☐ Traffic signals made us wait too long or did not give us enough time to cross
- ☐ Needed striped crosswalks or traffic signals
- ☐ Parked cars blocked our view of traffic
- ☐ Trees or plants blocked our view of traffic
- ☐ Needed curb ramps or ramps needed repair
- ☐ Something else _____

Locations of problems: _____

Rating: (circle one)
1 2 3 4 5 6

3. Did drivers behave well?

☐ Yes ☐ Some problems: Drivers...

- ☐ Backed out of driveways without looking
- ☐ Did not yield to people crossing the street
- ☐ Turned into people crossing the street
- ☐ Drove too fast
- ☐ Sped up to make it through traffic lights or drove through traffic lights?
- ☐ Something else _____

Locations of problems: _____

Rating: (circle one)
1 2 3 4 5 6

4. Was it easy to follow safety rules? Could you and your child...

☐ Yes	☐ No	Cross at crosswalks or where you could see and be seen by drivers?
☐ Yes	☐ No	Stop and look left, right and then left again before crossing streets?
☐ Yes	☐ No	Walk on sidewalks or shoulders facing traffic where there were no sidewalks?
☐ Yes	☐ No	Cross with the light?

Locations of problems: _____

Rating: (circle one)
1 2 3 4 5 6

5. Was your walk pleasant?

☐ Yes ☐ Some unpleasant things:

- ☐ Needed more grass, flowers, or trees
- ☐ Scary dogs
- ☐ Scary people
- ☐ Not well lighted
- ☐ Dirty, lots of litter or trash
- ☐ Dirty air due to automobile exhaust
- ☐ Something else _____

Locations of problems: _____

Rating: (circle one)
1 2 3 4 5 6

How does your neighborhood stack up? Add up your ratings and decide.

1. _____
2. _____
3. _____
4. _____
5. _____

Total _____

26–30	Celebrate! You have a great neighborhood for walking.
21–25	Celebrate a little. Your neighborhood is pretty good.
16–20	Okay, but it needs work.
11–15	It needs lots of work. You deserve better than that.
5–10	It's a disaster for walking!

Now that you've identified the problems, go to the next page to find out how to fix them.

Now that you know the problems,
you can find the answers.



Improving your community's score...



	What you and your child can do immediately	What you and your community can do with more time
1. Did you have room to walk? Sidewalks or paths started and stopped Sidewalks broken or cracked Sidewalks blocked No sidewalks, paths or shoulders Too much traffic	• pick another route for now • tell local traffic engineering or public works department about specific problems and provide a copy of the checklist	• speak up at board meetings • write or petition city for walkways and gather neighborhood signatures • make media aware of problem • work with a local transportation engineer to develop a plan for a safe walking route
2. Was it easy to cross streets? Road too wide Traffic signals made us wait too long or did not give us enough time to cross Crosswalks/traffic signals needed View of traffic blocked by parked cars, trees, or plants Needed curb ramps or ramps needed repair	• pick another route for now • share problems and checklist with local traffic engineering or public works department • trim your trees or bushes that block the street and ask your neighbors to do the same • leave nice notes on problem cars asking owners not to park there	• push for crosswalks/signals/ parking changes/curb ramps at city meetings • report to traffic engineer where parked cars are safety hazards • report illegally parked cars to the police • request that the public works department trim trees or plants • make media aware of problem
3. Did drivers behave well? Backed without looking Did not yield Turned into walkers Drove too fast Sped up to make traffic lights or drove through red lights	• pick another route for now • set an example: slow down and be considerate of others • encourage your neighbors to do the same • report unsafe driving to the police	• petition for more enforcement • request protected turns • ask city planners and traffic engineers for traffic calming ideas • ask schools about getting crossing guards at key locations • organize a neighborhood speed watch program
4. Could you follow safety rules? Cross at crosswalks or where you could see and be seen Stop and look left, right, left before crossing Walk on sidewalks or shoulders facing traffic Cross with the light	• educate yourself and your child about safe walking • organize parents in your neighborhood to walk children to school	• encourage schools to teach walking safely • help schools start safe walking programs • encourage corporate support for flex schedules so parents can walk children to school
5. Was your walk pleasant? Needs grass, flowers, trees Scary dogs Scary people Not well lit Dirty, litter Lots of traffic	• point out areas to avoid to your child; agree on safe routes • ask neighbors to keep dogs leashed or fenced • report scary dogs to the animal control department • report scary people to the police • report lighting needs to the police or appropriate public works department • take a walk with a trash bag • plant trees, flowers in your yard • select alternative route with less traffic	• request increased police enforcement • start a crime watch program in your neighborhood • organize a community clean-up day • sponsor a neighborhood beautification or tree-planting day • begin an adopt-a-street program • initiate support to provide routes with less traffic to schools in your community (reduced traffic during am and pm school commute times)
A Quick Health Check Could not go as far or as fast as we wanted Were tired, short of breath or had sore feet or muscles Was the sun really hot? Was it hot and hazy?	• start with short walks and work up to 30 minutes of walking most days • invite a friend or child along • walk along shaded routes where possible • use sunscreen of SPF 15 or higher, wear a hat and sunglasses • try not to walk during the hottest time of day	• get media to do a story about the health benefits of walking • call parks and recreation department about community walks • encourage corporate support for employee walking programs • plant shade trees along routes • have a sun safety seminar for kids • have kids learn about unhealthy ozone days and the Air Quality Index (AQI)



Need some guidance?
These resources might help...

Great Resources

WALKING INFORMATION

Pedestrian and Bicycle Information Center (PBIC)
UNC Highway Safety Research Center
730 Airport Road , Suite 300
Campus Box 3430
Chapel Hill, NC
27599-3430
Phone: (919) 962-2202
www.pedbikeinfo.org
www.walkinginfo.org



National Center for
Bicycling and Walking
Campaign to Make
America Walkable
1506 21st Street, NW
Suite 200
Washington, DC 20036
Phone: (800) 760-NBPC
www.bikefed.org

WALK TO SCHOOL DAY WEB SITES

USA event: www.walktoschool-usa.org
International: www.iwalktoschool.org

STREET DESIGN AND TRAFFIC CALMING

Federal Highway Administration
Pedestrian and Bicycle Safety Research Program
HSR – 20
6300 Georgetown Pike
McLean, VA 22101
www.fhwa.dot.gov/environment/bikeped/index.htm

Institute of Transportation Engineers
www.ite.org

Surface Transportation Policy Project
www.transact.org

Transportation for Livable Communities
www.tlcnetwork.org

WALKING COALITIONS

America Walks
P.O. Box 29103
Portland, Oregon 97210
Phone: (503) 222-1077
www.americawalks.org



Partnership for a Walkable America
National Safety Council
1121 Spring Lake Drive
Itasca, IL 60143-3201
Phone: (603) 285-1121
www.nsc.org/walkable.htm

PEDESTRIAN SAFETY

National Highway Traffic Safety Administration
Traffic Safety Programs
400 Seventh Street, SW
Washington, DC 20590
Phone: (202) 662-0600
www.nhtsa.dot.gov/people/injury/pedbimot/ped

National SAFE KIDS Campaign
1301 Pennsylvania Ave. NW
Suite 1000
Washington, DC 20004
Phone: (202) 662-0600
Fax: (202) 393-2072
www.safekids.org

WALKING AND HEALTH

US Environmental Protection Agency
Office of Children's Health Protection (MC 1107A)
Washington, DC 20460
Phone: 202-564-2188
Fax: 202 564 2733
www.epa.gov/children/
www.epa.gov/airnow/
www.epa.gov/air/urbanair/ozone/what.html
www.epa.gov/sunwise/uvindex.html
www.epa.gov/otaq/transp/comchoic/ccweb.htm

President's Task Force on Environmental Health Risks and
Safety Risks to Children
www.childrenshealth.gov

Centers for Disease Control and Prevention
Division of Nutrition and Physical Activity
Phone: (888) 232-4674
www.cdc.gov/needphp/dnpa/readyset
www.cdc.gov/needphp/dnpa/kidswalk/index.htm

Prevention Magazine
33 East Minor Street
Emmaus, PA 18098
www.trulyaboutprevention.com



Shape Up America!
6707 Democracy Boulevard
Suite 306
Bethesda, MD 20817
www.shapeup.org

ACCESSIBLE SIDEWALKS

US Access Board
1331 F Street, NW
Suite 1000
Washington, DC 20004-1111
Phone: (800) 872-2253;
(800) 993-2822 (TTY)
www.access-board.gov

APPENDIX D

EXISTING CONDITIONS CALCULATIONS

HCS Two-Way Stop-Control Report

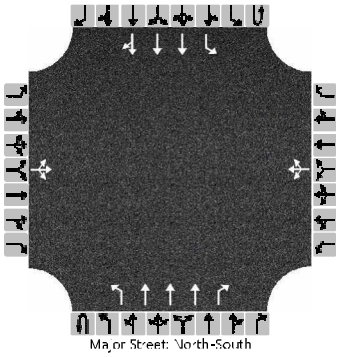
General Information

Analyst	CPC
Agency/Co.	SANTA FE ENGINEERING
Date Performed	5/29/2024
Analysis Year	2024
Time Analyzed	AM PEAK
Intersection Orientation	North-South
Project Description	EXISTING CONDITIONS

Site Information

Intersection	CERRILLOS - OCATE
Jurisdiction	CITY OF SANTA FE
East/West Street	OCATE RD / DRIVEWAY
North/South Street	CERRILLOS ROAD
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	1	0	1	3	0
Configuration			LTR				LTR			L	T	R		L	T	TR
Volume (veh/h)		50	0	51		1	0	1	0	40	1588	4	0	10	1131	36
Percent Heavy Vehicles (%)		1	1	1		1	1	1	1	1			1	1		
Proportion Time Blocked																
Percent Grade (%)		1				1										
Right Turn Channelized										Yes						
Median Type | Storage		Left Only								6						

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.62	6.72	7.22		6.62	6.72	7.22		5.32				5.32		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.81	4.01	3.91		3.81	4.01	3.91		3.11				3.11		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			115				2			45				11		
Capacity, c (veh/h)			194				68			274				159		
v/c Ratio			0.59				0.03			0.17				0.07		
95% Queue Length, Q_{95} (veh)			3.3				0.1			0.6				0.2		
95% Queue Length, Q_{95} (ft)			83.2				2.5			15.1				5.0		
Control Delay (s/veh)			47.2				59.7			20.7	3.1			29.4	2.0	
Level of Service (LOS)			E				F			C	A			D	A	
Approach Delay (s/veh)		47.2				59.7				3.5				2.2		
Approach LOS		E				F				A				A		

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HCS Two-Way Stop-Control Report

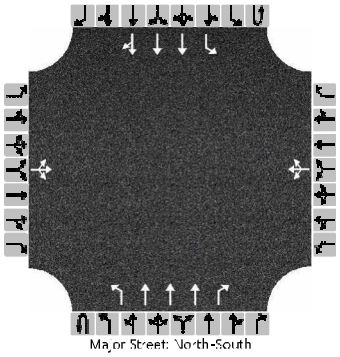
General Information

Analyst	CPC
Agency/Co.	SANTA FE ENGINEERING
Date Performed	5/29/2024
Analysis Year	2024
Time Analyzed	PM PEAK
Intersection Orientation	North-South
Project Description	EXISTING CONDITIONS

Site Information

Intersection	CERRILLOS - OCATE
Jurisdiction	CITY OF SANTA FE
East/West Street	OCATE RD / DRIVEWAY
North/South Street	CERRILLOS ROAD
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	1	0	1	3	0
Configuration			LTR				LTR			L	T	R		L	T	TR
Volume (veh/h)		55	0	39		1	0	6	9	29	1361	2	15	54	1668	4
Percent Heavy Vehicles (%)		1	1	1		1	1	1	1	1			1	1		
Proportion Time Blocked																
Percent Grade (%)		1				1										
Right Turn Channelized										Yes						
Median Type | Storage		Left Only								6						

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1	5.6	5.3			5.6	5.3		
Critical Headway (sec)		6.62	6.72	7.22		6.62	6.72	7.22	5.62	5.32			5.62	5.32		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9	2.3	3.1			2.3	3.1		
Follow-Up Headway (sec)		3.81	4.01	3.91		3.81	4.01	3.91	2.31	3.11			2.31	3.11		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			104				8			42				77		
Capacity, c (veh/h)			40				246			162				244		
v/c Ratio			2.64				0.03			0.26				0.31		
95% Queue Length, Q_{95} (veh)			11.5				0.1			1.0				1.3		
95% Queue Length, Q_{95} (ft)			289.8				2.5			25.2				32.8		
Control Delay (s/veh)			959.2				20.1			34.8	8.4			26.4	7.6	
Level of Service (LOS)			F				C			D	A			D	A	
Approach Delay (s/veh)		959.2				20.1				9.1				8.3		
Approach LOS		F				C				A				A		

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HCS Two-Way Stop-Control Report

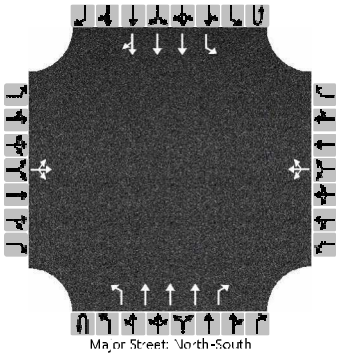
General Information

Analyst	CPC
Agency/Co.	SANTA FE ENGINEERING
Date Performed	5/29/2024
Analysis Year	2024
Time Analyzed	AM PEAK
Intersection Orientation	North-South
Project Description	EXISTING CONDITIONS - STAGE 1

Site Information

Intersection	CERRILLOS - OCATE
Jurisdiction	CITY OF SANTA FE
East/West Street	OCATE RD / DRIVEWAY
North/South Street	CERRILLOS ROAD
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	1	0	1	3	0
Configuration			LTR				LTR			L	T	R		L	T	TR
Volume (veh/h)		50	0	51		1	0	1	0	40	0	0	0	10	1131	36
Percent Heavy Vehicles (%)		1	1	1		1	1	1	1	1			1	1		
Proportion Time Blocked																
Percent Grade (%)	1				1											
Right Turn Channelized									Yes							
Median Type | Storage	Left Only								6							

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.62	6.72	7.22		6.62	6.72	7.22		5.32				5.32		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.81	4.01	3.91		3.81	4.01	3.91		3.11				3.11		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			115				2			45				11		
Capacity, c (veh/h)			206				575			274				1158		
v/c Ratio			0.56				0.00			0.17				0.01		
95% Queue Length, Q_{95} (veh)			3.0				0.0			0.6				0.0		
95% Queue Length, Q_{95} (ft)			75.6				0.0			15.1				0.0		
Control Delay (s/veh)			42.4				11.3			20.7	0.0			8.1	0.1	
Level of Service (LOS)			E				B			C	A			A	A	
Approach Delay (s/veh)	42.4				11.3				20.7				0.1			
Approach LOS	E				B				C				A			

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HCS Two-Way Stop-Control Report

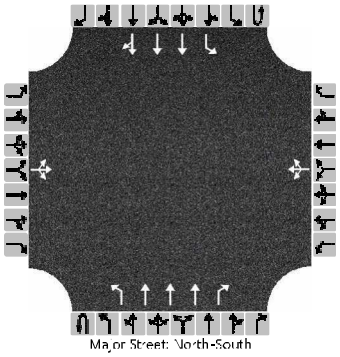
General Information

Analyst	CPC
Agency/Co.	SANTA FE ENGINEERING
Date Performed	5/29/2024
Analysis Year	2024
Time Analyzed	AM PEAK
Intersection Orientation	North-South
Project Description	EXISTING CONDITIONS - STAGE 2

Site Information

Intersection	CERRILLOS - OCATE
Jurisdiction	CITY OF SANTA FE
East/West Street	OCATE RD / DRIVEWAY
North/South Street	CERRILLOS ROAD
Peak Hour Factor	0.88
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	1	0	1	3	0
Configuration			LTR				LTR			L	T	R		L	T	TR
Volume (veh/h)		50	0	51		1	0	1	0	40	1588	4	0	10	0	0
Percent Heavy Vehicles (%)		1	1	1		1	1	1	1	1			1	1		
Proportion Time Blocked																
Percent Grade (%)		1				1										
Right Turn Channelized										Yes						
Median Type | Storage		Left Only								6						

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.62	6.72	7.22		6.62	6.72	7.22		5.32				5.32		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.81	4.01	3.91		3.81	4.01	3.91		3.11				3.11		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			115				2			45				11		
Capacity, c (veh/h)			516				78			1158				159		
v/c Ratio			0.22				0.03			0.04				0.07		
95% Queue Length, Q_{95} (veh)			0.8				0.1			0.1				0.2		
95% Queue Length, Q_{95} (ft)			20.2				2.5			2.5				5.0		
Control Delay (s/veh)			14.0				52.5			8.2	0.3			29.4	0.0	
Level of Service (LOS)			B				F			A	A			D	A	
Approach Delay (s/veh)		14.0				52.5				0.5				29.4		
Approach LOS		B				F				A				D		

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HCS Two-Way Stop-Control Report

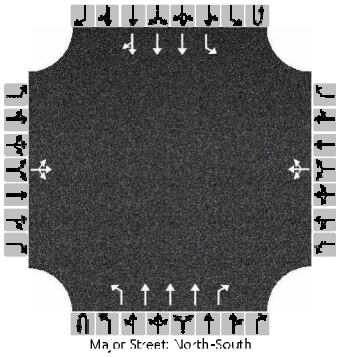
General Information

Analyst	CPC
Agency/Co.	SANTA FE ENGINEERING
Date Performed	5/29/2024
Analysis Year	2024
Time Analyzed	PM PEAK
Intersection Orientation	North-South
Project Description	EXISTING CONDITIONS - STAGE 1

Site Information

Intersection	CERRILLOS - OCATE
Jurisdiction	CITY OF SANTA FE
East/West Street	OCATE RD / DRIVEWAY
North/South Street	CERRILLOS ROAD
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	1	0	1	3	0
Configuration			LTR				LTR			L	T	R		L	T	TR
Volume (veh/h)		55	0	39		1	0	6	9	29	0	0	15	54	1668	4
Percent Heavy Vehicles (%)		1	1	1		1	1	1	1	1			1	1		
Proportion Time Blocked																
Percent Grade (%)		1				1										
Right Turn Channelized										Yes						
Median Type | Storage		Left Only								6						

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1	5.6	5.3			5.6	5.3		
Critical Headway (sec)		6.62	6.72	7.22		6.62	6.72	7.22	5.62	5.32			5.62	5.32		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9	2.3	3.1			2.3	3.1		
Follow-Up Headway (sec)		3.81	4.01	3.91		3.81	4.01	3.91	2.31	3.11			2.31	3.11		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			104				8			42				77		
Capacity, c (veh/h)			54				756			162				1223		
v/c Ratio			1.93				0.01			0.26				0.06		
95% Queue Length, Q_{95} (veh)			10.2				0.0			1.0				0.2		
95% Queue Length, Q_{95} (ft)			257.0				0.0			25.2				5.0		
Control Delay (s/veh)			601.6				9.8			34.8	0.0			8.1	0.5	
Level of Service (LOS)			F				A			D	A			A	A	
Approach Delay (s/veh)		601.6				9.8				34.8				0.8		
Approach LOS		F				A				D				A		

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HCS Two-Way Stop-Control Report

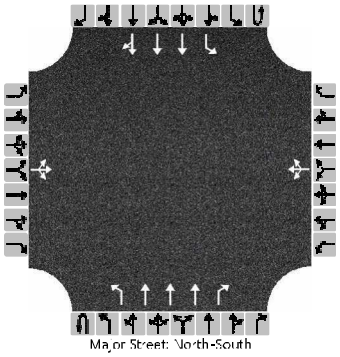
General Information

Analyst	CPC
Agency/Co.	SANTA FE ENGINEERING
Date Performed	5/29/2024
Analysis Year	2024
Time Analyzed	PM PEAK
Intersection Orientation	North-South
Project Description	EXISTING CONDITIONS - STAGE 2

Site Information

Intersection	CERRILLOS - OCATE
Jurisdiction	CITY OF SANTA FE
East/West Street	OCATE RD / DRIVEWAY
North/South Street	CERRILLOS ROAD
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	1	0	1	3	0
Configuration			LTR				LTR			L	T	R		L	T	TR
Volume (veh/h)		55	0	39		1	0	6	9	29	1361	2	15	54	0	0
Percent Heavy Vehicles (%)		1	1	1		1	1	1	1	1			1	1		
Proportion Time Blocked																
Percent Grade (%)		1				1										
Right Turn Channelized										Yes						
Median Type | Storage		Left Only								6						

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1	5.6	5.3			5.6	5.3		
Critical Headway (sec)		6.62	6.72	7.22		6.62	6.72	7.22	5.62	5.32			5.62	5.32		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9	2.3	3.1			2.3	3.1		
Follow-Up Headway (sec)		3.81	4.01	3.91		3.81	4.01	3.91	2.31	3.11			2.31	3.11		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			104				8			42				77		
Capacity, c (veh/h)			423				276			1221				244		
v/c Ratio			0.25				0.03			0.03				0.31		
95% Queue Length, Q_{95} (veh)			1.0				0.1			0.1				1.3		
95% Queue Length, Q_{95} (ft)			25.2				2.5			2.5				32.8		
Control Delay (s/veh)			16.3				18.4			8.1	0.3			26.4	0.0	
Level of Service (LOS)			C				C			A	A			D	A	
Approach Delay (s/veh)		16.3				18.4				0.5				26.4		
Approach LOS		C				C				A				D		

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APPENDIX E

WARRANT ANALYSIS

HCS Warrants Report

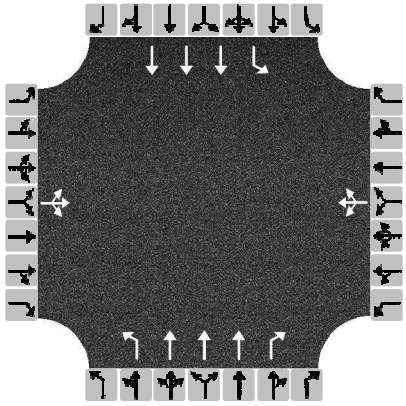
Project Information

Analyst	CPC	Date	8/6/2024
Agency	SANTA FE ENGINEERING	Analysis Year	2024
Jurisdiction	CITY OF SANTA FE	Time Period Analyzed	DAYTIME
Project Description	EXISTING CONDITIONS		

General

Major Street Direction	North-South	Population < 10,000	No
Starting Time Interval	6	Coordinated Signal System	No
Median Type	Divided	Crashes (crashes/year)	3
Major Street Speed (mi/h)	45	Adequate Trials of Crash Exp. Alt.	No
Nearest Signal (ft)	780		

Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Number of Lanes, N	0	1	0	0	1	0	1	3	1	1	3	0
Lane Usage		LTR			LTR		L	T	R	L	T	
Vehicle Volumes Averages (veh/h)	32	0	33	0	0	7	23	1195	3	24	1120	0
Pedestrian Averages (peds/h)	0			0			0			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay Averages (s/veh)	0.0			0.0			0.0			0.0		
Delay Averages (veh-hrs)	0.0			0.0			0.0			0.0		

School Crossing and Roadway Network

Number of Students in Highest Hour	0	Two or More Major Routes	No
Number of Adequate Gaps in Period	0	Weekend Counts	No
Number of Minutes in Period	0	5-year Growth Factor (%)	0

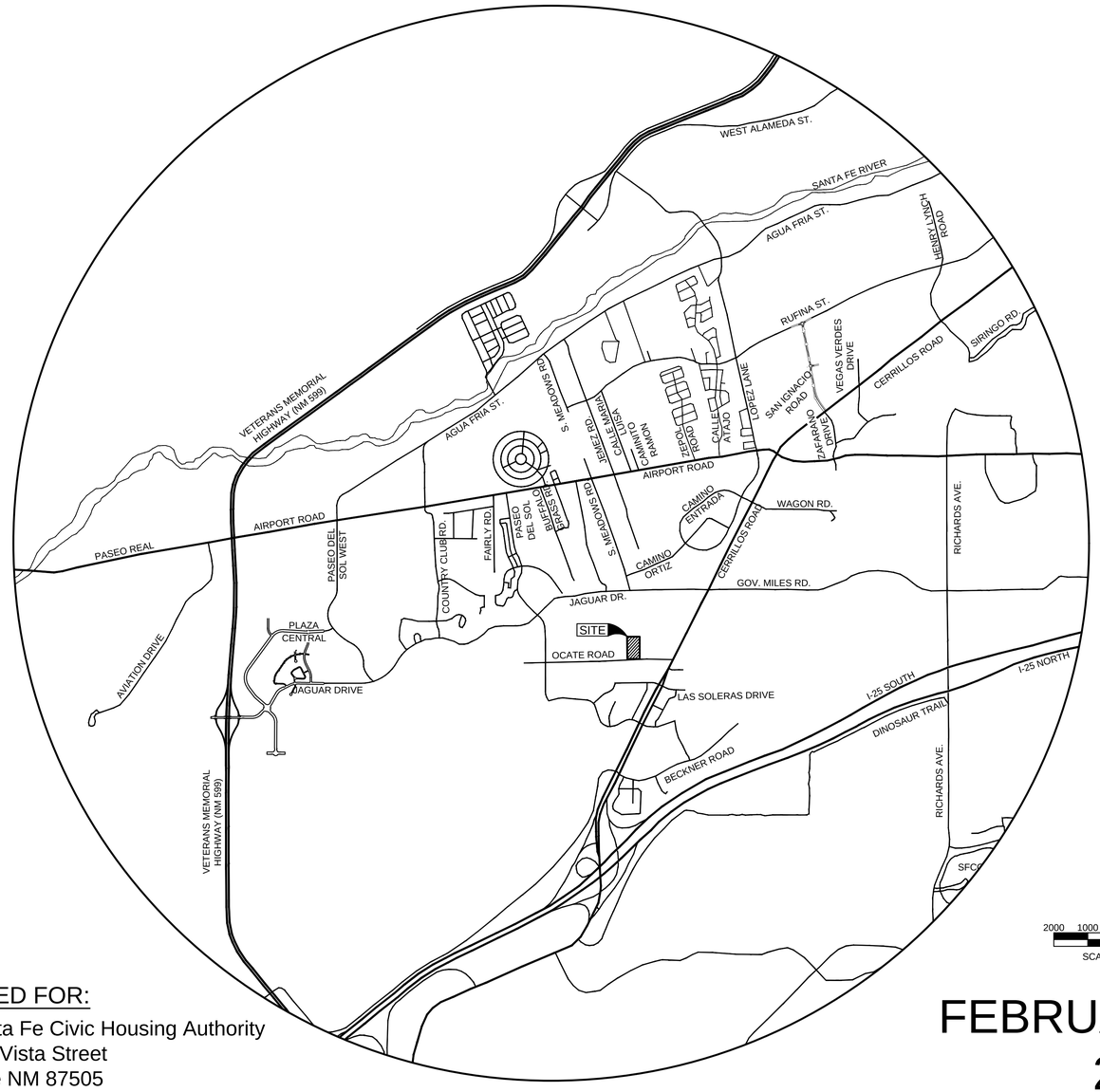
Railroad Crossing

Grade Crossing Approach	None	Rail Traffic (trains/day)	4
Highest Volume Hour with Trains	Unknown	High Occupancy Buses (%)	0
Distance to Stop Line (ft)	-	Tractor-Trailer Trucks (%)	10

DEVELOPMENT PLAN SUBMITTAL FOR

OCATE APARTMENTS

SANTA FE, NEW MEXICO



FEBRUARY
2025

PREPARED FOR:

The Santa Fe Civic Housing Authority
664 Alta Vista Street
Santa Fe NM 87505

CITY OF SANTA FE, NEW MEXICO

SECTION 18, TOWNSHIP 16N, RANGE 9E

PLANNING COMMISSION APPROVAL, CASE #
APPROVED BY THE PLANNING COMMISSION AT THEIR MEETING OF

PLANNING COMMISSION CHAIR DATE

PLANNING COMMISSION SECRETARY DATE

CITY OF SANTA FE LAND USE APPROVAL

LAND USE CITY PLANNER DATE

LAND USE CITY ENGINEER DATE

COUNTY OF SANTA FE } SS
STATE OF NEW MEXICO

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED FOR RECORD ON THIS ___ DAY OF _____ A.D. 20____ AT _____ O'CLOCK M. AND WAS DULY RECORDED IN BOOK PAGE_____ OF THE RECORDS OF SANTA FE COUNTY.

WITNESS MY HAND AND SEAL OF OFFICE
KATHARINE E. CLARK
COUNTY CLERK, SANTA FE COUNTY, NM

_____
DEPUTY

AFFIDAVIT

KNOW ALL PERSONS BY THESE PRESENTS THAT THE UNDERSIGNED OWNERS HAVE CAUSED THIS FINAL DEVELOPMENT PLAN TO BE PREPARED. ALL THAT APPEARS ON THIS PLAN IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE OWNER.

OWNER'S PRINTED NAME OWNER'S SIGNATURE AND DATE

THE FOREGOING WAS SWORN, ACKNOWLEDGED AND SUBSCRIBED BEFORE ME BY _____ THIS _____ DAY OF _____, 20_____.

NOTARY PUBLIC

MY COMMISSION EXPIRES

INDEX OF SHEETS

1-1	COVER SHEET AND INDEX OF SHEETS
2-1	EXISTING CONDITIONS PLAN
3-1	LEGAL LOT OF RECORD
4-1 TO 4-2	DEVELOPMENT PLANS
5-1	EXISTING CONDITIONS

Dolores I. Vigil
Liaison Planning Services Inc.
P.O. Box 1835
Santa Fe NM 87504
(505) 920-6839
liaisonplanning@gmail.com

Liaison Planning Services INC.

NOTE:
INFRASTRUCTURE PLANS ARE FILED IN THE CITY OF SANTA FE MAP ROOM

JEEBS & ZUZU, LLC.
Architecture
Construction
Design-Build
5924 ANAHEIM AVENUE NE SUITE A
ALBUQUERQUE, NM 87113
P: 505-797-1318

Santa Fe Engineering
Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

REV.	SHEETS	CITY ENGR.	DATE	REV.	SHEETS	CITY ENGR.	DATE
APPROVAL OF REVISIONS							

CITY OF SANTA FE

APPROVED FOR CONSTRUCTION

CITY ENGINEER DATE

COVER SHEET AND INDEX OF SHEETS

SHEET 1-1

CITY OF SANTA FE WASTEWATER MANAGEMENT DIVISION GENERAL NOTES

1. Prior to the Wastewater Management Division approval of the plan set, a letter will be required from the project engineer indicating they are providing the inspection and record drawing services for the project.
2. The Contractor must obtain all sewer hookup permits from the City's Building Permits Section (sewer lines) prior to commencing any sewer line construction. A copy of the permit must be kept at the construction site.
3. All manholes shall be constructed in accordance with the "Standard Manhole Detail Sheet" shown on the City Standard Drawings.
4. A copy of the approved plans shall be available at the construction site at all times during working hours.
5. All modifications to the sanitary sewer plans must be reviewed and approved by the City's Wastewater Management Division prior to construction.
6. Additional general notes are contained in the standard City detail sheets for sanitary sewer construction.
7. All public gravity sewer lines shall be a minimum 8 inch diameter with a minimum Class C bedding (2006 New Mexico American Public Works Association).
8. All 4 inch and 6 inch diameter gravity sewer pipe shall be private. No private sewer system shall use larger than a 6 inch diameter pipe. No public gravity sewer line to be accepted by the City of Santa Fe for permanent maintenance shall be less than 8 inches diameter.
9. No concrete encasement of new or existing public sewer pipe will be allowed unless approved by the City of Santa Fe Wastewater Management Division.
10. Core drilling is required for all new connections to an existing manhole.
11. No public sewer main line or manhole will be allowed under or within a storm water detention/retention pond.
12. Prior to paving over any sanitary sewer lines, submit T.V.tapes and logs, pressure tests, and the engineer's certification to the City's Wastewater Management Division. After the Wastewater Management Division reviews the above listed information, a preliminary manhole inspection will be conducted. When all the items listed above are completed to meet the standards of the Wastewater Management Division, a letter approving paving will be issued in relation to the sanitary sewer. Note: A final manhole inspection will be conducted after the final paving is completed.
13. All sewer manholes with sewer lines 12 inches in diameter and larger are required to have approved vented and locking manhole covers.
14. Locate wires shall be installed for all sanitary sewers (gravity/force mains). The locate wire must be visible in the manhole or access structure. This will be verified during the preliminary manhole inspection prior to paving. The locate wire is to be a continuous, 12 gauge, solid strand insulated copper wire.
15. Off-road public sewer access will be provided for all public sewer lines and manholes. Access roads are to be a minimum 12 feet wide with a driving surface of 6 inches of compacted base course. No access road shall have a grade greater than 15%. Manholes are to be aligned with the center line of the access road. Sewer easements are to be a minimum of 20 feet in width.
16. Off road sanitary sewer - Call the Wastewater Management Division at 955-4631 for a field review of the grading of all off road sanitary sewer to ensure that the City's maintenance vehicles can access all manholes. The grades may be required to be adjusted based upon this inspection. Additional bank protection may be required based upon a final inspection by the Wastewater Management Division and the project engineer.
17. For Record Drawings, tie manhole to a City of Santa Fe survey monument as part of the final record drawings. Show corrected as-built bearing and distances, slopes, rim and invert elevations and sewer services along the horizontal alignment of the sanitary sewer.
18. The Owner/Developer will be responsible for maintaining, repairing and locating the sewer system until City acceptance for maintenance. Damages resulting from a stoppage in any gravity and/or pressure sewer system will be the sole responsibility of the Owner/Developer until a final acceptance letter for permanent maintenance has been issued by the Wastewater Management Division.
19. Water meters will not be placed until a final acceptance letter has been issued by the Wastewater Division for all on-site sanitary sewer needed in order for the project to connect to the sanitary sewer system.
20. 20 foot wide access gates shall be provided at all fences, walls or other obstructions that cross a public sewer line. Access gates to be located within the sanitary sewer Easement.
21. The Owner/Developer will be responsible for locating each sewer service at the time each lot is ready to connect to the sewer. It is suggested that the Owner/ Developer retain a copy of the television inspection video along with the video logs. Each service shall be clearly marked for each lot at point of connection. All calls received by this Division regarding the location of service will be forwarded to the Owner/Developer.
22. The Contractor shall call the Wastewater Management Division (Douglas Flores at telephone # 955-4613) for a final manhole inspection. This inspection will be isolated to the manholes. The City's Plumbing and Mechanical Inspector's will conduct all other necessary plumbing inspections. Note: The City's Plumbing and Mechanical Inspectors will inspect the individual sewer service taps and laterals, which connect to the public sanitary sewer.
23. The existing sanitary sewer line must be T.V. taped prior to a new service connection being placed as well as taped after the services have been completed. This is to ensure that the existing sanitary sewer line is not damaged and the new service is installed correctly.
24. All costs associated with the operation, maintenance and replacement of grinder pumps for individual lots shall be the responsibility of the lot owner and/or Owners Association. For grinder pumps that connect to a pressure sewer main, the grinder pump will be a model manufactured by Environment-One or a type approved by the City of Santa Fe Wastewater Management Division. For grinder pumps that connect to a gravity main, the grinder pump shall be of a type approved by the City of Santa Fe Plumbing Code.
25. A minimum 12 inches of vertical clearance shall be provided between the sewer line and any storm drain piping.
26. All pressure sewer systems shall be air or hydrostatically pressure tested @ 120 psi for 2 hours minimum. The test is to be witnessed and certified by the project engineer. Prior to being put into service and acceptance by the City of Santa Fe, all pressure sewer system main lines will be filled with water.
27. No public pressure sewer system piping may be installed in a common trench with other utilities.
28. Sewer backflow check valves will be required for all sewer service lateral connections to sewer mains 12 inches or greater in diameter. The sewer service connection must be made at an existing or new manhole. Sewer service connections to sewer mains with pipe size diameter of 12 inches and greater will not be made without approval from the Wastewater Management Division.
29. Sewer backwater check valves shall be required on private sewer service laterals per the City of Santa Fe Plumbing Code.
30. Any 8 inch public sanitary sewer main line placed with a grade of less than 0.60% shall be removed and reconstructed at the Contractor's expense. All public sanitary sewer main lines with slopes of less than 1% require a minimum Class C bedding with select granular material foundation.
31. All as-built sewer line and manhole data shall be obtained and certified by a licensed surveyor or engineer. As-built data supplied by other than a licensed surveyor or engineer shall not be valid for final as-builts.
32. All existing and new public manholes within a project shall have access for City sewer maintenance equipment. All access is subject to field verification and modification as required by the Wastewater Division prior to final project close out with the City of Santa Fe.
33. All sewer line crossings of rivers, streams, arroyos, drainage channels, etc., shall require a basis of design analysis prepared by a licensed engineer.
34. An approved backflow valve and isolation valve are required on all low pressure sewer service lines as per the City of Santa Fe Standard Sewer Specifications.
35. Terminal flushing connections and in-line flushing connections are required on all low pressure sewer systems. The maximum spacing between in-line flushing connections shall be 500 feet. Distances greater the 500 feet between low pressure sewer in-line flushing connections shall be approved by the Wastewater Division.
36. Sewer backflow check valves are required on private sewer service laterals per the City's Plumbing Code. Final determination shall be made by the City of Santa Fe Plumbing Inspection Division

WASTEWATER NOTES:

WASTEWATER UEC CHARGES SHALL BE PAID AT THE TIME OF BUILDING PERMIT APPLICATION.

SANITARY SEWER NOTE:

NO FENCES, WALLS, OR OTHER STRUCTURES SHALL BE CONSTRUCTED WITHIN OR ACROSS SANITARY SEWER EASEMENTS

STREET LIGHTING NOTE:

PROPOSED LUMINAIRES SHALL BE METERED AND INCLUDE LED TYPE FIXTURES EQUIVALENT TO CONVENTIONAL 250 HIGH PRESSURE SODIUM. THE DESIGN AND FIXTURE TYPES SHALL BE REVIEWED AND APPROVED BY THE CITY OF SANTA FE TRAFFIC ENGINEERING DIVISION.

GENERAL NOTES:

GAS SERVICES AND METERS TO BE DESIGNED BY NEW MEXICO GAS COMPANY.

WATER SERVICES TO BE DESIGNED BY CITY OF SANTA FE WATER DISTRICT.

ELECTRIC TRANSFORMERS AND SERVICES TO BE DESIGNED BY PUBLIC SERVICE COMPANY OF NEW MEXICO.

CABLE TELEVISION SERVICE TO BE DESIGNED BY COMCAST.

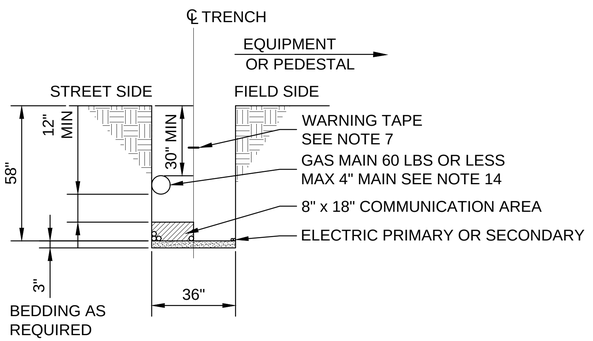
CONTRACTOR TO COORDINATE WITH ALL UTILITY COMPANIES.

JOINT TRENCH NOTES:

1. Compaction in city or state right-of-ways shall meet or exceed minimum specified requirements.
2. Shading and bedding materials to be type IV. Class 1 for direct buried cable and Type IV, Class 2 for cable in conduit. Type III material is suitable for either type of installation. Refer to DS-10-12.4 for fill material requirements.
3. If trench-run material meets back fill material type requirements, 3" bedding may be omitted provided the trench bottom is smooth, flat and without surface irregularities.
4. Maximum change in the trench bottom elevation shall not exceed 2" over a 10' length.
5. Spoil pile shall be placed on the field side a minimum of 2" from the trench edge.
6. Latest OSHA trench safety requirements shall be strictly observed.
7. Warning tape shall be placed a minimum of 12" above gas line.
8. When bringing cables to pedestals, 12" separation must be maintained from the gas line.
9. PNM owned or maintained street lights may be installed in trench, next to electric cable.
10. Private area lighting or private streetlight circuits must maintain 12" separation from all other joint occupants..
11. Gas service must be 12" away from where it will pass equipment or pedestals.
12. All parties agree that 12" separation between electric and communication may not be met when transitioning up to transformers and or pedestals.
13. Typical subdivision where property line is 9' from back of curb and 10' Public Utility Easements (PUE).
14. Depth of gas measured from final grade.

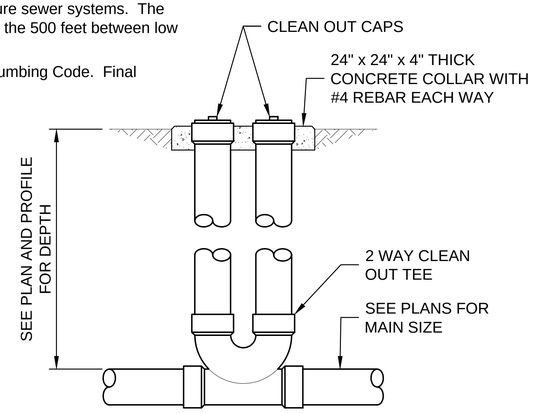
REFERENCES

1. NESC rule 352, 353, 354



TYPICAL JOINT TRENCH DETAIL

N.T.S.



SANITARY SEWER CLEANOUT DETAIL

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

CASE # _____

Santa Fe Engineering Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

ENGINEERS SEAL

FOR REVIEW ONLY

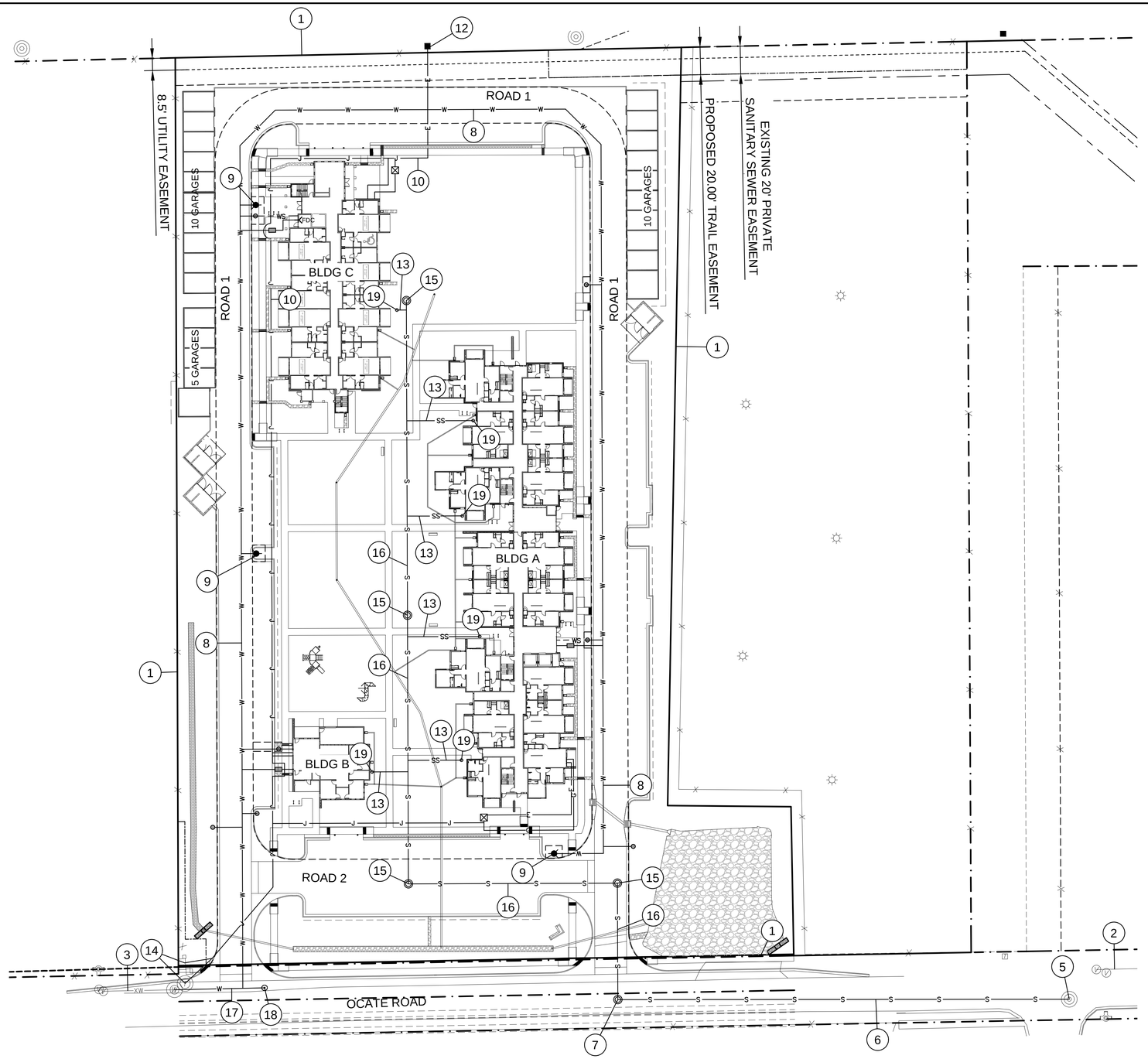
DATE

REVISIONS

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

UTILITY NOTES AND DETAILS

DATE:	SCALE:	SHEET:
FEBRUARY 2025	N.T.S.	7-1



SHEET KEYNOTES

1. PROPERTY LINE
2. EXISTING 8" PVC WATER LINE
3. EXISTING 12" PVC WATER LINE
4. EXISTING 8" PVC SANITARY SEWER LINE
5. EXISTING SANITARY SEWER MANHOLE
6. PROPOSED PUBLIC 8" PVC SDR-21 SANITARY SEWER LINE
7. PROPOSED PUBLIC SANITARY SEWER MANHOLE
8. PROPOSED 8" PVC WATER LINE
9. PROPOSED FIRE HYDRANT
10. PROPOSED JOINT UTILITY TRENCH
11. PROPOSED METER BANK FOR GAS AND ELECTRIC
12. TIE TO EXISTING ELECTRIC AT POLE
13. PROPOSED 4" SCH40 PVC SANITARY SEWER SERVICE
14. TIE TO EXISTING TELEPHONE AND GAS LINES
15. PROPOSED PRIVATE SANITARY SEWER MANHOLE
16. PROPOSED PRIVATE SANITARY SEWER LINE
17. PROPOSED 12" PVC WATER LINE
18. PROPOSED 2" BLOW-OFF VALVE
19. SANITARY SEWER CLEANOUT. SEE DETAIL, SHEET 7-1

LEGEND

EXISTING UTILITIES

- EXISTING SANITARY SEWER LINE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING OVERHEAD UTILITY
- UTILITY POLE, OVERHEAD UTILITY LINES, AND POLE GUY ANCHOR WHERE APPLICABLE
- TELEPHONE PEDESTAL
- UTILITY BOX
- MANHOLE COVER
- FIRE HYDRANT
- LIGHT POLE
- GAS CONNECT

PROPOSED UTILITIES

- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED SANITARY SEWER SERVICE
- PROPOSED JOINT UTILITY TRENCH
- PROPOSED ELECTRIC LINE
- PROPOSED GAS LINE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER METER
- PROPOSED HOTBOX
- PROPOSED FIRE DEPARTMENT CONNECTION
- PROPOSED TRANSFORMER
- PROPOSED LUMINAIRES (SEE ELECTRICAL SITE PLAN, SHEET 4-1)

UTILITY CONTACT INFORMATION

COMPANY	CONTACT	PHONE NUMBER
PUBLIC SERVICE COMPANY OF NEW MEXICO	ANNETTE DURAN-GONZALES	(505) 473-3269
X-FINITY / LUMEN	KRISTEN FENN	(505) 403-9170
COMCAST	SPENCER DeBORD	(505) 438-1930
NM GAS COMPANY	STEPHEN ASP	(505) 697-3843
CITY OF SANTA FE WATER DIVISION	JOHN DELMAR, P.E.	(505) 955-4231
CITY OF SANTA FE WASTE WATER DIVISION	STAN HOLLAND, P.E.	(505) 955-4650

MASTER UTILITY PLAN

SCALE: 1" = 40'

N

0 20 40 80

SCALE: 1" = 40'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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REVISIONS

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

MASTER UTILITY PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	7-2

OCATE APARTMENTS
PONDING CALCULATIONS - IMPERVIOUS

THE PROPOSED DEVELOPMENT AT THE SITE CONSISTS OF THE FOLLOWING:

PROPOSED IMPERVIOUS AREAS (ROOFS, DRIVEWAYS, ETC.) SIDEWALKS, = 130,966.05 SQ. FT.

THE CITY OF SANTA FE TERRAIN MANAGEMENT REGULATIONS REQUIRE THAT PEAK DISCHARGE AFTER DEVELOPMENT MUST NOT EXCEED PEAK DISCHARGE BEFORE DEVELOPMENT. EXCESS RUNOFF FROM NEW IMPERVIOUS AREAS (ROOFS, SIDEWALKS, PATIOS, ETC.) WILL BE MITIGATED BY TEMPORARY DETENTION IN LANDSCAPED PONDING AREAS WITH CONTROLLED RELEASE. CALCULATIONS TO DETERMINE VOLUMES ARE AS FOLLOWS:

ACCORDING TO THE USDA & NRCS WEB SOIL SURVEY, THE SOILS ON THE SITE ARE IN HYDROLOGIC GROUP C.

PRIOR TO THE DEVELOPMENT AT THE SITE, THE UNDEVELOPED AREA COULD BE CONSIDERED "HERBACEOUS", IN FAIR CONDITION.
ACCORDING TO TR 55, THE DIRECT RUNOFF FOR THE 100 YEAR PRECIPITATION IS AS FOLLOWS:

	CN	DIRECT RUNOFF (INCHES)
HERBACEOUS HYDROLOGIC SOIL GROUP C COVER FAIR	81	1.48

THE DIRECT RUNOFF FOR THE PROPOSED IMPERVIOUS AREAS FOR THE
100 YEAR PRECIPITATION IS AS FOLLOWS:

	CN	DIRECT RUNOFF (INCHES)
IMPERVIOUS AREAS (ROOFS, SIDEWALKS DRIVEWAYS) HYDROLOGIC SOIL GROUP C	98	2.99

TO MITIGATE THE PROPOSED IMPERVIOUS AREAS (ROOFS, SIDEWALKS, PATIOS), THE DIFFERENCE IN DIRECT RUNOFF FROM THE PRE-DEVELOPMENT CONDITIONS AND POST DEVELOPMENT CONDITIONS IS CALCULATED. THE PONDING VOLUME IS CALCULATED AS FOLLOWS:

2.99" DIRECT RUNOFF IMPERVIOUS AREAS
1.48" DIRECT RUNOFF PRE-DEVELOPMENT
STORE 1.51" OF RAINFALL FOR IMPERVIOUS AREAS

IMPERVIOUS AREAS = 130,966 SQ. FT.
POND 1.51" FROM ALL IMPERVIOUS AREAS

THE TOTAL VOLUME OF WATER TO BE STORED FOR IMPERVIOUS AREA:

REQUIRED VOLUME = $\frac{(1.51" \times 130{,}966 \text{ SQ. FT.})}{12}$

= 16,480 CU. FT.

TOTAL PONDING VOLUME REQUIRED = 16,480 CU. FT.

OCATE APARTMENTS
PONDING CALCULATIONS - OPEN SPACE (PARK)

THE PROPOSED DEVELOPMENT AT THE SITE CONSISTS OF THE FOLLOWING:

PROPOSED OPEN SPACE (PARK) = 89,927.43 SQ. FT.

THE CITY OF SANTA FE TERRAIN MANAGEMENT REGULATIONS REQUIRE THAT PEAK DISCHARGE AFTER DEVELOPMENT MUST NOT EXCEED PEAK DISCHARGE BEFORE DEVELOPMENT. EXCESS RUNOFF FROM NEW OPEN SPACE (PARK) WILL BE MITIGATED BY TEMPORARY DETENTION IN LANDSCAPED PONDING AREAS WITH CONTROLLED RELEASE. CALCULATIONS TO DETERMINE VOLUMES ARE AS FOLLOWS:

ACCORDING TO THE USDA & NRCS WEB SOIL SURVEY, THE EXISTING SOILS ON THE SITE ARE IN HYDROLOGIC GROUP C.

PRIOR TO THE DEVELOPMENT AT THE SITE, THE UNDEVELOPED AREA COULD BE CONSIDERED "HERBACEOUS", IN FAIR CONDITION.
ACCORDING TO TR 55, THE DIRECT RUNOFF FOR THE 100 YEAR PRECIPITATION IS AS FOLLOWS:

	CN	DIRECT RUNOFF (INCHES)
HERBACEOUS HYDROLOGIC SOIL GROUP C COVER FAIR	81	1.48

THE DIRECT RUNOFF FOR THE PROPOSED LANDSCAPING AREAS CONSIDERED "OPEN SPACE" IN GOOD CONDITION IN HYDROLOGIC GROUP C FOR THE 100 YEAR PRECIPITATION IS AS FOLLOWS:

	CN	DIRECT RUNOFF (INCHES)
OPEN SPACE HYDROLOGIC SOIL GROUP C COVER GOOD	74	1.05

TO MITIGATE THE PROPOSED LANDSCAPE, THE DIFFERENCE IN DIRECT RUNOFF FROM THE PRE-DEVELOPMENT CONDITIONS AND POST DEVELOPMENT CONDITIONS IS CALCULATED. THE PONDING VOLUME IS CALCULATED AS FOLLOWS:

1.05" DIRECT RUNOFF OPEN SPACE (PARK)
1.48" DIRECT RUNOFF PRE-DEVELOPMENT
STORE -0.43" OF RAINFALL FOR NATURAL DESERT

OPEN SPACE AREAS = 89,927 SQ. FT.
POND -0.43" FROM ALL OPEN SPACE

THE TOTAL VOLUME OF WATER TO BE STORED FOR OPEN SPACE:

REQUIRED VOLUME = $\frac{(-0.43" \times 89{,}927 \text{ SQ. FT.})}{12}$

= -3,222 CU. FT.

TOTAL PONDING VOLUME REQUIRED = -3,222 CU. FT.

OCATE APARTMENTS
PONDING CALCULATIONS - GRAVEL AREAS

THE PROPOSED DEVELOPMENT AT THE SITE CONSISTS OF THE FOLLOWING:

PROPOSED GRAVEL AREAS = 3,731.44 SQ. FT.

THE CITY OF SANTA FE TERRAIN MANAGEMENT REGULATIONS REQUIRE
THAT PEAK DISCHARGE AFTER DEVELOPMENT MUST NOT EXCEED PEAK DISCHARGE BEFORE DEVELOPMENT. EXCESS RUNOFF FROM NEW GRAVEL AREAS WILL BE MITIGATED BY TEMPORARY DETENTION IN LANDSCAPED PONDING AREAS WITH CONTROLLED RELEASE. CALCULATIONS TO DETERMINE VOLUMES ARE AS FOLLOWS:

ACCORDING TO THE USDA & NRCS WEB SOIL SURVEY, THE EXISTING SOILS ON THE SITE ARE IN HYDROLOGIC GROUP C.

PRIOR TO THE DEVELOPMENT AT THE SITE, THE UNDEVELOPED AREA COULD BE CONSIDERED "HERBACEOUS", IN FAIR CONDITION.
ACCORDING TO TR 55, THE DIRECT RUNOFF FOR THE 100 YEAR PRECIPITATION IS AS FOLLOWS:

	CN	DIRECT RUNOFF (INCHES)
HERBACEOUS HYDROLOGIC SOIL GROUP C COVER FAIR	81	1.48

THE DIRECT RUNOFF FOR THE PROPOSED GRAVEL AREAS CONSIDERED IN HYDROLOGIC GROUP C FOR THE
100 YEAR PRECIPITATION IS AS FOLLOWS:

	CN	DIRECT RUNOFF (INCHES)
GRAVEL AREAS HYDROLOGIC SOIL GROUP C	76	1.17

TO MITIGATE THE PROPOSED GRAVEL AREAS, THE DIFFERENCE IN DIRECT RUNOFF FROM THE PRE-DEVELOPMENT CONDITIONS AND POST DEVELOPMENT CONDITIONS IS CALCULATED. THE PONDING VOLUME IS CALCULATED AS FOLLOWS:

1.17" DIRECT RUNOFF GRAVEL AREAS
1.48" DIRECT RUNOFF PRE-DEVELOPMENT
STORE -0.31" OF RAINFALL FOR GRAVEL AREAS

GRAVEL AREAS = 3,731 SQ. FT.
POND -0.31" FROM ALL GRAVEL AREAS

THE TOTAL VOLUME OF WATER TO BE STORED FOR GRAVEL AREAS:

REQUIRED VOLUME = $\frac{(-0.31" \times 3{,}731 \text{ SQ. FT.})}{12}$

= -96 CU. FT.

TOTAL PONDING VOLUME REQUIRED = -96 CU. FT.

ALL ON-SITE SOIL DISTURBING CONSTRUCTION ACTIVITIES SHALL BE ADDRESSED AND PROVIDE MEASURES TO MITIGATE OR CONTROL DUST FROM BEING TRANSPORTED OFFSITE AND POLLUTING NEIGHBORING PROPERTIES.

ANY PERSON, OWNER, CONTRACTOR OR OPERATOR WHO CONDUCTS EARTHMOVING AND/OR DUST GENERATING ACTIVITIES IS RESPONSIBLE FOR IMPLEMENTING BEST MANAGEMENT PRACTICES (BMPs) IN ORDER TO MITIGATE OFF-PROPERTY TRANSPORT OF FUGITIVE DUST EMISSIONS.

A PLAN, OR STORM WATER PREVENTION PLAN (SWPPP) WHEN APPLICABLE, LISTING THE BEST MANAGEMENT PRACTICES (BMPs), SHALL BE PROVIDED TO THE CITY ENGINEER, OR THEIR DESIGNEE, FOR REVIEW AND APPROVAL. THE APPROVED BMPs SHALL BE APPLIED TO THE GRADED AND/OR DISTURBED SOIL IN ORDER TO STABILIZE THE SITE.

THE INITIAL BMP SHALL ADDRESS HOW THE CONTRACTOR WILL MINIMIZE THE AMOUNT OF DISTURBED SOIL, AND HOW THE CONTRACTOR WILL STABILIZE THE DISTURBED SURFACE AREA EXPOSED TO WIND OR VEHICLE TRAFFIC DURING CONSTRUCTION.

SOME BMPs SHALL INCLUDE:

- THE REDUCTION OF VEHICLE SPEEDS: ESTABLISH A MAXIMUM SPEED LIMIT OR INSTALL TRAFFIC CALMING DEVICES TO REDUCE SPEEDS TO A RATE TO MITIGATE OFF-PROPERTY TRANSPORT OF DUST ENTRAINED BY VEHICLES.
- THE MINIMIZATION OF DROP HEIGHT: DRIVERS AND OPERATORS SHALL UNLOAD TRUCK BEDS AND LOADER OR EXCAVATOR BUCKETS SLOWLY AND MINIMIZE DROP HEIGHT OF MATERIALS TO THE LOWEST HEIGHT POSSIBLE, INCLUDING SCREENING OPERATIONS.
- HIGH WINDS RESTRICTION: TEMPORARILY HALT WORK ACTIVITIES DURING HIGH WIND EVENTS GREATER THAN 30 MPH IF OPERATIONS WOULD RESULT IN OFF-PROPERTY TRANSPORT.
- RESTRICT ACCESS: RESTRICT ACCESS TO THE WORK AREA TO ONLY AUTHORIZED VEHICLES AND PERSONNEL.

IN THE EVENT THE ABOVE PRACTICES ARE INEFFECTIVE TO PREVENT OFF PROPERTY TRANSPORT, THE OWNER OR OPERATOR SHALL USE ONE OR MORE OF THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPs):

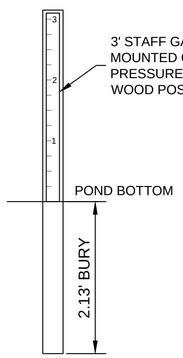
- WET SUPPRESSION: APPLY WATER TO DISTURBED SOIL SURFACES, BACKFILL MATERIALS, SCREENINGS, AND OTHER DUST GENERATING OPERATIONS AS NECESSARY AND APPROPRIATE CONSIDERING CURRENT WEATHER CONDITIONS, AND PREVENT WATER USED FOR DUST CONTROL FROM ENTERING ANY PUBLIC RIGHT-OF-WAY, STORM WATER DRAINAGE FACILITY, OR WATERCOURSE.
- WIND BARRIER: CONSTRUCT A FENCE OR OTHER TYPE OF WIND BARRIER TO PREVENT WIND EROSION OF THE GRADED OR DISTURBED SURFACE.
- VEGETATION: PLANT VEGETATION APPROPRIATE FOR RETAINING SOILS OR CREATING A WIND BREAK.
- SURFACE ROUGHENING: STABILIZE AN ACTIVE CONSTRUCTION AREA DURING PERIODS OF INACTIVITY OR WHEN VEGETATION CANNOT BE IMMEDIATELY ESTABLISHED.
- COVER: INSTALL COVER MATERIALS SUCH AS TACKIFIERS, EROSION CONTROL BLANKETS, GRAVEL, VEGETATION (WHEN APPROPRIATE), COLD-MILLINGS, ETC. DURING PERIODS OF INACTIVITY AND PROPERLY ANCHOR THE COVER.
- SOIL RETENTION: STABILIZE DISTURBED OR EXPOSED SOIL SURFACE AREAS THAT WILL BE INACTIVE FOR MORE THAN 30 DAYS OR WHILE VEGETATION IS BEING ESTABLISHED.

PONDING AREA	
LAND TYPE	PONDING AREA
IMPERVIOUS	16,480
GRAVEL AREA	-96
OPEN SPACE	-3,222
TOTAL	13,162

EARTHWORK NOTES:

1. APPROXIMATE UNADJUSTED EARTHWORK VOLUMES (NOT INCLUDING SUB/OVER EXCAVATION IF REQUIRED):

1.1. CUT = 7,228 C.Y.
1.2. FILL = 1,313 C.Y.



SCALE: N.T.S.

GUNNISON'S PRAIRIE DOG NOTE

THE PROJECT SHALL COMPLY WITH THE PROVISIONS OF THE GUNNISION'S PRAIRIE DOG ORDINANCE (ARTICLE 14-8.12).

WATER LEVEL MEASUREMENT

1. THE CONTRACTOR SHALL INSTALL A STAFF GAUGE AT EACH POND TO MEASURE SEDIMENT ACCUMULATION. STAFF GAUGE MARKINGS SHALL BE IN 0.25' INCREMENTS WITH 0 AT THE BOTTOM OF THE POND AND LABELED FOOT MARKS TO THE TOP OF THE POND. UV RESISTANT MATERIALS SHALL BE USED INCLUDING: FIBERGLASS, STAINLESS STEEL, PVC, ALUMINUM / DIE-BOND BACKED, LEXAN OR POLYCARBONTE COATED MYLAR. SHOP DRAWING SUBMITTALS ARE REQUIRED PRIOR TO CONSTRUCTION.

2. THE STAFF GAUGE SHALL BE CLEANED DURING SPRING AND FALL MAINTENANCE TO REMOVE ANY ACCUMULATION ON THE GAUGE.

CITY OF SANTA FE DRAINAGE NOTES

1. SUBJECT TO THE APPROVAL OF CITY OF SANTA FE PERMIT AND DEVELOPMENT REVIEW DIVISION STAFF. STORM DRAINAGE AND EROSION/SEDIMENT CONTROL IMPROVEMENTS SHALL BE EXECUTED IN CONJUNCTION WITH THE CONSTRUCTION OF EACH SEGMENT OF ROADS AND UTILITIES. THESE IMPROVEMENTS SHALL BE COMPLETED AND INSPECTED PRIOR TO THE ISSUANCE OF BUILDING PERMITS FOR INDIVIDUAL BUILDINGS.

2. MAINTENANCE OF PRIVATE DRAINAGE EASEMENTS AND DRAINAGE FACILITIES IS THE RESPONSIBILITY OF THE OWNER. THE CITY OF SANTA FE IS HEREBY GRANTED THE RIGHT TO ACCESS AND INSPECT THESE EASEMENTS AND DRAINAGE FACILITIES AT THE DISCRETION OF THE CITY. THE OWNER AGREES TO INDEMNIFY AND TO HOLD HARMLESS FROM ALL DAMAGE TO PERSONS OR PROPERTY RESULTING FROM THE CITY'S REASONABLE EXERCISE TO THEIR ACCESS AND INSPECTION RIGHT.

CASE # _____

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DEPARTMENT	SIGN-OFF	DATE
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WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
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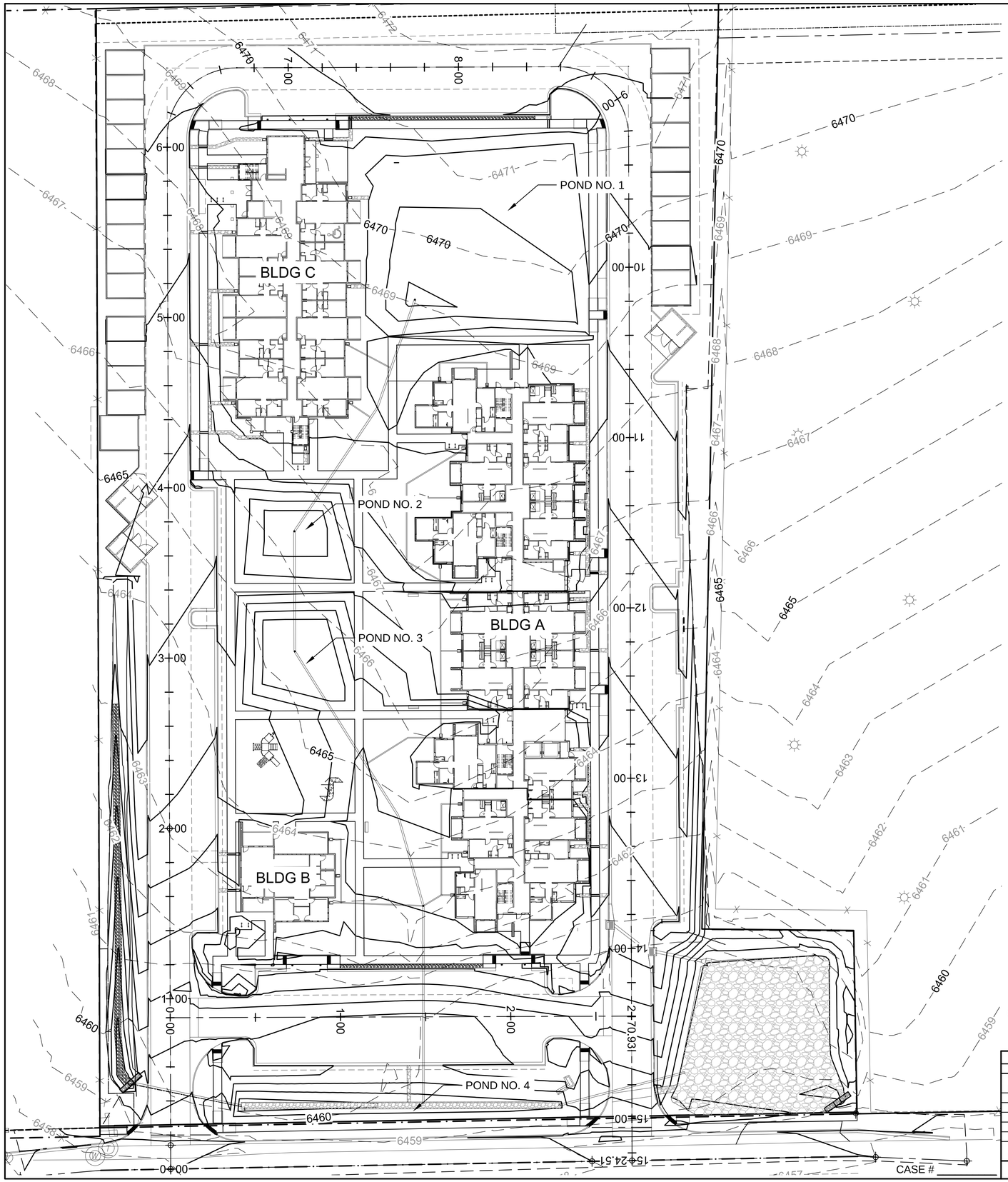
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1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

GRADING AND DRAINAGE NOTES

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 30'	8-1

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GRADING NOTES

1. THE LIMITS OF CONSTRUCTION AND LOCATIONS OF THE CONTRACTORS STAGING AREAS SHALL BE IDENTIFIED BY THE CONTRACTOR AND APPROVED BY THE OWNER. THE LIMITS OF CONSTRUCTION SHALL BE CLEARLY DELINEATED AND SHALL BE THE MINIMUM REQUIRED TO MAINTAIN ALL WORKERS IN A SAFE CONDITION, TO PROVIDE ACCESS, AND TO MEET O.S.H.A. REGULATIONS.
2. CONTRACTOR IS REQUIRED TO PROVIDE DUST AND EROSION CONTROL PROTECTION.
3. GRADING SETBACKS TO EXTERIOR PROPERTY LINES ARE AS FOLLOWS:
   TOP OF VERTICAL SLOPE = ONE FIFTH THE VERTICAL HEIGHT OF CUT WITH A MINIMUM OF 2 FEET AND A MAXIMUM OF 15 FEET.
   TOE OF FILL SLOPE = ONE HALF THE HEIGHT OF THE SLOPE WITH A MINIMUM OF 2 FEET AND A MAXIMUM OF 15 FEET.
4. THE SURVEYOR SHALL VERIFY SETBACKS, TIE IN ELEVATIONS, AND TOPOGRAPHY WHEN STAKING PROJECT.
5. UNSUITABLE MATERIAL FROM SITE GRADING AND REMOVAL OPERATIONS, SHALL BE DISPOSED OF AT AN APPROVED LANDFILL.
6. THE VOLUME OF PONDING REQUIRED IS 18,074 CUBIC FEET.
7. THE VOLUME OF PONDING PROVIDED IS 18,074 CUBIC FEET.
8. ALL DISTURBED AREAS SHALL BE REVEGETATED AND COORDINATED WITH THE LANDSCAPING PLAN.
9. ALL FILL MATERIAL SHALL MEET THE REQUIREMENTS OF THE N.M.D.O.T. OR SITE SPECIFIC GEOTECHNICAL REPORT ENTITLED "GEOTECHNICAL ENGINEERING SERVICES, JOB NO. 1-40709, OCATE APARTMENTS, SANTA FE, NEW MEXICO", PREPARED BY GEO-TEST, INC, DATED AUGUST 21, 2024 WHICHEVER IS MORE STRINGENT. THE FILL SHALL BE COMPACTED AS PER N.M.D.O.T. SPECIFICATIONS.
10. ALL EXTERIOR CONCRETE SIDEWALK ELEVATIONS AT DOOR OPENINGS SHALL BE 1/2" LOWER THAN THE FINISHED FLOOR SLAB ELEVATIONS.
11. THE MAXIMUM CROSS SLOPE OF WALKING SURFACES SHALL NOT EXCEED 2%.
12. INSTALL SILT FENCE AROUND THE SITE.

DRAINAGE FACILITIES MAINTENANCE NOTE

ALL DRAINAGE FACILITIES SHALL BE MAINTAINED BY ALL PROPERTY OWNERS. THE PROPERTY OWNERS SHALL ALSO HAVE THE RESPONSIBILITY FOR MAINTENANCE OF THE PUBLIC DRAINAGE EASEMENT.

INSPECTIONS SHALL BE CONDUCTED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO OR OTHER QUALIFIED PERSON. INSPECTIONS SHALL BE CONDUCTED ON THE DRAINAGE FACILITIES IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

ON OR ABOUT MARCH 15, ON OR ABOUT SEPTEMBER 15, AND AFTER EACH STORM EVENT OF 1-INCH OR GREATER. MAINTENANCE OF THE DRAINAGE FACILITIES SHALL BE CONDUCTED AND DOCUMENTED BY THE ENGINEER OR QUALIFIED PERSON AND THE OWNER. THE OWNER SHALL MAINTAIN A FILE OF THE INSPECTIONS AND REMEDIAL ACTION CONDUCTED ON THE DRAINAGE FACILITIES.

WORK SHALL BE CONDUCTED IN ACCORDANCE WITH THE ENGINEER'S RECOMMENDATIONS, AND SHALL INCLUDE, BUT IS NOT LIMITED TO THE FOLLOWING:

A. FLUSH ALL CULVERTS, DROP INLETS AND DRAINAGE PIPES TO REMOVE SEDIMENT AND VEGETATION THAT PREVENTS OR HINDERS THE FLOW OF STORM WATER IN THE DRAINAGE STRUCTURE(S).

B. REMOVE SEDIMENT IN PONDS THAT IS GREATER THAN 6-INCHES IN DEPTH, AND IF NECESSARY, RESEED WITH NATIVE GRASSES AND INSTALL FILTER FABRIC AND 3 TO 4 INCH COBBLE AS DIRECTED BY THE ENGINEER.

C. INSPECT FOR SEDIMENTATION IN ALL SWALES, DITCHES, DRAINAGE PONDS AND REMOVE AND STABILIZE AS NECESSARY.

D. INSPECT FOR SOIL EROSION AT ALL DRAINAGE PONDS, CUT AND FILL SLOPES, AND REPAIR OR STABILIZE ACCORDINGLY.

E. INSPECT THE STRUCTURAL INTEGRITY OF DRAINAGE PONDS, SLOPES, RIP-RAP, GABIONS, DROP INLETS, CULVERTS, ENERGY DISSIPATORS, AND RETAINING WALLS, ROCK PLATING, EROSION CONTROL MATS OR BLANKETS, AND REPAIR OR STABILIZE ACCORDINGLY.

FF	FINISH FLOOR		FINISH CONTOUR
TOA	TOP OF ASPHALT		EXISTING CONTOUR
EOA	EDGE OF ASPHALT		PROPERTY LINE / ROW
TOS	TOP OF SIDEWALK		DENOTES RIPRAP RUNDOWN
FG	FINISH GROUND		DENOTES BUILDING SPLASHBLOCK

N

0 15 30 60
SCALE: 1" = 30'

POND VOLUMES	
POND NO.	VOLUME
	CU. FT.
NO 1	7,493
NO 2	1,857
NO 3	1,289
NO 4	2,826
TOTAL	13,465

CITY REVIEW		
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LANDSCAPE		
SUBDIVISION ENGINEER		
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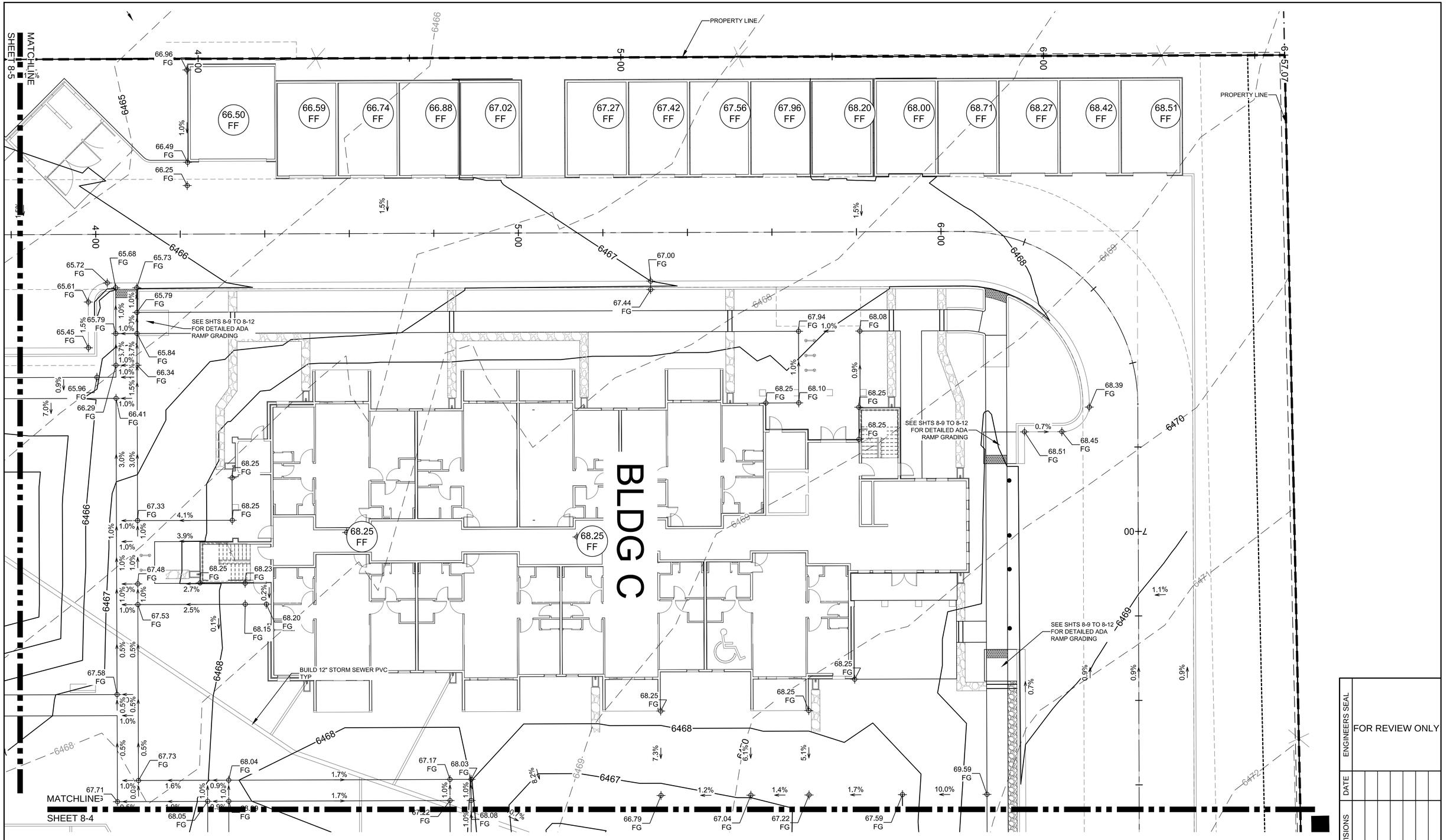
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

OVERALL GRADING AND DRAINAGE

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 30'	8-2



FF FINISH FLOOR
TOA TOP OF ASPHALT
EOA EDGE OF ASPHALT
TOS TOP OF SIDEWALK
FG FINISH GROUND

FINISH CONTOUR
EXISTING CONTOUR
PROPERTY LINE / ROW
DENOTES RIPRAP RUNDOWN
DENOTES BUILDING SPLASHBLOCK

CASE # _____

CITY REVIEW		
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED GRADING AND DRAINAGE PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	8-3

SHEET 8-3

SHEET 8-6

MATCHLINE

MATCHLINE

68.25 FF

67.84 FF

67.98 FF

68.14 FF

68.29 FF

68.45 FF

68.61 FF

68.75 FF

68.89 FF

69.05 FF

69.21 FF

00–8

10–00

11–00

GRAVEL MULCH IN PARKING OVERHANG

BUILD CURB OPENING, SIDEWALK CULVERT AND RIPRAP RUNDOWN SEE DETAIL ON SHT 6-6 & 6-7

BUILD NYOPLAST CATCH BASIN OR APPROVED EQUAL

SEE SHTS 8-9 TO 8-12 FOR DETAILED ADA RAMP GRADING

SEE SHTS 8-9 TO 8-12 FOR DETAILED ADA RAMP GRADING

PROPERTY LINE

PROPERTY LINE

DENOTES BUILDING SPLASHBLOCK

0 5 10 20

SCALE: 1" = 10'

SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED GRADING AND DRAINAGE PLAN

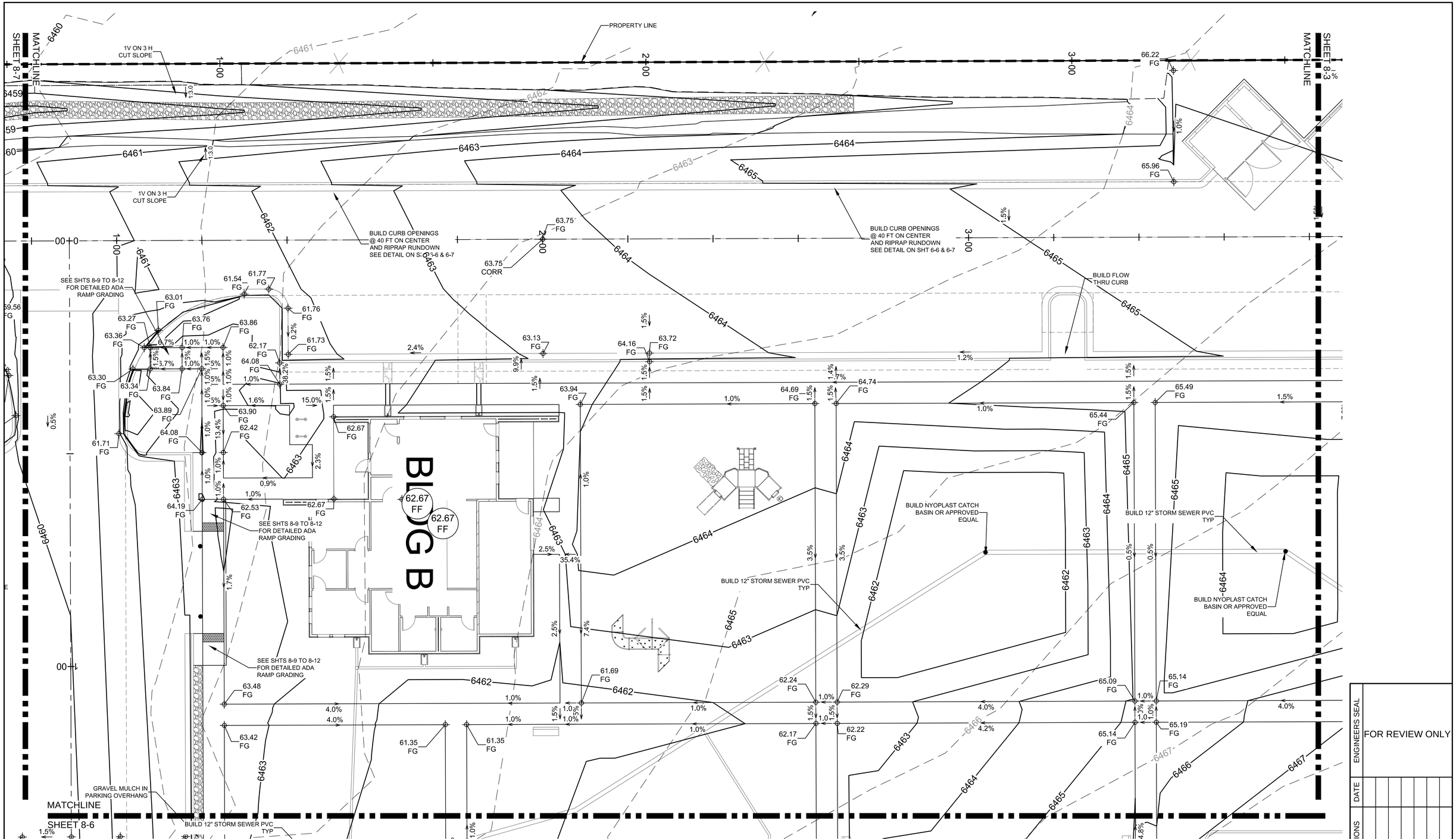
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	8-4

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REVISIONS



FF	FINISH FLOOR		FINISH CONTOUR
TOA	TOP OF ASPHALT		EXISTING CONTOUR
EOA	EDGE OF ASPHALT		PROPERTY LINE / ROW
TOS	TOP OF SIDEWALK		DENOTES RIPRAP RUNDOWN
FG	FINISH GROUND		DENOTES BUILDING SPLASHBLOCK

0 5 10 20

SCALE: 1" = 10'

SCALE: 1" = 10'

CASE # _____

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SUBDIVISION ENGINEER		
CITY	USE	ONLY

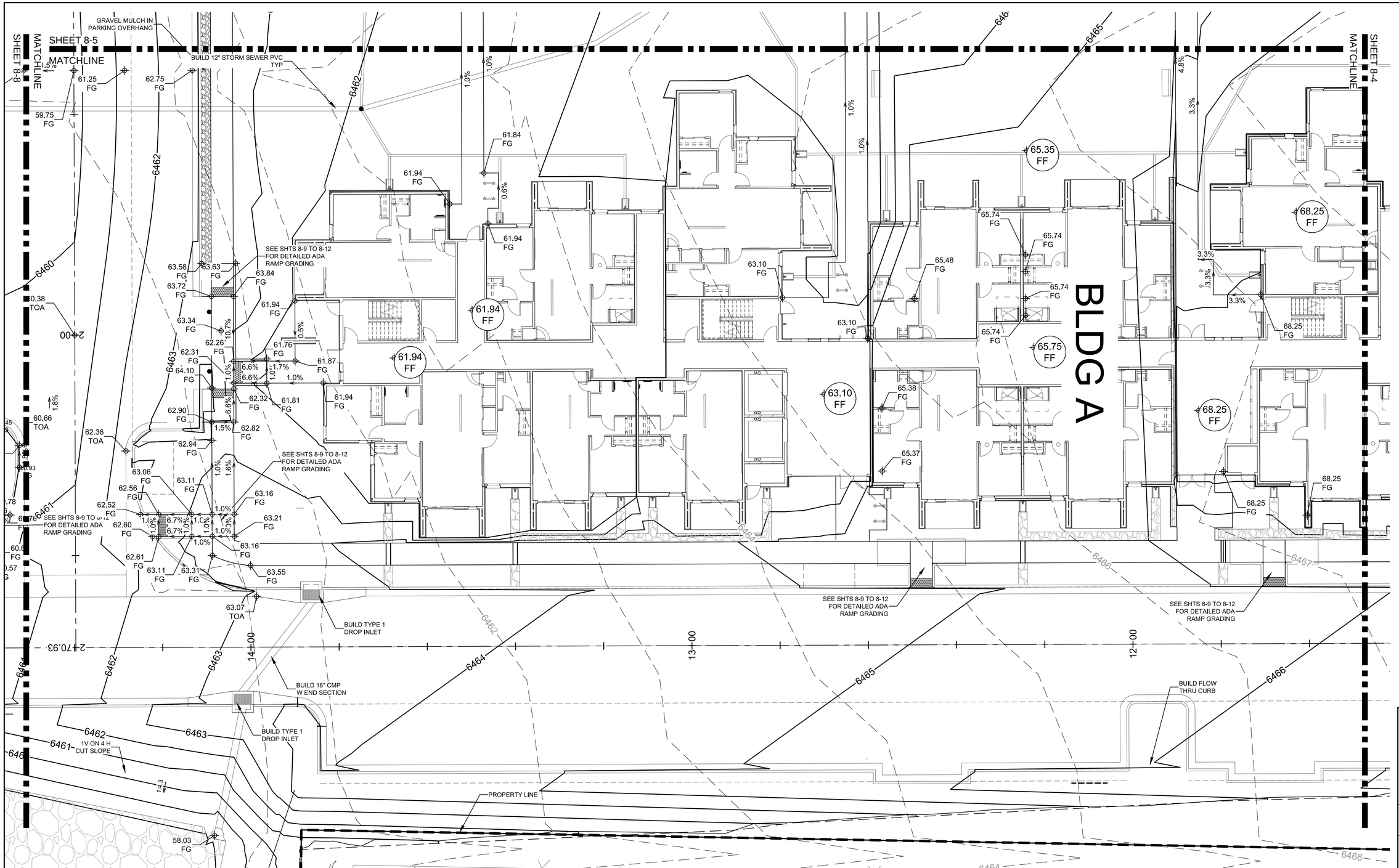
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1599 St. Francis Drive, Suite B
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(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED GRADING AND DRAINAGE PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	8-5

ENGINEER'S SEAL	FOR REVIEW ONLY
DATE	
REVISIONS	



FF	FINISH FLOOR		FINISH CONTOUR
TOA	TOP OF ASPHALT		EXISTING CONTOUR
EOA	EDGE OF ASPHALT		PROPERTY LINE / ROW
TOS	TOP OF SIDEWALK		DENOTES RIPRAP RUNDOWN
FG	FINISH GROUND		DENOTES BUILDING SPLASHBLOCK

0 5 10 20

SCALE: 1" = 10'

SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED GRADING AND DRAINAGE PLAN

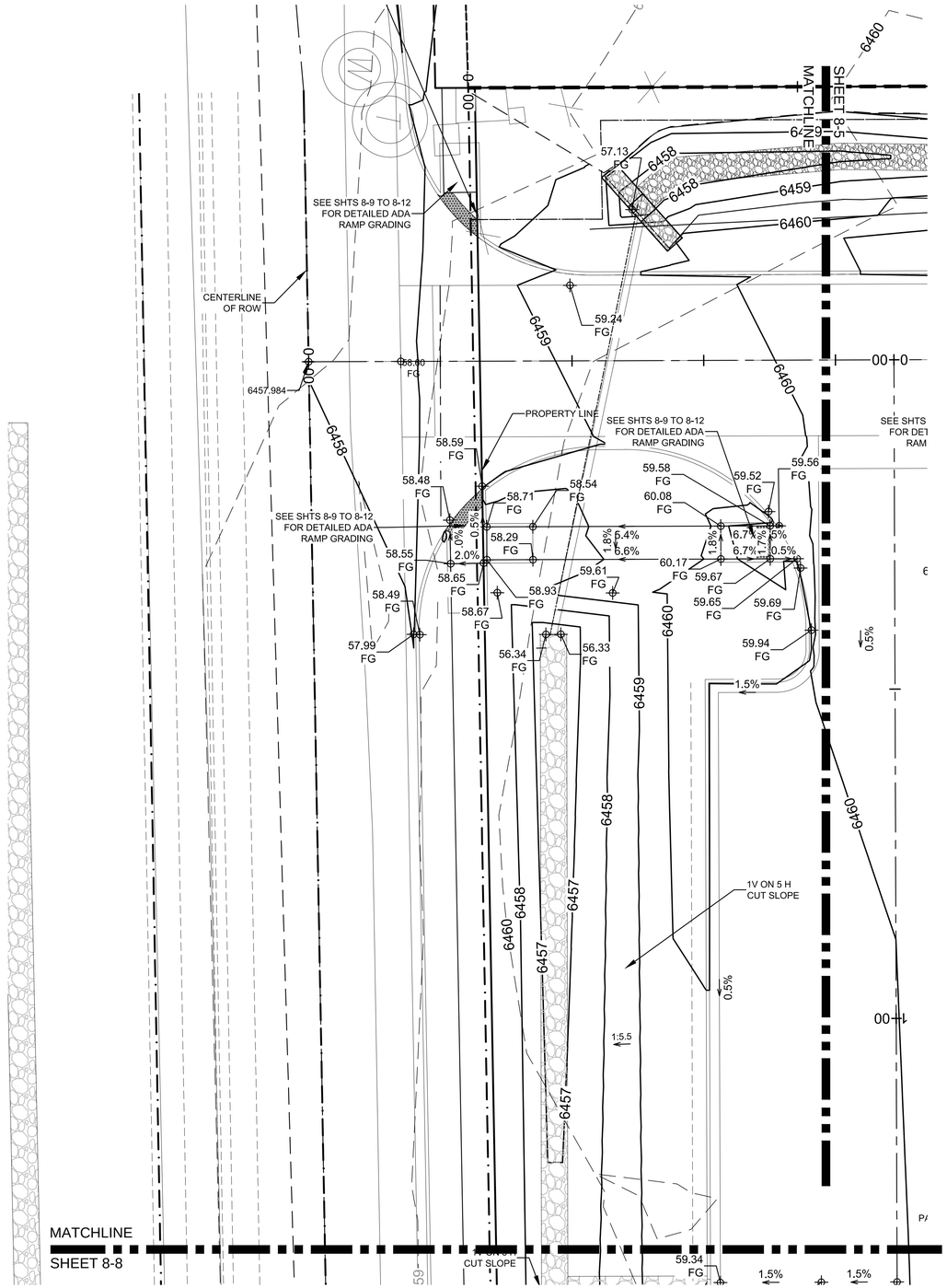
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	8-6

ENGINEERS SEAL

FOR REVIEW ONLY

DATE

REVISIONS



FF	FINISH FLOOR		FINISH CONTOUR
TOA	TOP OF ASPHALT		EXISTING CONTOUR
EOA	EDGE OF ASPHALT		PROPERTY LINE / ROW
TOS	TOP OF SIDEWALK		DENOTES RIPRAP RUNDOWN
FG	FINISH GROUND		DENOTES BUILDING SPLASHBLOCK

0 5 10 20

SCALE: 1" = 10'

SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
CITY	USE	ONLY

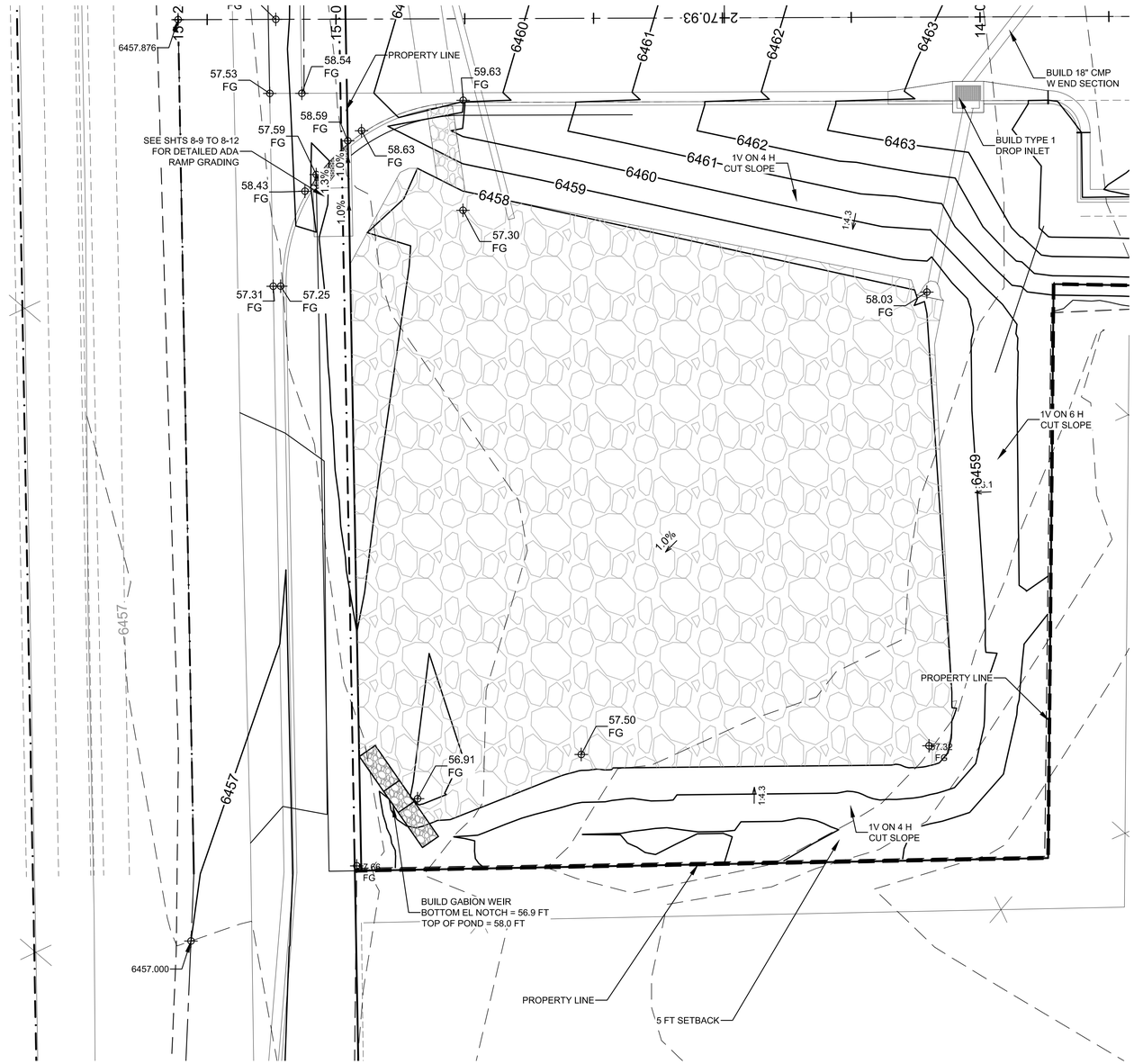
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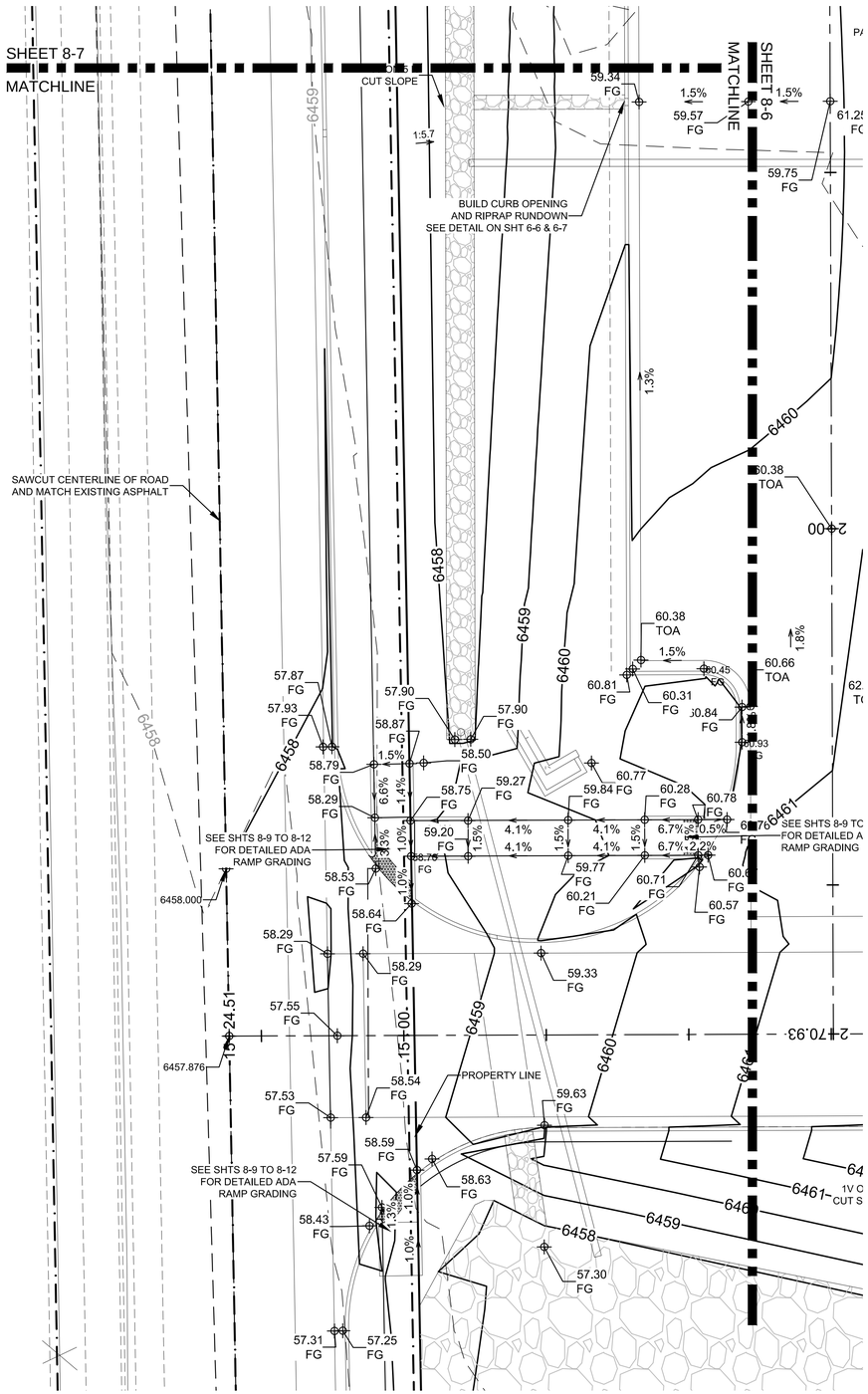
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED GRADING AND DRAINAGE PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	8-7

ENGINEERS SEAL	FOR REVIEW ONLY
DATE	
REVISIONS	





FF FINISH FLOOR
TOA TOP OF ASPHALT
EOA EDGE OF ASPHALT
TOS TOP OF SIDEWALK
FG FINISH GROUND

FINISH CONTOUR
EXISTING CONTOUR
PROPERTY LINE / ROW
DENOTES RIPRAP RUNDOWN
DENOTES BUILDING SPLASHBLOCK

0 5 10 20
SCALE: 1" = 10'

SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
CITY	USE	ONLY

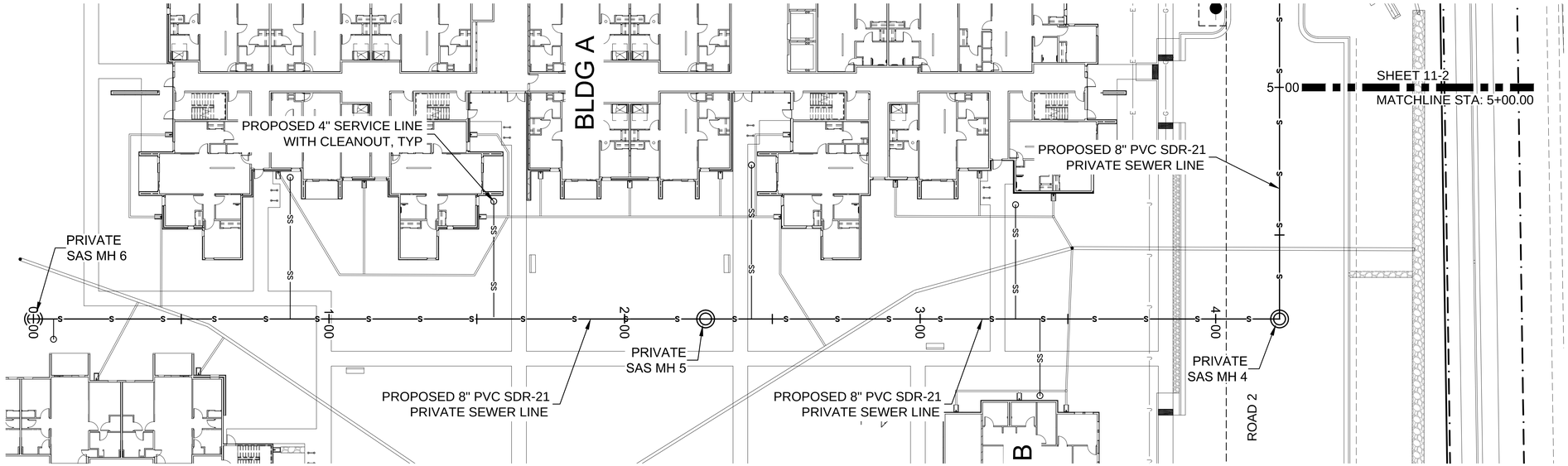
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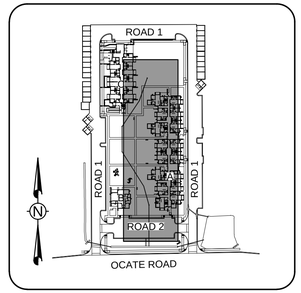
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED GRADING AND DRAINAGE PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	8-8

ENGINEERS SEAL	FOR REVIEW ONLY
DATE	
REVISIONS	

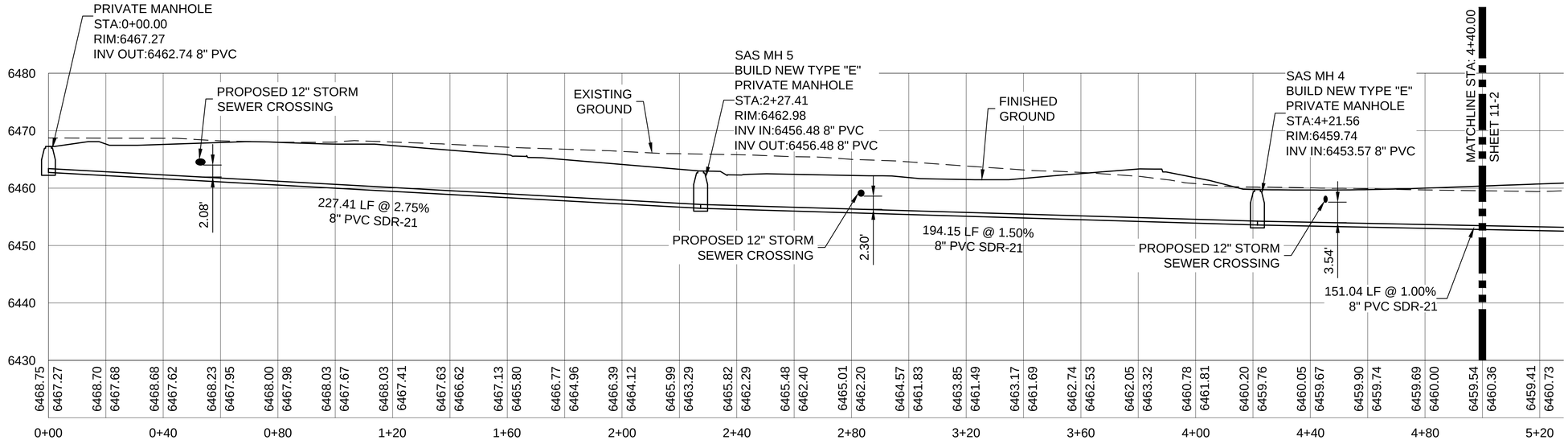




KEYMAP
SCALE: 1" = 200'

N

PROPOSED SANITARY SEWER - PLAN VIEW
SCALE: 1" = 20'



PROPOSED SANITARY SEWER - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 10 20 40
SCALE: 1" = 20'

0 5 10 20
SCALE: 1" = 10'

ENGINEERS SEAL	FOR REVIEW ONLY
DATE	
REVISIONS	◁ ◁ ◁ ◁ ◁ ◁ ◁

CASE # _____

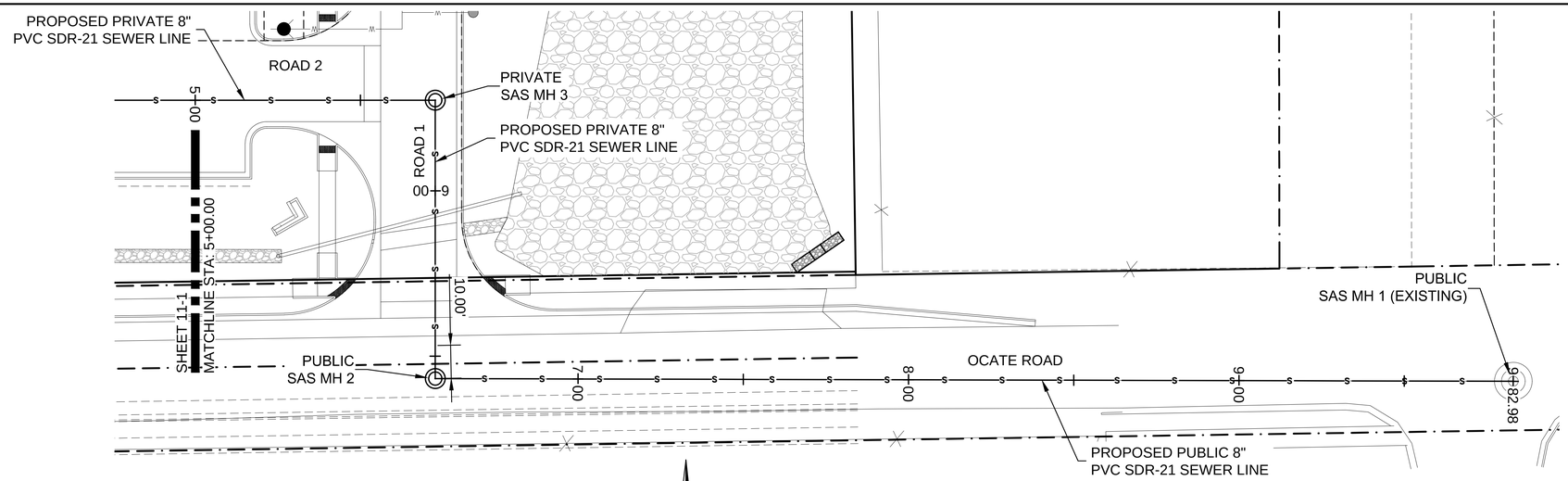
CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

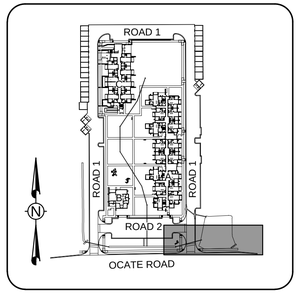
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

SANITARY SEWER PLAN AND PROFILE

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	11-1

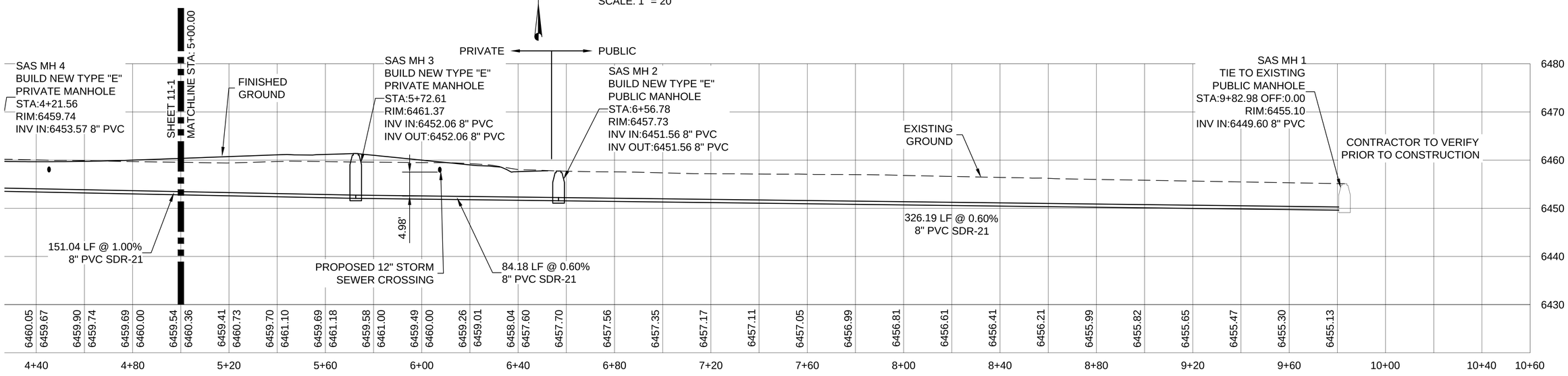




KEYMAP
SCALE: 1" = 200'

PROPOSED SANITARY SEWER - PLAN VIEW (CONT'D)

SCALE: 1" = 20'



PROPOSED SANITARY SEWER - PROFILE VIEW (CONT'D)

SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 10 20 40
SCALE: 1" = 20'

0 5 10 20
SCALE: 1" = 10'

ENGINEERS SEAL: FOR REVIEW ONLY
DATE
REVISIONS

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

SANITARY SEWER PLAN AND PROFILE (CONT'D)

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	11-2

LONG TERM MAINTENANCE RESPONSIBILITIES AND INSPECTIONS

1. ALL STORM WATER FACILITIES SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
2. THE STORM WATER MANAGEMENT SYSTEM SHALL BE MAINTAINED IN GOOD CONDITION AND PROMPTLY REPAIRED.
3. THE CITY OR ITS AUTHORIZED AGENT MAY ENTER UPON THE PROPERTY, AT REASONABLE TIMES TO ENSURE THAT THE SYSTEM IS MAINTAINED IN PROPER WORKING CONDITION.
4. IF AFTER NOTICE BY THE CITY TO CORRECT A VIOLATION REQUIRING MAINTENANCE WORK, SATISFACTORY CORRECTIONS ARE NOT MADE WITHIN A REASONABLE PERIOD OF TIME. THE CITY MAY PERFORM ALL NECESSARY WORK TO PLACE THE FACILITY IN PROPER WORKING CONDITION. THE OWNER(S) OR RESPONSIBLE PARTY OF THE FACILITY SHALL BE ASSESSED THE ASSOCIATED COSTS OF THE WORK.

INSPECTIONS AND VIOLATIONS DURING CONSTRUCTION PROCESS

1. INSPECTIONS BY CITY ARE DUE WHEN STORM WATER MANAGEMENT MEASURES ARE COMPLETED AND WHEN THE FINAL SITE RESTORATION MEASURES ARE COMPLETED. HOWEVER, IF FINAL SITE RESTORATION MEASURES ARE BEING DELAYED DUE TO THE SEASON, THE CITY SHALL BE NOTIFIED WHEN TEMPORARY EROSION CONTROL MEASURES FOR USE UNTIL RESTORATION IS COMPLETE, IN PLACE AND READY FOR INSPECTION.
2. FURTHER CONSTRUCTION OR ISSUANCE OF ANY PERMITS SHALL NOT OCCUR UNTIL WRITTEN APPROVAL HAS BEEN GRANTED BY THE CITY.

DRAINAGE FACILITIES MAINTENANCE

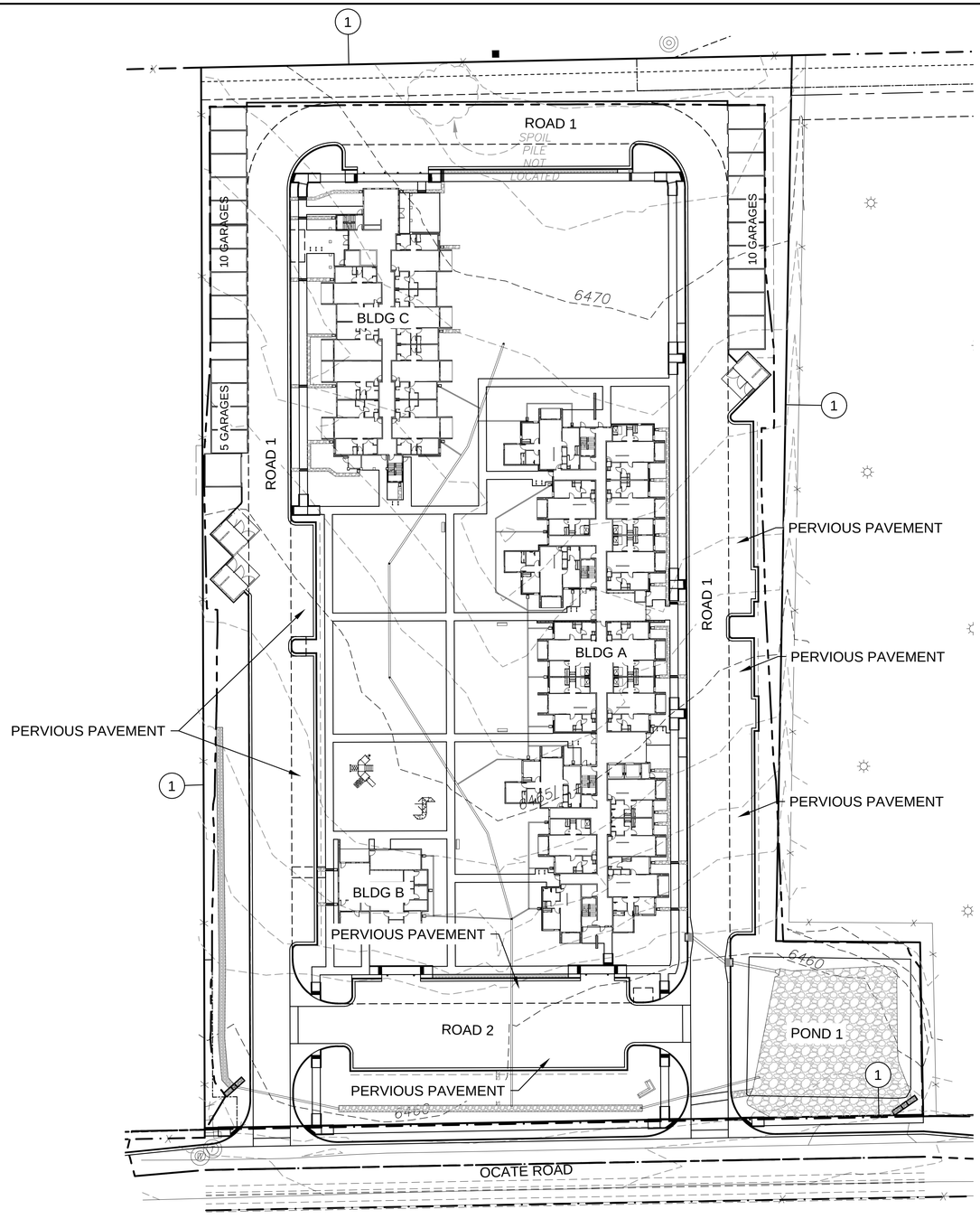
1. THE DRAINAGE FACILITIES ARE PRIVATE AND SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
2. INSPECTIONS OF THE DRAINAGE FACILITIES SHALL BE CONDUCTED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

   ON OR ABOUT MARCH 15, ON OR ABOUT SEPTEMBER 15, AND AFTER EACH STORM EVENT OF 1-INCH OR GREATER. PROPERTY OWNERS SHALL MAINTAIN A FILE OF THE INSPECTIONS AND REMEDIAL ACTION CONDUCTED ON THE DRAINAGE FACILITIES.
3. THE REMEDIAL ACTION SHALL CONSIST OF (1) REMOVAL AND DISPOSAL OF SEDIMENT IN PONDS THAT IS GREATER THAN 6-INCHES IN DEPTH; (2) FLUSHING ALL CULVERTS, DROP INLETS AND DRAINAGE PIPES TO REMOVE SEDIMENT AND POLLUTANTS THAT PREVENTS OR HINDERS THE FLOW OF STORM WATER IN THE DRAINAGE STRUCTURES; AND (3) INSPECT FOR SOIL EROSION AT ALL DRAINAGE PONDS AND INSPECT FOR THE STRUCTURAL INTEGRITY OF ALL APPURTENANT DRAINAGE STRUCTURES AND REPAIR OR STABILIZE ACCORDINGLY.

DRAINAGE FACILITIES MAINTENANCE SCHEDULE

SPRING MAINTENANCE:	MARCH 15th	CLEARING AND MAINTENANCE FOR ALL STORMWATER MANAGEMENT FACILITIES SHALL OCCUR WITHIN 30 DAYS OF DATE. REMOVE SEDIMENT BUILD UP IN ALL PONDS AND RESEED.
FALL MAINTENANCE:	SEPTEMBER 15th	CLEARING AND MAINTENANCE FOR ALL STORMWATER MANAGEMENT FACILITIES SHALL OCCUR WITHIN 30 DAYS OF DATE.
PERIODIC MAINTENANCE:	AFTER SIGNIFICANT STORMS (1" OR GREATER)	CLEARING AND MAINTENANCE FOR ALL STORMWATER MANAGEMENT FACILITIES SHALL OCCUR WITHIN 30 DAYS OF STORM.

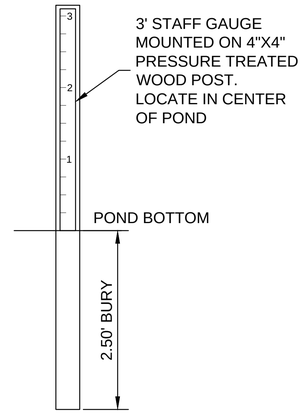
SFCC 13-2 PROHIBITS THE DISCHARGE OF POLLUTANTS INCLUDING SEDIMENT, VEGETATION, SLURRIES, MUD, PLASTERS, CONCRETE RINSATES AND ANY CONSTRUCTION MATERIALS, WASTES AND GARBAGE, ETC. TO THE STORM DRAIN SYSTEM. THE STORM DRAIN SYSTEM INCLUDES ROADS, STREETS, CURBS, GUTTERS, DROP INLETS, PIPED STORM DRAINS, CULVERTS, RETENTION AND DETENTION BASINS, NATURAL AND MAN-MADE DRAINAGE CHANNELS, ARROYOS, RIVERS, AND ANY FACILITY AND APPURTENANCE BY WHICH STORMWATER IS COLLECTED AND/OR CONVEYED. CULVERT AND DRAIN FLUSHING SHALL BE CAREFULLY DONE. POLLUTANTS AND DEBRIS SHALL BE CAREFULLY REMOVED AND DISPOSED OF AT THE LANDFILL.



PERMANENT EROSION CONTROL PLAN
SCALE: 1" = 40'

SHEET KEYNOTES

1. PROPERTY LINE



POST AND STAFF GAUGE
SCALE: N.T.S.

ENGINEERS SEAL	FOR REVIEW ONLY
DATE	
REVISIONS	

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

CASE # _____

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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

PERMANENT EROSION CONTROL PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	13-3

LEGEND

- XW — EXISTING ASSUMED WATER LINE
- XG — EXISTING GAS LINE
- XS — EXISTING SEWER
- W — W — PROPOSED WATER LINE
- J — PROPOSED JOINT TRENCH
- S — PROPOSED SEWER
- PROPOSED FIRE HYDRANT
- VALVE
- TEE
- ELBOW
- SINGLE METER
- HOT BOX W/ BACKFLOW PREVENTOR

FIRE SERVICE TABLE

BUILDING NUMBER	ADDRESS	SERVICE SIZE	REQUIRED FLOW (GPM)	RESIDUAL PRESSURE (PSI)
A	1111___ OCATE ROAD	_" FS		
B	1111___ OCATE ROAD	_" FS		
C	1111___ OCATE ROAD	_" FS		

WATER SERVICE TABLE

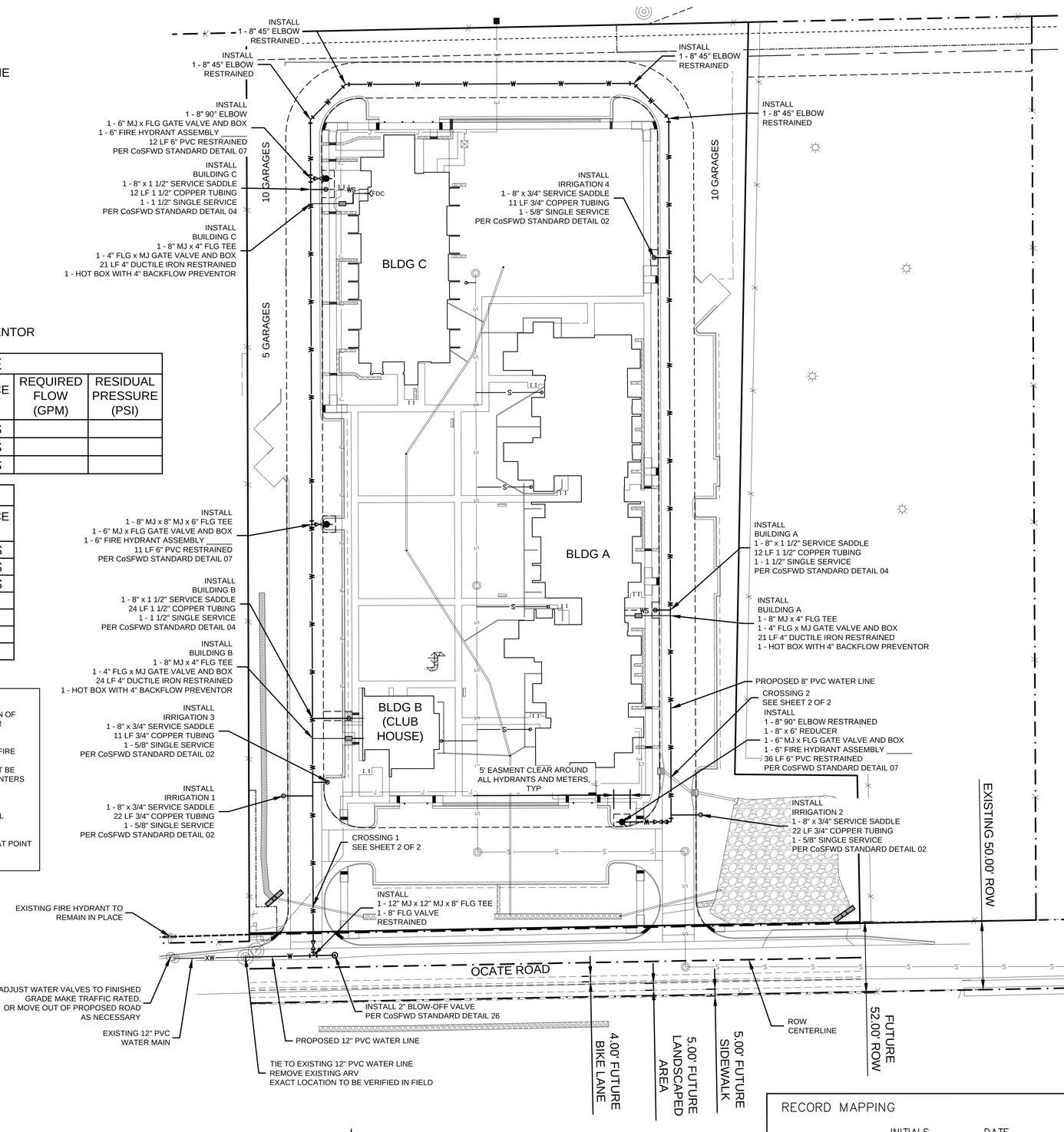
BUILDING NUMBER	ADDRESS	SERVICE SIZE
A	1111___ OCATE ROAD	_" DS
B	1111___ OCATE ROAD	_" DS
C	1111___ OCATE ROAD	_" DS
IRR 1	1111___ OCATE ROAD	_" IR
IRR 2	1111___ OCATE ROAD	_" IR
IRR 3	1111___ OCATE ROAD	_" IR
IRR 4	1111___ OCATE ROAD	_" IR

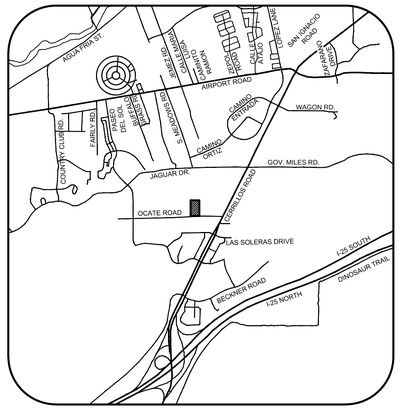
(1) SERVICE TYPES

DS IS A METERED SERVICE CONNECTION FOR DOMESTIC SERVICE OR COMBINATION OF DOMESTIC AND IRRIGATION SERVICE. BACKFLOW PREVENTERS ARE REQUIRED FOR SERVICES OVER 2 INCH OR IF REQUIRED BY CoSFWD.

FS IS A FIRE SERVICE DEDICATED FOR AUTOMATIC FIRE SPRINKLER SYSTEMS. ALL FIRE SERVICES MUST BE EQUIPPED WITH A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER WITH DETECTOR ASSEMBLY (RPDA). THE BACKFLOW PREVENTER MUST BE LOCATED WITHIN 30' OF THE CONNECTION TO THE WATER MAIN. BACKFLOW PREVENTERS MUST BE LISTED AS APPROVED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH.

IR IS A METERED SERVICE CONNECTION FOR A DEDICATED IRRIGATION SYSTEM. ALL IRRIGATION SYSTEMS REQUIRE A BACKFLOW PREVENTER.
(2) PEAK FLOW IN GALLONS PER MINUTE.
(3) RESIDUAL PRESSURE IS POUNDS PER SQUARE INCH AT THE LISTED FIRE FLOW AT POINT OF CONNECTION TO MAIN.
(4) LIST ADDRESS / BUILDING NUMBERS OR NAMES SERVED.





0 1500 3000 6000
SCALE: 1" = 3000'

VICINITY MAP
SCALE: 1" = 3000'

NOTE:
ANY RE—GRADING OF SITE OVER EXISTING WATER MAINS SHALL MAINTAIN A MINIMUM OF 4 FEET OF COVER AND NOT EXCEED 5 FEET OF COVER. DEPTH OF EXISTING MAIN TO BE ADJUSTED TO MAINTAIN A MINIMUM OF 4 FEET OF COVER AND NOT EXCEED 5 FEET OF COVER IF SITE GRADING IMPACTS THESE DEPTH REQUIREMENTS.

A SEPARATE IRRIGATION METER WILL BE REQUIRED FOR COMMERCIAL LOTS IF THE TOTAL LANDSCAPED AREA IS 1,000 SQUARE FEET OR GREATER. AN APPROVED BACKFLOW PREVENTION DEVICE SHALL ALSO BE INSTALLED BEYOND THE METER ON ANY NEW IRRIGATION SERVICE.



1111 OCATE ROAD - WATER PLAN
SCALE: 1" = 40'

0 20 40 80
SCALE: 1" = 40'

THIS RECORD DRAWING HAS BEEN COMPLETED ON A COPY OF THE SEALED ENGINEERING DRAWING FOR THIS PROJECT. THE INFORMATION SHOWN HEREON IS BELIEVED TO BE ACCURATE BASED ON LIMITED FIELD OBSERVATION DURING CONSTRUCTION, AS WELL AS DATA FURNISHED BY THE INSTALLER.

MICHAEL D. GOMEZ, N.M.P.E. NO. 8731 DATE

RECORD MAPPING

	INITIALS	DATE
AS BUILT		
VALVE MAPS		
GIS (MAPPING)		
Inspector approved		

1111 OCATE ROAD

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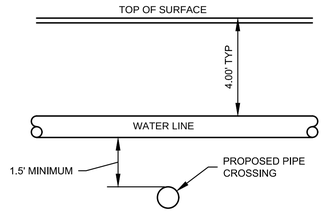
PLAT RECORDING INFORMATION
BOOK _____
PAGE _____
FILE DATE _____

APPROVED
CITY OF SANTA FE WATER DIVISION DATE
SANTA FE FIRE DEPARTMENT DATE

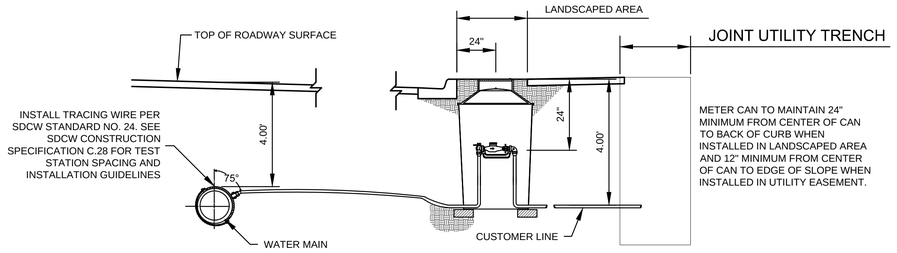
INSPECTOR
DATE: _____

AERIAL	TOWNSHIP RANGE SECTION	WORK ORDER NO.
N14	T 16 N . R 09 E . S 18	

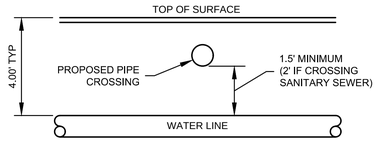
2024
17
(1 OF 2)



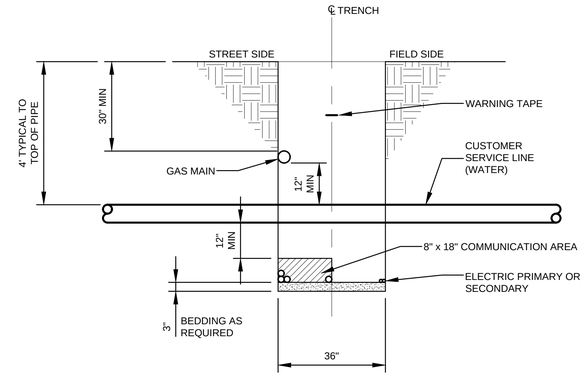
TYPICAL UTILITY CROSSING DETAIL (OVER)
SCALE: N.T.S.



TYPICAL WATER SERVICE AND METER CAN PLACEMENT DETAIL
SCALE: N.T.S.



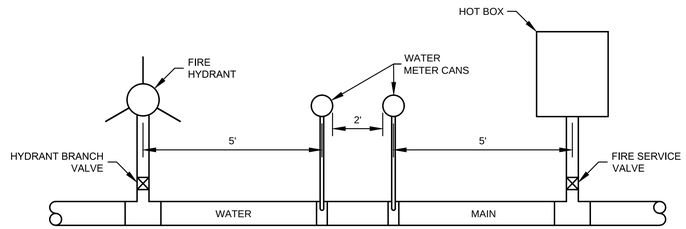
TYPICAL UTILITY CROSSING DETAIL (UNDER)
SCALE: N.T.S.



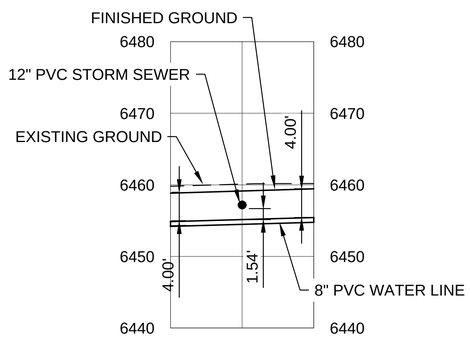
UTILITY TRENCH AND CROSSING DETAIL FOR CUSTOMER LINE
SCALE: N.T.S.

GENERAL NOTES

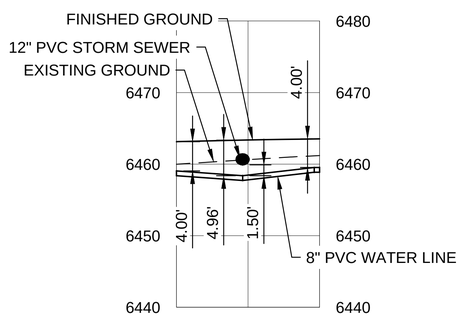
1. CONTRACTOR SHALL NOTIFY THE CITY OF SANTA FE WATER DIVISION (CoSFWD) FIVE (5) DAYS PRIOR TO COMMENCEMENT OF WORK.
2. CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CoSFWD CONSTRUCTION STANDARDS AND SPECIFICATIONS.
3. ALL EASEMENTS SHALL BE DEDICATED, CLEARED, GRADED AND STAKED PRIOR TO WATER LINE INSTALLATION.
4. ALL STREETS SHALL BE CUT TO WITHIN ±6" OF FINAL GRADE PRIOR TO WATER LINE INSTALLATION.
5. LOT CORNERS SHALL BE STAKED PRIOR TO SERVICE LINE INSTALLATION. CURB, GUTTER AND DRIVEWAY APRON SHALL BE INSTALLED PRIOR TO SERVICE LINE INSTALLATION UNLESS OTHERWISE APPROVED, IN WRITING, BY CoSFWD.
6. CONTRACTOR (DEVELOPER) SHALL PROVIDE CONSTRUCTION STAKING UTILIZING THE APPROPRIATE RIGHT-OF-WAY MAPS, SIGNED PLATS AND CoSFWD DRAWINGS.
7. MATERIAL SUBMITTALS SHALL BE APPROVED BY CoSFWD PRIOR TO CONSTRUCTION.
8. CONTACT NEW MEXICO ONE CALL AT 8ll TWO (2) WORKING DAYS IN ADVANCE OF CONSTRUCTION FOR UTILITY SPOTS.
9. PRESSURE REGULATORS SHALL BE INSTALLED ON ALL SERVICES DOWNSTREAM FROM THE METER.
10. 4 FEET COVER TO TOP OF PIPE SHALL BE MAINTAINED ON ALL WATER MAINS AND SERVICES.
11. CONTRACTOR SHALL SUBMIT AS-BUILT CONSTRUCTION PACKET WITHIN FIVE (5) DAYS OF COMPLETION OF CONSTRUCTION INCLUDING: VALVE TIES, AS-BUILT DRAWINGS (INCLUDING, BUT NOT LIMITED TO: FITTING-TO-FITTING MEASUREMENTS, SERVICE-TO-SERVICE MEASUREMENTS, CENTER OF MAIN TO CENTER OF SERVICE MEASUREMENTS, LENGTH OF MAIN INSTALLED, FITTINGS INSTALLED, ETC.) AND POTABILITY RESULTS.
12. ALL VALVE BOXES SHALL BE BROUGHT UP TO GRADE OF THE FINAL PAVING MATERIAL SO THAT THE CONCRETE IS EXPOSED.
13. FIRE HYDRANTS SHALL BE NUMBERED USING REFLECTIVE NUMERALS. THE REFLECTIVE NUMERALS SHALL BE OBTAINED BY THE CONTRACTOR FOR THE CoSFWD FIELD REPRESENTATIVE AT THE TIME THE NOTICE TO PROCEED (NTP) IS ISSUED. NUMBERS SHALL BE LEGIBLE FROM THE ROAD. PRIOR TO INSTALLING NUMBERS, FIRE HYDRANTS SHALL BE PAINTED.
14. A MECHANICAL RESTRAINT SYSTEM SHALL BE UTILIZED ON FITTINGS AND PIPING FOR THRUST RESTRAINT. CONCRETE THRUST BLOCKING SHALL BE USED ONLY FOR SPECIAL CONDITIONS (E.G. CAPS WHERE MAIN WILL BE EXTENDED IN THE FUTURE) AS SPECIFICALLY APPROVED BY CoSFWD.
15. ANY FIELD CHANGES TO THESE PLANS REQUIRE APPROVAL OF BOTH THE DESIGN ENGINEER AND CoSFWD.
16. WORK ON CoSFWD FACILITIES SHALL NOT BEGIN UNTIL CoSFWD HAS ISSUED A NTP TO THE APPROVED UTILITY CONTRACTOR.
17. ANY AND ALL EASEMENTS FOR CITY-OWNED INFRASTRUCTURE SHALL BE OBTAINED/VERIFIED AND RECORDED BY DEVELOPER BEFORE PROJECT COMMENCEMENT. CONTRACTOR SHALL VERIFY THE EASEMENT IS IN PLACE BEFORE INSTALLING ANY INFRASTRUCTURE.
18. ALL METER BOXES AND HYDRANTS MUST HAVE 5 FEET OF UNOBSTRUCTED CLEARANCE ON ALL SIDES
19. ALL TEES ARE MJ x MJ x FLG.
20. ALL VALVES ON TEES ARE FLG x MJ.



SEPARATION SPACING DETAIL
SCALE: N.T.S.



CROSSING 1
SCALE HORIZ: 1" = 10'
VERT: 1" = 10'



CROSSING 2
SCALE HORIZ: 1" = 10'
VERT: 1" = 10'

THIS RECORD DRAWING HAS BEEN COMPLETED ON A COPY OF THE SEALED ENGINEERING DRAWING FOR THIS PROJECT. THE INFORMATION SHOWN HEREON IS BELIEVED TO BE ACCURATE BASED ON LIMITED FIELD OBSERVATION DURING CONSTRUCTION, AS WELL AS DATA FURNISHED BY THE INSTALLER.

MICHAEL D. GOMEZ, N.M.P.E. NO. 8731 DATE

1111 OCATE ROAD

Santa Fe Engineering Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, NM 87505
(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

RECORD MAPPING

	INITIALS	DATE
AS BUILT	_____	_____/_____/_____
VALVE MAPS	_____	_____/_____/_____
GIS (MAPPING)	_____	_____/_____/_____
Inspector approved	_____	_____/_____/_____

PLAT RECORDING INFORMATION
BOOK _____
PAGE _____
FILE _____
DATE _____

APPROVED

CITY OF SANTA FE WATER DIVISION DATE

SANTA FE FIRE DEPARTMENT DATE

INSPECTOR _____
DATE: _____

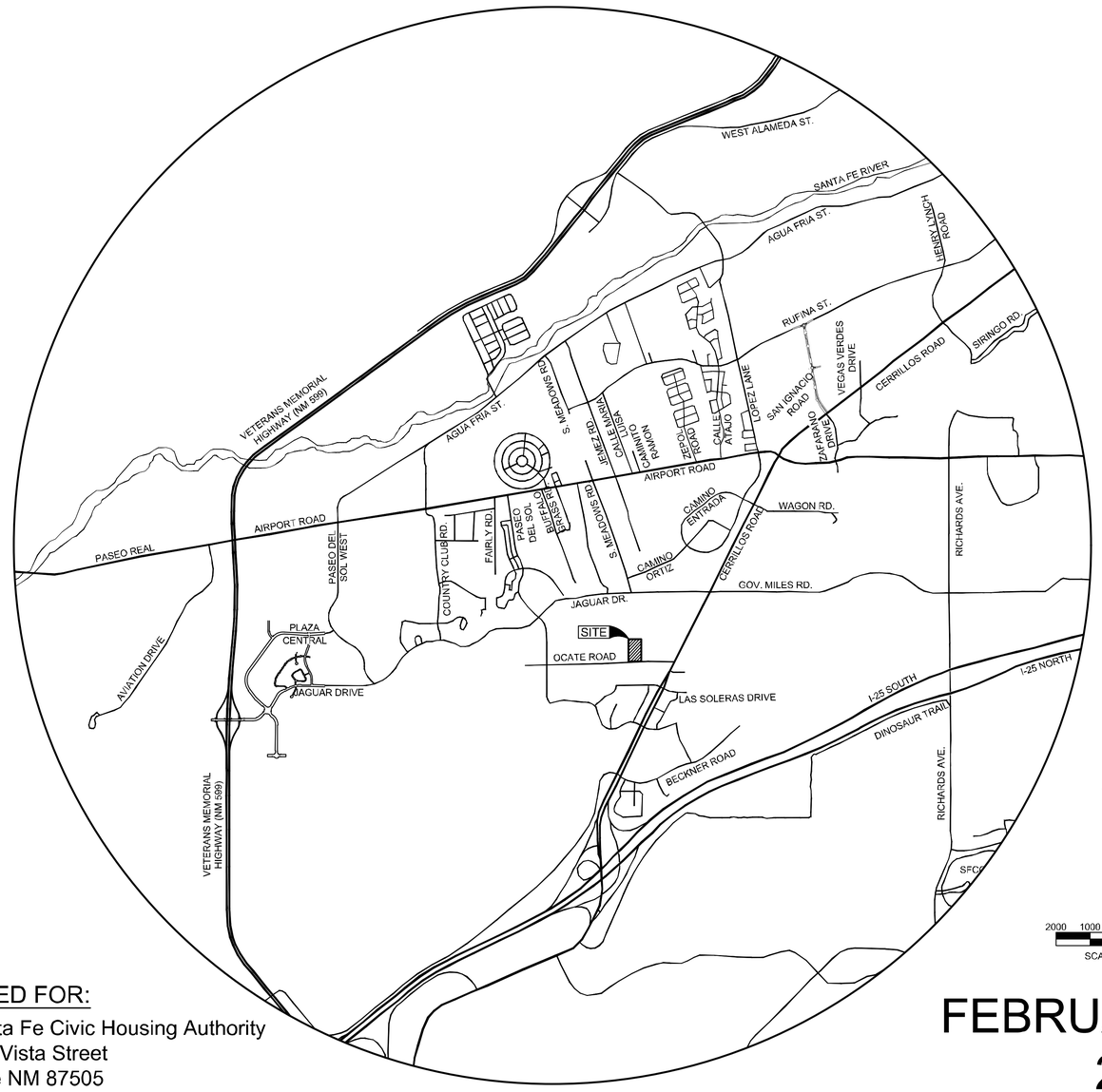
AERIAL	TOWNSHIP RANGE SECTION	WORK ORDER NO.
N14	T 16 N . R 09 E . S 18	

2024
17
(2 OF 2)

INFRASTRUCTURE PLANS FOR

OCATE APARTMENTS

SANTA FE, NEW MEXICO



PREPARED FOR:

The Santa Fe Civic Housing Authority
664 Alta Vista Street
Santa Fe NM 87505

CITY OF SANTA FE, NEW MEXICO

SECTION 18, TOWNSHIP 16N, RANGE 9E

FEBRUARY
2025

CASE # _____

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BUILDING PERMIT No's: (GRADING)_____ (LANDSCAPE/UTILITIES)_____

INFRASTRUCTURE CONSTRUCTION ADDRESS_____

ENGINEER'S STORMWATER INFRASTRUCTURE CERTIFICATION

I, UNDERSIGNED, BEING A PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE RECORD INFORMATION SHOWN HEREON IS BASED ON ACTUAL FIELD MEASUREMENTS AND VISUAL INSPECTIONS PERFORMED BY MYSELF OR UNDER MY DIRECT SUPERVISION.

I FURTHER CERTIFY THAT THE RECORD CONDITION OF THE SITE AS OF _____ IS IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED GRADING AND DRAINAGE PLAN PREPARED BY _____, DATED _____.

_____
PRINTED NAME, NMPE NO._____, DATE_____.

GUNNISON'S PRAIRIE DOG NOTE

THE PROJECT SHALL COMPLY WITH THE PROVISIONS OF THE GUNNISON'S PRAIRIE DOG ORDINANCE (ARTICLE 14-8.12).

CITY OF SANTA FE DRAINAGE NOTES:

1. SUBJECT TO THE APPROVAL OF CITY OF SANTA FE PERMIT AND DEVELOPMENT REVIEW DIVISION STAFF, STORM DRAINAGE AND EROSION/SEDIMENT CONTROL IMPROVEMENTS SHALL BE EXECUTED IN CONJUNCTION WITH THE CONSTRUCTION OF EACH SEGMENT OF ROADS AND UTILITIES. THESE IMPROVEMENTS SHALL BE COMPLETED AND INSPECTED PRIOR TO THE ISSUANCE OF BUILDING PERMITS.
2. MAINTENANCE OF PRIVATE DRAINAGE EASEMENTS AND DRAINAGE FACILITIES IS THE RESPONSIBILITY OF THE OWNER. THE CITY OF SANTA FE IS HEREBY GRANTED THE RIGHT TO ACCESS AND INSPECT THESE EASEMENTS AND DRAINAGE FACILITIES AT THE DISCRETION OF THE CITY. THE OWNER AGREES TO TO INDEMNIFY AND TO HOLD HARMLESS FROM ALL DAMAGE TO PERSONS OR PROPERTY RESULTING FROM THE CITY'S REASONABLE EXERCISE TO THEIR ACCESS AND INSPECTION RIGHT.

I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND BASED UPON INFORMATION PROVIDED BY OTHERS, I ACCEPT THE RECORD DATA AS BEING ACCURATE AND APPLICABLE FOR USE.

SANTA FE ENGINEERING CONSULTANTS, LLC.

Dolores I. Vigil
Liaison Planning Services Inc.
P.O. Box 1835
Santa Fe NM 87504

Liaison Planning Services INC.

NOTE: THESE PLANS SHOW THE ORIGINAL SHEET SUBMITTED TO THE CITY (MARKED AS VOID), AND THE REVISED PLAN. THE REVISED PLAN USES A REVISION CLOUD TO SHOW THE CHANGE. THE REVISION CLOUD WAS REQUESTED BY CITY STAFF. IF THE PROJECT IS APPROVED, THE VOIDED SHEETS AND REVISION CLOUD WILL BE REMOVED.

JEEBS & ZUZU, LLC.
Architecture
Construction
Design-Build
5924 ANAHEIM AVENUE NE SUITE A
ALBUQUERQUE, NM 87113
P: 505-797-1318

Santa Fe Engineering
Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

REV.	SHEETS	CITY ENGR.	DATE	REV.	SHEETS	CITY ENGR.	DATE
APPROVAL OF REVISIONS							

CITY OF SANTA FE

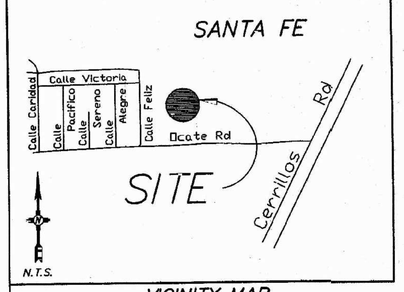
APPROVED FOR CONSTRUCTION

CITY ENGINEER DATE

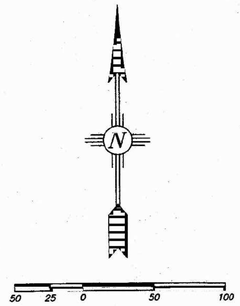
COVER SHEET AND INDEX OF SHEETS

SHEET 1-1

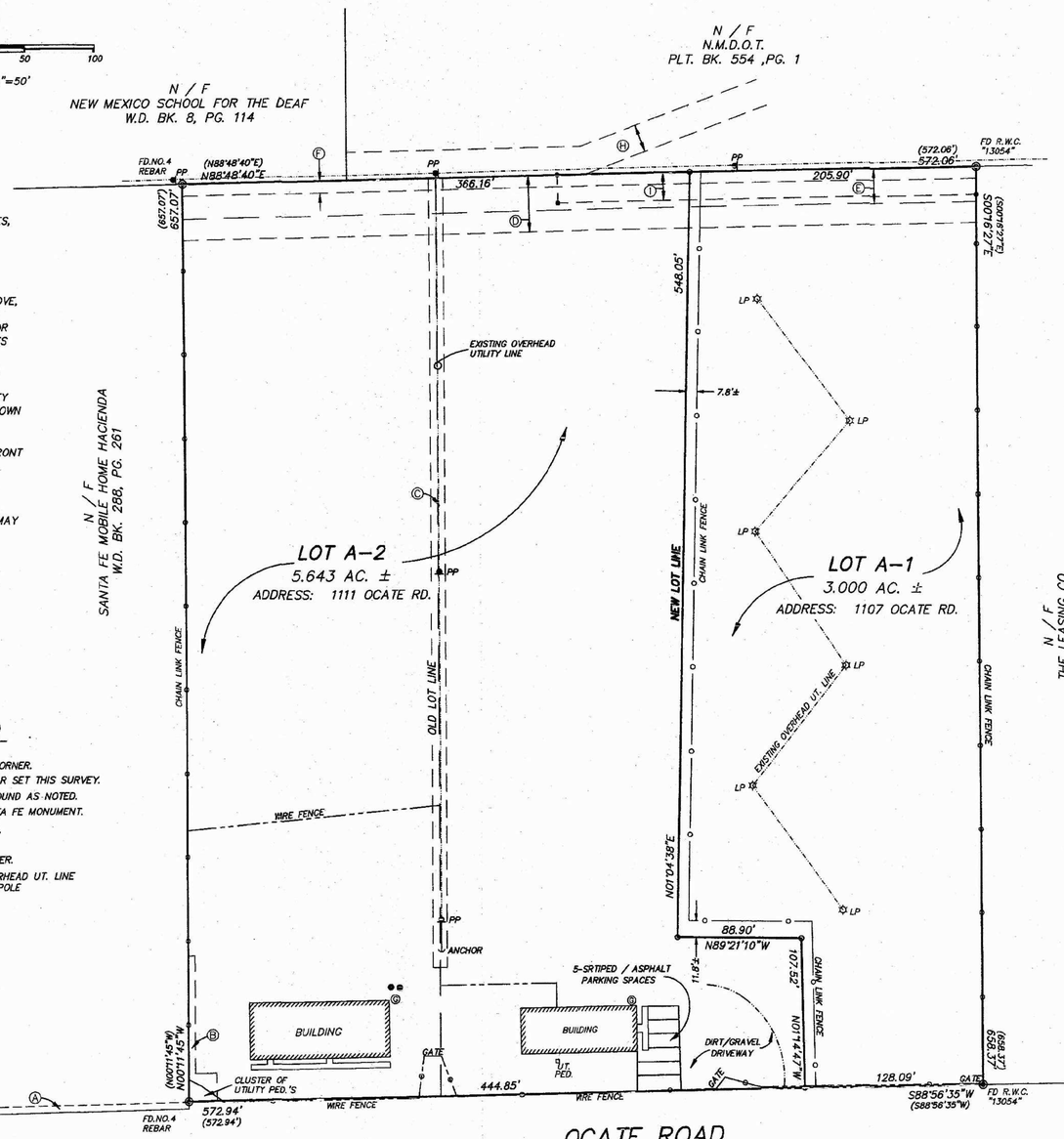
LOT LINE ADJUSTMENT
OF
LOT A-2 & LOT A-1
SECTION 18, T.16N., R.09E., N.M.P.M.
CITY LIMITS OF SANTA FE, COUNTY OF SANTA FE
STATE OF NEW MEXICO



VICINITY MAP



SCALE: 1"=50'



PUBLIC UTILITY EASEMENTS (PUE)

PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT ARE GRANTED FOR THE COMMON AND JOINT USE OF:

PUBLIC SERVICE COMPANY OF NEW MEXICO (PNM): FOR INSTALLATION, MAINTENANCE, AND SERVICE OF OVERHEAD AND UNDERGROUND ELECTRICAL LINES, TRANSFORMERS, AND OTHER EQUIPMENT AND RELATED FACILITIES REASONABLY NECESSARY TO PROVIDE ELECTRICAL SERVICE.

NEW MEXICO GAS COMPANY (NMGC): FOR INSTALLATION, MAINTENANCE, AND SERVICE OF NATURAL GAS LINES, VALVES AND OTHER EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE NATURAL GAS.

QWEST: FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF SUCH LINES, CABLE, AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE CABLE TV SERVICE.

INCLUDED, IS THE RIGHT TO BUILD, REBUILD, CONSTRUCT, RECONSTRUCT, LOCATE, RELOCATE, CHANGE, REMOVE, REPLACE, MODIFY, RENEW, OPERATE AND MAINTAIN FACILITIES FOR PURPOSES DESCRIBED ABOVE, TOGETHER WITH FREE ACCESS TO, FROM, AND OVER SAID EASEMENTS; INCLUDING SUFFICIENT WORKING AREA SPACE FOR ELECTRIC TRANSFORMERS, WITH THE RIGHT AND PRIVILEGE TO TRIM AND REMOVE TREES, SHRUBS OR BUSHES WHICH INTERFERE WITH THE PURPOSES SET FORTH HEREIN. NO BUILDING, POOL (ABOVEGROUND OR SUBSURFACE), HOT TUB, CONCRETE OR WOOD POOL DECKING OR OTHER STRUCTURE SHALL BE ERECTED OR CONSTRUCTED ON SAID EASEMENTS, NOR SHALL ANY WELL BE DRILLED OR OPERATED THEREON. PROPERTY OWNERS SHALL BE SOLELY RESPONSIBLE FOR CORRECTING ANY VIOLATIONS OF NATIONAL ELECTRICAL SAFETY CODE BY CONSTRUCTION OF POOLS, DECKING, OR ANY STRUCTURES ADJACENT TO OR NEAR EASEMENTS SHOWN ON THIS PLAT.

EASEMENTS FOR ELECTRIC TRANSFORMER/SWITCHGEARS, AS INSTALLED, SHALL EXTEND TEN (10) FEET IN FRONT OF TRANSFORMER/SWITCHGEAR DOORS AND FIVE (5) FEET ON EACH SIDE.

DISCLAIMER
IN APPROVING THIS PLAT, PNM & NMGC DID NOT CONDUCT A TITLE SEARCH OF THE PROPERTIES SHOWN HEREON. CONSEQUENTLY, PNM DOES NOT WAVE OR RELEASE ANY EASEMENT OR EASEMENT RIGHTS WHICH MAY HAVE BEEN GRANTED BY PRIOR PLAT, REPLAT OR OTHER DOCUMENT AND WHICH ARE NOT SPECIFICALLY DESCRIBED AND SHOWN ON THIS PLAT.

DEDICATION / AFFIDAVIT:

KNOW ALL MEN BY THESE PRESENTS:

THAT THE UNDERSIGNED OWNER HAS CAUSED THE FOREGOING LOT LINE ADJUSTMENT OF LAND AS SHOWN HEREON. THIS LOT LINE ADJUSTMENT IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE WISHES AND DESIRES OF THE SAID OWNER. EASEMENTS ARE HEREBY GRANT FOR ALL EXISTING UTILITIES. THESE LAND LIE WITH IN THE PLANNING AND PLATTING JURISDICTION OF THE CITY OF SANTA FE, SANTA FE COUNTY, STATE OF NEW MEXICO.

BOYS & GIRLS CLUB – (REPRESENTATIVE)

OFFICIAL SEAL
Victoria M. Dalton
NOTARY PUBLIC - STATE OF NEW MEXICO
My Commission Expires 5/23/23

STATE OF NEW MEXICO }SS
COUNTY OF SANTA FE }

ON THIS 28 DAY OF August, 2019, THE ~~FOREGOING INSTRUMENT~~ WAS ACKNOWLEDGED BEFORE ME BY THE PERSON(S) WHOSE NAME(S) APPEAR ABOVE.

Victoria M. Dalton
NOTARY PUBLIC

LEGEND

- CACULATED CORNER.
- CAPPED REBAR SET THIS SURVEY.
- MONUMENT FOUND AS NOTED.
- CITY OF SANTA FE MONUMENT.
- (W) WATER METER.
- (G) GAS METER.
- (E) ELECTRIC METER.
- EXISTING OVERHEAD UT. LINE WITH POWER POLE

REFERENCE AND BASIS OF BEARINGS:

PLAT OF SURVEY ENTITLED "SUMMARY REVIEW LAND DIVISION PLAT PREPARED FOR SANTA FE BOYS AND GIRLS CLUB, INC. OF REMAINDER PORTION OF TRACT "A", CITY AND COUNTY OF SANTA FE, NEW MEXICO", PREPARED BY JEFF L. LUDWIG LS. 13054. FILED FOR RECORD IN THE SANTA FE, NEW MEXICO COUNTY CLERK'S OFFICE IN PLAT BOOK 841 AT PAGE 25.

BEARINGS AND DISTANCES IN PARENTHESIS FROM ABOVE MENTIONED PLAT OF SURVEY.

SURVEYOR'S CERTIFICATE

ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, I HEREBY CERTIFY THAT THIS PLAT IS AN ACCURATE DELINEATION OF A SURVEY COMPLETED UNDER MY DIRECTION ON AUGUST 1, 2019. I FURTHER CERTIFY THAT THIS SURVEY MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR LAND SURVEYS IN NEW MEXICO, ADOPTED BY THE NEW MEXICO STATE BOARD OF PROFESSIONAL ENGINEERS AND SURVEYORS.

LORENZO E. DOMINGUEZ — 8/28/19 DATE
P.S. #10461

REGISTERED PROFESSIONAL SURVEYOR STATE OF NEW MEXICO 10461 LORENZO E. DOMINGUEZ

EAST MOUTAIN SURVEYING CO.
P.O. BOX 1607
MORIARTY, NM 87035
(505) 450-2097

NOTES:

THE SURVEY SHOWN, IS BASED ON THE HEREON REFERENCED DOCUMENTS. SURVEYOR HAS MADE NO ATTEMPT IN A TITLE SEARCH.

THIS TRACT OR PARCEL OF LAND MAYBE SUBJECT TO RESTRICTIONS AND/OR EASEMENTS OF RECORD.

THIS TRACT OR PARCEL OF LAND MAY CONTAIN UTILITIES & UNDERGROUND DEBRIS THAT ARE NOT IDENTIFIED HEREON.

THESE TRACTS OR PARCELS OF LAND AS SHOWN HEREON ARE SUBJECT TO ALL NOTES & CONDITIONS OF PRIOR SURVEYS APPROVED BY THE THE CITY OF SANTA FE LANDUSE DEPARTMENT.

EASEMENTS:

- (A) EXISTING 5' WIDE R.O.W. ESMT. PLT. BK. 841, PG. 25
- (B) EXISTING PUBLIC UTILITY ESMT. PLT. BK. 841, PG. 25
- (C) EXISTING 10' WIDE UTILITY ESMT. PLT. BK. 841, PG. 25
- (D) EXISTING 40' WIDE ROADWAY ESMT. PLT. BK. 841, PG. 25
- (E) EXISTING 25' WIDE ROAD RESERVATION. PLT. BK. 841, PG. 25
- (F) EXISTING 8.5' WIDE UTILITY ESMT. PLT. BK. 841, PG. 25
- (H) EXISTING 20' WIDE SANITARY SEWER ESMT. PLT. BK. 841, PG. 25
- (I) EXISTING 20' WIDE PRIVATE SANITARY SEWER ESMT. PLT. BK. 841, PG. 25

CITY OF SANTA FE APPROVAL:

CITY ENGINEER FOR LAND USE — DATE 9/5/19

CITY PLANNER — DATE 9/5/19

NOTES & CONDITIONS

CONNECTION TO THE CITY PUBLIC SEWER SYSTEM IS MANDATORY FOR LOT A-1 & LOT A-2 WHEN THE PROPERTY IS BEING DEVELOPED OR IMPROVED PRIOR TO THE DEVELOPMENT OF IMPROVEMENT OF THE PROPERTY, OWNERS AND DEVELOPERS OF THE PROPERTY SHALL OBTAIN A TECHNICAL SEWER EVALUATION REVIEW BY THE CITY OF SANTA FE WASTEWATER DIVISION.

AN AGREEMENT FOR METERED SERVICE (AMS) FROM CITY WATER DIVISION WILL BE REQUIRED TO INSTALL NEW SERVICES.

AT THE DEVELOPMENT STAGE, THE LOT SPLIT AT 1107/111 OCATE ROAD SHALL COMPLY WITH ALL APPLICABLE STANDARDS FOR DESIGN & DEVELOPMENT AND THEIR INTENDEDUSE OF SAID LOT(S) AS DETERMINED WITHIN THE CITY OF SANTA FE CITY CODE. ALL SITE DESIGN SHALL INCLUDE LANDSCEAPING, WATER CONSERVATION STORM WATER & OPEN SPACE MANAGEMENT AND ALL OTHER APPLICABLE REQUIREMENTS AND STANDARDS FOR BUILDING AND DEVELOPMENT WITHIN THE THE CITY OF SANTA FE.

FIRE DEPARTMENT SHAL HAVE 150 FEET DISTANCE TO ANY PORTION OF THE BUILDING ON ANY NEW CONSTRUCTION (IFC 2009 SECTION 503.1.1).

SHALL HAVE WATER SUPPLY THAT MEETS FIRE FLOW REQUIREMENTS AS PER IFC (APPENDIX B).

SHALL COMPLY WITH SECTION D102.1 ACCESS AND LOADING (75,000 LBS).

SHALL MEET THE 150 FEET DRIVEWAY REQUIREMENTS AS PER IFC OR ANEMERGENCY TURN-AROUND THAT MEETS THE IFC REQUIREMENTS SHALL BE PROVIDED. (APPENDIX D TABLE D103.4).

SHALL COMPLY WITH IFC 2009 SECTION D103.2 GRADE. FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 10 PERCENT IN GRADE.

FIRE APPARATUS ACCESS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET EXCLUSIVE OF SHOULDRS AND AN UNOBSTRUCTED VERTICAL CLEARANCE OF NOT LESS THAN 13 FT 6 IN (FC2009 SECTION 503.2.1).

SHALL COMPLY WITH IFC 2009 SECTION D103.5 FIRE APPARATUS ACCESS ROADS GATES (LOTS A-1 AND A-2).

SHALL MEET THE IFC CODE REQUIREMENTS 2009 EDITION OR THE MOST CURRENT EDITION THE GOVERNING BODY HAS ADOPTED AT THE TIME OF PERMITTING.

WASTEWATER UTILITY EXPANDION CHARGES (UEC) FOR EACH LOT SHALL BE DUE AT TIME OF BUILDING PERMIT APPLICATION.

SIDEWALKS MUST BE CONSTRUCTED ALONG OCATE ROAD AND INCLUDED IN THE PROPOSED WORK WHEN A PERMIT IS ISSUED FOR ANY WORK ON EITHER LOT.

ACCORDING TO FEMA DFIRM PANELS No. 35049C 0506E & 35049C 0507E, THIS PROPERTY LIES WITHIN DESIGNATED FLOOD ZONE "X". AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. EFFECTIVE DATE OF 12/4/12.

EACH LOT SHALL BE SERVED BY SEPARATE SEWER AND WATER SERVICES INCLUDING SEPARATE METER SERVICE ACCOUNTS.

PROPERTY DEVELOPMENT IS REQUIRED TO COMPLY WITH THE PROVISIONS OF EACH CITY OF SANTA FE ORDINANCE ADOPTED PRIOR TO PLAT AND/OR DEVELOPMENT PLAN RECORDING WITH THE COUNTY CLERK.

BUILDABLE AREAS FOR PLATIED PARCELS WILL BE DETERMINED AT THE TIME OF BUILDING PERMIT APPLICATION AS DETAILED IN THE LAND DEVELOPMENT CODE.

STORMWATER AGREEMENT: STORMWATER EASEMENTS AND ANY OTHER DRAINAGE IMPROVEMENTS ON PRIVATE PROPERTY WILL BE MAINTAINED AND KEP FUNCTIONAL AS ORIGINALLY DESIGNED AND CONSTRUCTED WITHIN PRIVATE PROPERTY BOUNDARIES; THE CITY HAS THE RIGHT OF ACCESS FOR INSPECTION OF SAID IMPROVEMENTS; THE CITY HAS THE RIGHT, IN THE EVENT OF DRAINAGE FACILITY MAINTENANCE DEFICIENCY AND AFTER TEN (10) DAYS WRITTEN NOTICE TO THE RESPECTIVE PROPERTY OWNER, TO ENTER AND RESTORE FULL FUNCTIONAL CAPACITY OF THE DRAINAGE IMPROVEMENTS; AND TO LIEN THE PROPERTY FOR BOTH DIRECT AND INDIRECT COST ASSOCIATED WITH SUCH WORK. BY SIGNATURE AFFIXED TO THIS INSTRUMENT, THE PROPERTY OWNER(S) APPROVE AND AGREE THAT THIS AGREEMENT IS BINDING PERPTUALLY, RUNNING WITH THE LAND, ON PRESENT AND FUTURE OWNERS, HEIRS AND ASSIGNS.

COUNTY TREASURER — DATE Sept 3, '19

Inst# 1896045
COUNTY OF SANTA FE }SS
STATE OF NEW MEXICO }

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED FOR RECORD ON THIS 5TH DAY OF September A.D. 20 19, AT 3:40 O'CLOCK P. M., AND WAS DULY RECORDED IN BOOK 854, PAGE 15 OF THE RECORDS OF SANTA FE COUNTY.

WITNESS MY HAND AND SEAL OF OFFICE
GERALDINE SALAZAR
COUNTY CLERK, SANTA FE COUNTY, NM

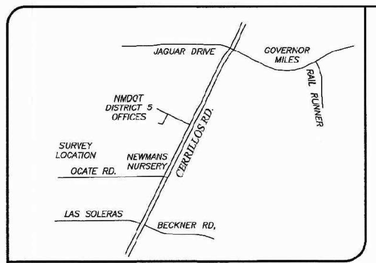
COUNTY CLERK GERALDINE SALAZAR SANTA FE COUNTY NEW MEXICO

DEPUTY

SHEET 2-1

INDEXING INFORMATION FOR COUNTY CLERK

OWNERS(S): SANTA FE BOYS & GIRLS CLUB, INC.
RECORDED DOCUMENT(S): PLT. BK. 841, PG. 25
SEC.(S), TOWNSHIP(S), RANGE(S): SEC. 18, T.16N., R.09E., N.M.P.M.
LAND GRANT(S): N / A
UPC #: 1-049-094-170-491
PROJECT NO.: B&G CLUB-2019



VICINITY MAP
NOT TO SCALE

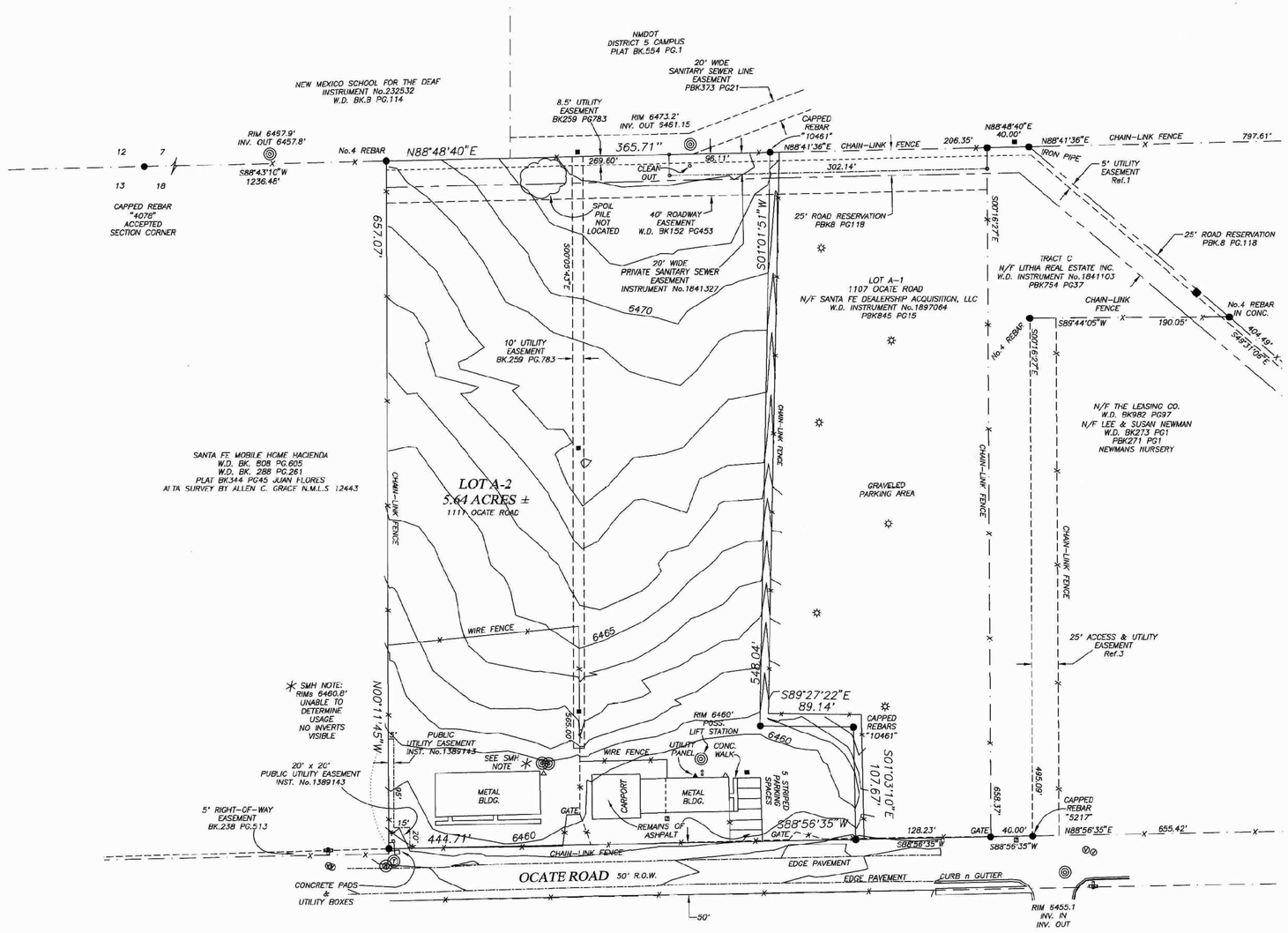
PUBLIC NOTICE

THIS SURVEY IS BASED ON THOSE RECORDED DOCUMENTS NOTED HEREON. CITY OF SANTA FE STAFF MUST APPROVE ALL DOCUMENTS SUBMITTED WITH AN APPLICATION FOR A BUILDING PERMIT AND MAY REQUIRE SUBMITTAL OF ADDITIONAL DOCUMENTATION TO PROVE LEGAL LOT OF RECORD.

913 32

N
W E
S

SCALE 1" = 60'
60' 0 60'



LEGEND–DEED/PLAT REFERENCES

1) REFERENCE A WARRANTY DEED FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK AS INSTRUMENT No.1976024.

2) REFERENCE A PLAT OF SURVEY ENTITLED, "LOT LINE ADJUSTMENT OF LOT A–2 & A–1, SECTION 18, T–16–N, R–9–E, N.M.P.M., CITY LIMITS OF SANTA FE, COUNTY OF SANTA FE, SANTA FE, NEW MEXICO," DATED 08/28/19, BY LORENZO E. DOMINGUEZ, N.M.L.S.10481 AND FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN PLAT BOOK 854, PAGE 15 AS INSTRUMENT No.1896045

3) REFERENCE A PLAT OF SURVEY ENTITLED, "SUMMARY REVIEW LAND DIVISION SURVEY PLAT PREPARED FOR SANTA FE BOYS AND GIRLS CLUB, INC., A REMAINDER PORTION OF TRACT "A" IN SECTION 18, T–16–N, R–9–E, N.M.P.M., CITY AND COUNTY OF SANTA FE, NEW MEXICO, DATED 02/26/18 BY JEFFERY I. LUDWIG, N.M.L.S.13054 AND FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN PLAT BK.754 PG.37 AS INSTRUMENT No.1359347.

- ● CAPPED REBAR "13054" FOUND AND USED, OR AS NOTED
- ○ CAPPED REBAR "13054" SET
- ◦ COMPUTED POINT
- UTILITY POLE, OVERHEAD UTILITY LINES, AND POLE GUY ANCHOR WHERE APPLICABLE
- TELEPHONE PEDESTAL
- UTILITY BOX
- MANHOLE COVER
- FIRE HYDRANT
- LIGHT POLE
- GAS CONNECT

SURVEYOR"S NOTES:

BASIS OF BEARING IS GEODETIC AZIMUTH BASED ON GPS OBSERVATIONS. ANY MONUMENTED LINE NOTED HEREON MAY BE UTILIZED AS A LOCAL BASIS OF BEARINGS.

BEARINGS ARE NM STATE PLANE CENTRAL ZONE – NAD83
DISTANCES ARE GROUND

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS BOUNDARY/TOPOGRAPHIC SURVEY PLAT AND THE FIELD SURVEY ON WHICH IT IS BASED WAS MADE BY ME OR UNDER MY PERSONAL DIRECTION AND CONTROL, AND THAT THE DATA SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT THIS SURVEY MEETS OR EXCEEDS THE MINIMUM REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS, EFFECTIVE 07/24/16. IMPROVEMENTS CURRENT AS OF THE DATE OF THIS SURVEY.

THIS IS A BOUNDARY SURVEY PLAT OF AN EXISTING TRACT AND IS NOT A LAND DIVISION, OR SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT.

JEFFERY L. LUDWIG 13054 NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR

06–25–2024

JEFFERY L. LUDWIG N.M.L.S. 13054 DATE

COUNTY CLERK SEAL

Instrument No. 2036321

COUNTY OF SANTA FE)SS
STATE OF NEW MEXICO)
I hereby certify that this instrument was filed for record on the 25 day of June A.D. 2024 at 8:45 o'clock A m. and was duly recorded in book 913 page 32 of the records of Santa Fe County.

Witness my hand and Seal of Office
Katherine E. Clark
County Clerk, Santa Fe County, N.M.

Deputy

UPC 1–049–094–170–491
INDEXING INFORMATION FOR COUNTY CLERK

SHEET 2-2

CORNERSTONE LAND SURVEYING
JEFFERY L. LUDWIG
N.M.L.S. No.13054
505-690-7010 CELL
505-471-5477 OFFICE
P.O. BOX 8348
SANTA FE, NEW MEXICO
87504

TRANSIT GPS

SECTION(s)	18
TOWNSHIP	T–16–N
RANGE	R–9–E
GRANT	N/A
N.M.P.M.	

BOUNDARY/TOPOGRAPHIC SURVEY PLAT PREPARED FOR

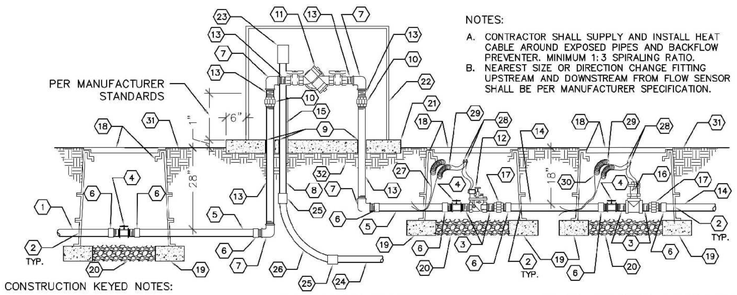
SANTA FE CIVIC HOUSING AUTHORITY

OF

LOT A-2

CITY AND COUNTY OF SANTA FE, NEW MEXICO

SCALE	1" = 60'
DATE	06/25/24
DRAWN-BY	LUDY
CHECKED-BY	LUDY
PROJECT No.	24–006B



NOTES:

A. CONTRACTOR SHALL SUPPLY AND INSTALL HEAT CABLE AROUND EXPOSED PIPES AND BACKFLOW PREVENTER. MINIMUM 1:3 SPIRALING RATIO.
B. NEAREST SIZE OR DIRECTION CHANGE FITTING UPSTREAM AND DOWNSTREAM FROM FLOW SENSOR SHALL BE PER MANUFACTURER SPECIFICATION.

CONSTRUCTION KEYED NOTES:

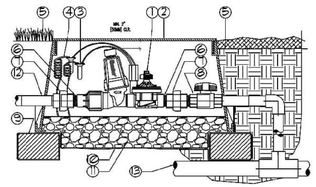
1. MAINLINE FROM METER
2. DRILLED HOLE THROUGH VALVE BOX EXTENSION. DIAMETER SHALL BE 1/2" LARGER THAN PIPE
3. SCH. 80 PVC NIPPLE
4. SCH. 80 PVC TRUE UNION BALL VALVE
5. CONSTANT PRESSURE IRRIGATION MAINLINE
6. SCH. 80 TOE NIPPLE WITH SLIP COUPLER
7. GALVANIZED ELL
8. RIGID ELECTRICAL CONDUIT SECURED TO UNISTRUT
9. PVC SLEEVE AND INSULATION (MIN. 1" THICK)
10. GALVANIZED UNION (MIN. 4" ABOVE CONCRETE SLAB)
11. REDUCED PRESSURE BACKFLOW PREVENTION DEVICE–SEE IRRIGATION LEGEND
12. AUTOMATIC MASTER VALVE – SEE IRRIGATION LEGEND
13. GALVANIZED NIPPLE
14. NON–CONSTANT PRESSURE IRRIGATION MAINLINE
15. UNISTRUT BRACING MINIMUM 2" CLEARANCE FROM ANY EQUIPMENT OR PIPING
16. FLOW SENSOR – SEE IRRIGATION LEGEND
17. SCH. 80 PVC UNION
18. 17"X30" VALVE BOX WITH T–STYLE BOLT DOWN COVER AND EXTENSIONS AS REQUIRED – SEE IRRIGATION LEGEND
19. 4"x 8"x 16" SOLID CMU BLOCK, EIGHT PER VALVE BOX
20. 6" DEPTH OF 1" DIAMETER WASHED GRAVEL,MINIMUM 2" CLEARANCE FROM BOTTOM OF ANY EQUIPMENT OR PIPING
21. 4" 3000 PSI CONCRETE SLAB
22. PROTECTIVE ENCLOSURE–SEE IRRIGATION LEGEND. INSTALL PER MANUFACTURERS INSTRUCTIONS
23. 110V ELECTRICAL GFI OUTLET FOR HEAT CABLE. PLACE AWAY FROM RELIEF VALVE
24. GRAY ELECTRICAL CONDUIT – DEPTH OF BURY SHALL BE 36"
25. WATER TIGHT CONNECTOR
26. GRAY ELECTRICAL SWEEP ELL
27. MASTER VALVE CONTROL WIRE
28. WATERPROOF WIRE CONNECTOR
29. 36" LENGTH WIRE EXPANSION LOOP
30. FLOW SENSOR COMMUNICATION WIRE
31. FINISH GRADE
32. 95% COMPACTED SUBGRADE

MASTER VALVE WITH RPBA

N.T.S.

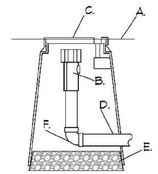
LEGEND

1. HUNTER REMOTE CONTROL VALVE (ICZ) WITH FILTER REGULATOR
2. IRRIGATION VALVE BOX: HEAT STAMP LID WITH 'RCV' IN 2" LETTERS
3. WATERPROOF CONNECTORS (2)
4. 18"-24" COILED WIRE TO CONTROLLER
5. FINISH GRADE AT ADJACENT SURFACE (TURF OR MULCH)
6. SCH. 80 CLOSE NIPPLE, MATCH SIZE TO VALVE
7. PVC SLIP X FPT UNION
8. ISOLATION VALVE, SIZE AND TYPE PER PLAN
9. BRICK SUPPORTS (4)
10. FILTER FABRIC - WRAP TWICE AROUND BRICK SUPPORTS
11. 3/4" WASHED GRAVEL - 4" MIN. DEPTH
12. IRRIGATION LATERAL
13. MAINLINE LATERAL AND FITTINGS



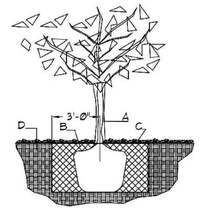
DRIP CONTROL ZONE KIT (ICZ-101-LF) WITH UNIONS AND ISOLATION VALVE

N.T.S.



A. FINISH GRADE
B. END FLUSH CAP
C. 6" ROUND BOX WITH LID
D. 3/4" POLY DRIP PIPE
E. 2" DEPTH OF GRAVEL
F. 90° PVC FITTING

END FLUSH CAP

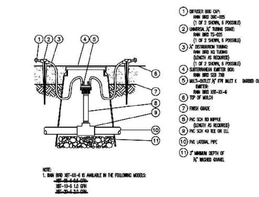


TREE PLANTING DETAIL

NTS

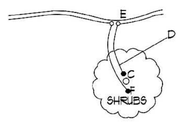
GENERAL NOTES:
1. ROOTBALL SHALL BE PLACED ON UNDISTURBED SOIL TO PREVENT TREE FROM SETTLING.
2. TOP OF ROOTCOLLAR INDICATED LEVEL AT WHICH TREE WAS GROWN AND DUG. THIS REPRESENTS THE LEVEL AT WHICH THE TREE SHOULD BE INSTALLED. THAT LEVEL MAY BE EXCEEDED BY ONLY A ONE INCH LAYER OF SOIL.
3. PRIOR TO BACKFILLING TREE, ALL WIRE, ROPE AND SYNTHETIC MATERIALS SHALL BE REMOVED FROM THE TREE AND THE PLANTING PIT.
4. PRIOR TO BACKFILLING ALL BURLAP SHALL BE CUT AWAY EXCEPT FROM BOTTOM OF THE ROOTBALL.

CONSTRUCTION NOTES:
A. TREE
B. BACKFILL WITH EXISTING SOIL.
C. 3" DEPTH OF GRAVEL MULCH.
D. UNDISTURBED SOIL.



Tree Xeri-Bug Multi Outlet Emitter Dtl

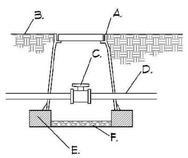
N.T.S.



C. EMITTERS
D. 1/8" DISTRIBUTION LINE
E. PE DRIPLINE
F. EMITTER PLACED WITHIN 6" OF PLANT STEM
NOTE: PLACE EMITTER ABOVE PLAN" ON SLOPE

SHRUB EMITTER PLACEMENT Dtl

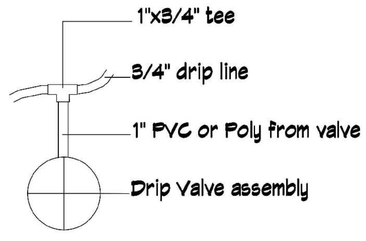
N.T.S.



A. NDS 6" ROUND BOX
B. FINISH GRADE
C. SPEARS SCH80 BALL VALVE SIZE TO MAINLINE
D. MAINLINE/24" BURY
E. 8"x8"x16" CMU CONCRETE BLOCK
F. 4" LAYER OF 3/4" GRAVEL

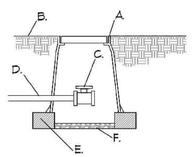
ISOLATION VALVE DETAIL

N.T.S.



DRIP VALVE DETAIL

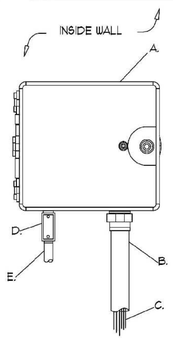
N.T.S.



A. NDS 6" ROUND BOX
B. FINISH GRADE
C. SPEARS SCH80 BALL VALVE SIZE TO MAINLINE
D. MAINLINE/24" BURY
E. 8"x8"x16" CMU CONCRETE BLOCK
F. 3/4" GRAVEL SUMP UNDER MANUAL DRAIN TO BE A MINIMUM OF 12" DEEP

MANUAL DRAIN VALVE DETAIL

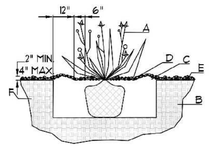
N.T.S.



A. WALL MOUNT CONTROLLER
B. 2" PVC SCH 40 CONDUIT AND FITTINGS
C. WIRES TO REMOTE CONTROL VALVES
D. JUNCTION BOX
E. 1" PVC SCH 40 CONDUIT AND FITTINGS TO POWER SUPPLY

WALL MOUNTED AUTOMATIC CONTROLLER

N.T.S.



SHRUB PLANTING DETAIL

NTS

GENERAL NOTES:
1. THE OUTSIDE DIAMETER OF THE WATER RETENTION BASIN SHALL BE TWICE THE DIAMETER OF THE SHRUB PLANTING PIT.

CONSTRUCTION NOTES:
A. SHRUB.
B. BACKFILL WITH EXISTING SOIL.
C. EARTH BERM AROUND WATER RETENTION BASIN.
D. 3" DEPTH OF GRAVEL MULCH.
E. FINISH GRADE.
F. UNDISTURBED SOIL.

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	N.T.S. SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CASE # _____ CITY USE ONLY

Mitchell Associates, inc
Landscape Architects
Danny Mitchell
danny@mitchellassociatesinc.com
505.639.9383

Project NO. 2024-077

Landscape Architect

STATE OF NEW MEXICO
DANNY D. MITCHELL
2339
REGISTERED LANDSCAPE ARCHITECT
Sept 21, 2025

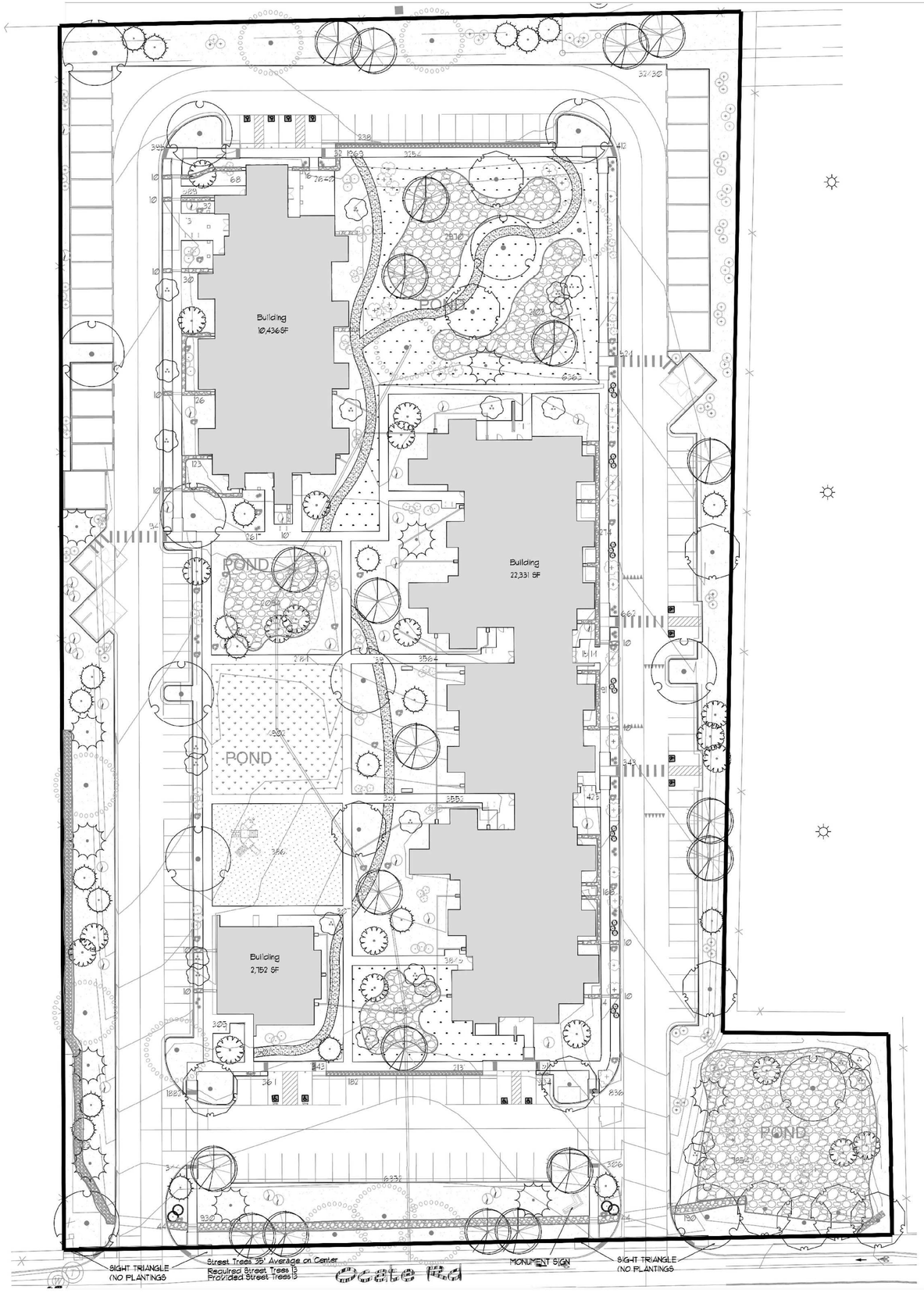
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LA SEAL | DATE | REVISIONS

DE
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

Landscape Details

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 30' - 0"	L 3-1



PLANT SCHEDULE

SYMBOL	QTY	SIZE	COMMON / BOTANICAL NAME	W
TREES				
	11	2" Cal.	Buckley Oak *Quercus buckleyi*	Lo
	13	2" Cal.	Chinese Pistache *Pistacia chinensis*	Lo
	21	2" Cal.	Gambel Oak *Quercus gambelii*	Lo
	23	4'-6'	Oneseed Juniper *Juniperus monosperma*	Lo
	10	4'-6'	Pinyon Pine *Pinus edulis*	Lo
	11	2" Cal.	Texas Live Oak *Quercus fusiformis*	Lo
	21	2" Cal.	Thornless Cockspur Hawthorn *Crataegus crus-galli Inermis*	Mo
	25	2" Cal.	Western Redbud Multi-trunk *Cercis occidentalis*	Ve
	135			
SHRUBS				
	55	5 gal.	Apache Plume *Fallugia paradoxa*	Lo
	44	5 gal.	Blue Mist Bluebeard *Caryopteris x clandonensis 'Blue Mist'*	Lo
	21	5 gal.	Chamisa *Ericameria nauseosa nauseosa*	Ve
	8	5 gal.	Fernbush *Chamaebatiaria millefolium*	Ve
	27	5 gal.	Gro-Low Fragrant Sumac *Rhus aromatica 'Gro-Low'*	Ve
	34	5 gal.	Horstmann Blue Atlas Cecar *Cedrus atlantica 'Horstmann'*	Mo
	30	5 gal.	Japanese Greenleaf Barberry *Berberis thunbergii*	Lo
	4	5 gal.	Palm Yucca *Yucca faxoniana*	Ve
	47	5 gal.	Parrys Agave *Agave parryi*	Lo
	21	5 gal.	Red Yucca *Hesperaloe parviflora*	Ve
	291			
SYMBOL	**QTY**	**SIZE**	**SPACING**	**COMMON / BOTANICAL NAME**	**W**
GROUND COVERS					
	4,902 sf	---		Kentucky Bluegrass Turf Sod Bluegrass	Mo
	27	2-3cf	Boulders *To be placed at contractor discretion*		
	3211		Crusher Fine, No Fabric,		
	93035		Landscape Gravel / No Filter Fabric or Similar *Mountainair Brown*		
	9617		Wild Flower Seeding/ Wood Mulch, or Similar *High Deset Mix, Plants of the Southwest*		
	3843		Playground Mulch		
	20109		Oversize Landscape Gravel / No Filter Fabric, or Similar *2-4" Amaretto or Contrasting Cobble*		
	2138		Organic Mulch/Rain Garden		
	113845		Total Landscape Provided		

USEABLE OPEN SPACE CALCULATIONS:

USEABLE OPEN SPACE REQUIREMENTS:
TOTAL LOT AREA = 245,809 SF x 25 = 61,453 SF REQUIRED

PER CITY OF SANTA FE 14-7.5 (D)(8)(C)
WITHIN THE C-2 ZONING DISTRICT, OPEN SPACE IS
REQUIRED 250 SF MINIMUM FOR EACH GROUND FLOOR
DWELLING UNIT, ONLY FOR GROUND LEVEL FLOORS.
24 GROUND FLOOR UNITS

TOTAL MINIMUM OPEN SPACE PER UNIT TOTAL FOR CALCULATIONS.

TOTAL MINIMUM REQUIRED OPEN SPACE PER UNIT 6,000 + 61,453=	6,000 SF REQUIRED
TOTAL REQUIRED OPEN SPACE:	67,453 SF REQUIRED

LANDSCAPE CALCULATIONS

Total Open Space Required	67,453
Total Open Space Provided	113,879
1 Tree Required per 500 saf 2 Shrubs Required per 500 sqf 67,453/500=138	
Required Trees	135
Provided Trees	135
Required Shrubs= 135x2=270	270
Provided Shrubs	291

PARKING LOT LANDSCAPE CALCULATIONS

Total Parking Spaces Required	130
10 sf of Landscape Area with 1 Tree per Parking Space 130 Spacesx10=1300 sf Parking Lot Landscape Required 1300 sf Parking Lot Landscape Provided	
1 Tree per 90 sq Required 1300/90=14	
Required Trees	14
Provided Trees	14

TOTAL TREES AND SHRUBS CALCULATION

Total Trees of the Site Provided	135
Total Shrubs Provided	291

Maximum Turf allowed (20% of the required open Space)
Ø2x 68103=13741 > 636 Provided Turf

EVERGREEN SHRUBS AND TREES CALCULATIC

Required Evergreen Trees 130x025=33 Provided Evergreen Trees	33 44
Required Evergreen Shrubs 270x025=68 Provided Evergreen Shrubs	68 93

LANDSCAPE NOTES:
Landscape maintenance shall be the responsibility of the Property Owner. The Property Owner shall maintain street trees and shrubs in a living, healthy, and attractive condition.

Water management is the sole responsibility of the Property Owner. All landscaping will be in conformance with the City of Santa Fe, Zoning Code. In general, water conservative, environmentally sound landscape principles will be followed in design and installation.

Landscape Gravel over Filter Fabric to a minimum depth of 3" shall be placed in all landscape areas indicated on the plan.

It is the intent of this plan to comply with the City Of Santa Fe Water landscape ordinances and codes.



Vicinity Map

GRAPHIC SCALE
30 15 0 15 30
SCALE: 1" = 30'-0"

CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CASE # _____ CITY USE ONLY

Mitchell Associates, Inc
Landscape Architecture
Danny Mitchell
505.639.9583
danny@mitchellassociatesinc.com

Designed By: F. Valenzuela
Drawn By: F. Valenzuela
Approved By: D. Mitchell

Landscape Architect

LA SEAL

STATE OF NEW MEXICO
DANNY D. MITCHELL
2138
REGISTERED LANDSCAPE ARCHITECT

Feb. 21, 2025

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REVISIONS	DATE

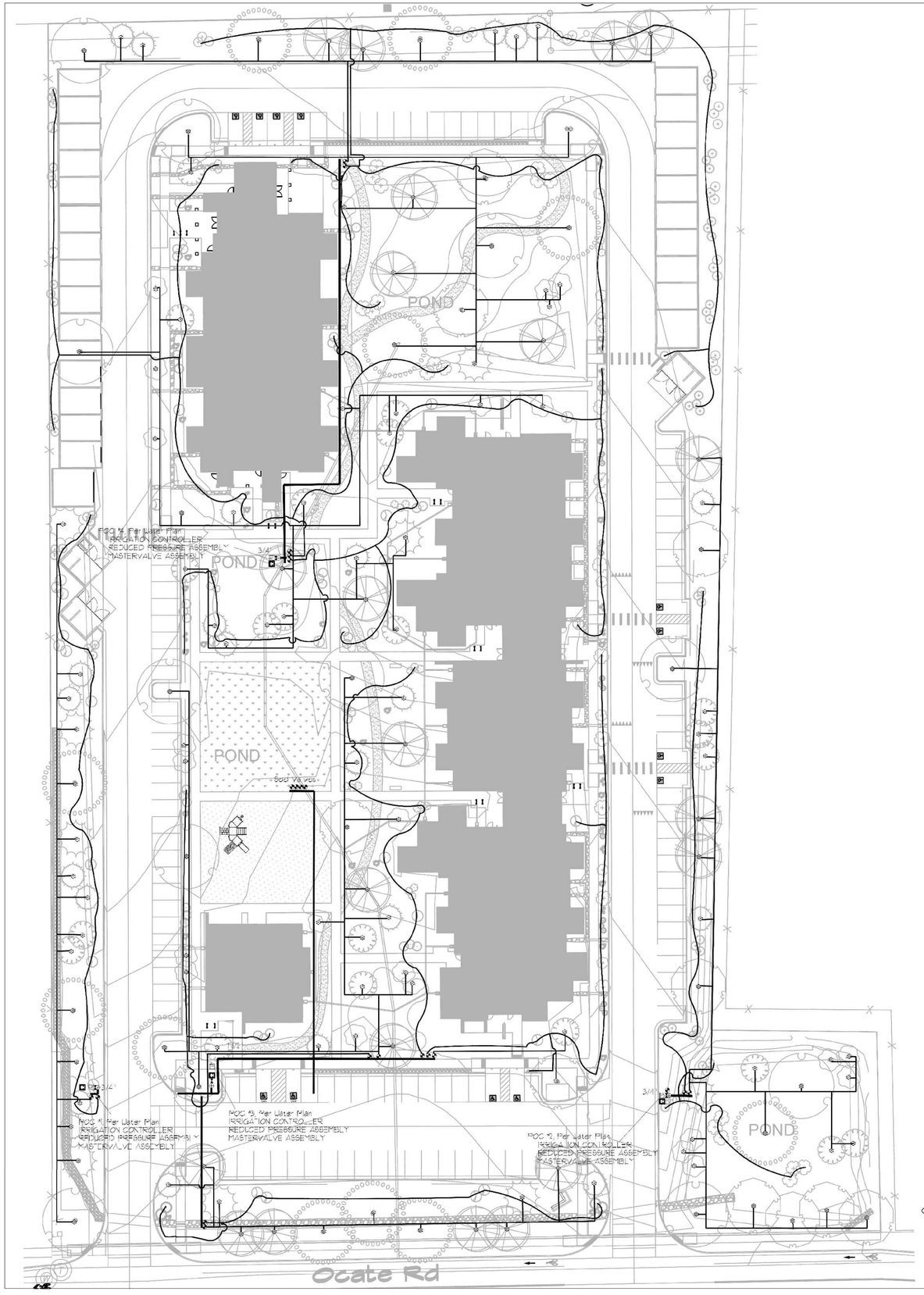
land F/X

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

Landscape Plan

Project No: 2024- 071

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 30' - 0"	3-2



IRRIGATION LEGEND

	COMPONENT	MANUFACTURER	SIZE / NOTES
P	POINT OF CONNECTION, PROVIDED BY OTHERS	SEE CIVIL PLANS	1 1/2"
C	IRRIGATION CONTROLLER	RAINBIRD	LOCATION TO BE DETERMINED
R	REDUCED PRESSURE ASSEMBLY	FEBCO (OR EQUAL)	1 1/2" RPA / Freeze Protection Required
M	MASTERVALVE ASSEMBLY	AMLER	1 1/2"
	MAINLINE	Sch 40 PVC	1 1/2"
	ELECTRIC ZONE VALVE	RAINBIRD	1" typ.
	SLEEVES	Class 200 PVC	2 SIZES LARGER THAN PIPE TO BE SLEEVED.
	PVC LATERALS FOR NETAFIM TREE RINGS		1 1/2"
	Drip Line, Shrub Drip Emitter Line	Polypipe	3/4" and 1" typ.
	Netafim Tree Irrigation Rings	Netafim	SEE DETAIL
	Pop up Spray Sprinkler		

See Equipment Schedule for Specifications and Details
Irrigation System Layout is diagrammatic. Pipe locations to be coordinated by General Contractor

IRRIGATION NOTES

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, EQUIPMENT QUANTITIES, AND UTILITY LOCATIONS PRIOR TO BEGINNING WORK.
2. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN PLANS OR SPECIFICATIONS PRIOR TO BEGINNING OR CONTINUING WORK.
3. THE IRRIGATION CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
4. ALL CONSTRUCTION SHALL CONFORM TO CITY, COUNTY, STATE, AND FEDERAL REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THAT ALL IRRIGATION EQUIPMENT MEETS GOVERNMENT REGULATIONS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR APPROVALS.
5. THIS PLAN IS SCHEMATIC AND DUE TO THE NATURE OF CONSTRUCTION SLIGHT FIELD MODIFICATIONS MAY BE NECESSARY TO IMPLEMENT PLAN.
6. IRRIGATION SYSTEMS CONNECTED TO POTABLE WATER SUPPLY SHALL HAVE A BACKFLOW PREVENTER INSTALLED.
7. IRRIGATION LATERAL LINES, MAIN LINES AND EQUIPMENT MAY BE SHOWN OUTSIDE PROPERTY LINES ON THIS PLAN. ALL IRRIGATION LINES AND EQUIPMENT ARE TO BE WITHIN AND INSTALLED WITHIN THE LIMITS OF THE PROPERTY LINE.
8. ALL IRRIGATION SLEEVING TO BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR. ELECTRICAL WIRES FOR IRRIGATION VALVES AND IRRIGATION LINES ARE TO BE PLACED IN SEPARATE SLEEVES. SEE SLEEVING DETAIL.
9. SUPPLY LINE AND WATER METER TO BE PROVIDED BY OWNER. BACKFLOW PREVENTOR TO BE PROVIDED BY IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR'S POINT OF CONNECTION TO BE WITHIN DOWNSTREAM OF THE IRRIGATION WATER METER.

IRRIGATION NOTES:
Irrigation system maintenance and operation shall be the sole responsibility of the owner. It shall be the owners responsibility to ensure that fugitive water does not leave the site due to overwatering.

Irrigation shall be a complete underground system with Trees to receive 1 Netafim spiral (5ft length) with 3 loops at a final radius of 1.5 from tree trunk, spread in place. Netafim shall have emitters 2 o.c. with a flow of .6 gph. Shrubs to receive (2) 1.0 GPH Drip Emitters. Drip and Bubbler systems to be tied to polypipe with flush caps at each end.

Point of connection for irrigation system is unknown at current time and will be coordinated in the field. Irrigation will be operated by a smartic controller.

Location of controller to be field determined and power source for controller to be provided by others.

Irrigation maintenance shall be the responsibility of the Property Owner.

Water and Power source shall be the responsibility of the Developer/Builder.

Pop up spray systems shall be designed and installed by the irrigation contractor on site. Point of connection, RPA, Mastervalve, and mainline to said irrigation shall be "1".

Water Demand Calculations

Irrigation Demand Calculations						
		Hr				
Year 1	GPH / Plant	Min / Run	Run /Wk	# Plants	Total Gal	Total Ac. Ft
Deciduous Trees	91	1	2	48	8736	
Evergreen Trees	44	1	2	15	1320	
Shrubs	291	1	5	281	408855	
				2 Weekly Gal	418911	
				Monthly Gal	1675644	
				Annual Gal	13405152	41.14
Year 2	GPH / Plant	Min / Run	Run /Wk	# Plants	Total Gal	Total Ac. Ft
Deciduous Trees	91	0.75	2	48	6552	
Evergreen Trees	44	0.75	2	15	990	
Shrubs	291	0.75	5	281	306641.3	
				Weekly Gal	314183.3	
				Monthly Gal	1256733	
				Annual Gal	10053864	30.85
Year 2	GPH / Plant	Min / Run	Run /Wk	# Plants	Total Gal	Total Ac. Ft
Deciduous Trees	91	0.5	2	48	4368	
Evergreen Trees	44	0.5	2	15	660	
Shrubs	291	0.5	5	281	204427.5	
				Weekly Gal	209455.5	
				Monthly Gal	837822	
				Annual Gal	6702576	20.57

GENERAL IRRIGATION NOTES:
Irrigation shall be a complete automatic underground system.
Trees to receive Netafim Spiral Tree Rings, See Det.
Shrubs to receive (2) 1.0 GPH Drip Emitters.
Drip and Bubbler systems to be tied to polypipe with flush caps at each end.
Trees and shrubs shall be on separate valves.
See Water use and demand information.

Utility Notes:

Trees shall have a minimum of 10' minimum clearance from all CLC utility services

A CLC inspector is required to be on site prior to digging for new irrigation lines installations crossing on CLC utilities to ensure minimum vertical separations are met per CLC standards.

Call FWCA at: 575 528-3038 48 hours or two working days prior to digging.

GPM water usage for landscape as shown is 15 gallons per minute.

WATER BUDGET

YEAR 1
Drip Irrigation to Trees and Shrubs
4 months at 1 run time per hour
4 months at 1 run time per week
4 months at 4 run times per week
Approximately 80 run cycles per year.

135 Trees / 420 gallons per run cycle
342 Shrubs / 560 gallons per run cycle
29988 Gallons per run cycle x 80 run times =2398920 GPY / 325851 gal per ac. ft.
21 Acre Ft.

YEAR 2
Drip Irrigation to Trees and Shrubs
4 months at 1 run time per hour
4 months at 1 run time per week
4 months at 4 run times per week
Approximately 80 run cycles per year.

135 Trees / 210 gallons per run cycle
342 Shrubs / 280 gallons per run cycle
14994 Gallons per run cycle x 80 run times =1134460 GPY / 325831 gal per ac. ft.
15 Acre Ft.

YEAR 3
Drip Irrigation to Trees and Shrubs
4 months at 1 run time per hour
4 months at 1 run time per week
4 months at 4 run times per week
Approximately 80 run cycles per year.

135 Trees / 210 gallons per run cycle
342 Shrubs / 280 gallons per run cycle
14994 Gallons per run cycle x 80 run times =1134460 GPY / 325831 gal per ac. ft.
15 Acre Ft.

Mitchell Associates, inc
Landscape Architecture
Danny Mitchell
danny@mitchellassociatesinc.com
505.639.9583
Project: NO. 2024-07

LA SEAL

STATE OF NEW MEXICO
DANNY D. MITCHELL
REGISTERED LANDSCAPE ARCHITECT
Feb. 2, 2025

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REVISIONS	DATE

GRAPHIC SCALE
30 15 0 15 30
SCALE: 1" = 30'-0"

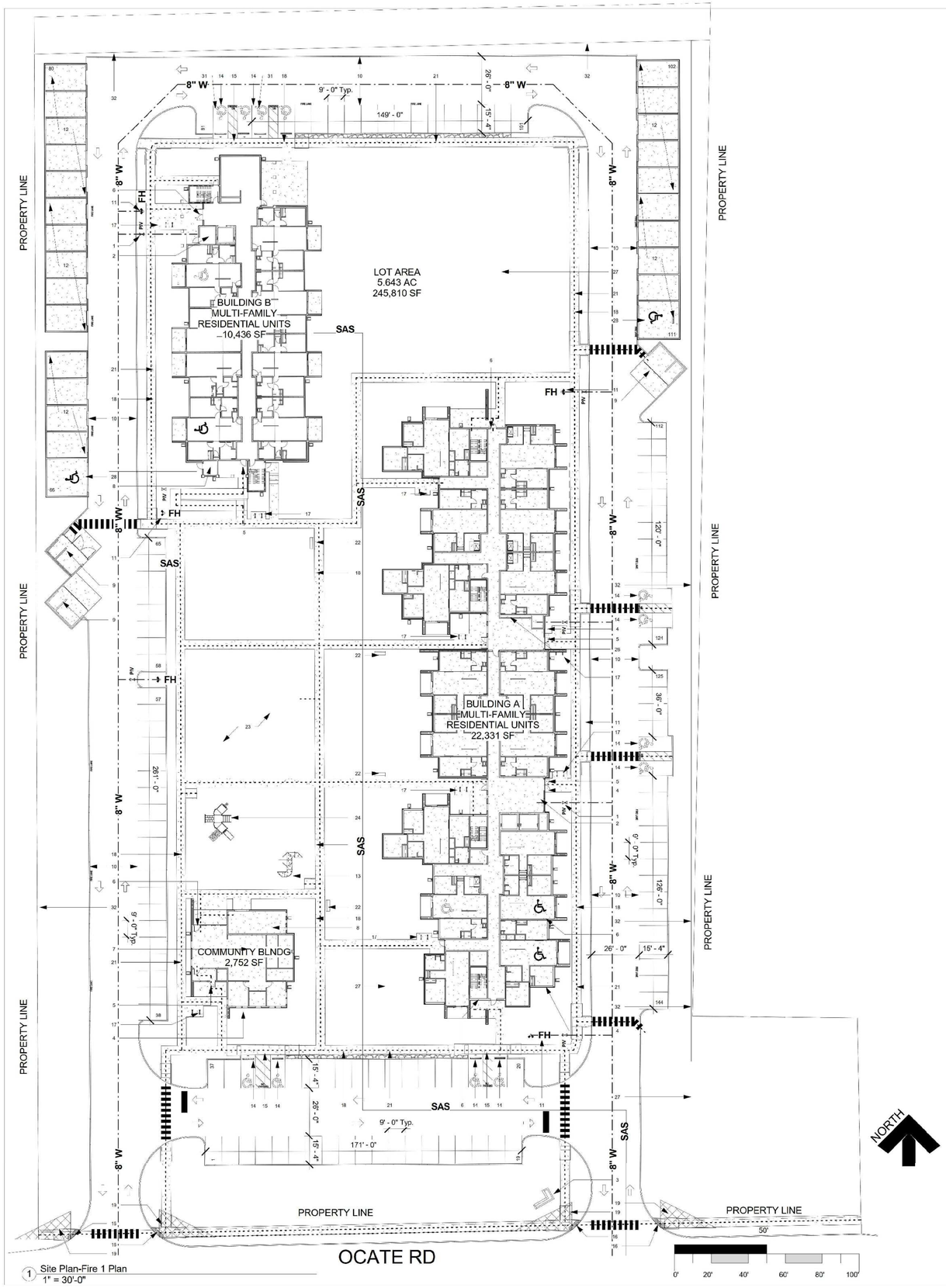
CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

Irrigation Plan

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 30' - 0"	3-3



1 Site Plan-Fire 1 Plan
1" = 30'-0"

GENERAL NOTES:

ALL BUILDINGS SHALL BE EQUIPPED WITH AUTOMATIC FIRE SPRINKLER SYSTEMS MEETING NFPA 13R REQUIREMENTS FOR DESIGN AND CONSTRUCTION.

AUTOMATIC FIRE SPRINKLER SYSTEMS SHALL BE DESIGNED AND CONSTRUCTED BY THE CONTRACTOR.

AUTOMATIC FIRE SPRINKLER SYSTEM DESIGNS AND ENGINEERING SHALL BE PRESENTED TO THE CITY OF SANTA FE FIRE MARSHAL FOR REVIEW AND APPROVAL PRIOR TO START OF CONSTRUCTION.

- FIRE ALARM AND FIRE SPRINKLER SYSTEMS SHALL BE REQURIED.
- FIRE ALARM SHALL FOLLOW 2019 NFPA 72 STANDARDS AND FIRE SPRINKLERS SHALL FOLLOW 2019 NFPA 13R.
- FIRE ALARM AND FIRE SPRINKLER SHALL HAVE DEFERRED SUBMITTALS AND UTILIZE PROVIDED CHECKLIST.
- FIRE ALARM AND FIRE SPRINKLER PLANS SHALL HAVE A MINIMUM OF A NICET III OR FPE STAMP AND COMPANY SHALL HAVE A CERTIFICATE OF FITNESS FROM THE NM STATE FIRE MARCHAL'S OFFICE.
- FIRE SPRINKLER SYSTEMS SHALL HAVE A ROUGH IN INSPECTION AS WELL AS A HYDROSTATIC TEST WITNESSED BY THE FIRE MARSHALS OFFICE.
- FIRE SPRINKLER SYSTEM SHALL BE MONITORED AND BE TIED INTO THE FIRE ALARM SYSTEM.
- FIRE SPRINKLER CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR ABOVE GROUND PIPING SHALL BE REQUIRED.
- FIRE RISER ROOM(S) SHALL BE HEATED.
- FIREA ALARM SHALL BE DESIGNED AND INSTALLED PER 2019 NFPA 72.
- FIRE ALARM SHALL REQUIRE A RECORD OF COMPLETION AT FINAL.
- FIRE ALARM SYSTEM SHALL BE MONITORED AND ADDRESSABLE.
- ALL DEVICES FOR SMOKE DETECTION, FIRE DETECTION AND NOTIFICATION SHALL BE TIED INTO THE FIRE ALARM.
- DURING CONSTRUCTION A FIRE WATCH SHALL BE MAINTAINED UNTIL FIRESPRINKLER AND OR FIRE ALARM ARE FULLY FUNCTIONAL.
- DURING CONSTRUCTION EMERGENCY ACCESS SHALL BE MAINTAINED.
- FIRE EXTINGUISHERS SHALL BE PROVIDED AT THE MAXIMUN TRAVEL DISTANCE 75' THROUGHOUT THE CONSTRUCTION SITE.
- EMERGENCY EXITS SHALL BE MAINTAINED DURING CONSTRUCTION AND BE PROPERLY LABELED AND VISIBLE.
- HYDROSTATIC TESTS SHALL BE WITNESSED BY A MEMBER OF THE FIRE MARSHALS OFFICE.
- SOW LETTER WITH NICET III AND FPE FOR LESS THAN 20 SPRINKLER HEADS MOVED.
- AIR HANDLERS OVER 2000CFM SHALL HAVE DUCT SMOKE DETECTION.
- FIRE ACCESS SHALL FOLLOW IFC 2021 APPENDIX D.
- RECORD OF COMPLETION SHALL BE REQUIRED AT FINAL.

LINE LEGEND:

W	W	WATER LINE
SAS	SAS	SEWER LINE

SITE PLAN LEGEND:

1. POST INDICATOR VALVE
2. FIRE RISER ROOM
3. MONUMENT SIGN - SEE DETAIL 2
4. 18" ALUMINUM CAST BUILDING LETTER SIGN TO BE LIT FROM DUSK TO DAWN.
5. PRIMARY BUILDING ENTRY
6. SECONDARY BUILDING ENTRANCE
7. COMMUNITY AREA/LEASING OFFICE
8. MAINTENANCE RM
9. GARBAGE ENCLOSURE W/ GATES
10. ASPHALT DRIVEWAY - DRIVE AISLE: 2.5" ASPHALT PAVEMENT OVER 4" COMPACTED ROADWAY BASECOURSE. DRIVE SHALL BE DESIGNED AND CONSTRUCTED CAPABLE OF SUPPORTING THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING AT LEAST 75,000 POUNDS - DRIVE SHALL NOT EXCEED 10% GRADE.
11. FIRE HYDRANT
12. COVERED PARKING GARAGE
13. TOT LOT AGE UNDER 5: CONSTRUCT NEW TOT LOT AREA W/ BENCHES, WARNING AND PLAYGROUND RULES AND SIGNAGE REQUIRED.
14. ADA PARKING W/ PRECAST CONCRETE WHEEL STOPS - SEE DETAILS
15. ADA CURB RAMP - SEE DETAILS
16. DETECTABLE WARNING STRIP
17. NEW BICYCLE RACKS TO ACCOMODATE 12 BICYCLE PARKING SPACES PER 100 OR MORE PARKING SPACES PER CITY OF SANTA FE. (12 REQUIRED 36 PROVIDED)
18. ACCESSIBLE ROUTE FROM ADA PARKING TO BUILDING CORRIDOR
19. SIGHT TRIANGLE
20. NEW STOP AND PEDESTRIAN CROSSING SIGNAGE - SEE DETAILS
21. NEW 6" CAST IN PLACE CONCRETE SIDEWALK
22. WEATHER PERMANENT MOUNTED BENCH
23. GRASS AREA: MULTI-PURPOSE/MULTI- AGE/SPORTS PLAYING FIELD.
24. PLAYGROUND AGE 5 TO 12: CONSTRUCT NEW PLAY AREA W/ BENCHES, WARNING AND PLAYGROUND RULES SIGNAGE TO BE PROVIDED.
25. NA
26. MAIL CENTER
27. RAIN GARDEN
28. ADA PARKING GARAGE - SEE DETAILS
29. OUTDOOR GATHERING OPEN SPACE
30. NA
31. ADA VAN ACCESSIBLE PARKING
32. PROPOSED WROUGHT IRON FENCING. SEE DETAIL 3.

FIRE APARATUS ACCESS ROADS

FIRE ACCESS ROAD SHALL BE PROVIDED AND SHALL BE CAPABLE OF SUPPORTING IMPOSED LOAD OF 75,000 POUNDS.

FIRE ACCESS ROADS, INCLUSIVE OF THE INTERMEDIATE FIRE LANE, ARE PROVIDED ON ALL FOUR SIDES OF THE BUILDINGS.

ALL FIRE ACCESS ROADS SHALL BE CONSTRUCTED AS DRIVELANES AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH SOILS ENGINEERING STUDY AND REPORT COMPLETED BY GEOTEST - REPORT DATED NOVEMBER 30, 2022 - WHICH DESCRIBES A DRIVEWAY SECTION OF 3 INCHES ASPHALTIC PAVEMENT OVER 6 INCHES COMPACTED GRAVEL BASE OVER 12 INCHES OF COMPACTED SUBGRADE.

FIRE ACCESS ROADS SHALL BE MIN 28' WIDTH WITH 28' CORNER RADIUS MIN.

IFC 2018 SECTION D106 MULTI-FAMILY RESIDENTIAL DEVELOPMENTS
REQUIREMENT:
PROJECTS WITH MORE THAN 100 UNITS SHALL HAVE 2 ACCESS ROADS.
EXCEPTION: PROJECTS HAVING UP TO 200 DWELLING UNITS MAY HAVE A SINGLE APPROVED FIRE APARATUS ACCESS ROAD WHEN ALL BUILDINGS, INCLUDING NON-RESIDENTIAL BUIDLINGS, ARE EQUIPPED THROUGHOUT WITH NFPA 13R AUTOMATIC FIRE SPRINKLER SYSTEMS.

NOTE:
- COMBINED TOTAL NUMBER OF UNITS FOR BOTH OCATE SANTA FE APARTMENTS = 84 UNITS
- ALL BUILDINGS, SHALL BE PROTECTED THROUGHOUT BY NFPA 13R AUTOMATIC FIRE SPRINKLER SYSTEMS.
- PROJECT MEETS ALL REQUIREMENTS OF THE EXCEPTION NOTED ABOVE.

TOTAL APARTMENT MIX:

1 BEDROOM UNIT	= 16 UNITS
2 BEDROOM UNIT	= 53 UNITS
3 BEDROOM UNIT	= 15 UNITS
TOTAL UNITS	**= 84 UNITS**

FIRE FLOW CALCULATIONS - APPENDIX B

FIRE FLOW FROM -TABLE B105.1(2) 2015-IFC

FOR CONSTRUCTION TYPE = 5A

	TOTAL BUILDING SF	FIRE FLOW	DURATION
BUILDING A	84,233 SF	= 5,250 GPM	4 HRS
BUILDING B	32,555 SF	= 3,250 GPM	3 HRS
COMM BLNDG	2,752 SF	= 1,500 GPM	2 HRS

REQUIRED FIRE FLOW PER TABLE B105.2
ALL BUILDINGS EQUIPPED WITH 903.1.2 AUTOMATIC FIRE SPRINKLER SYSTEM

FFmin = 25% OF TABLE B105.1(2) VALUE ***NOT LESS THAN 1500 GPM**

REQUIRED FIRE FLOW DURATION PER TABLE B105.2
FFDmin = DURATION IN TABLE B15.1(2) AT REDUCED FLOW

FIRE FLOW ADJUSTMENTS

	FIRE FLOW	DURATION
BUILDING A	5,250 GPM x .25 = 1,312 USE 1500 GPM	2 HRS
BUILDING B	2,250 GPM x .25 = 562.5 USE 1500 GPM	2 HRS
COMM BLDNG	1,500 GPM x .25 = 375 USE 1500 GPM	2 HRS

FIRE HYDRANT LOCATIONS AND DISTRIBUTION - APPENDIX C

FIRE HYDRANT LOCATIONS AND DISTRIBUTION FROM -TABLE C102.1 2015-IFC

	FIRE FLOW	# OF HYDRANTS	SPACING	MAX DISTANCE FROM ANY POINT ON ROAD FRONTAGE
BUILDING A	1,500 GPM	1	500' - 0"	250' - 0"
BUILDING B	1,500 GPM	1	500' - 0"	250' - 0"
COMM BLDNG	1,500 GPM	1	500' - 0"	250' - 0"

TOTAL # OF REQUIRED PARKING SPACES PER UNIT:

PER CITY OF SANTA FE EXHIBIT A - Table 14-8.6-1

1 BR UNIT x 1.25 SPACES
2 BR UNIT x 1.50 SPACES
3 BR UNIT x 2.00 SPACES

TOTAL UNIT APARTMENT MIX:

1 BR UNITS	16 x 1.25 SPACES =	20 SPACES
2 BR UNITS	53 x 1.50 SPACES =	80 SPACES
3 BR UNITS	15 x 2.00 SPACES =	30 SPACES
TOTAL # OF REQUIRED PARKING SPACES =		130 SPACES

SPACES PROVIDED
OFF-STREET STANDARD PARKING SPACES **105 SPACES**

ADA PARKING REQUIRED 1 / ADA UNIT
ADA PARKING SPACES REQUIRED 5 SPACES
NMBC TABLE 1106.1 = 8 SPACES W/ 4 VAN ACCESSIBLE

ADA PARKING SPACES PROVIDED **8 SPACES**

VAN ACCESSIBLE PARKING SPACES PROVIDED **4 SPACES**

COVERED PARKING SPACES PROVIDED **23 SPACES**

COVERED ADA PARKING SPACES PROVIDED **2 SPACES**

TOTAL PARKING: 142 SPACES

PROJECT INFORMATION:

LEGAL DESCRIPTION:	LOT A-2, 5.64 AC, S18 T16N R9E
TYPE OF CONSTRUCTION:	TYPE 5A
LOT SF/ACRE:	245,810 SF 5.643 ACRES
ZONING:	C2 - GENERAL COMMERCIAL DISTRICT
INTENDED USE:	DWELLING / MULTI FAMILY (84 UNITS)
MAXIMUM HEIGHT:	45' - 0"

ENGINEERS SEAL

STATE OF NEW MEXICO
DAVID BRAGAN
NO. 3340
REGISTERED ARCHITECT

DATE

REVISIONS

CITY REVIEW

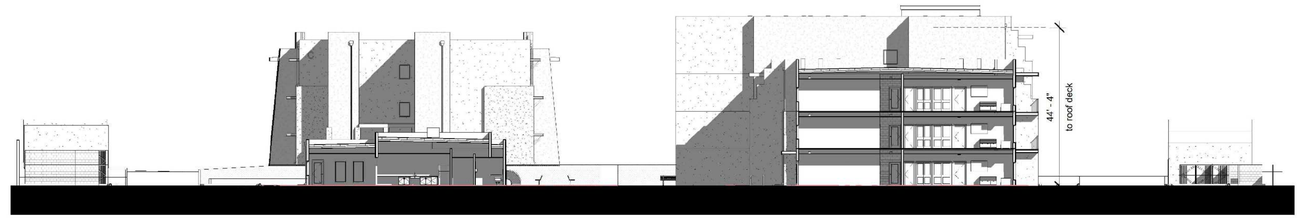
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WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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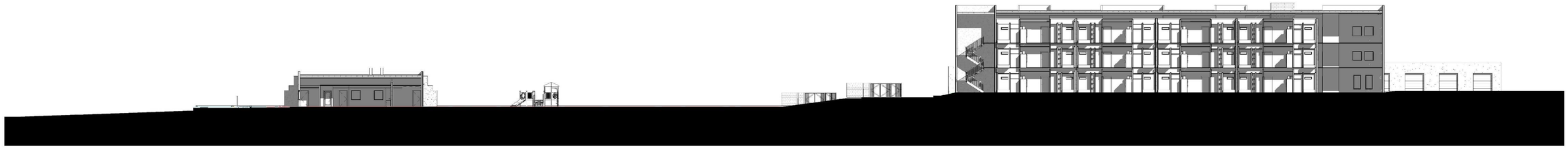
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

Fire 1 Plan

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 30' - 0"	3-4



1 Section - East / West
1" = 20'-0"



2 Section - North / South
1" = 20'-0"

ENGINEERS SEAL

STATE OF NEW MEXICO
DAVID ENGEMAN
No. 3340
REGISTERED ARCHITECT

DATE

REVISIONS

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
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SUBDIVISION ENGINEER		

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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

Site Sections

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 30' - 0"	3-5



4 West Elevation-Building Ax
3/32" = 1'-0"



1 East Elevation-Building Ax
3/32" = 1'-0"



2 North Elevation-Building Ax
3/32" = 1'-0"



3 South Elevation-Building Ax
3/32" = 1'-0"

GENERAL NOTES:

1. NO STUCCO SURFACE SHALL EXCEED 120 SF OF SURFACE AREA WITHOUT STUCCO EXPANSION JOINT.
2. ALL OPERABLE WINDOWS AT 2ND AND 3RD LEVELS THAT DO NOT OPEN TO A BALCONY MUST HAVE A WINDOW OPENING CONTROL DEVICE COMPLYING WITH ASTM F 2090.
3. CONTRACTOR TO REFER TO NOTE 1 AND APPROVED PERMIT SET FOR STUCCO EXPANSION JOINT LOCATIONS AND PATTERN.
4. ALL WINDOWS AND EXTERIOR DOORS TO BE RECESSED NOT LESS THAN 2 INCHES FROM THE WALL PLANE.
5. ALL WINDOWS ARE TO BE CLEAR. COLORED GLAZINGS NOT TO BE USED.
6. ALL ROOF AND WALL MOUNTED EQUIPMENT (MECHANICAL, ELECTRIACL, COMMUNICATIONS, SERVICE, VENTS, PIPES, SATELITE DISHES) TO BE SCREENED FROM PUBLIC VIEW BY BUILDING PARAPETS, WALLS, AND OR FENCES.



NORTHWEST CORNER



SOUTHEAST CORNER

MATERIAL SURFACE AREAS:

STUCCO	WEST	EAST	NORTH	SOUTH
COLOR #1 - SW 6099	5,670 SF	4,999 SF	1,220 SF	2,150 SF
COLOR #2 - SW 6104	2,517 SF	2,301 SF	1,847 SF	1,411 SF
COLOR #3 - SW HIST 2839	4,623 SF	4,536 SF	1,191 SF	786 SF

NOTE: ALL WALLS HAVE A MONOLITHIC APPEARANCE AND UTILIZE ONLY ONE SINGLE COLOR

ARCHITECTURAL DESIGN REVIEW

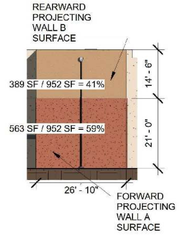
PER CODE OF ORDINANCE CITY OF SANTA FE, NM TABLE 14-8.7-1: POINT REQUIREMENTS BY ZONING DISTRICT. POINTS REQUIRED FOR NEW CONSTRUCTION AND VARY ACCORDING TO THE ZONING DISTRICT WHICH THE PROECT IS LOCATED.

ZONING DISTRICT: C-2 POINTS REQUIRED: 205 POINT REQUIRED

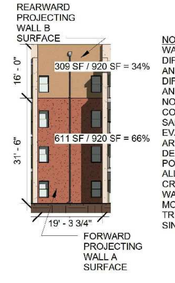
ARCHITECTURAL DESIGN STANDARDS AND POINT ALLOCATIONS:
PER CODE OF ORDINANCES CITY OF SANTA FE, NM TABLE 14-8.7-2

ARCHITECTURAL DESIGN STANDARDS **225 POINTS ACHIEVED**

SEE PROVIDED SPREAD SHEET FOR CALCULATIONS



8 West Elevation-Building Ax - Callout 1
3/64" = 1'-0"



9 West Elevation-Building Ax - Callout 2
3/64" = 1'-0"

NOTE:
WALLS A AND B ARE DIFFERENT WALLS AND ARE IN DIFFERENT PLANES AND THEREFORE NOT TO BE CONSIDERED THE SAME WALL WHEN EVALUATING ARCHITECTURAL DESIGN STANDARDS POINTS ALLOCATIONS CRITERIA - ALL WALLS ARE MONOLITHICLY TREATED WITH ONE SINGLE COLOR

ENGINEERS SEAL

STATE OF NEW MEXICO
J. DAVID GRAYSON
No. 3340
REGISTERED ARCHITECT

DATE

REVISIONS

CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
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STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CASE # _____

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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

Building A Elevations

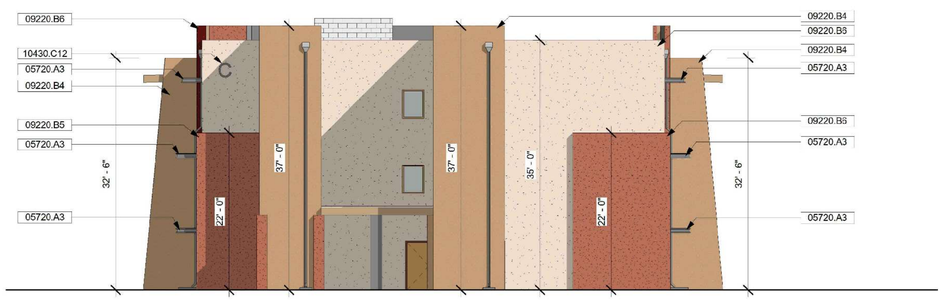
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10' - 0"	3-6



1 East Elevation
1" = 10'-0"



2 West Elevation
1" = 10'-0"



3 South Elevation
1" = 10'-0"



4 North Elevation
1" = 10'-0"

Keynotes:	
Key Value	Keynote Text
05710.B3	New Steel Handrail / Guardrail
05720.A3	New Window Steel Shade Awning
09220.B4	Stucco Color #1
09220.B5	Stucco Color #2
09220.B6	Stucco Color #3
10430.C12	24" Aluminum Cast Lettering

GENERAL NOTES:

1. NO STUCCO SURFACE SHALL EXCEED 120 SF OF SURFACE AREA WITHOUT STUCCO EXPANSION JOINT.
2. ALL OPERABLE WINDOWS AT 2ND AND 3RD LEVELS THAT DO NOT OPEN TO A BALCONY MUST HAVE A WINDOW OPENING CONTROL DEVICE COMPLYING WITH ASTM F 2090.
3. CONTRACTOR TO REFER TO NOTE 1 AND APPROVED PERMIT SET FOR STUCCO EXPANSION JOINT LOCATIONS AND PATTERN.
4. ALL WINDOWS AND EXTERIOR DOORS TO BE RECESSED NOT LESS THAN 2 INCHES FROM THE WALL PLANE.
5. ALL WINDOWS ARE TO BE C..EAR. COLORED GLAZINGS NOT TO BE USED.
6. ALL ROOF AND WALL MOUNTED EQUIPMENT (MECHANICAL, ELECTRIACL, COMMUNICATIONS, SERVICE, VENTS, PIPES, SATELITE DISHES) TO BE SCREENED FROM PUBLIC VIEW BY BUILDING PARAPETS, WALLS, AND OR FENCES.



SOUTHEAST CORNER



NORTHWEST CORNER

9 3D NW Corner

ESTIMATED MATERIAL SURFACE AREAS:

STUCCO	WEST	EAST	NORTH	SOUTH
COLOR #1 - SW 6099	3,165 SF	3,323 SF	1,566 SF	736 SF
COLOR #2 - SW 6104	864 SF	195 SF	370 SF	497 SF
COLOR #3 - SW HIST 2839	2,014 SF	1,514 SF	490 SF	1,400 SF
PERCENTAGE OF COLOR #3 TO FACADE AREA	33%	30%	20%	53%

ARCHITECTURAL DESIGN REVIEW

PER CODE OF ORDINANCE CITY OF SANTA FE, NM TABLE 14-8.7-1: POINT REQUIREMENTS BY ZONING DISTRICT. POINTS REQUIRED FOR NEW CONSTRUCTION AND VARY ACCORDING TO THE ZONING DISTRICT WHICH THE PROECT IS LOCATED.

ZONING DISTRICT: C-2 POINTS REQUIRED: 205 POINT REQUIRED

ARCHITECTURAL DESIGN STANDARDS AND POINT ALLOCATIONS:
PER CODE OF ORDINANCES CITY OF SANTA FE, NM TABLE 14-8.7-2

ARCHITECTURAL DESIGN STANDARDS **245 POINTS ACHIEVED**

SEE PROVIDED SPREAD SHEET FOR CALCULATIONS

ENGINEERS SEAL

STATE OF NEW MEXICO
DAVID GRIFFIN
NO. 3340
REGISTERED ARCHITECT

DATE

REVISIONS

CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
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STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

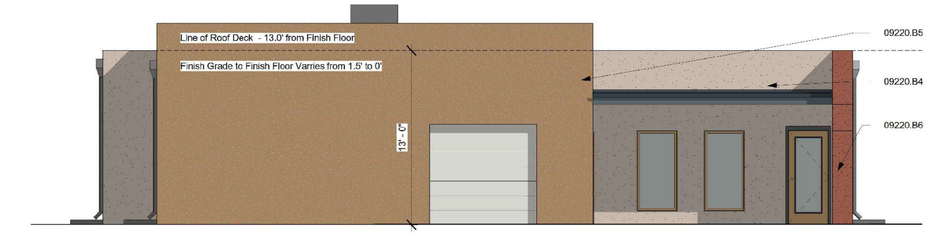
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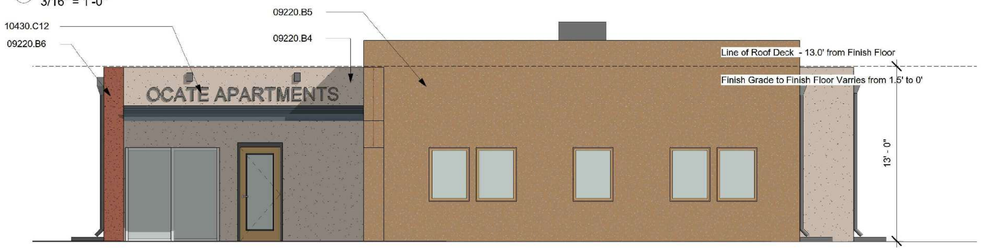
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

Building B Elevations

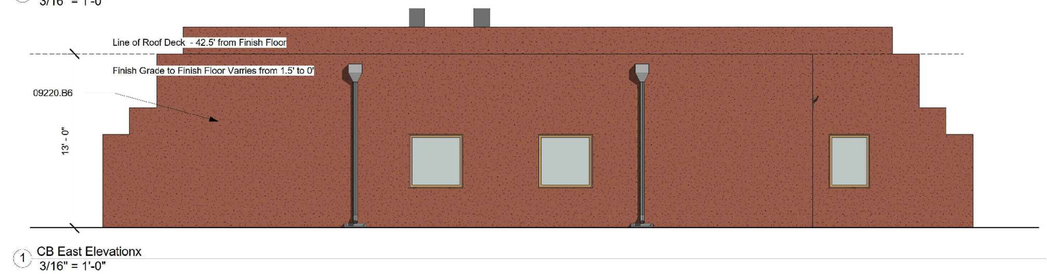
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FEBRUARY 2025	1" = 10' - 0"	3-7



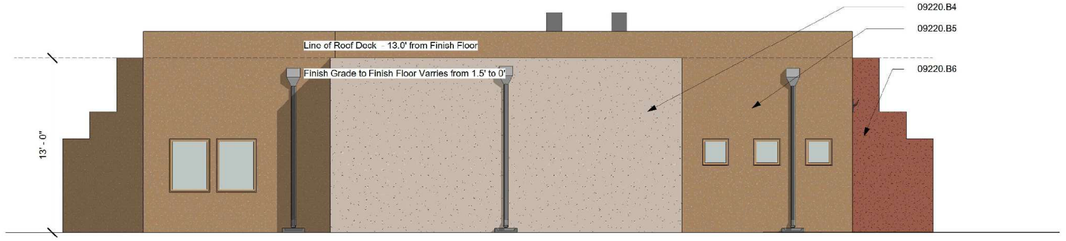
3 CB South Elevationx
3/16" = 1'-0"



2 CB North Elevationx
3/16" = 1'-0"



1 CB East Elevationx
3/16" = 1'-0"



4 CB West Elevationx
3/16" = 1'-0"

Keynotes:	
Key Value	Keynote Text
09220.B4	Stucco Color #1
09220.B5	Stucco Color #2
09220.B6	Stucco Color #3
10430.C12	24" Aluminum Cast Lettering

GENERAL NOTES:

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MATERIAL SURFACE AREAS:

STUCCO	WEST	EAST	NORTH	SOUTH
COLOR #1 - SW 6099	341 SF	0 SF	211 SF	224 SF
COLOR #2 - SW 6104	417 SF	0 SF	409 SF	430 SF
COLOR #3 - SW HIST 2839	116 SF	865 SF	39 SF	20 SF

NOTE: ALL WALLS HAVE A MONOLITHIC APPEARANCE AND UTILIZE ONLY ONE SINGLE COLOR

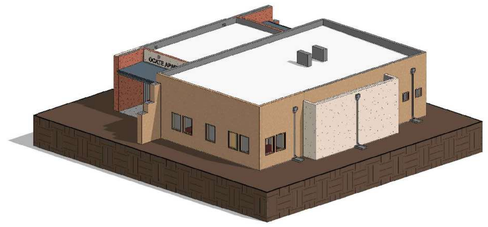
ARCHITECTURAL DESIGN REVIEW

PER CODE OF ORDINANCE CITY OF SANTA FE, NM TABLE 14-8.7-1: POINT REQUIREMENTS BY ZONING DISTRICT. POINTS REQUIRED FOR NEW CONSTRUCTION AND VARY ACCORDING TO THE ZONING DISTRICT WHICH THE PROECT IS LOCATED.
ZONING DISTRICT: C-2 POINTS REQUIRED: 205 POINT REQUIRED

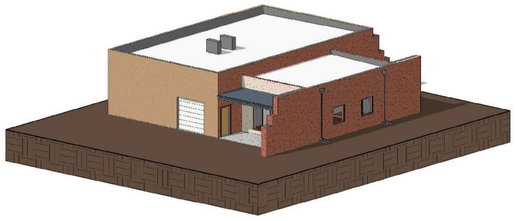
ARCHITECTURAL DESIGN STANDARDS AND POINT ALLOCATIONS:
PER CODE OF ORDINANCES CITY OF SANTA FE, NM TABLE 14-8.7-2

ARCHITECTURAL DESIGN STANDARDS **225 POINTS ACHIEVED**

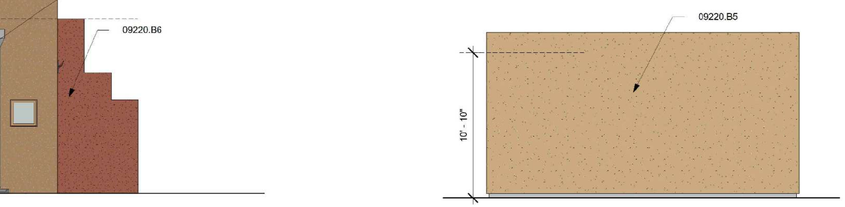
SEE PROVIDED SPREAD SHEET FOR CALCULATIONS



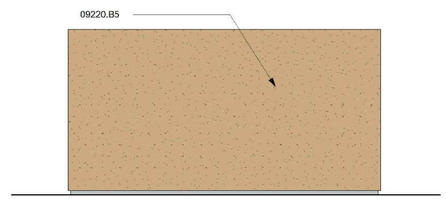
Southeast Corner View



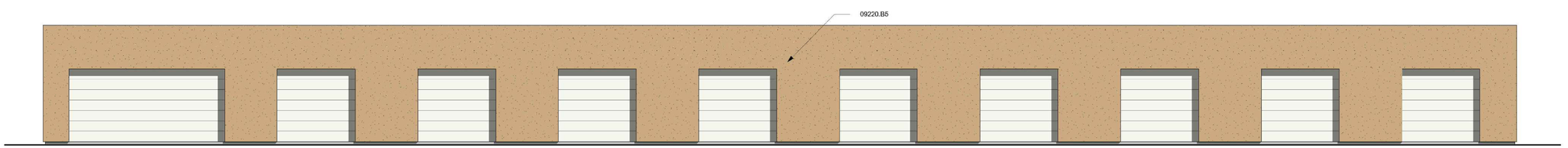
Northwest Corner View



10 Garage End Elevation
3/16" = 1'-0"



12 Garage End Elevation.
3/16" = 1'-0"



11 Garage Front Elevation
3/16" = 1'-0"



13 Garage Rear Elevation
3/32" = 1'-0"

ENGINEERS SEAL

STATE OF NEW MEXICO
DAVID GRAHAM RAY
NO. 3340
REGISTERED ARCHITECT

DATE

REVISIONS

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

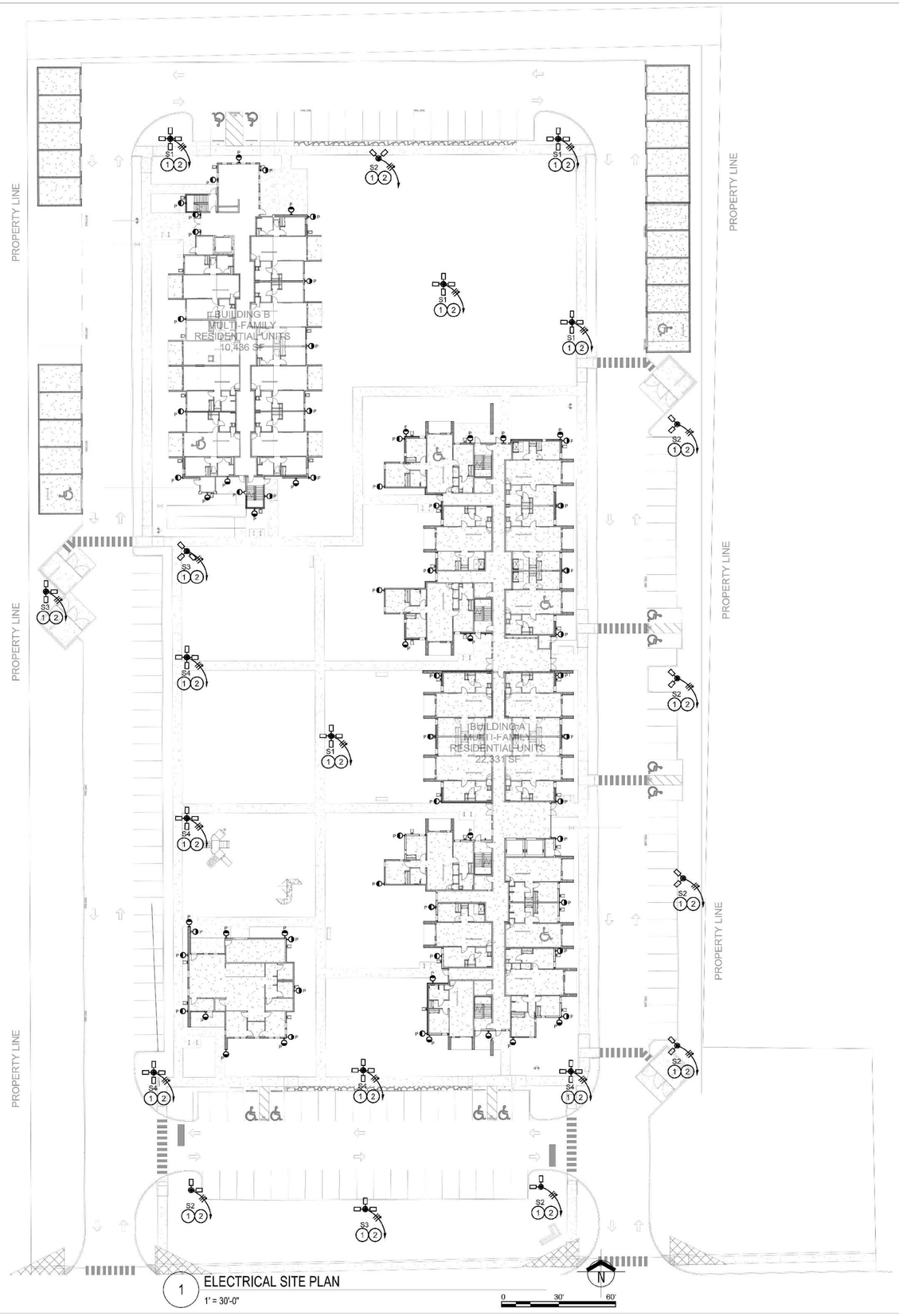
CASE # _____

CITY USE ONLY

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

Community Building Elevations

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10' - 0"	3-8



1 ELECTRICAL SITE PLAN
1" = 30'-0"

LUMINAIRE SCHEDULE

Multi Family Apartments Santa Fe, NN

TYPE / MARK	BRAND	CATALOG NUMBER	LAMP(S) QTY	LAMP(S) WATTS	LAMP(S) TYPE	DESCRIPTION	VOLT.	LUM. WATT.	MOUNTING	COMMENTS
P	*ILP*	VWM-8L-U-CCTS-T4-BLK-PCU	1	59.7	L.E.D.	AREA LIGHT, WALL MOUNT	120	**59.7**	SURFACE	INSTALL UP +10'-6" AFF
S	*ILP*	SAS-9L-U-40-T3-UMB-BRZ70	1	70	L.E.D.	PARKING LOT LIGHT	120	**70**	POLE	20' TEXTURED BRONZE POLE, SEE POLE BASE DETAIL

GENERAL LIGHTING NOTES:
A. ANY EMERGENCY BALLASTS SPECIFIED FOR LIGHTING FIXTURES SHALL BE FACTORY INSTALLED. 10/09/2024
B. ALL EXTERIOR LIGHTING FIXTURES SHALL CONFORM TO APPLICABLE CODES INCLUDING THE NIGHT SKY ACT.

GENERAL NOTES:

A. REFER TO ARCHITECTURAL AND CIVIL SITE PLANS FOR ADDITIONAL SITE UTILITY INFORMATION.

COORDINATE THE FOLLOWING WITH OTHERS:

B. METER CENTER LOCATION, REFER TO POWER RISER DIAGRAM.

C. GENERAL LOCATION FOR SERVICE TRANSFORMER TO SERVE BUILDING INDICATED. COORDINATE EXACT LOCATION WITH POWER UTILITY REPRESENTATIVE.

D. TELEPHONE CABINET, REFER TO COMMUNICATIONS RISER DIAGRAM.

E. EXTEND PRIMARY DUCT TO UTILITY SERVICE POINT PER UTILITY REQUIREMENTS.

F. MONUMENT SIGN, VERIFY EXACT LOCATION WITH ARCHITECTURAL DRAWINGS. CONNECT TO DEDICATED 120V CIRCUIT INDICATED THROUGH PHOTOCELL FOR DUSK-TO-DAWN OPERATION. USE #10 WIRING.

G. TELEPHONE SERVICE POINT, VERIFY WITH PROVIDER'S REPRESENTATIVE.

H. 4" SCHEDULE 80 PVC TELEPHONE SERVICE CONDUIT PER PROVIDER STANDARDS. FIELD VERIFY ROUTING WITH LOCAL COMMUNICATIONS REPRESENTATIVE.

I. MAIN TELEPHONE BACKBOARD, REFER TO COMMUNICATIONS RISER DIAGRAM.

J. FURNISH P.I.V., TEMPER AND FLOW SWITCHES IN EACH FIRE RISER ROOM. FIRE ALARM PANEL TO BE LOCATED AT THE COMMUNITY BUILDING (B). COORDINATE WITH ARCHITECTURAL AND FIRE PROTECTION DESIGN PROFESSIONAL.

K. PROVIDE POWER FOR WAY-FINDING SIGN.

L. PROVIDE POWER FOR FIRE PROTECTION HOT BOX.

ELECTRICAL KEYED NOTES: ◯

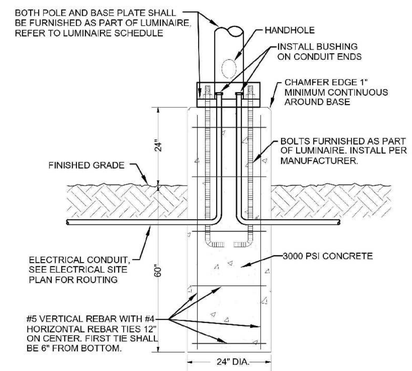
1. PARKING LOT LIGHTING FIXTURE ON 20' POLE, REFER TO POLE BASE MOUNTING DETAIL.
2. EXTEND TO CIRCUIT INDICATED THROUGH LIGHTING CONTROLS USING #10 CONDUCTORS. CIRCUIT HB1-34,36 AND HA1-34,36.

POLE BASE NOTES:

A ALL LIGHT POLE CONCRETE BASES SHOULD BE VERIFIED WITH STRUCTURAL ENGINEER FAMILIAR WITH THE SOIL AND WIND CONDITIONS OF THIS PROJECT.

B G.C. TO PROVIDE AND INSTALL ENTIRE POLE BASE.

C LIGHTING FIXTURES SHALL BE OF TYPE INDICATED ON DRAWINGS.



POLE BASE MOUNTING DETAIL
SCALE: NONE

ENGINEERS SEAL



DATE

REVISIONS

CASE # _____

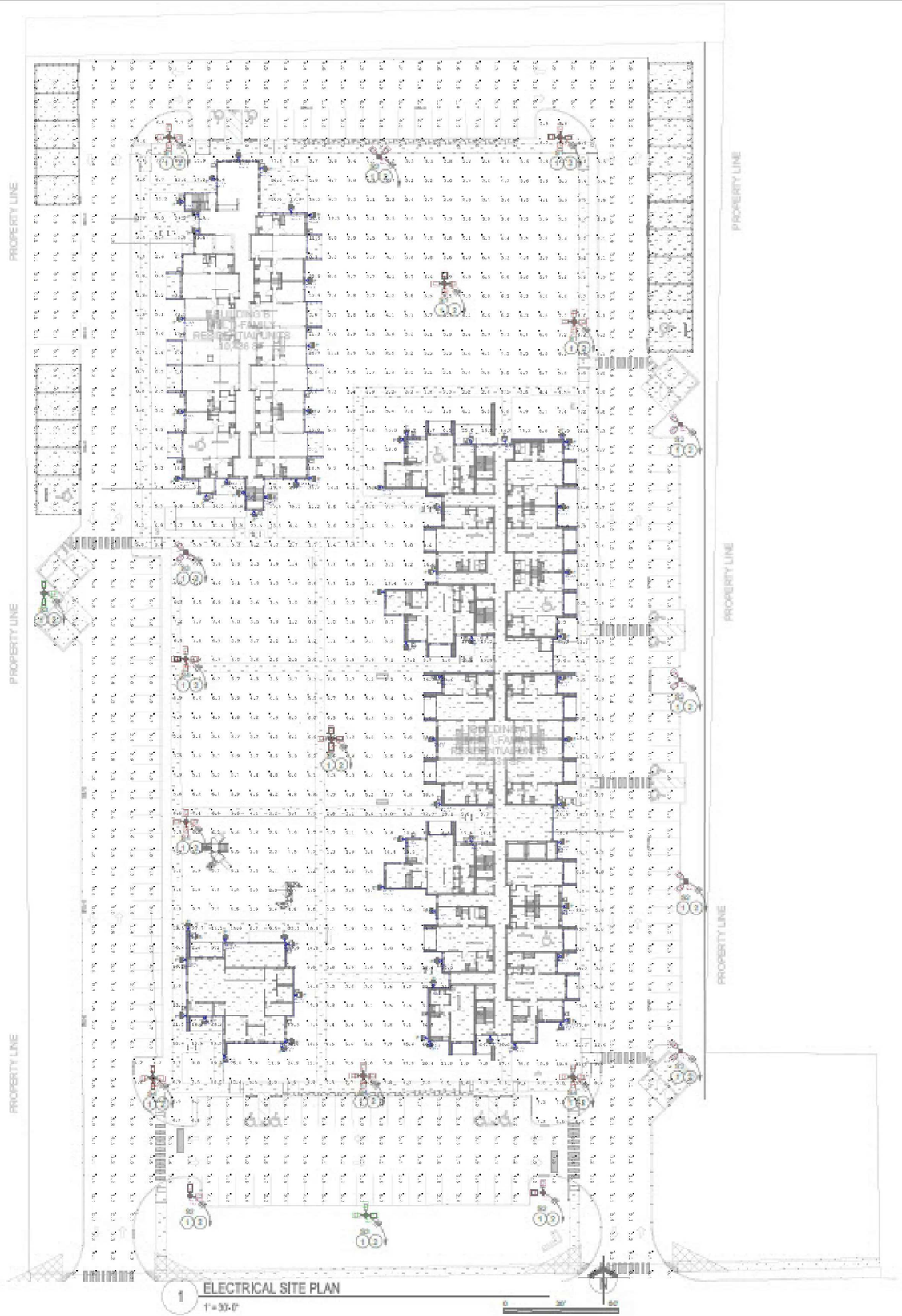
CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

JEEBS & ZUZU, LLC.
ARCHITECTS & CONTRACTORS
MAKING HOUSE CALLS
5924 ANAHEIM AVENUE NE SUITE A
ALBUQUERQUE, NM 87113
P: 505-797-1318

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

ELECTRICAL SITE PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 30' - 0"	4-1



1 ELECTRICAL SITE PLAN
1" = 30'-0"

LUMINAIRE SCHEDULE

Multi Family Apartments Santa Fe, NM

TYPE / MARK	BRAND	CATALOG NUMBER	LAMP(S) QTY	LAMP(S) WATTS	LAMP(S) TYPE	DESCRIPTION	VOLT.	LUM. WATT.	MOUNTING	COMMENTS
P	LP	WM4-BLU-CCTS-T4-BLK-PDU	1	59.7	LED	AREA LIGHT, WALL MOUNT	120	59.7	SURFACE	INSTALL UP +10'-0" AFF
S	LP	SM6-BLU-48-T3-UMB-BRZ70	1	70	LED	PARKING LOT LIGHT	120	70	POLE	20' TEXTURED BRONZE POLE, SEE POLE BASE DETAIL

GENERAL LIGHTING NOTES:
A. ANY EMERGENCY BALLASTS SPECIFIED FOR LIGHTING FIXTURES SHALL BE FACTORY INSTALLED. 10/08/2024
B. ALL EXTERIOR LIGHTING FIXTURES SHALL CONFORM TO APPLICABLE CODES INCLUDING THE NIGHT SKY ACT.

GENERAL NOTES:

A. REFER TO ARCHITECTURAL AND CIVIL SITE PLANS FOR ADDITIONAL SITE UTILITY INFORMATION.

COORDINATE THE FOLLOWING WITH OTHERS:

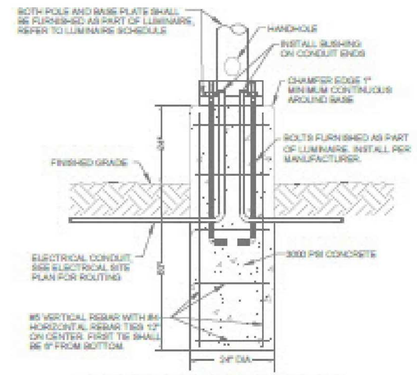
B. METER CENTER LOCATION, REFER TO POWER RISER DIAGRAM.
C. GENERAL LOCATION FOR SERVICE TRANSFORMER TO SERVE BUILDING INDICATED. COORDINATE EXACT LOCATION WITH POWER UTILITY REPRESENTATIVE.
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K. PROVIDE POWER FOR WAY-FINDING SIGN.
L. PROVIDE POWER FOR FIRE PROTECTION HOT BOX.

ELECTRICAL KEYED NOTES:

1. PARKING LOT LIGHTING FIXTURE ON 20' POLE, REFER TO POLE BASE MOUNTING DETAIL.
2. EXTEND TO CIRCUIT INDICATED THROUGH LIGHTING CONTROLS USING #10 CONDUCTORS. CIRCUIT HB1-34,36 AND HA1-34,36.

POLE BASE NOTES:

A. ALL LIGHT POLE CONCRETE BASES SHOULD BE VERIFIED WITH STRUCTURAL ENGINEER FAMILIAR WITH THE SOIL AND WIND CONDITIONS OF THIS PROJECT.
B. G.C. TO PROVIDE AND INSTALL ENTIRE POLE BASE.
C. LIGHTING FIXTURES SHALL BE OF TYPE INDICATED ON DRAWINGS.



POLE BASE MOUNTING DETAIL
SCALE: NONE

ENGINEERS SEAL

REVISIONS	DATE

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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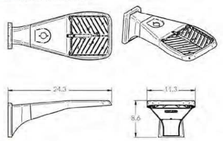
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

Site Details

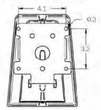
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 30' - 0"	4-2

SKYLINE
AREA LIGHT SERIES

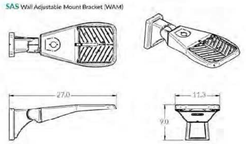
SAS Wall Fixed Mount (WFM)



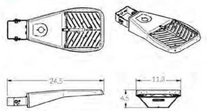
WFM/WAM Mounting Detail



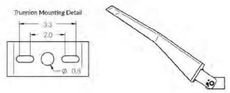
SAS Wall Adjustable Mount Bracket (WAM)



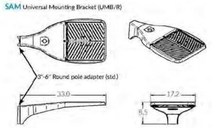
SAS Trunion Mount (TRN)



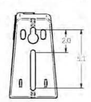
Trunion Mounting Detail



SAM Universal Mounting Bracket (UMB/R)

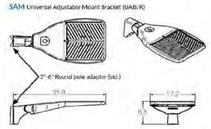


UMB/R, UAB/R Mounting Detail



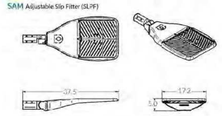
SKYLINE
AREA LIGHT SERIES

SAM Universal Adjustable Mount Bracket (UAB/R)



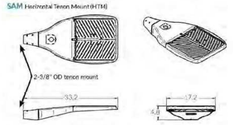


SAM Adjustable Slip Fitter (SLPF)

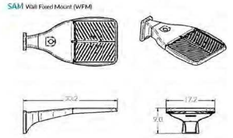




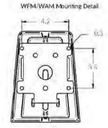
SAM Horizontal Tenon Mount (HTM)



SAM Wall Fixed Mount (WFM)

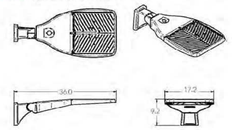


WFM/WAM Mounting Detail

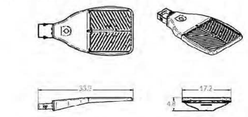


SKYLINE
AREA LIGHT SERIES

SAM Wall Adjustable Mount Bracket WAM

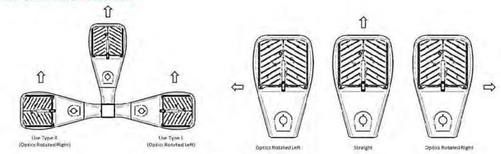


SAM Trunion Mount (TRN)





OPTICS ORIENTATION



FACTORY SELECT FINISH GUIDE



COLOR NAME AND DESCRIPTION		PRICING
WHT	- ILP White	Standard
SLV	- ILP Silver	Standard
BRZ	- ILP Bronze	Standard
BLK	- ILP Black	Standard

COLORS SHOWN ABOVE ARE TO BE USED AS REFERENCE, NOT EXACT MATCH.
PLEASE REQUEST PAINT CHIPS FOR EXACT MATCH.

ENGINEERS SEAL

DATE

REVISIONS

CASE # _____

CITY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

Outdoor Lighting Specifications

DATE: FEBRUARY 2025 | SCALE: 1" = 30' - 0" | SHEET: 4-3

Project Name: | Part Number: | Type:

SKYLINE
AREA LIGHT SERIES

FEATURES

- Specification Grade die-cast aluminum housing
- Bronze polyester powder coat finish (standard)
- Custom and factory select colors available
- 5 Optical Distributions with Highest Uniformity in their product class
- Factory Rotatable Type 2, 3, 4, 5 Square, & Automotive Front Row Optics
- Optional Split Light Control Integral Shield (HSS)
- Universal Quick Pole Mount Allows for 1 man installation on existing poles with no drilling required
- 9 Different Optional Mounting Methods (3G Rated)[3]
- Single Fastener hinged door driver access
- 120-277V Universal Voltage or 347-480V High Voltage
- 0-10V Dimmable Driver (std.)
- PIR Occupancy, Photocell, & Bi-Level Dimming Sensors Available
- 3-Pin & 7-Pin ANSI C136.41 Control Receptacle Options
- Wireless control integrated luminaire
- 3000K, 4000K & 5000K CCT
- +70 Color Rendering Index (CRI)
- Calculated L80 >100,000 hrs @ 25°C per TM-21-11
- IP66 Rated Luminaire
- Dark Sky Compliant[1,2]
- 5 Year Warranty; 10 Year Optional Warranty*
- ETL Listed for Wet Locations
- DesignLights Consortium® Premium Qualified Luminaire

[1] 3000K is IDA Listed [2] Must select UMB, WFM, or HTM mounting options to qualify
[3] TRN & SLPF LSG Rated *Requires additional Surge Protection (EP1, SP2, SP480V2). For additional details see General Terms and Conditions.

ILP
407-478-3759
www.ilp-inc.com
Product Overview
SCAN ME



* Shown with UMB Mounting

DarkSky Enlighted legrand® synapse LEVITON

SUITABLE APPLICATIONS

- Parking Lots
- Parking Structure
- Parks
- Education
- Hospitals
- Car Dealerships
- Roadways
- Shopping Centers

ORDERING GUIDE

SERIES	LUMENS	VOLTAGE	CCT	DISTRIBUTION	ORIENTATION	MOUNTING	FINISH	WARRANTY
☑ SAS Small	☐ 6L 6,000 lm	☑ U 120-277V	☐ 30 3000K	☐ T2 T2 - Type 2	☐ (Blank) - Standard	☑ SLPF Adjustable Slip Fitter	☑ BRZ	☐ (Blank) 5YR
	☑ 9L 9,000 lm	☐ HV 347-480V	☑ 40 4000K	☑ T3 T3 - Type 3	L Optics Rotated Left	☑ UMB Universal Mount Sgl/Trnr, pole 3"-5"	☐ BLK	☐ 10YR[3] 10YR
	☐ 12L 12,000 lm		☐ 50 5000K	☐ T4 T4 - Type 4	R Optics Rotated Right	☐ UAB Universal Adjustable Sgl/Trnr, pole 3"-5"	☐ WHT	
	☐ 16L 16,000 lm			☐ T5S Type 5 Square		☐ UAB/R	☐ SLV	
	☐ 18L 18,000 lm			☐ FTA Forward Throw Automotive		☐ WFM Wall Fixed Mount	☐ RAL xxxx [4]	
☐ SAM Med	☐ 24L 24,000 lm					☐ WAM Wall Adjustable Mount		
	☐ 30L 30,000 lm					☐ TRN Trunnion Mount		
	☐ 36L 36,000 lm					☐ HTM Horizontal Tenon Mount		
	☐ 42L 42,000 lm							
	☐ 50L 50,000 lm							

BASIC CONTROLS		ADVANCED CONTROLS	
☐ (Blank)	None	☐ (Blank)	None
☐ FAO[4]	Field Adjustable Output	☐ SYN[4,5]	Synapse Control System (X = Mounting Height 3-10-20, 7-20-40)
☐ CR3P[4]	3-Pin NEMA Control receptacle	☐ SYNS/LX[4]	Synapse Control System w/ Sensor (X = Mounting Height 3-10-20, 7-20-40)
☐ CR7P[4]	7-Pin NEMA Control receptacle	☐ SU/SS/LR/CL[4]	Enlighted SS Connected Lighting (CL) Sensor with Control Unit
☐ FSP-311/LXX[4,6]	Legrand FSP-311 120-277V Sensor (X = Mounting Height 3-10-20, 7-20-40)	☐ SU/SS/LR/IOT[4,5]	Enlighted SS Internet of Things (IOT) Sensor with Control Unit
☐ FSP-321/LXX[4,6]	Legrand FSP-321 347-480V Sensor (X = Mounting Height 3-10-20, 7-20-40)	☐ ZLD1Z[4,5,8]	Leviton ZLD1Z 120-277V Bluetooth Groupable Sensor (16 Devices with 8-20' & 20-40' lens included
☐ CR3P/FAO[4]	Universal 3-Pin control receptacle (See acc. for photocells) with Field Adjustable Output - 7 level selection connected to 0-10V dimming wires		
☐ CR7P/FSP/LX[4]	Universal 7-Pin control receptacle with FSP Sensor (X= Mounting Height, 3-20', 7-40') (Controls provided by others)		

OPTIONS - FACTORY INSTALLED		ACCESSORIES			
☐ (Blank)	None	☐ SAx/BIRD	Bird Spikes (x= fixture size)	☐ TL7/HVG[1,7]	Synapse Twist Lock Mesh Network 480V
☐ SP1[4]	10kA Surge Protection Device	☐ SAx/GS[7]	Rotatable Glare Shield (x= fixture size)		
☐ SP2[4]	20kA Surge Protection Device	☐ TL7/B2[1,5,7]	Synapse Twist Lock Mesh Network 120-277V	☐ TLPC/HV[4]	347-480V Twist Lock Photocell
☐ SP10V	10kA Max 480V Surge Protector	☐ ILP PAINT CHIP PACK	ILP Standard Color Paint Chips	☐ TLPC/UNV[4,6]	120-277V Twist Lock Photocell
☐ SP480V2	20kA Max 480V Surge Protector	☐ TLSC[10]	Twist Lock Shorting cap for use with CR*P Option (120V-480V)		
☐ HSS[7]	Rotatable House Side Shield				
☐ FUSE/5XXX	FUSE 120V, 277V, 347V (x= voltage)				
☐ FUSE/0XXX	FUSE 208V, 240V, 480V (x= voltage)				
☐ SMLxxx	Specified Lumen Output (xxx=lumen output, nearest hundred)				

[1] Not available with HV option. * Option Not DLC qualified
[2] Requires Bluetooth Enabled device for programming (provided by others)
[3] Only Compatible with CR3P and CR7P

[1] Contact Factory for Site Layout. For HV models contact Factory for pricing.
[2] Dimming Leads will be wired to receptacle unless otherwise specified
[3] CR7P Required
[4] Only one control option allowed

[5] Contact factory for pricing and availability.
[6] Requires additional Surge Protection (EP1, SP2, SP480V2). For additional details see General Terms and Conditions. Consult factory for pricing.
[7] UMB/R standard, see mounting options for adders or alternate mounting methods.

SKYLINE
AREA LIGHT SERIES

LED SYSTEMS INFO		3000K		4000K		5000K		BUG Rating	Watts[1]	Replaces
Part Numbers	Distribution	Lumens	Efficacy	Lumens	Efficacy	Lumens	Efficacy			
SAS-6L	2	6322	138.0	6655	145.3	6738	148.2	3-U-G1	66 W	175W MH
	3	6301	137.6	6633	144.8	6716	147.7	3-U-G2		
	4	6234	136.1	6562	143.3	6693	144.1	3-U-G3		
	5S	6345	138.5	6679	145.8	6813	148.7	3-U-G2		
	FTA	6824	149.0	7182	156.8	7327	160.0	3-U-G3		
SAS-9L	2	8661	127.9	9412	136.6	9600	137.3	3-U-G2	70 W	250W MH
	3	8932	127.5	9381	134.2	9569	134.9	3-U-G2		
	4	8817	126.1	9261	132.9	9467	133.4	3-U-G2		
	5S	8973	128.4	9455	135.1	9634	137.8	3-U-G2		
	FTA	9650	138.1	10158	145.3	10361	148.2	3-U-G3		
SAS-12L	2	12693	154.4	13361	162.5	13628	165.8	3-U-G2	82 W	320W MH
	3	12652	153.9	13318	162.0	13584	165.3	3-U-G2		
	4	12516	152.3	13175	160.3	13439	163.5	3-U-G2		
	5S	12739	155.0	13409	163.1	13677	166.4	3-U-G2		
	FTA	13701	166.7	14421	175.4	14709	178.9	3-U-G3		
SAS-15L	2	16183	148.1	16856	155.9	17191	159.0	3-U-G2	108 W	400W MH
	3	15962	147.7	16802	155.4	17138	158.5	3-U-G2		
	4	15791	146.1	16622	153.8	16954	156.8	3-U-G2		
	5S	16070	148.7	16915	156.5	17250	159.6	3-U-G2		
	FTA	17283	159.9	18193	168.3	18557	171.7	3-U-G3		
SAS-18L	2	18675	138.3	19205	143.8	19589	148.7	3-U-G2	132 W	400W MH
	3	18186	138.1	19143	145.4	19529	148.3	3-U-G3		
	4	17984	136.6	18931	143.7	19310	146.6	3-U-G3		
	5S	18310	139.0	19274	146.3	19659	149.3	3-U-G3		
	FTA	19692	149.5	20728	157.4	21143	160.5	3-U-G3		
SAM-24L	2	23494	142.4	24735	149.9	25225	152.9	3-U-G3	165 W	400W MH
	3	23373	141.7	24603	149.1	25095	152.1	3-U-G4		
	4	22800	140.8	24424	148.0	24912	151.0	3-U-G4		
	5S	23911	144.9	25169	152.5	25672	155.6	3-U-G3		
	FTA	23559	142.8	24799	150.3	25295	153.3	3-U-G2		
SAM-30L	2	30061	135.0	31653	142.1	32278	144.9	3-U-G3	222 W	750W MH
	3	29905	134.3	31482	141.4	32110	144.2	3-U-G4		
	4	29188	132.3	31231	140.3	31876	143.1	3-U-G4		
	5S	30594	137.4	32204	144.6	32844	147.5	3-U-G4		
	FTA	30146	135.4	31732	142.5	32365	145.3	3-U-G2		
SAM-36L	2	36547	150.6	38470	161.7	39239	164.9	3-U-G3	237 W	750W MH
	3	36357	152.8	38271	160.9	39038	164.1	3-U-G3		
	4	34913	146.8	36752	154.5	37483	157.6	3-U-G3		
	5S	35977	151.2	37871	159.2	38628	162.4	3-U-G4		
	FTA	35448	149.0	37314	156.8	38060	160.0	3-U-G2		
SAM-42L	2	39231	141.6	41295	149.0	42122	152.0	3-U-G3	277 W	1,000W MH
	3	39059	141.1	41157	148.5	41980	151.5	3-U-G3		
	4	38865	140.3	42932	147.7	41751	150.7	3-U-G3		
	5S	39927	144.1	42028	151.7	42869	154.7	3-U-G4		
	FTA	39341	142.0	41410	149.4	42238	152.4	3-U-G2		
SAM-50L	2	48196	142.3	50732	149.8	51747	152.8	3-U-G4	338 A	1,000W MH
	3	48033	141.9	50561	149.3	51573	152.3	3-U-G5		
	4	47771	141.1	50285	148.5	51291	151.5	3-U-G5		
	5S	49020	144.9	51631	152.5	52661	155.5	3-U-G5		
	FTA	48329	142.7	50872	150.2	51890	153.2	3-U-G3		

*Values are nominal, see IES file for more detail *Electrical data at 25C (77°). Actual wattage may differ by +/-10%.

SKYLINE
AREA LIGHT SERIES

EPA RATINGS AND VIBRATION CHART

	SLPF		UMB		UAB		WFM		WAM		TRN		HTN		WEIGHT
SAS	0.53	1.5g	0.47	3g	0.53	3g	0.47	3g	0.53	3g	0.47	1.5g	0.47	3g	11 lbs
SAM	0.71	1.5g	0.64	3g	0.71	3g	0.64	3g	0.71	3g	0.64	1.5g	0.64	3g	22 lbs

WEIGHT	4.5 lbs	2.5 lbs	5.5 lbs	3.0 lbs	6.0 lbs	2.5 lbs	3.5 lbs

* EPA Ratings listed assume Fixture is mounted horizontally. For adjustable mounting options, EPA will vary with selected angle.

TILT DEGREE		0°	30°	45°
Single	SAS	0.47	1.32	1.72
	SAM	0.64	2.49	3.32
D180°	SAS	1.03	1.32	1.72
	SAM	1.41	2.49	3.32
D90°	SAS	0.85	1.38	1.72
	SAM	1.15	2.99	3.32

TILT DEGREE		0°	30°	45°
T90°	SAS	1.13	1.83	2.39
	SAM	1.54	3.46	4.61
TN120°	SAS	1.22	2.77	3.58
	SAM	1.66	5.23	6.91
Q90°	SAS	1.13	1.83	2.39
	SAM	1.54	3.46	4.61

*EPA for UMB, WFM, TRN, and HTM mounts

ELECTRICAL DATA (AMPS)

Lumen Package	120V	208V	240V	277V	347V	480V
6L	0.58 A	0.22 A	0.19 A	0.17 A	0.13 A	0.10 A
9L	0.58 A	0.34 A	0.29 A	0.25 A	0.20 A	0.15 A
12L	0.73 A	0.42 A	0.37 A	0.32 A	0.25 A	0.18 A
15L	0.92 A	0.53 A	0.46 A	0.40 A	0.32 A	0.23 A
18L	1.14 A	0.66 A	0.57 A	0.49 A	0.39 A	0.29 A
24L	1.39 A	0.80 A	0.70 A	0.60 A	0.48 A	0.35 A
30L	1.83 A	1.06 A	0.92 A	0.79 A	0.63 A	0.46 A
36L	1.96 A	1.13 A	0.98 A	0.85 A	0.68 A	0.49 A
42L	2.27 A	1.31 A	1.13 A	0.98 A	0.78 A	0.57 A
50L	2.82 A	1.63 A	1.41 A	1.22 A	0.98 A	0.71 A

*Electrical data at 25C (77°). Actual wattage may differ by +/-10%.

SKYLINE
AREA LIGHT SERIES

FIELD ADJUSTABLE OUTPUT DATA (FAO)

Part Number	FAO Position	0	1	2	3	4	5	6	7
SAS-6L U-40-T4	Input Power (W)	46	40	35	29	24	19	13	8
	Approx Lumens @3000K	6234	5421	4749	3930	3253	2575	1762	1084
	Approx Lumens @4000K	6562	5706	4993	4137	3424	2710	1854	1141
	Approx Lumens @5000K	6693	5820	5093	4220	3492	2765	1892	1164
SAS 9L U 40 T4	Input Power (W)	70	61	52	44	35	27	19	10
	Approx Lumens @3000K	8817	7683	6550	5540	4409	3401	2393	1260
	Approx Lumens @4000K	9281	8088	6894	5834	4641	3580	2519	1326
	Approx Lumens @5000K	9467	8250	7033	5951	4734	3652	2570	1352
SAS-12L-U-40-T4	Input Power (W)	82	72	61	52	43	33	23	14
	Approx Lumens @3000K	12516	10970	9311	7937	6563	5037	3511	2137
	Approx Lumens @4000K	13175	11560	9801	8355	6909	5302	3695	2249
	Approx Lumens @5000K	13439	11810	9997	8522	7047	5408	3769	2294
SAS-15L-U-40-T4	Input Power (W)	108	95	82	70	57	44	31	18
	Approx Lumens @3000K	15791	13890	11989	10235	8334	6433	4533	2632
	Approx Lumens @4000K	16629	14621	12620	10774	8773	6772	4771	2770
	Approx Lumens @5000K	16954	14913	12872	10989	8948	6907	4866	2826
SAS-18L-U-40-T4	Input Power (W)	132	117	101	85	69	53	37	21
	Approx Lumens @3000K	17986	15940	13624	11581	9264	7221	5041	2861
	Approx Lumens @4000K	18931	16781	14342	12190	9752	7603	5306	3012
	Approx Lumens @5000K	19315	17116	14629	12434	9948	7753	5413	3072
SAM-24L-U-40-T4	Input Power (W)	165	142	123	104	84	64	44	25
	Approx Lumens @3000K	23203	19999	17297	14605	11812	9010	6187	3515
	Approx Lumens @4000K	24429	21059	18207	15395	12434	9474	6513	3701
	Approx Lumens @5000K	24912	21479	18571	15702	12682	9663	6643	3775
SAM-30L-U-40-T4	Input Power (W)	222	196	169	142	115	88	62	34
	Approx Lumens @3000K	29648	26211	22603	18990	15379	11768	8091	4544
	Approx Lumens @4000K	31231	27591	23795	19989	16189	12388	8518	4786
	Approx Lumens @5000K	31826	28143	24266	20389	16512	12636	8692	4882
SAM-36L-U-40-T4	Input Power (W)	297	261	225	189	154	118	82	46
	Approx Lumens @3000K	36913	32636	28151	23666	19181	14696	10109	5682
	Approx Lumens @4000K	38875	32563	28222	23880	19338	14795	10169	5713
	Approx Lumens @5000K	37485	33215	28786	24357	19729	15098	11230	6643
SAM-42L-U-40-T4	Input Power (W)	277	239	202	164	142	109	76	43
	Approx Lumens @3000K	38486	33551	29058	24726	19934	15301	10669	6036
	Approx Lumens @4000K	40952	35917	30598	25782	20983	16107	11230	6354
	Approx Lumens @5000K	41751	36523	31206	26226	21403	16429	11455	6481
SAM-50L-U-40-T4	Input Power (W)	339	292	253	213	174	133	93	53
	Approx Lumens @3000K	47771	41148	35652	30015	24520	18742	13105	7469
	Approx Lumens @4000K	50265	43313	37528	31595	25810	19728	13795	7862
	Approx Lumens @5000K	51291	44180	38279	32227	26326	20123	14071	8019

SKYLINE
AREA LIGHT SERIES

SPECIFICATIONS

CONSTRUCTION
The Skyline series features a slim profile die-cast aluminum housing available in 2 different sizes for a fully scalable solution. The versatile 9 optional mounting methods allow for easy installation while the hinged door allows for quick drop-down driver access for maintenance. The standard Keyhole / slotted UMB mounting bracket allows for a "no-drilling" 1-man installation by mounting the UMB on existing pole drillings and the luminaire head onto the UMB, substantially reducing installation labor. The fully gasketed housing is IP66 rated for whole luminaire ingress protection against moisture and environmental contaminants. The Skyline's low-profile design results in a low EPA, allowing pole optimization to thinner or smaller size pole shafts. Vibration rated per ANSI C136.31 on all mountings (see table Above). The Skyline Series is protected with a durable bronze polyester powder coat finish to withstand extreme weather changes without cracking or peeling.

OPTICS
The IP66 silicone gasket sealed optical chamber utilizes proprietary polycarbonate refractive optics to provide exceptional coverage and uniformity in factory installed IES Types 2, 3, 4, 5S (Square) or FTA (Forward Throw Automotive). Polycarbonate optics are impact resistant and UV stabilized for maximum longevity. Available in 5000K, 4000K, and 3000K, color temperatures per ANSI C78.377. Minimum CRI of 70. The optical integrated House side shield (HSS) option allows for improved backlight control without any large shields taking away from the site. The Skyline series produces Zero uplight and is IDA listed in 3000K color temperature. Optional field installed 3-sided glare shield accessory is available for on-site external house side protection.

ELECTRICAL
Class 1 High-performance drivers features over-voltage, under-voltage, short circuit and over temperature protection. 0-10V dimming (10% - 100%) standard. Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac). L80 >100,000 hrs. in accordance with IESNA TM-21-19 projected values at 25°C Ambient temperature. Total harmonic distortion: <20%. Power factor: >0.90. Input power stays constant over life. Minimum 6kV surge rating meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2). Additional protection is available in 10kV and 20kV options.

THERMAL
The Skyline Series features an array of High-efficacy LED's mounted on a metal core circuit board. The LED boards are mounted directly to the cast aluminum housing with heat dissipating fins to provide excellent thermal performance extending the life of electronic components. Operating Ambient Temperature: -40°C to +50°C (-40°F to 122°F) 50L Lumen -- Package: -40°C to +45°C (-40°F to 113°F).

INSTALLATION
The versatile Skyline series comes with 9 optional mounting methods. The standard keyhole / slotted universal mounting bracket (UMB) allows for a "no-drilling" 1-man installation by mounting the UMB on existing pole drillings and the luminaire head onto the UMB, substantially reducing installation labor. The 3G rated UMB quick mount allows for pole mounting onto square 4-6" poles with a vertical mounting pattern between 2"-9" and the UMB/R adds additional mounting capability to any round pole 3"-6" in diameter. The 3G rated universal adjustable mount (UAB) model adds full range tilting to the standard UMB fixed model. The 3G rated wall fixed mount (WFM) allows for easy installation to any vertical wall surface or J-box. The optional 3G rated wall adjustable mount (WAM) adds full range wall mount tilting. The 3G rated horizontal mast arm (HMA) mount is designed for straight horizontal 2"(2-3/8" OD) mast arms. The 1.5G rated adjustable slip fitter (SLPF) mounts to any vertical or horizontal tenon 2" pipe (2-3/8" OD) allowing for full range tilting.

The trunnion/yoke bracket (TRN) enables the Skyline to be used for general flood applications with full range tilting as required.
All mounting methods are provided with a 3-wire 3' outdoor rated cord is provided for wiring. 5-wire cord optional for external dimming, consult factory. See charts above for all vibration, weight, and EPA results.

CONTROLS
Standalone Controls:
Factory installed 3-Pin & 7-Pin ANSI C136.41 Control Receptacle Options available. Dusk to Dawn twist lock photocells sold separately (See accessories). Optional PIR sensors available installed in housing hinged door. Sensors provide optional on/off control, photocell capability, bi-level dimming, high-end trim, and bluetooth configuration allows for on-site modifications.

Wireless Control Systems:
The Skyline Series is wireless mesh controls ready with Synapse, Enlighted, and Leviton Bluetooth Mesh wireless control platforms. Available with and without PIR sensors. Inquire with factory for more information or for additional controls options, including customer supplied items.

WARRANTY
5 Year Warranty Standard; 10 Year Warranty Optional (Terms and Conditions apply).

CERTIFICATIONS
ETL Listed for wet locations. Tested in accordance with IESNA LM-79 and LM-80 standards. BAA compliant. RoHS Compliant. Title 24 Compliant; see local ordinance for qualification information. IP66 rated Luminaire per IEC 60598. IP66 rated optical chamber. ASTM B117 Salt Spray Tested 500 Hrs.

DLC Premium Listed Product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

SKYLINE
AREA LIGHT SERIES

BASIC

FAO
Internal 5l-level switch offers adjustable light levels for greater flexibility within one product. Utilizes 0-10V dimming wires and cannot be combined with other sensor or control options.

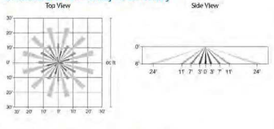
CR*P
3-Pin or 7-pin ANSI C136.41-2013 control receptacle option available for NEMA twist lock photocontrols or wireless control modules. Control accessories sold separately. Dimming leads from the receptacle will be connected to the driver dimming leads (Consult factory for alternate wiring). x = Number of pins (3 or 7).

FSP-311/Ly - FSP-321/Ly
Optional Bluetooth Programmable PIR sensor allows for Continuous Dimming, Motion and/ or daylight harvesting. Fully adjustable high/low dimmed light levels, and Adjustable time delay/ cutoff delay. The sensor is programmed via a free IOS® or Android® Sensor Configuration App (compatible device provided by others). Available in 10'-20' or 20'-40' mounting lenses. See coverage patterns below. Li=20'-40', Lo=20'-40'.

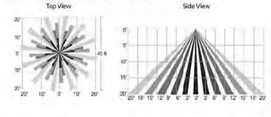
Default Settings:
- High Mode: 100% Output
- Low Mode: 10% Output
- Time Delay: 5 mins
- Cutoff: 1 hr
- Sensitivity: High
- Photocell: Disabled
- Continuous Dimming: Disabled

COVERAGE PATTERNS

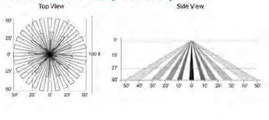
SYNS/L2 and FSP-311/Ly - FSP-321/Ly



SYNS/L3 and FSP-311/Ly - FSP-321/Ly



SYNS/L7 and FSP-311/Ly - FSP-321/Ly



SKYLINE
AREA LIGHT SERIES

ADVANCED

Synapse (SYN or TLI)
Utilizing a robust 2.4 GHz Self-Healing Mesh Network Synapse provides flexibility and scalability making it a perfect outdoor solution for both new construction and retrofit projects. The easy-to-use web application is accessible on any device with an internet connection and allows for complete customization of the system and its features. Integral radio (SYN) includes (2) 24V inputs for a Wattstopper sensor or twist lock photocell into the wireless lighting system. External radio (TLI) includes (1) low voltage input for a Wattstopper sensor, available in both universal(120-277V) or high voltage (480V). Sensors available in 20' or 40' mounting lenses. See coverage patterns below. Sensor mounted on hinged driver cover. Antenna exits side of luminaire for maximum connectivity.

Enlighted
Enlighted's three-tier, over-the-air upgradeable wireless control platforms provide out-of-the-box compliance with energy use regulations. The comprehensive capabilities of the sensor include vacancy detection, daylight harvesting, demand response, and energy savings reporting. Enlighted's enterprise system allows for easy integration of indoor and outdoor lighting with building management systems for site-wide IOT management. Enlighted ruggedized sensor mounted on hinged driver cover.

- **Enlighted Connected (SU/SS/LR/CL)**
  -Fixtures are controlled based on occupancy & ambient light. Includes individual lighting control plus connection to Enlighted Energy Manager. The Energy Manager provides data analysis for all data collected by the Enlighted Smart Sensors for energy, occupancy & environment.
- **Enlighted IOT (SU/SS/LR/OT)**
  -Fixtures are controlled based on occupancy and ambient light. Includes individual lighting control plus connection to Enlighted Energy Manager. The Energy Manager provides data analysis for all data collected by Enlighted Smart Sensors for energy, occupancy & environment. Additionally, the IOT functionality takes the data access and function beyond just lighting to a wide range of applications beyond the standard connected lighting controls.

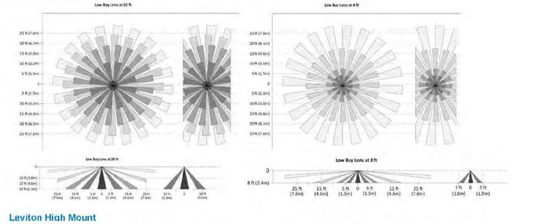
Leviton ZLD1Z
Optional Bluetooth Groupable PIR sensor that allows for Programmable Options such as, Continuous Dimming, Motion and/ or daylight harvesting, fully adjustable high/ low dimmed light levels and Adjustable time delay/ cutoff delay. The sensor is programmed via a free IOS® or Android® Sensor Configuration App (compatible device provided by others). Sensor Mesh Grouping allows for 16 devices per group, with both Occupancy and Daylight Control. Recommended spacing = 100'. Comes standard with both 8'-20' or 20'-40' mounting lenses. See coverage patterns on page 6..

Default Settings:
- High Mode: 100% Output
- Auto-On/Auto-Off with 20-minute timeout
- Sensitivity: High
- Daylight Harvesting: Enabled

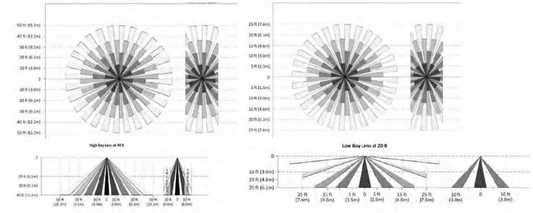
SKYLINE
AREA LIGHT SERIES

COVERAGE PATTERNS

Leviton Low Mount



Leviton High Mount



BACK LIGHT CONTROL OPTIONS



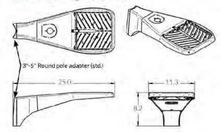
HSS
Integral House Side Shield
Delivers backlight control that significantly reduces light spill behind the pole for applications with pole locations close to adjacent properties. Shown with Medium housing., HSS rotates with optic distribution.

GS
External Glare Shield
Rotatable 3-sides fold installable external glare shield. Shown with Medium housing

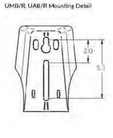
SKYLINE
AREA LIGHT SERIES

LINE DRAWINGS

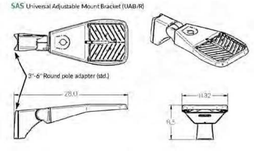
SAS Universal Mounting Bracket (UMB/R)



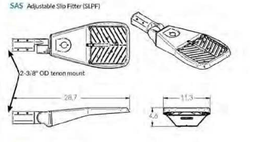
UMB/R, UAB/R Mounting Detail



SAS Universal Adjustable Mount Bracket (UAB/R)



SAS Adjustable Slip Fitter (SLPF)



Project Name:	Part Number:	Type: P

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WALL PACK SERIES

FEATURES

- Architectural Wedge die-cast aluminum housing
- Bronze polyester powder coat finish (std.)
- Custom and factory select colors available
- Full Cutoff Type III & Type IV Distributions
- 3,000 - 14,000 Delivered Lumens with up to 147 LPW
- 3000K, 4000K & 5000K CCT Selectable via Integral selector
- Lumen Selectable - 3 lumen levels per SKU
- 120-277V Universal Voltage or 347-480V High Voltage
- 0-10V Dimmable Driver (std.)
- 6kV Surge protection
- >70 Color Rendering Index (CRI)
- Calculated L70 >100,000 hrs @ 25°C per TM-21-11
- Operating Ambient Temperature: -40°C to +40°C (-40°F to 104°F)
- Bluetooth Programmable PIR Occupancy, Photocell, & Bi-Level Dimming Sensors Available
- Five ½" coin plugs on sides for conduit or electronic photocell
- Battery backup & cold weather battery options available
- IP65 Rated Luminaire
- IDA Dark Sky Compliant; 3000K lo IDA Listed
- 5 Year Warranty; 10 Year Optional Warranty
- ETL Listed for Wet Locations
- DesignLights Consortium® Premium Qualified Luminaire*

ILP
407-478-3759
www.ilp-inc.com





SUITABLE APPLICATIONS

- Exterior Wall Lighting
- Building Entrances
- Pedestrian Walkways
- Multi-use Facilities
- Industrial Facilities
- Parking Lots
- Storage Facilities
- Education
- Multi-family
- Retail
- Office

ORDERING GUIDE

SERIES	LUMENS	VOLTAGE	CCT	DISTRIBUTION	FINISH	WARRANTY	CONTROL OPTIONS
☑ VWM	☐ 3L/4L/8L[2,4] 3,645,000 lm (Selectable)	☑ U 120-277V	☑ CCT5[3] Selectable CCT (3000K, 4000K, 5000K)	☐ T3 Type 3	☐ BRZ Bronze	☐ (Blank) 5 YR	☐ ZLD1Z[2,5] Leviton ZLD1Z 120-277V Bluetooth Groupable Sensor (10' Diameter with 8-20' & 20-40' lens (ea.)
☐ 3L 3,000 lm	☐ HV[2] 277-480v			☑ T4 Type 4	☑ BLK* Black	☐ 10 Year[2] 10 YR	☐ FSP-311[1,2,5] Legend FSP-311 120-277V Sensor (X = Mounting Height 3'=0-20', 7'=20-40')
☐ 4L 4,000 lm					☐ SLV* Silver		☐ FSP-321/L[2,5] Legend RXR-101-347/480V Sensor (X = Mounting Height 3'=0-20', 7'=20-40')
☐ 5L 5,000 lm					☐ WHT* White		
☐ 8L/11L/14L[2,4] 8/11/14,000 lm (Selectable)							
☑ 8L 8,000 lm							
☐ 11L 11,000 lm							
☐ 14L 14,000 lm							

OPTIONS - FACTORY INSTALLED		SHIP-WITH ACCESSORIES	
☐ SP1[1,2]	10kA Max 120-277V Surge Protector	☑ +PCU[2]	Electronic UNIV Photocell (120-277V)
☐ SP2[1,2]	20kA Max 120-277V Surge Protector		
☐ SP1HV	10kA Max 480V Surge Protector		
☐ SP480V2	20kA Max 480V Surge Protector		
☐ FUSE/6XXX	Fuse - Single-fine Voltage (120, 277 or 347)		
☐ FUSE/2XXX	Fuse - Dual-line Voltage (208V, 240V or 480V)		
☐ EM14[2,4]	14W CEC Title 20 Battery Backup		
☐ EMCT14[2,4]	14W Cold Temp Battery Backup		

[1] Bronze finish standard. Consult factory for pricing & availability of other finishes; subject to longer lead-times
[2] Requires additional surge protection (SP1, SP1HV, SP2, SP480V2) For additional details see general terms and conditions
[3] SP1/SP2 (specified in combination with Battery Backups, separate surge protectors are required per electrical line
[4] Not Available with HV
[5] Requires Bluetooth Enabled device for programming (provided by others)
[6] Highest Lumen Package and 4000K are standard settings
[7] HV Option removes lumen and CCT selectability. Most openly lumen package and CCT (3D/4D/5D). Does not qualify for DLC
[8] Not all versions of this product may be DLC Premium qualified. Please check the DLC website at designlights.org/QPL to confirm which versions qualify.

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WALL PACK SERIES

QUICK SHIP ORDERING:

SERIES	LUMENS	VOLTAGE	CCT	DISTRIBUTION	FINISH	WARRANTY
☐ VWM	☐ 3L/4L/8L ☐ 8L/11L/14L	☐ U 120-277V	☐ CCT5[3] Selectable CCT (3000K, 4000K, 5000K)	☐ T4 Type 4	☐ BRZ Bronze	☐ (Blank) 5 YR ☐ 10 Year[1] 10 YR

ACCESSORIES	
☐ +PCU[2]	Electronic UNIV Photocell (120-277V)

[1] Requires additional surge protection (SP1, SP1HV, SP2, SP480V2) For additional details see general terms and conditions
[2] Not Available with HV
[3] Highest Lumen Package and 4000K are standard settings

LED SYSTEMS INFO[1]		3500K		4000K		5000K		BUG RATING	WATTS	REPLACES	DLC*
Part Numbers	LENS	Lumens	Efficacy	Lumens	Efficacy	Lumens	Efficacy				
VWM-3L/4L/5L-U-CCTS	T3	5304	132.0	5813	144.7	5529	137.5	B2-U0-G1	40.2	175W MH	Premium
	T4	5191	129.2	5631	141.6	5384	134.2	B1-U0-G1			
VWM-3L-U-CCTS	T3	2678	133.4	2935	146.2	2781	138.6	B1-U0-G1	20.1	150W MH	Premium
	T4	2621	130.6	2873	143.1	2723	135.7	B1-U0-G1			
VWM-4L-U-CCTS	T3	3949	132.6	4328	145.3	4132	137.7	B1-U0-G1	29.8	150W MH	Premium
	T4	3866	129.8	4236	142.3	4015	134.8	B1-U0-G1			
VWM-5L-U-CCTS	T3	5304	132.0	5813	144.7	5539	137.5	B2-U0-G1	40.2	175W MH	Premium
	T4	5191	129.2	5631	141.6	5384	134.2	B1-U0-G1			
VWM-8L/11L/14L-U-CCTS	T3	13302	132.9	14601	145.9	13829	138.1	B3-U0-G2	100.1	320W MH	Premium
	T4	12875	128.6	14079	141.2	13380	133.7	B3-U0-G2			
VWM-8L-U-CCTS	T3	8030	134.5	8817	147.7	8348	139.9	B2-U0-G2	59.7	250W MH	Premium
	T4	7771	130.2	8533	143.0	8080	135.4	B2-U0-G1			
VWM-11L-U-CCTS	T3	10708	133.6	11757	146.7	11132	138.9	B3-U0-G2	80.2	320W MH	Premium
	T4	10363	129.3	11379	142.0	10774	134.4	B3-U0-G2			
VWM-14L-U-CCTS	T3	13302	132.9	14605	145.9	13829	138.1	B3-U0-G2	100.1	320W MH	Premium
	T4	12875	128.6	14079	141.2	13380	133.7	B3-U0-G2			

*Values are nominal, see IES file for more detail *Electrical data at 25C (77F). Actual wattage may differ by +/- 10%
Not all versions of this product may be DLC Premium qualified. Please check the DLC website at designlights.org/QPL to confirm which versions qualify.

ELECTRICAL DATA (AMPS)

Lumen Package	Wattage	120V	208V	240V	277V	347V	480V
VWM-3L/4L/5L-U-CCTS	40.2 W	0.34 V	0.19 V	0.17 V	0.15 V	0.12 V	0.08 V
VWM-3L-U-CCTS	20.1W	0.17 V	0.10 V	0.08 V	0.07 V	0.06 V	0.04 V
VWM-4L-U-CCTS	29.8 W	0.253 V	0.14 V	0.12 V	0.11 V	0.09 V	0.06 V
VWM-5L-U-CCTS	40.2 W	0.34 V	0.19 V	0.17 V	0.15 V	0.12 V	0.08 V
VWM-8L/11L/14L-U-CCTS	100.1 W	0.83 V	0.48 V	0.42 V	0.36 V	0.29 V	0.21 V
VWM-8L-U-CCTS	59.7 W	0.50 V	0.29 V	0.25 V	0.22 V	0.17 V	0.12 V
VWM-11L-U-CCTS	80.2 W	0.67 V	0.39 V	0.33 V	0.29 V	0.23 V	0.17 V
VWM-14L-U-CCTS	100.1 W	0.83 V	0.48 V	0.42 V	0.36 V	0.29 V	0.21 V

*Electrical data at 25C (77F). Actual wattage may differ by +/- 10%

viewpoint

WALL PACK SERIES

SPECIFICATIONS

CONSTRUCTION

The Viewpoint Wall Pack series features an architectural rectilinear wedge shape with die-cast aluminum construction. The VWM is prosected with a durable Bronze polyester powder coat finish to withstand extreme weather changes without cracking or peeling with optional wet paint Black, White, and Silver finishes (Consult factory for pricing & availability of alternate finishes). The recessed LED source allows for a full cutoff designation with no uplight and complies with IDA in 3000K CCT. The fully gasketed housing is IP65 rated for ingress protection against moisture and environmental contaminants. A one-piece silicone gasket seals door and back box. Salt Spray tested for 500 hrs.

OPTICS

The Isolated IP65 rated silicone gasket sealed optical chamber utilizes impact resistant and UV stabilized polycarbonate optics to provide exceptional coverage in IES types T3 & T4 distributions. CCT Selectable via integral switch in 3000K, 4000K, & 5000K color temperatures per ANSI C78.377. 5 Step McAdams Ellipse Binning. Minimum CRI of 70. The VWM produces Zero uplight and is IDA listed in 3000K color temperature.

ELECTRICAL

High-performance driver features over-voltage, under-voltage, short circuit and over temperature protection. 0-10V dimming (10% - 100%) standard. Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (277-480 Vac). L70 >100,000 hrs. in accordance of ESNA TM-21-19 Projected values at 25°C Ambient temperature. Total harmonic distortion: 0.90. Input power stays constant over life. Minimum 6kV surge rating, meets Category C Low operation (per ANSI/IEEE C62.41.2). Additional protection is available in 10kV and 20kV options. Optional 120-277V battery backup & cold weather battery options provide 90 minutes of constant power to the LED system, ensuring code compliance. Select models CEC title 20 Compliant, see ordering guide.

THERMAL

The VWM features an array of High-efficacy LED's mounted on a metal core circuit board. The LED boards are mounted directly to the cast aluminum housing with heat dissipating fins to provide excellent thermal performance extending the life of electronic components. Operating Ambient Temperature: -40°C to +40°C (-40°F to 104°F). Operating temperature for standard battery backup: 0°C to +60°C (+32°F to +104°F). Cold Weather battery backup: -20°C to +40°C (-4°F to +104°F).

INSTALLATION

The Viewpoint Wall Pack is designed for effortless installation to standard 3-1/2" to 4" round/octagonal, 4" square, single gang, masonry junction boxes or vertical surface mounting (secured by lag bolts (supplied by others)), 1/2" NPT conduit entry points allow for surface conduit or thru branch wiring. Back box is an authorized electrical wiring compartment. Integral CCT selector allows for CCT tuning at time of installation.

CONTROLS

Five 1/2" NPT apertures allow for field or factory installed 120-277V universal electronic photocell. Optional PIR sensors available installed separate mounting box below the luminaire. Sensors provide optional on/off control, photocell capability, bi-level dimming, high-end trim, and Bluetooth configuration allows for on-site modifications. Grouping Options available via ZLD1Z sensor. See page 4 for more details.

WARRANTY

5 Year Warranty Standard, 10 Year Warranty Optional (Terms and Conditions apply)

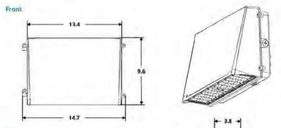
CERTIFICATIONS

ETL Listed for wet locations. IP65 Rated per IEC 60598. Tested in accordance with IESNA LM-79 and LM-80 standards. RoHS Compliant. Title 24 Compliant; see local ordinance for qualification information.

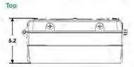
LINE DRAWINGS

VWM

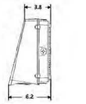
Front



Top



Side



viewpoint

WALL PACK SERIES

CONTROL OPTIONS

BASIC CONTROLS



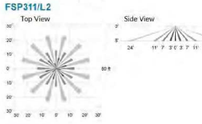
FSP-311

Optional Bluetooth Programmable PIR sensor allows for Continuous Dimming, Motion and/ or daylight harvesting, Fully adjustable high/low dimmed light levels, and Adjustable time delay/ cutoff delay. The sensor is programmed via a free iOS® or Android® Sensor Configuration App (compatible device provided by others). Available in 8' or 20' mounting lenses. See coverage patterns below.

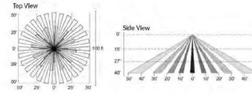
Default Settings:
- High Mode: 100% Output
- Low Mode: 10% Output
- Time Delay: 5 mins
- Cutoff: 1 hr
- Sensitivity: High
- Photocell: Disabled
- Continuous Dimming: Disabled

COVERAGE PATTERNS

FSP311/L2



FSP311/L7



ADVANCED



PCU
Three 1/2" apertures allow for field or factory installed 120-277V universal electronic pencial photocell

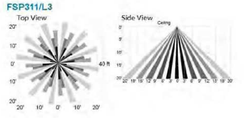
ADVANCED CONTROLS

Leviton ZLD1Z

Optional Bluetooth Groupable PIR sensor that allows for Programmable Options such as, Continuous Dimming, Motion and/ or daylight harvesting, fully adjustable high/low dimmed light levels, and Adjustable time delay/ cutoff delay. The sensor is programmed via a free IOS® or Android® Sensor Configuration App (compatible device provided by others). Sensor Mesh Grouping allows for 16 devices per group, with both Occupancy and Daylight Control. Recommended spacing = 100'. Comes standard with both 8'-20' or 20'-40' mounting lenses.

Default Settings:
- High Mode: 100% Output
- Auto-ON/Auto-OFF with 20-minute timeout
- Sensitivity: High
- Daylight Harvesting: Enabled

FSP311/L3



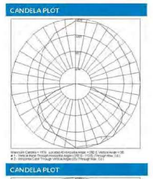
viewpoint

WALL PACK SERIES

PHOTOMETRIC REPORTS

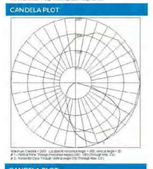
LUMINAIRE DATA	
Part Number	VWM-3L/4L/5L-U-40-T3
Description	ViewPoint Wall Pack, Selectable 3,000/4,000/5,000 Lumens, 4000K CCT, Type 3 Optic
Fixture Lumens (lm)	5813 Lumens
Wattage (W)	40.18 W
Efficacy (lm/W)	144.7 lm/W
Mounting	Wall-Mounted
Spacing Criteria	N/A

CANDELA PLOT



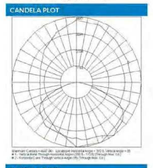
LUMINAIRE DATA	
Part Number	VWM-3L/4L/5L-U-40-T4
Description	ViewPoint Wall Pack, Selectable 3,000/4,000/5,000 Lumens, 4000K CCT, Type 4 Optic
Fixture Lumens (lm)	5632 Lumens
Wattage (W)	39.77 W
Efficacy (lm/W)	141.6 lm/W
Mounting	Wall-Mounted
Spacing Criteria	N/A

CANDELA PLOT



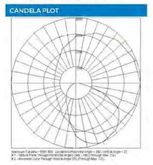
LUMINAIRE DATA	
Part Number	VWM-8L/11L/14L-U-40-T3
Description	ViewPoint Wall Pack, Selectable 8,000/11,000/14,000 Lumens, 4000K CCT, Type 3 Optic
Fixture Lumens (lm)	13302 Lumens
Wattage (W)	100.11 W
Efficacy (lm/W)	132.9 lm/W
Mounting	Wall-Mounted
Spacing Criteria	N/A

CANDELA PLOT



LUMINAIRE DATA	
Part Number	VWM-8L/11L/14L-U-40-T4
Description	ViewPoint Wall Pack, Selectable 8,000/11,000/14,000 Lumens, 4000K CCT, Type 4 Optic
Fixture Lumens (lm)	12875 Lumens
Wattage (W)	49.5 W
Efficacy (lm/W)	100.11 lm/W
Mounting	Wall-Mounted
Spacing Criteria	N/A

CANDELA PLOT



ENGINEERS SEAL	
DATE	
REVISIONS	

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

Outdoor Lighting Specifications

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 30' - 0"	4-5

TABLE 14-8.7-2: Architectural Design Standards and Point Allocations (See Note 1)

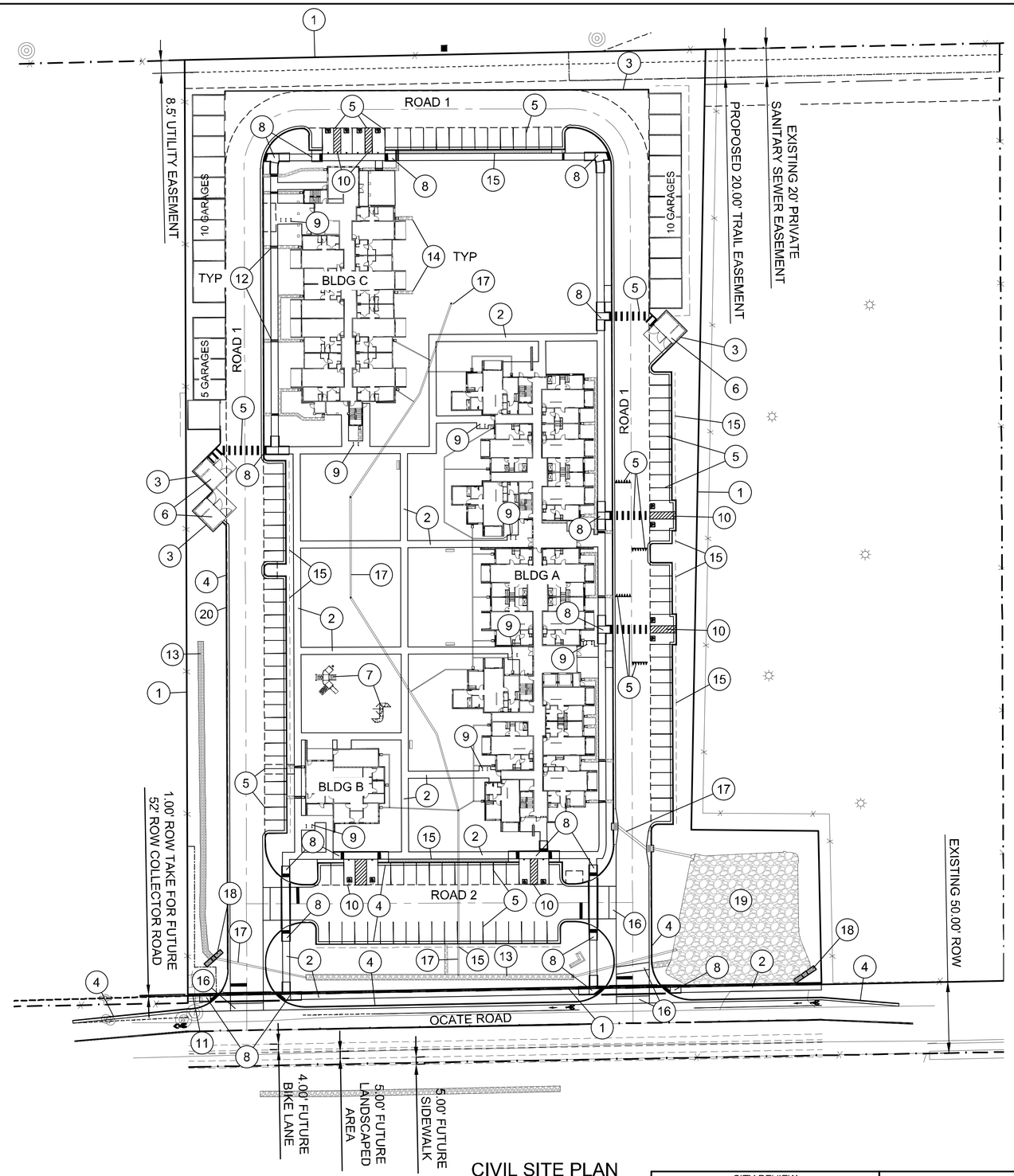
Architectural Design Standards			1111 Ocate Design Solution	
		Points^(1)	Points Achieved	Justification
WALLS				
Predominant Exterior Surface Material	Stucco, adobe	30	30	All Exterior Wall surfaces are Stucco
	Brick, natural stone, and integrally colored unit masonry	25	na	no brick or masonry
	Concrete and non-integrally colored unit masonry	20	na	no concrete or CMU
	Metal siding, glass curtainwall systems, glass block, wood siding, and simulated materials	10	na	no metal siding or curtain walls
	Mirrored glass curtainwall systems	-10	na	no mirrored glass
Color of Predominant Exterior Surface Material	Earthtones, creams, and pastels of earthtone hues including but not necessarily limited to rose, peach, and terra cotta colors	30	30	All Stucco is earthtones and creams and terra cotta - (see stucco color samples) Primary Colors #1(SW 6099) and #2(SW 6104) are from the same hue (and therefore not considered different colors). Color #3 (Historic SW 2839) is a terra cotta color from Sherwin Williams Historic collection.
	Pastel colors of non-earthtone hues, whites, grays, and grayish greens	15	na	no pastels or non-earth tones used
	High-intensity colors	-10	na	no high-intensity colors
	Metallic colors, glass and black	-10	na	no metallic colors
Exterior Surface Treatment	(A) Wall surfaces appear monolithic with at least 75 percent of the total wall area one material and one color. Differing shades of the same general hue shall not be considered different colors. Non-solar fenestration, window and door awnings, applied trim, and accent materials, colors, and decorative bands, with the exception of stucco, masonry or concrete control joints, are used in such a way that they do not give a panelized or prefabricated appearance, produce striped or checkerboard patterns, or exceed 25 percent of the surface area of any façade. Fenestration and/or accent colors on wall surfaces under portals or canopies having a horizontal depth of at least six feet shall be exempt from area calculations	10	0	100% of exterior wall finishes are stucco. Windows and exterior doors do not exceed 25% of the surface area of any faade. The greatest percentage is 23.99% and is located on the east elevation of Building A. As Color #1 and Color #2 are different shades of the same hue, they are considered the same color. On the "body" of Building A, the facade is divided with a lighter color on top of a more saturated color (Color #1 is above color #3) In these locations, the ratio of color #1 to color #3 exceed 25%, however, there is also a wall plane change. As the two planar surfaces are physically different walls, the maximum 25% ratio is not applicable and the two walls are monolithic in appearance. None of the colors or exterior wall features are used in such a way as to create a "panelized" appearance and do not create striped or checker board patterns.
	(B) Wall surfaces do not meet the criteria set forth in paragraph (A) above	-10	0	All planar wall surfaces and contigous walls are of a single color and have a monolithic appearance.
ROOFS				
Form	(A) Flat roof surfaces entirely concealed from public view by parapets	20	20	All roofs are flat and roof surfaces are concelaed from public view

	(B) Flat roof surfaces not entirely concealed from public view by parapets, uniformly sloping roofs, or any combination of at and uniformly sloping roofs, having a height, from springline to peak, that does not exceed the average height of the supporting walls and having a slope with greater than or equal to four feet of vertical rise for every 12 feet of horizontal run and less than or equal to 12 feet of vertical rise for every 12 feet of horizontal run	15	na	not applicable
	(C) Uniformly sloping roofs or any combination of at and uniformly sloping roofs, having a height, from springline to peak, that does not exceed the average height of the supporting walls and having a slope with less than four feet of vertical rise for every 12 feet of horizontal run or having a slope with greater than 12 feet of vertical rise for every 12 feet of horizontal run	10	na	not applicable
	(D) Any type of sloping roof having a height, from springline to peak, that exceeds the average height of the supporting walls; non-uniformly sloping roofs; or any combination of at and non-uniformly sloping roofs	-10	na	not applicable
Predominant Material	(A) All surfaces are concealed from public view	20	20	All roofs are flat and roof surfaces are concelaed from public view
	(B) Standing, flat, or batten seam metal roofing, or membrane, asphalt or gravel surfaces exposed to public view	15	na	not applicable
	(C) Flat tiles of clay, concrete or slate	10	na	not applicable
	(D) Barrel tiles of clay, concrete, or slate; and asphalt shingles	5	na	not applicable
	(E) Wood shingles or shakes and other materials including but not necessarily limited to plastic, berglass or metal roof tiles	-10	na	not applicable
Predominant Color	(A) All surfaces are concealed from public view	15	15	All roofs are flat and roof surfaces are concelaed from public view
	(B) Dark reds, browns, and earthtones, and natural metals including aluminum, zinc, tin, and lead	10	na	not applicable
	(C) Low-intensity colors other than those stated above	5	na	not applicable
	(D) White	0	na	not applicable
	(E) Bright, non-fading, high-intensity colors and any use of multiple colors	-15	na	not applicable
BUILDING FORM				
Massing	(A) One-story buildings with over 10,000 square feet of gross floor area and multi-story buildings with over 20,000 square feet of gross floor area which are designed with wall plane projections or setbacks on each publicly visible façade having a depth of at least three percent of the length of the façade and extending at least 20 percent of the length of the façade	30	30	Each building's façade is comprised of multiple wall plane shifts. These shifts varry in depth from the main building in dimension (Building A: 2 feet to 20 feet in depth; 10 feet to 20 feet in length) (Community Building: 2 feet to 30 feet in depth, 10 feet to 25 feet in lenght) Building C: 2 feet to 24 feet in depth, 10 feet to 26 feet in length). Wall projections and setbacks are found on every facade of each building.

	(B) One-story buildings with less than or equal to 10,000 square feet of gross floor area and multi-story buildings with less than or equal to 20,000 square feet of gross floor area which are designed with either offsetting wall planes or upper story stepbacks of at least four horizontal feet, or a recessed entry space or projecting canopy or portal having a depth of at least six horizontal feet, on at least one publicly visible façade	30		Each building has been designed with offsetting wall planes that are more than 4 feet horizontal. This is true of every façade on every building. Upper Story Setbacks of not less than 4 feet are also found at each building. (Building A = 20. Community Building B = 4. Building C = 10). Additionally, each building has been designed with recessed entry spaces of at least 6 feet. Building A includes 8 number of such entries. Community Building B includes 2 such entries, and Building C includes 3 such entries. These entries are located on each of the publicly visible building facades.
	(C) Buildings not utilizing the massing techniques described in paragraphs (A) or (B) above	0	na	not applicable
DOORS AND WINDOWS				
Treatment	(A) More than 50 percent of doors, windows and glazed surfaces, which are not located under portales or canopies having a horizontal depth of at least six feet, have either frames recessed a minimum of two inches, are cased with trim, have divided lites, or have exposed or otherwise articulated lintels	20	20	100% of windows and doors are to be setback from the predominanty wall surface by not less than 2 inches. This will be accomplished in the wall framing. Note #4 on the exterior elevations
	(B) More than 50 percent of doors, windows and glazed surfaces do not meet the requirements set forth in paragraph (A) above	0	na	not applicable
Area	(A) All wall surfaces which are not located under portales or canopies having a horizontal depth of at least six feet, and which do not include solar fenestration, have less than or equal to 50 percent openings consisting of doors, windows, glazing and other penetrations	20	20	For wall surfaces which are not covered with 6 foot projections, the maximum percentage of opening to wall is 25% and is located on the north façade of Building C.
	(B) Wall surfaces do not meet the requirements as set forth in paragraph (A) above	0	na	not applicable
Location	(A) All doors, windows and glazed surfaces, on structures having a gross floor area greater than 150 square feet, are located at least two feet from outside building corners	20	20	100% of windows on the building are located 2 feet or more from the building corners. The nearest window to corner dimension is 2 feet, and is located on the furthest west projecting wall planes on the west façade of Building A and on north wall of Building C.
	(B) All doors, windows and glazed surfaces, on structures having a gross floor area less than or equal to 150 square feet, have at least a two inch mullion at inside and outside building corners	20	na	Not applicable - corner windows not used.
Glazing	(A) All glazing is clear or tinted neutral gray	10	10	All glazing is to be clear. See Note #5 on the exterior elevations.
	(B) Any use of colored glazing	0	na	All glazing is to be clear. See Note #5 on the exterior elevations.
	(C) Any use of mirrored glazing	-10	na	All glazing is to be clear. See Note #5 on the exterior elevations.
EQUIPMENT				
Screening	(A) All roof and wall mounted mechanical, electrical, communications, and service equipment, including satellite dishes and vent pipes, are screened from public view by parapets, walls, fences, dense evergreen foliage, or by other means	10	10	All roof and wall equipment (mechanical, electrical, service, communications, staelite dishes, vents, pipes) are to be screened from public view by the building parapets, fences, and/or walls. See Note #6 on exterior elevations.
	(B) All building mounted equipment set forth in paragraph (A) above is either screened; and/or painted to match visually adjacent surfaces	5	na	not applicable

	(C) All building mounted equipment set forth in paragraph (A) above is not screened and/or painted to match visually adjacent surfaces	-10	na	not applicable

225 Total Points Achieved
205 Points Required
245 > 205 - Criteria 14-8.7 met



N

0 20 40 80

SCALE: 1" = 40'

CIVIL SITE PLAN

SCALE: 1" = 40'

SHEET KEYNOTES

1. PROPERTY LINE
2. CONCRETE SIDEWALK. SEE SHEET 6-6
3. 6" STAND-UP CURB. SEE SHEET 6-6
4. 2' STANDARD CURB & GUTTER. SEE SHEET 6-6
5. PROPOSED STRIPING. SEE 10 SERIES SHEETS
6. TRASH ENCLOSURE. SEE SHEET 6-6
7. PLAYGROUND. SEE ARCHITECTURAL PLANS
8. ADA ACCESSIBLE CURB RAMP. SEE SHEETS 6-8 & 6-9
9. BICYCLE PARKING. SEE ARCHITECTURAL PLANS
10. ADA PARKING. SEE SHEET 10-1
11. AREA OF ROW TO BE DEDICATED TO THE CITY OF SANTA FE. SEE TYPICAL SECTIONS, SHEET 6-2 FOR DETAILS
12. PROPOSED SIDEWALK CULVERT
13. PROPOSED 4' WIDE SWALE. SEE SHEET 6-7 FOR DETAILS
14. PROPOSED 2' WIDE SWALE FROM ROOF DRAINS. SEE SHEET 6-7 FOR DETAILS
15. PARKING OVERHANG LINE
16. PROPOSED 5' TYPE II VALLEY GUTTER. SEE SHEET 6-6
17. PROPOSED STORM SEWER. SEE SHEETS 11-3 & 11-4 FOR PLANS AND PROFILES
18. GABION WALL. SEE SHEET SERIES 14
19. POND W/ GRAVEL LINED BOTTOM
20. PLACE CURB CUTS SPACED 40' ON CENTER ALONG PORTION OF CURB SOUTH OF TRASH ENCLOSURE AND NORTH OF CURB RETURN. SEE SHEET 6-6

LEGEND

- HIGH VISIBILITY CROSS WALK SEE SHEET 10-2
- CONTROLLED CROSS WALK SEE SHEET 10-2
- STOP BAR, SEE SHEET 10-2
- PROPOSED 4' WIDE SWALE SEE SHEET 6-7
- PROPOSED 2' WIDE SWALE SEE SHEET 6-7

ENGINEERS SEAL — FOR REVIEW ONLY

DATE

REVISIONS

CASE # _____

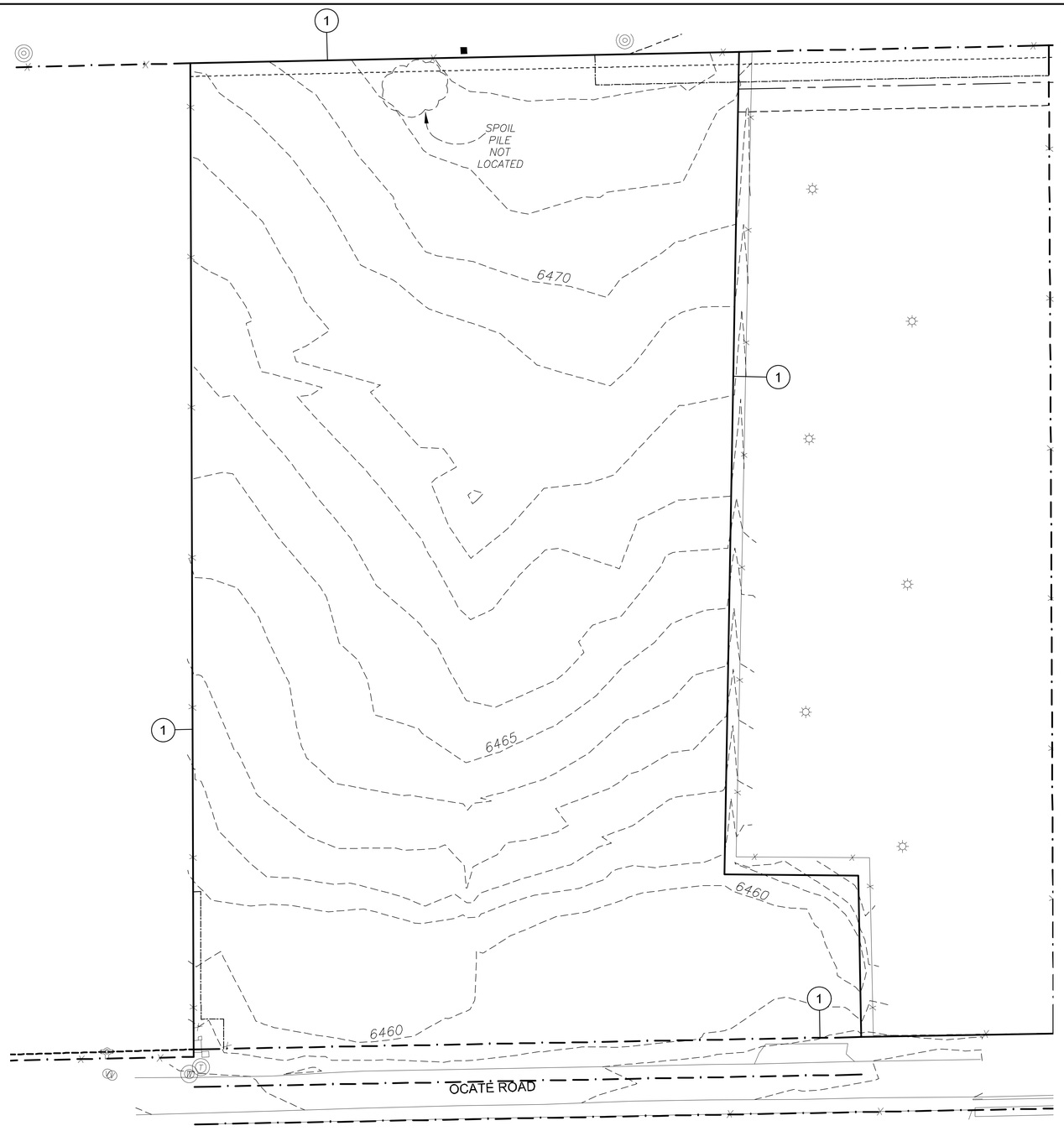
CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
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INFRASTRUCTURE PLANS FOR OCATE APARTMENTS SANTA FE, NEW MEXICO

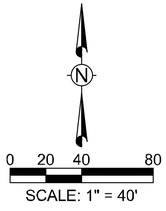
CIVIL SITE PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	5-1



SHEET KEYNOTES

1. PROPERTY LINE



LEGEND

AREA OF 20% TO 30% SLOPE

AREA OF 30% AND GREATER SLOPE

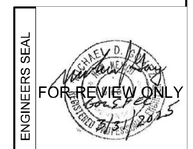
NOTE:

1. ALL TOPOGRAPHIC INFORMATION IS PROVIDED BY CORNERSTONE LAND SURVEYING.
2. THIS SLOPE ANALYSIS IS BASED UPON 1 FOOT CONTOUR INTERVALS.
3. THE TOTAL AMOUNT OF NATURAL 30% OR GREATER SLOPES DISTURBANCE ON THIS PROJECT IS 0 SQUARE FEET.
4. THERE ARE NO 20% OR GREATER SLOPES WITHIN THE PROJECT LIMITS.

SLOPE ANALYSIS MAP

SCALE: 1" = 40'

ENGINEERS SEAL



DATE

REVISIONS

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

SLOPE ANALYSIS MAP

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	5-2

NM DEPT OF TRANSPORTATION STORAGE LOT

VACANT LAND

NEW MEXICO SCHOOL FOR THE DEAF
INSTRUMENT No.232532
W.D. BK.B PG.114

12 7
13 18

SANTA FE MOBILE HOME HACIENDA
W.D. BK. 808 PG.605
W.D. BK. 288 PG.261
PLAT BK.344 PG45 JUAN FLORES
ALTA SURVEY BY ALLEN C. GRACE N.M.L.S 12443

SANTA FE MOBILE HOME HACIENDA

LOT A-2
5.64 ACRES ±
1111 OCATE ROAD

1111 OCATE ROAD

CHAIN-LINK FENCE

LOT A-1
1107 OCATE ROAD
N/F SANTA FE DEALERSHIP ACQUISITION, LLC
W.D. INSTRUMENT No.1897064
PBK845 PG15

STORAGE LOT

LITHIA CHRYSLER

TRACT C
N/F LITHIA REAL ESTATE INC.
W.D. INSTRUMENT No.1841103
PBK754 PG37

N/F THE LEASING CO.
W.D. BK982 PG97
N/F LEE & SUSAN NEWMAN
W.D. BK273 PG1
PBK271 PG1
NEWMANS NURSERY

DRIVEWAY

NEWMAN'S NURSERY

OCATE ROAD

50' R.O.W.

50' ROW

EXISTING COMMERCIAL
BUILDINGS

UNPAVED ACCESS ROAD

SUBARU OF SANTA FE

VACANT LAND

LEGEND

- PROPERTY LINE / ROW
- EXISTING ROADWAY
- DEVELOPEMENT AREA
- EXISTING RESIDENTIAL
- EXISTING COMMERCIAL

N

0 25 50 100
SCALE: 1" = 50'

FOR REVIEW ONLY

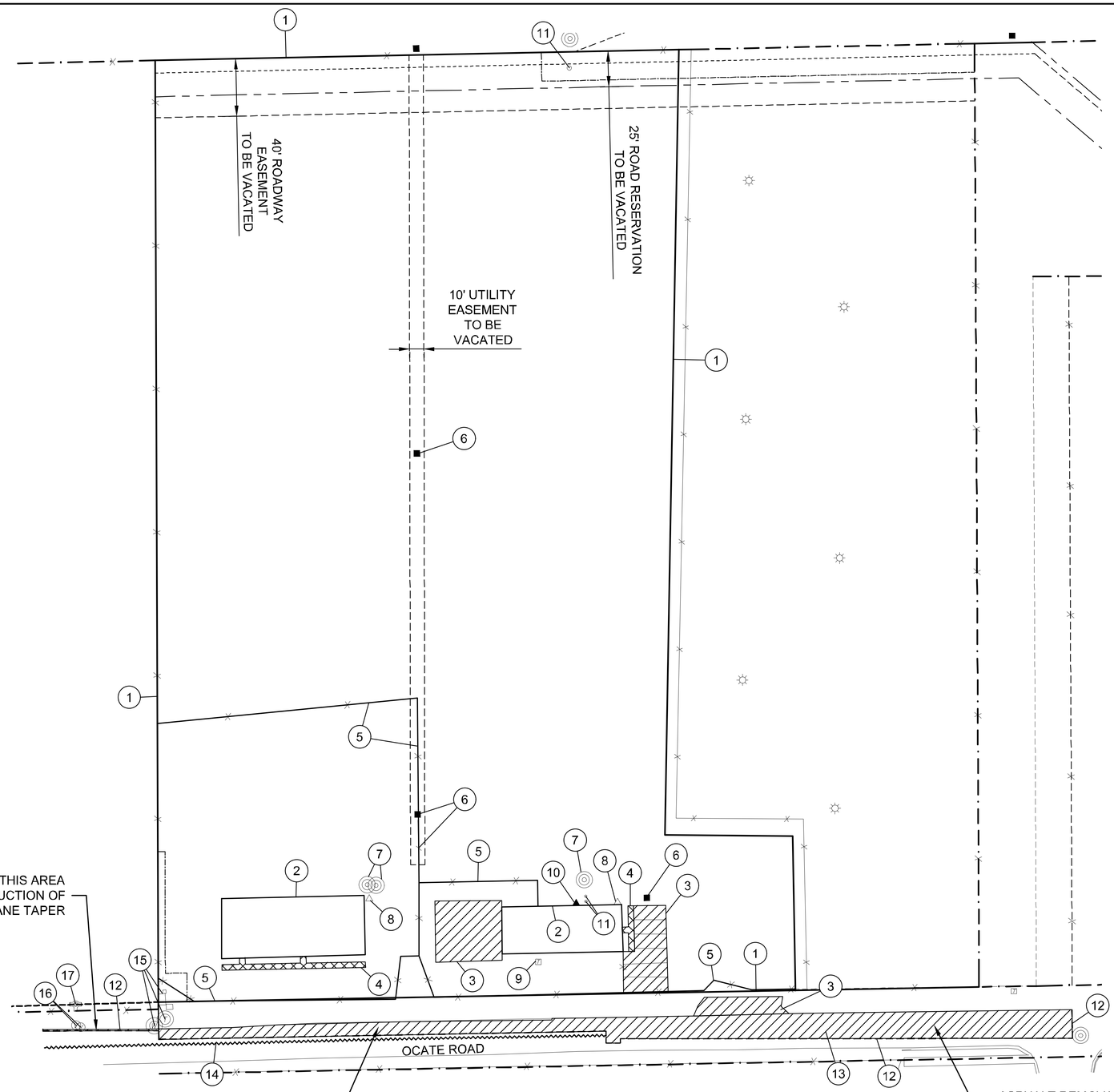
EXISTING CONDITIONS MAP
SCALE: 1" = 50'

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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

EXISTING CONDITIONS MAP

DATE:	SCALE:	SHEET:
SEPTEMBER 2024	1" = 50'	5-3



SHEET KEYNOTES

1. PROPERTY LINE
2. DEMOLISH EXISTING METAL BUILDING
3. DEMOLISH EXISTING ASPHALT
4. DEMOLISH EXISTING CONCRETE
5. DEMOLISH EXISTING FENCE AND GATES
6. EXISTING UTILITY POLES, OVERHEAD LINES, AND GUY WIRES TO BE REMOVED BY OTHERS
7. DEMOLISH EXISTING MANHOLE. SANITIZE LINES AND ABANDON IN PLACE
8. DEMOLISH EXISTING GAS FACILITIES
9. DEMOLISH EXISTING TELEPHONE PEDESTAL
10. DEMOLISH EXISTING UTILITY PANEL
11. DEMOLISH EXISTING CLEANOUT
12. SAWCUT
13. REMOVE AND REPLACE ASPHALT ON OCATE ROAD (MATCH EXISTING)
14. OBLITERATE STRIPING
15. UTILITY APPURTENANCES TO BE RELOCATED BEHIND PROPOSED SIDEWALK AND WITHIN EXISTING UTILITY EASEMENT BY RESPECTIVE UTILITY COMPANIES (WATER, TELEPHONE, GAS)
16. EXISTING WATER VALVES TO BE ADJUSTED TO FINISHED GRADE, MADE TRAFFIC RATED, OR RELOCATED AS NECESSARY
17. EXISTING HYDRANT TO REMAIN UNDISTURBED

N

0 20 40 80

SCALE: 1" = 40'

DEMOLITION PLAN

SCALE: 1" = 40'

LEGEND

- SAWCUT
- AREA OF CONCRETE REMOVAL
- AREA OF ASPHALT REMOVAL

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

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DATE

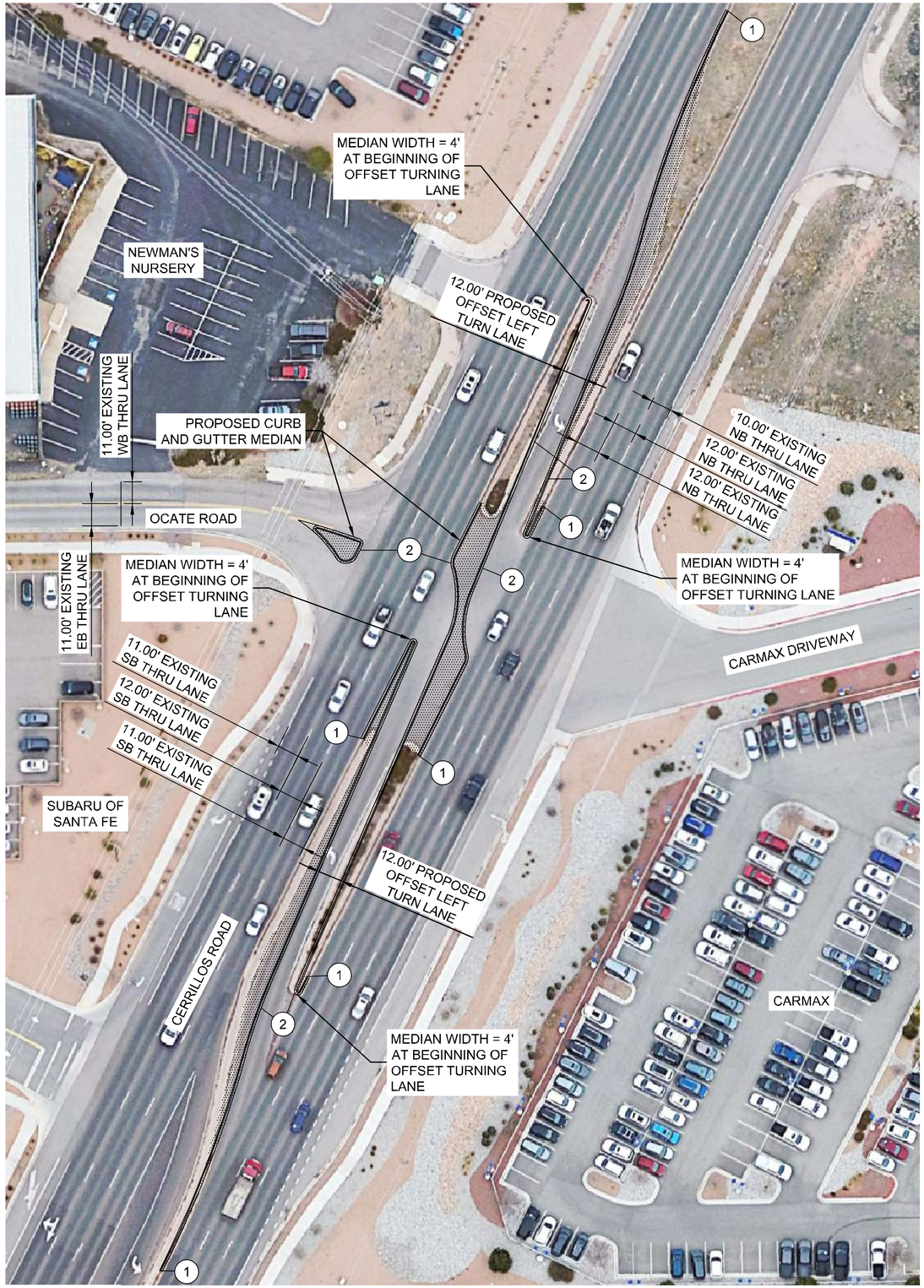
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INFRASTRUCTURE PLANS FOR OCATE APARTMENTS SANTA FE, NEW MEXICO

DEMOLITION PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	5-4



SCHEMATIC OFFSITE IMPROVEMENT PLAN
SCALE: 1" = 30'

0 15 30 60
SCALE: 1" = 30'

SHEET KEYNOTES

1. TIE TO EXISTING CURB AND GUTTER
2. PROPOSED MEDIAN CURB AND GUTTER

NOTE:
TOPOGRAPHIC MAPPING INCLUDING DETAILED DESIGN DRAWINGS INCLUDING TRAFFIC CONTROL PLANS WILL BE PROVIDED, IF THE PROJECT RECEIVES APPROVALS TO MOVE FORWARD

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
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STREETS DIV.		
TRAFFIC DIV.		
FIRE		
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ENGINEERS SEAL
MICHAEL D. DOZ
NEW MEXICO
31511
PROFESSIONAL ENGINEER
3/5/2025
FOR REVIEW ONLY

DATE
REVISIONS

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

SCHEMATIC OFFSITE IMPROVEMENT PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 30'	5-5

CITY OF SANTA FE PUBLIC INFRASTRUCTURE GENERAL CONSTRUCTION NOTES

1. All construction shall conform to the requirements of City of Santa Fe Standard Drawings and Specifications as applicable.
2. Utility construction shall conform to applicable sections of the APWA's "New Mexico Standard Specifications for Public Works Construction, 2006 edition including latest published amendments.
3. Infrastructure construction shall conform to applicable sections of the New Mexico Department of Transportation's "Standard Specifications for Highway and Bridge Construction, Current Edition (SSHBC).
4. The order of precedence shall be, listed in order of highest precedence, the project specifications, plans, City of Santa Fe Standard Drawings, SSHBC, and APWA.
5. In the case of conflicts between plans and specifications resolution shall be by using the more restrictive requirement as determined by the project engineer and approved by the City.
6. The project plans shall be approved for construction by the City prior to any construction activity and scheduling a pre-construction meeting.
7. The construction Project Engineer shall be a New Mexico licensed Professional Engineer in the appropriate category for the type of work represented by the project plans. The Project Engineer shall arrange for a pre-construction meeting prior to the start of construction or mobilization of equipment on-site and after receipt of the financial guaranty. At the pre-construction meeting, the Project Engineer shall submit a letter providing the name(s) of specific individuals who will be performing what type of inspections and respective telephone contact number(s); this includes preparation of the record drawings. The pre-construction meeting shall be scheduled a minimum of 10 calendar days in advance of the meeting date.
8. Attendance at the pre-construction meeting is mandatory.
9. The Contractor shall provide a list of contact personnel responsible for site construction including position, telephone numbers, and at least one emergency telephone number active on a 24 hour basis.
10. If an EPA Notice of Intent (NOI) is applicable, a copy of the mailed permit application shall be presented at the pre-construction meeting along with a written statement giving the mailing date.
11. The Contractor shall be responsible for maintaining the integrity of all underground utilities during the course of work regardless of any location shown on the plans or other field evidence, or lack thereof. Notification to New Mexico One Call at 1-800-321-2537 for utility locates a minimum of 48 hours in advance of any excavation is required. Maintenance of utility locates shall be continued throughout the project life.
12. The Owner shall be responsible for all changes in construction deemed necessary for any reason and shall have appropriate plans and/or specifications, including applicable design criteria, prepared by a New Mexico Professional Engineer and submitted to the City for approval. Upon approval, said changes may be incorporated into the project.
13. Final Record Drawings, reflecting substantial changes to the original design drawings, shall be submitted by the Contractor's Surveyor for approval to the Engineer. Said plans shall be approved by applicable City Divisions prior to final acceptance of project work for maintenance responsibility and the beginning of the warranty period. Under no circumstances will partial acceptance and/or warranty commencement begin for any component of project scope be provided.
14. All Contractor work activity shall be confined to the construction limits of the project. There shall be no encroachment onto adjacent properties, either construction or marshaling yard(s) unless legal easements(s)/agreement(s) is/are executed and approved by the Engineering Supervisor.
15. Grading shall be completed under the authority of a Building Permit, the application of which shall show the type of work as "Other" with the notation of Grading, Landscaping, and infrastructure shown thereon. E-mail "permitcounter@santafenm.gov" for permit information.
16. All cut and fill slopes, including setback requirements, shall conform to the requirements of:
    a. Santa Fe City Code's Article 14-8 (Development and Design Standards);
    b. Chapter 33 of the Uniform Building Code, 1997 edition unless otherwise noted on the approved construction plans; and
    c. In the case of conflict between these two specifications, City Code shall prevail.
17. The Contractor is responsible for any damage caused by construction activities to public or private property, including utilities.
18. Material quality testing shall be completed by the Contractor, through a recognized testing laboratory. The laboratory shall be under the auspices of a New Mexico Professional Engineer.
19. All material quality test reports shall be provided directly to the City Planning and Land Use Department at P.O. Box 909, Santa Fe, New Mexico 87504-0909 within seven (7) calendar days after laboratory material testing is complete unless otherwise directed during the pre-construction meeting. Field test reports shall be provided directly to the City Planning and Land Use Department staff at the time of field testing. All test reports and other communication shall carry the applicable Planning and Land Use Department Case and Building Permit project numbers which will be provided at the pre-construction meeting if not noted on the approved project plans.
20. Compaction testing of soil and similar materials, including optimum moisture-density relationships, shall be performed in accordance with the referenced specifications and/or plans. Unless specified in individual project plans, the frequency of compaction testing shall be one (1) test per 1.5 vertical feet of fill or backfill of similar material; within two (2) horizontal feet of structures; for each 500 linear feet of trench backfill or each days compactive effort, whichever results in the greatest quantity of tests; or for each 500 cubic yards of fill of similar material; or as directed by the Engineer.
21. Portland cement concrete (Pcc) proposed to be used for the project shall conform to a mix design prepared by a New Mexico Professional Engineer. The design shall be provided to City Planning and Land Use Department staff for approval a minimum of 14 calendar days prior to scheduling the initial casting operation or, alternatively, the project plans shall define a specific mix having a prior approval by the City Planning and Land Use Department. Each mix shall have the following minimum properties:
    a. Compressive strength of 4,000 psi in 28 calendar days
    b. Seven (7.0) bags of cementitious material per cubic yard of concrete
    c. Twenty (20.0) percent or less of flyash material substitution for cement
    d. Maximum aggregate size of ¾"
    e. Air entrainment content ranging between 4.0 and 7.0 percent at the point of concrete delivery into forms
22. Concrete sample set shall consist of a minimum of three (3) cylinders. One sample set shall be obtained for each 500 linear feet cast, 50 cast cubic yards, or one (1) set per calendar day, whichever is greatest; or as directed by the Engineer. Cylinders shall be tested at 7, 28, and 56 day intervals; the 56 day interval need not be tested if any previous test result exceeds the design value.
23. Traffic control devices, as per approved plan, shall be installed, maintained, and removed by the Contractor. Said devices shall conform to the latest published edition of the Manual of Uniform Traffic Control Devices and to written directions from the City Traffic Engineer who may be reached at 505-955-6631.
24. Site erosion and/or sediment control, as per approved plan, shall be installed, maintained, and removed by the Contractor. The Contractor's attention is directed to the SSHBC's Section 603 for other requirements relating to dust abatement and similar issues.
25. Utility lines must be bored under all existing street Pcc street appurtenances. A minimum of 12" separation must be maintained between utility lines. Any curb, gutter, or other damage must be repaired before final inspection will be given.
26. Each City utility division shall provide a letter of completed installation, not necessarily accepted for warranty, at the Contractor's request. Said letters shall be provided to the Planning and Land Use staff and received written staff acceptance prior to scheduling either TV inspection of SAS ; and Storm Sewer lines or placement of roadway pavement material.
27. ASTM, ASHTO, or independent laboratory certificates of material compliance are to be provided to City Planning and Land Use Department staff prior to bringing applicable material on site.
28. Aggregate base course material shall conform to the SSHBC's Section 304 using Gradation I.
29. Hot Mix Asphalt (HMA) proposed to be used for the project shall conform to a mix design prepared by a New Mexico Professional Engineer conforming to SSHBC's Section 423 using Aggregated Classification(s) called for in the project plans. The design shall be provided to City Planning and Land Use Department staff for approval a minimum of 14 calendar days prior to scheduling the initial paving operation or, alternatively, the project plans shall define a specific mix having a prior approval by the City Planning and Land Use Department.
30. Compaction testing of subgrade, aggregate base course, and each lift of HMA material shall be completed for every 100 linear feet of roadway length excepting for HMA material in which case provide one (1) test for every 100 linear feet of laydown machine pass; or as directed by the Engineer.
31. HMA material quality test samples (wet) shall be obtained and tested for every 500 tons or fraction thereof or one (1) sample per day.
32. Utility appurtenance such as telephone pedestals, electrical transformers, gas, and cable TV pedestals shall be placed outside the public right-of-way and within utility easements. The Owner is responsible for relocating mis-placed utility structures prior to requesting a pre-final inspection. Water meter boxes and fire hydrants may be placed between the sidewalk and curb. Water valve and meter boxes are not to be placed within maintenance areas of semi-improved (gravel or equal) roads.
33. Construction debris and/or excess material shall be stored in an on-site area and appropriately contained. Said debris shall not be a nuisance to the surrounding neighborhood. Disposal of debris shall be either within the city limits under separate grading permit or at a designated NMED approved disposal site. The Contractor shall provide written notice as to proposed debris disposal site location(s). All debris and/or excess material shall be removed from the site prior to scheduling a pre-final inspection with City Planning and Land Use Department staff.
34. Interim terrain and stormwater management inspections shall be arranged for at the following events:
    a. Completion of temporary erosion control best management installations and prior to any earthwork (clearing, grubbing, etc.)
    b. Final stormwater management features are constructed
    c. Final site restoration measures are completed
    d. Further construction or issuance of any permit(s) shall not occur until written approval by City Planning and Land Use Department staff for each of the above inspections has been obtained. Inspections shall be scheduled by calling 505-955-6646.
35. The Contractor shall make written request for a pre-final inspection of terrain management and infrastructure works a minimum of 14 calendar days in advance with City Planning and Land Use Department staff. At this inspection, applicable city division staff will review the final work product. Any deficiencies will be noted in a "punchlist" and provided to the Contractor for correction. When all punchlist items are completed the Contractor shall file a written statement to that effect and a final inspection will be held by City Planning and Land Use Department staff. Upon acceptance, an acceptance letter will be provided wherein all work will be accepted for maintenance by the City and the commencement of the warranty period initiated.
36. All surveys to be performed under the supervision of a Professional Land Surveyor, licensed in the State of New Mexico.
37. ADA compliance: The contractor shall ensure ADA compliance for construction of ADA features and appurtenances (including, but not limited to, sidewalk & curb ramp cross slopes, ramp slopes, level landings, etc.) as detailed in the plans and in accordance with referenced standard drawings, specifications and current public right of way accessibility guidelines. The contractor is responsible for field checking slopes and dimensions of all form work for compliance prior to installation of concrete. The City reserves the right to inspect any ADA features and appurtenances at any time before final completion of the project and to have the contractor remove, replace, and/or correct any work at his cost that is not in compliance, as determined by the project manager.

ADDITIONAL CONSTRUCTION NOTES

1. The contractors surveyor shall coordinate with Cornerstone Land Surveying. The contractors surveyor shall verify proposed grades. Invert elevations, Flow lines, Alignments, Property lines, Right of Way, Setbacks, and topography Prior to construction. Any deviations shall be reported to the engineer.
2. The contractor shall maintain existing fencing, or build new fencing to insure that the site is secure at all times.
3. It is solely the contractors responsibility to meet OSHA requirements and to maintain a safe working condition.
4. Santa Fe Engineering Consultants, LLC, waives any and all responsibility and is not liable for problems which arise from failure to follow these plans, Specifications and the design intent they convey or for problems which arise from failure to obtain and/or follow SFEC guidance with respect to any errors, omissions, inconsistencies, ambiguities or conflicts.
5. Television inspection to be provided by private contractor, not the City.
6. Pot holing, construction water, T.V. inspections, flushing and cleaning of sanitary sewer lines or storm sewers are incidental to the work and no separate payment will be made.
7. The existing utility locations shown on these plans have been compiled from multiple sources, including utility locates, and field surveys. It is the contractor's responsibility to verify and pothole any potential utility conflicts. The contractor is responsible for any damage caused by construction activities to public or private property, including utilities.
8. The contractor shall maintain an up to date set of as-built plans for the project. These plans shall be kept current, within two weeks, at all times and shall be subject to review by the project manager throughout the project and will be reviewed by the project manager for accuracy and completeness at least once every 30 days. Upon 50% completion of the project, the contractor shall submit progress as-built plans to the project manager for review. The final as-built plans bearing the signed seal and certification of the contractor's surveyor shall be submitted to the project manager prior to any final payment. This work is considered incidental to completion of the project and no measurement or payment shall be made.

ENGINEERS SEAL



DATE

REVISIONS

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

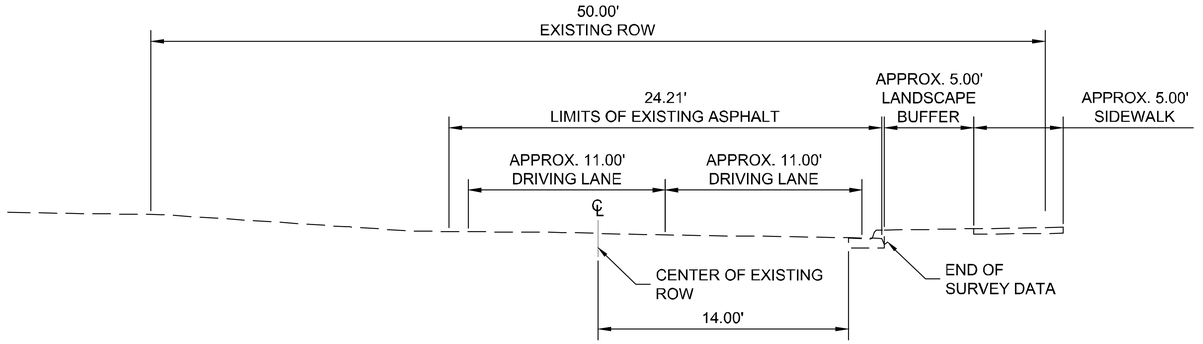
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1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

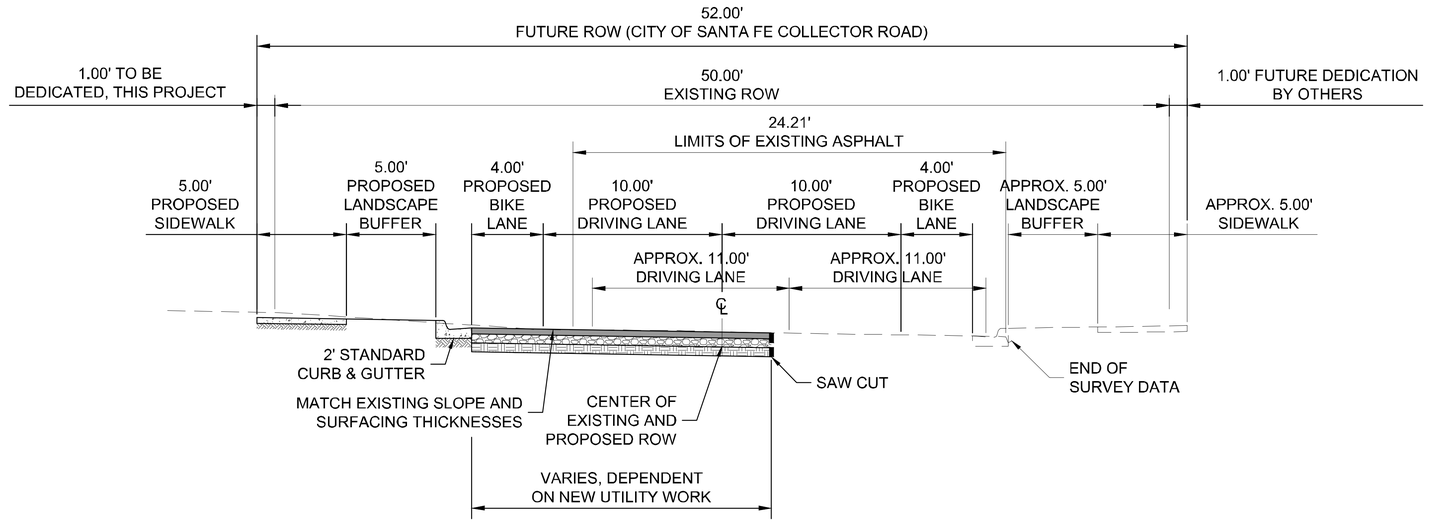
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

GENERAL NOTES

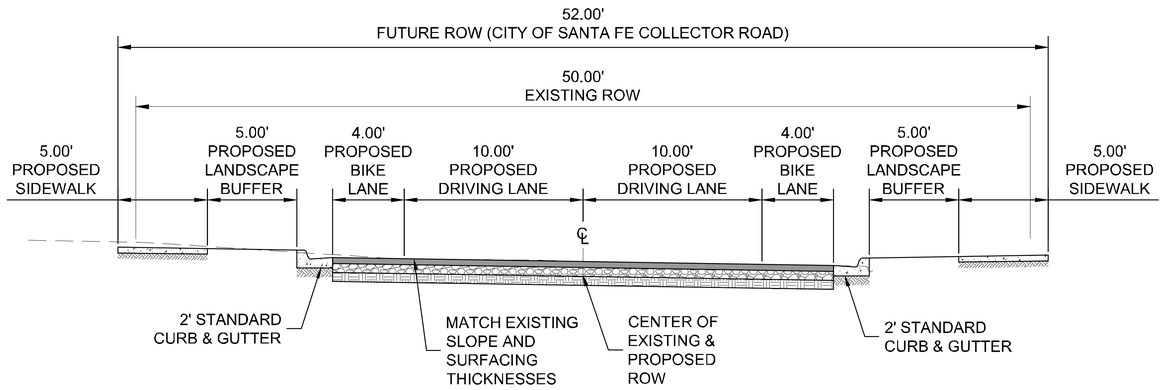
DATE:	SCALE:	SHEET:
FEBRUARY 2025	N.T.S.	6-1



TYPICAL ROADWAY SECTION
EXISTING OCATE ROAD



TYPICAL ROADWAY SECTION
PROPOSED OCATE ROAD



TYPICAL ROADWAY SECTION
ULTIMATE OCATE ROAD

PAVEMENT DESIGN NOTE

PAVEMENT DESIGN BASED UPON REPORT ENTITLED "GEOTECHNICAL ENGINEERING SERVICES, JOB NO. 1-40709, OCATE APARTMENTS, SANTA FE, NEW MEXICO", PREPARED BY GEO-TEST, INC, DATED AUGUST 21, 2024

ENGINEERS SEAL



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DATE	REVISIONS
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CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

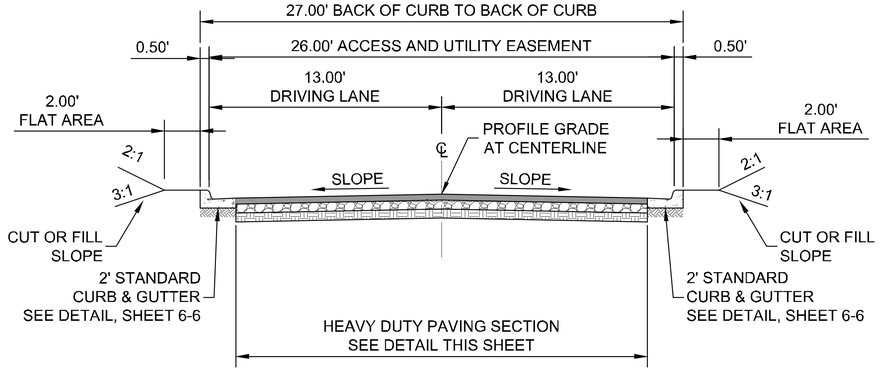
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

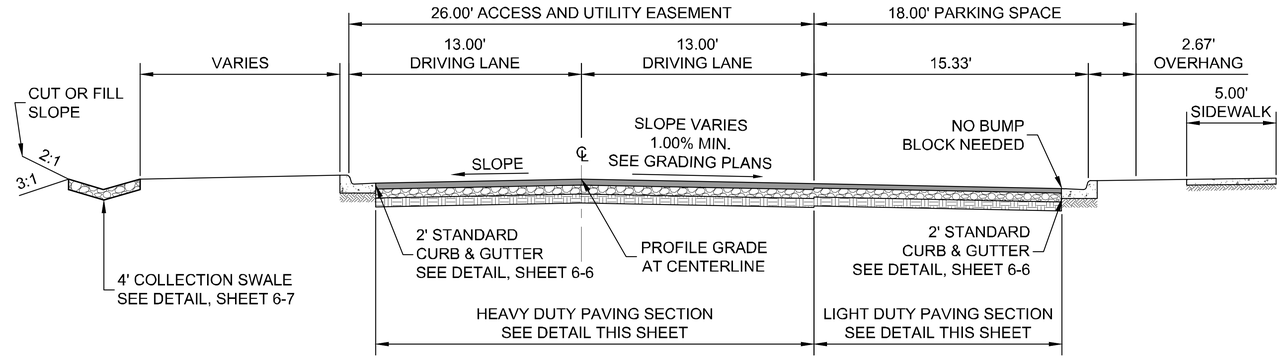
TYPICAL SECTIONS

DATE:	SCALE:	SHEET:
FEBRUARY 2025	N.T.S.	6-2



TYPICAL DRIVEWAY SECTION

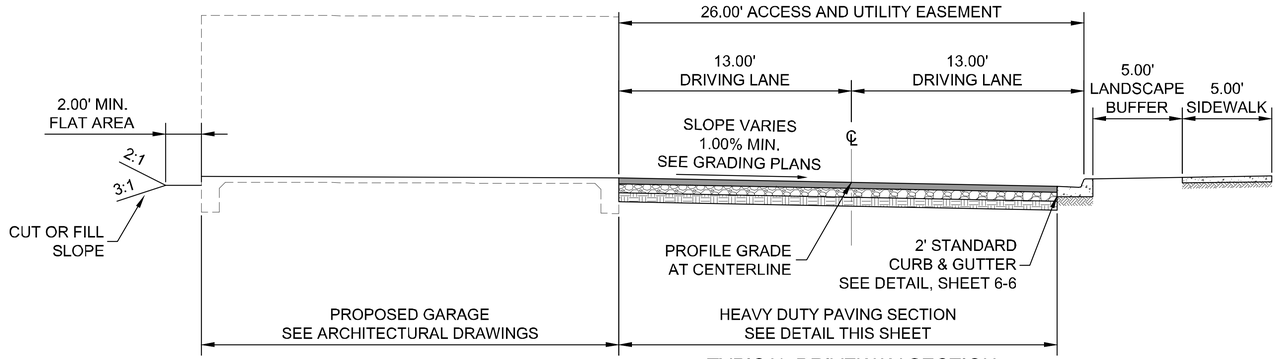
NO PARKING
ROAD 1 - STA: 00+00.00 TO STA: 01+35.68



TYPICAL DRIVEWAY SECTION

PARKING ON RIGHT SIDE
ROAD 1 - STA: 01+35.68 TO STA: 04+02.68

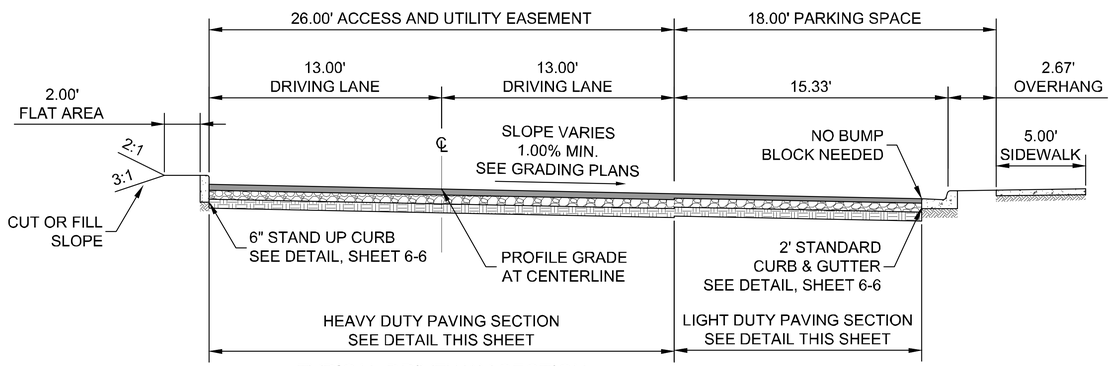
NOTE:
ROAD 1 STA: 03+53.93 BEGINS LEFT SIDE
TRANSITION TO TRASH PICKUP AREA



TYPICAL DRIVEWAY SECTION

GARAGE ON ONE SIDE
ROAD 1 - STA: 04+21.80 TO STA: 06+36.46
ROAD 1 - STA: 08+92.13 TO STA: 10+17.62

NOTE:
ROAD 1 STA: 10+22.80 BEGINS LEFT SIDE
TRANSITION TO TRASH PICKUP AREA

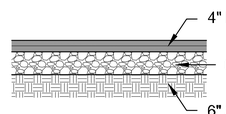


TYPICAL DRIVEWAY SECTION

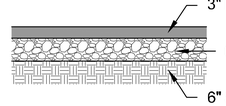
PARKING ON RIGHT SIDE
ROAD 1 - STA: 06+36.46 TO STA: 08+92.13

PAVEMENT DESIGN NOTE

PAVEMENT DESIGN BASED UPON REPORT ENTITLED "GEOTECHNICAL ENGINEERING SERVICES, JOB NO. 1-40709, OCATE APARTMENTS, SANTA FE, NEW MEXICO", PREPARED BY GEO-TEST, INC, DATED AUGUST 21, 2024



TYPICAL PAVING SECTION - HEAVY DUTY (DRIVING LANE)



TYPICAL PAVING SECTION - LIGHT DUTY (PARKING)

ENGINEERS SEAL
MICHAEL D. DOZ
NEW MEXICO
REGISTERED
8/31/2025
FOR REVIEW ONLY
DATE
REVISIONS

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

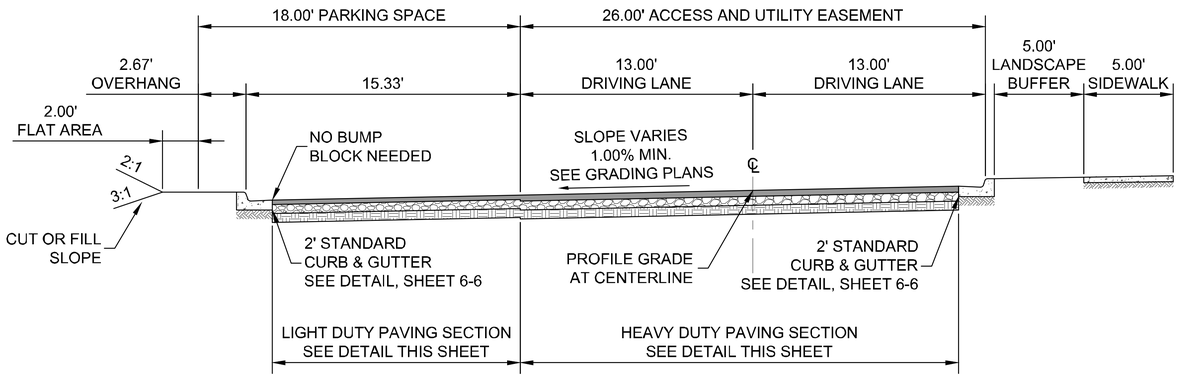
CASE # _____

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(505) 982-2845 Fax (505) 982-2641
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

TYPICAL SECTIONS

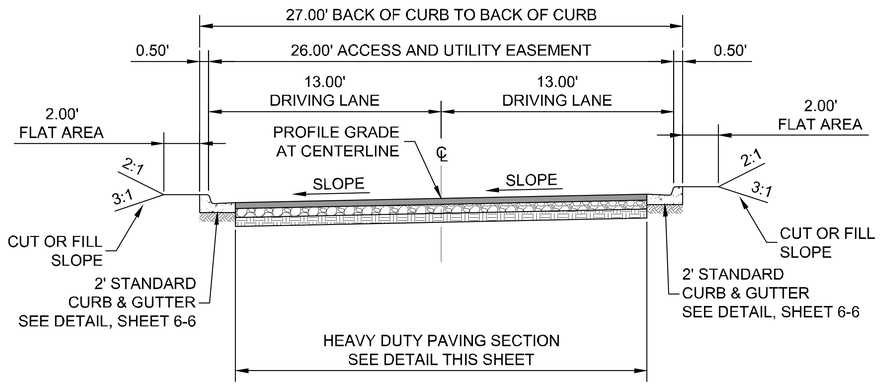
DATE:	SCALE:	SHEET:
FEBRUARY 2025	N.T.S.	6-3



TYPICAL DRIVEWAY SECTION

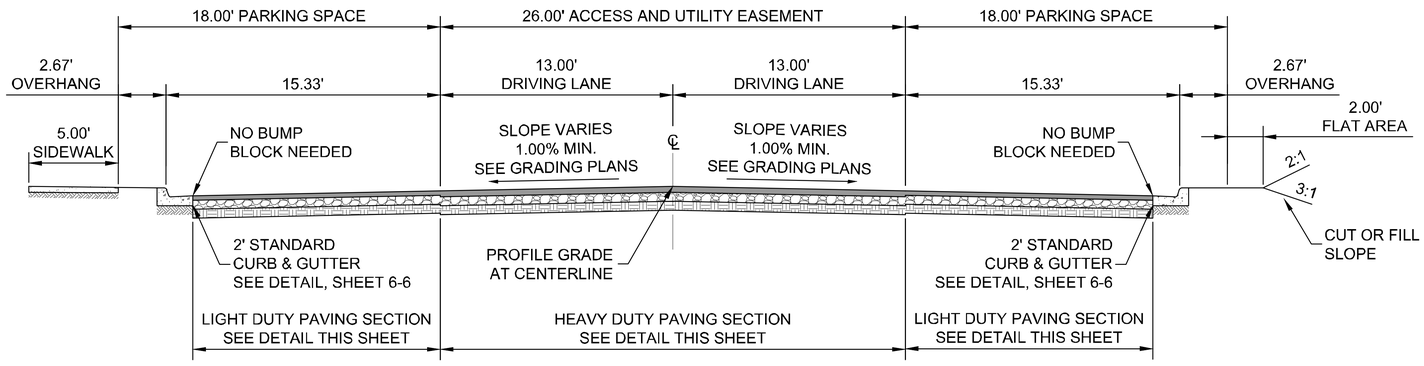
PARKING ON LEFT SIDE
ROAD 1 - STA: 10+68.98 TO STA: 13+89.48

NOTE:
ROAD 1 STA: 13+92.43 PARKING ENDS



TYPICAL DRIVEWAY SECTION

NO PARKING
ROAD 1 - STA: 13+89.48 TO STA: 15+24.51

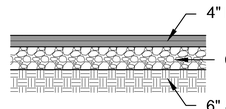


TYPICAL DRIVEWAY SECTION

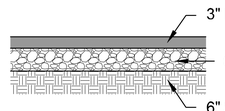
PARKING ON BOTH SIDES
ROAD 2 - STA: 00+00.00 TO STA: 02+70.93

PAVEMENT DESIGN NOTE

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TYPICAL PAVING SECTION - HEAVY DUTY (DRIVING LANE)



TYPICAL PAVING SECTION - LIGHT DUTY (PARKING)

ENGINEERS SEAL
FOR REVIEW ONLY
DATE
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CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

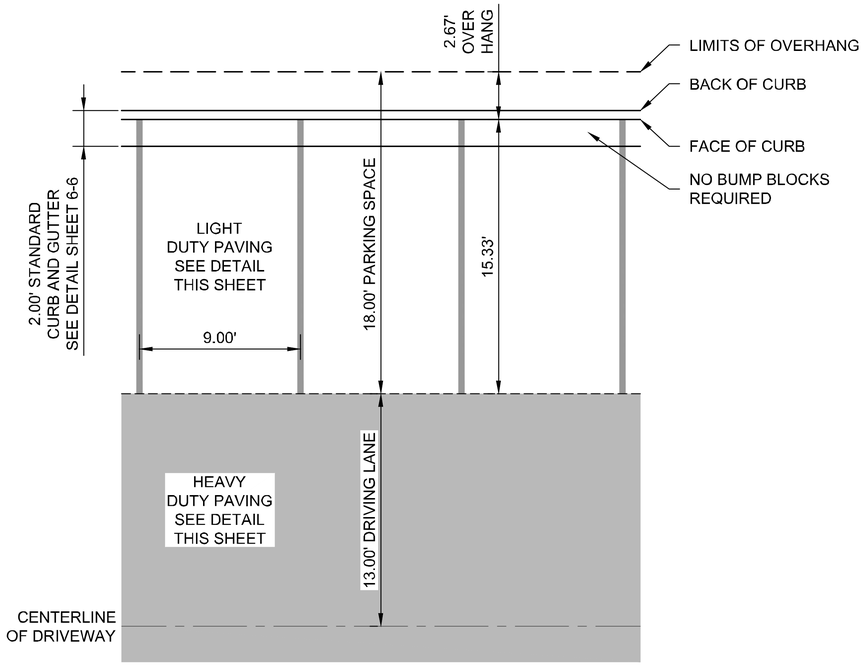
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

TYPICAL SECTIONS

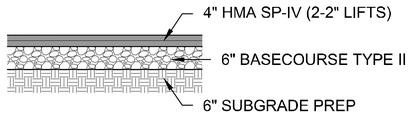
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FEBRUARY 2025	N.T.S.	6-4



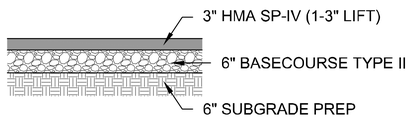
TYPICAL PARKING STALL PLAN
WITH LIGHT DUTY PAVING PARKING

PAVEMENT DESIGN NOTE

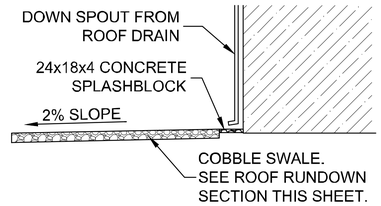
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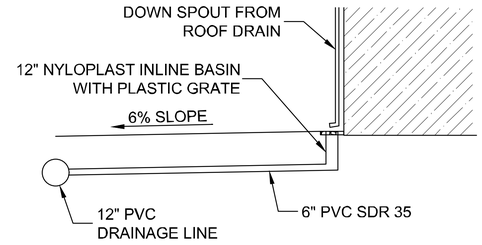
TYPICAL PAVING SECTION - HEAVY DUTY (DRIVING LANE)



TYPICAL PAVING SECTION - LIGHT DUTY (PARKING)



ROOF DRAIN DETAIL WITH SPLASH BLOCK AND COBBLE SWALE



ROOF DRAIN DETAIL WITH INLET TO STORM DRAIN

ENGINEERS SEAL
MICHAEL D. WOOD — NEW MEXICO — 21782 — REGISTERED PROFESSIONAL ENGINEER
FOR REVIEW ONLY
3/31/2025

DATE

REVISIONS

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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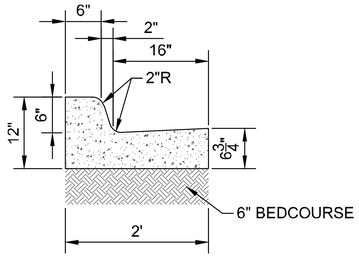
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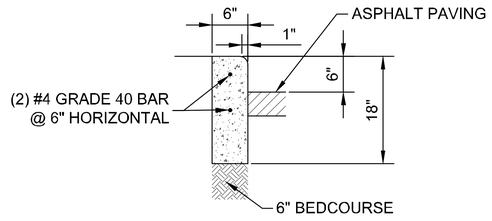
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

TYPICAL DETAILS

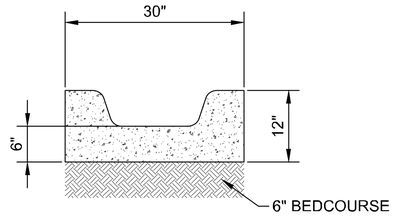
DATE:	SCALE:	SHEET:
FEBRUARY 2025	N.T.S.	6-5



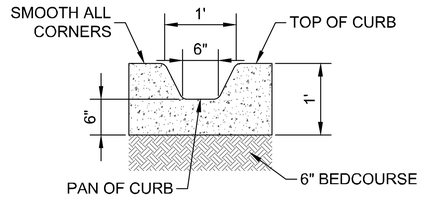
STANDARD 2' CURB AND GUTTER



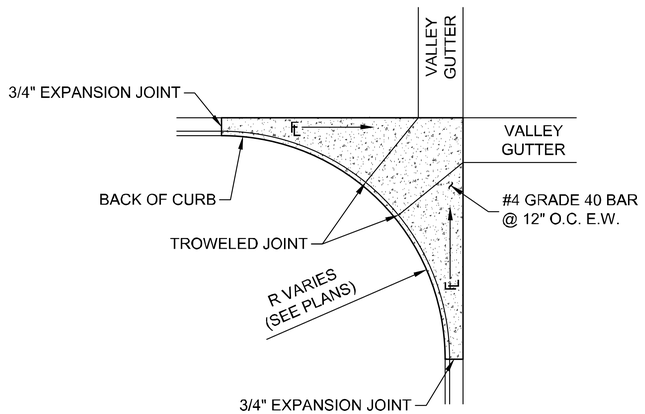
6" STAND-UP CURB



FLOW-THROUGH CURB

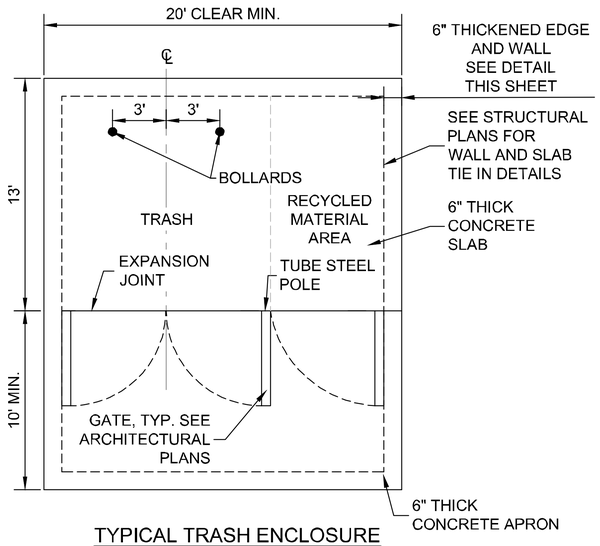


CURB OPENING LONGITUDINAL SECTION



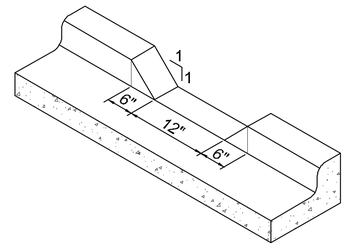
NOTES:
1. POUR FILLETS MONOLITHICALLY
2. PROVIDE A REINFORCING CONTINUATION BETWEEN FILLETS AND VALLEY GUTTERS WITH A 30" REBAR LAP BETWEEN FILLETS AND VALLEY GUTTERS BEING CAST WITHIN 30 CALENDAR DAYS.

FILLET CURB RETURN

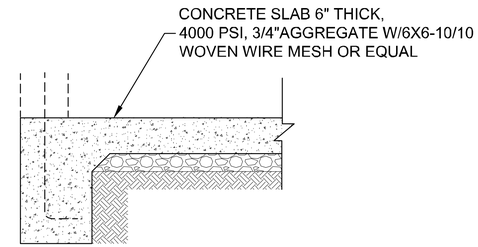


TYPICAL TRASH ENCLOSURE

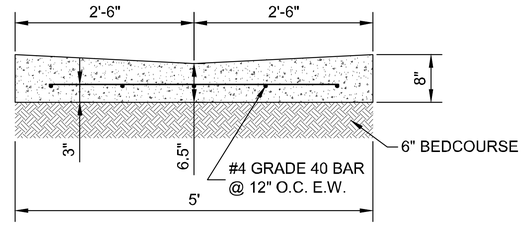
LOCATE CURB CUTS AS SHOWN ON PLANS.
GRADE SWALES TO DRAIN.
SEE LANDSCAPE AND GRADING PLANS.



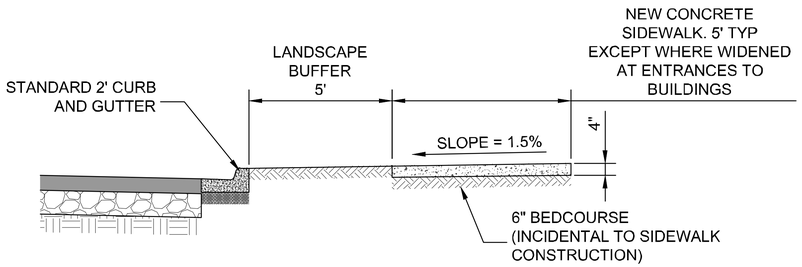
CURB CUT DETAIL



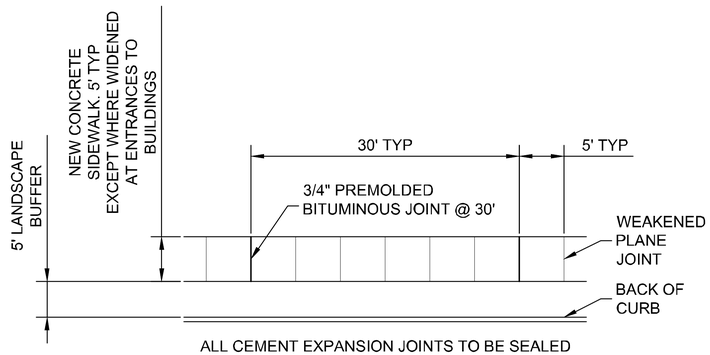
TRASH ENCLOSURE SLAB DETAIL



5' - TYPE II VALLEY GUTTER



TYPICAL SIDEWALK SECTION



ALL CEMENT EXPANSION JOINTS TO BE SEALED MEETING 2019 NMDOT, SEE SHEET SERIES 16

TYPICAL SIDEWALK PLAN

ENGINEERS SEAL

MICHAEL D. HARRIS
NEW MEXICO
23781
REGISTERED
FOR REVIEW ONLY
3/3/2025

DATE

REVISIONS

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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WATER SERVICES		
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FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

TYPICAL DETAILS

DATE:	SCALE:	SHEET:
FEBRUARY 2025	N.T.S.	6-6

SHEET KEYNOTES

(1) PROPERTY LINE

LEGEND

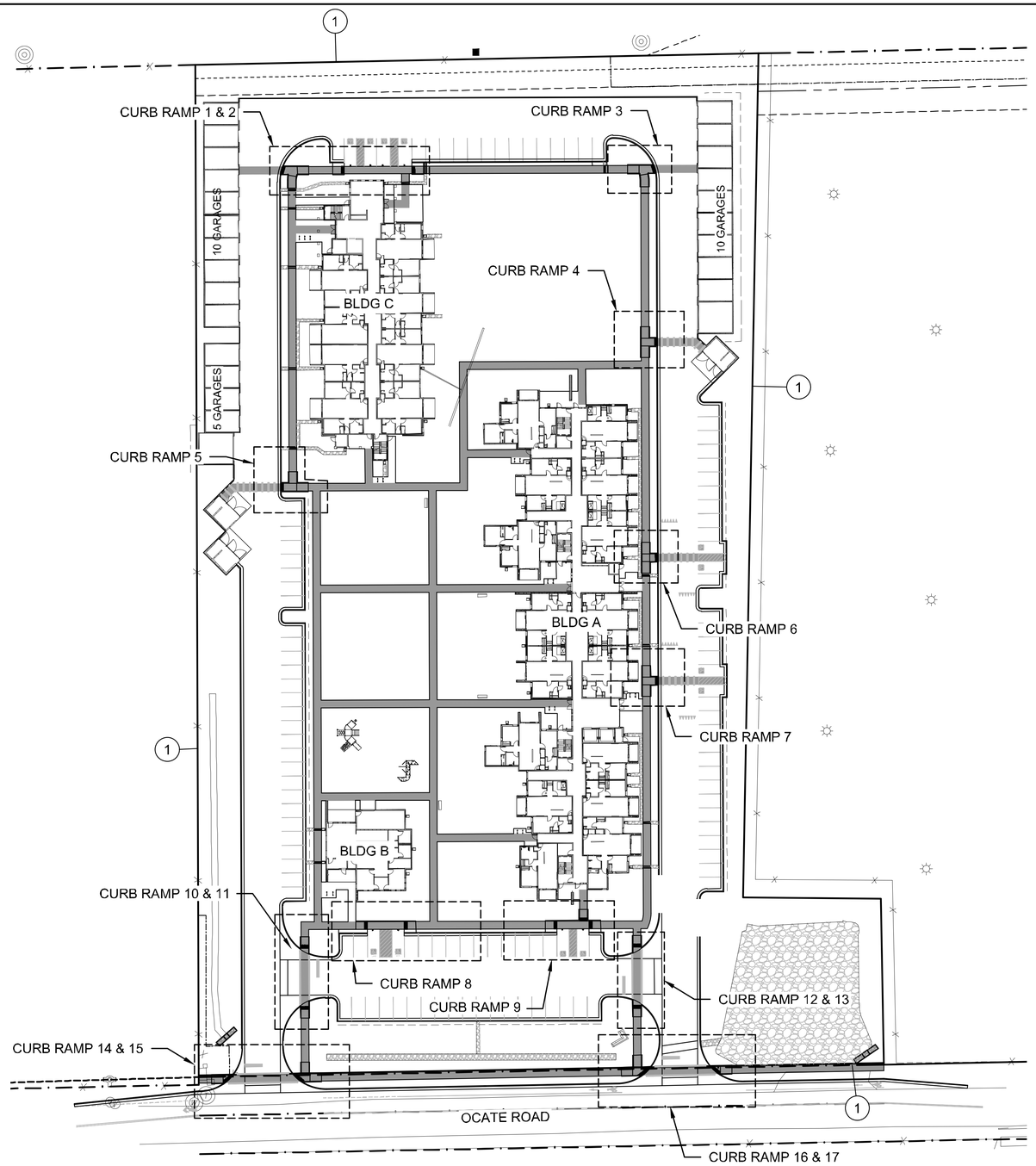
ADA ACCESSIBLE ROUTE

NOTES:

1. ALL CEMENT EXPANSION JOINTS SHALL BE SEALED, MEETING NMDOT SERIES 608.2.2.1-608.3.5.2. (FILL THE EXPANSION JOINTS WITH PRE-MOLDED EXPANSION JOINT FILLER. ALSO, FILL SEALED EXPANSION JOINTS WITH A BACKER ROD AND SILICONE JOINT SEALANT AT THE SPECIFIED INTERVALS)

1. SEE 8 SERIES FOR SIDEWALK GRADING.

2. SEE SHEETS 6-8 & 6-9 FOR CURB RAMP DETAILS



ADA ACCESS PLAN
SCALE: 1" = 40'

ADA COMPLIANCE GENERAL NOTES

1. THE CONTRACTOR SHALL ENSURE ADA COMPLIANCE FOR CONSTRUCTION OF REQUIRED ADA ACCESSIBLE FEATURES AND APPURTENANCES, AND AS DETAILED IN THE APPROVED CONSTRUCTION PERMIT DOCUMENTS.
2. ALL CONSTRUCTION WORK SHALL COMPLY WITH, IN ORDER OF PRECEDENCE: SANTA FE CITY CODE, GOVERNOR'S COMMISSION ON DISABILITY (GCD), ICC ANSI A117.1-2009, CHAPTERS 1-5 AND CHAPTER 7, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION), AND AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS.
3. CURB RAMPS SHALL FOLLOW NMDOT PEDESTRIAN ACCESS ROUTE DETAILS (SERIAL 608) WITH REQUIRED TURNING SPACE AND 7% RUNNING SLOPES TYPICAL AND 8.3% MAXIMUM. CURB RAMP LANDING TYPICAL SLOPE IS 1% AND SHALL NOT EXCEED 2% RUNNING AND CROSS SLOPE.
4. SIDEWALK RUNNING SLOPES SHALL NOT EXCEED 5% WITHOUT HANDRAIL(S). CROSS SLOPES SHALL NOT EXCEED 2%.
5. PROVIDE DETECTABLE WARNING SURFACES AT CURB RAMPS AND TRANSITIONS TO DRIVEWAY AND INTERSECTION CROSSINGS ALONG THE ACCESSIBLE PATHS OF TRAVEL.
6. PER ICC ANSI A117.1-2009, SIDEWALKS SHALL COMPLY WITH SECTION 302, FLOOR SURFACE, 303.4 RAMPS, 401 ACCESSIBLE ROUTES, 403 WALKING SURFACES, 405 RAMPS
7. ALL PARKING AND WALK SURFACES ALONG THE ACCESSIBLE PATH OF TRAVEL SHALL BE FIRM, STABLE AND SLIP RESISTANT.
8. ANSI 502.7 SIGNAGE WITH REQUIRED LANGUAGE ARE REQUIRED AT ALL ADA PARKING SPACES. PARKING SIGNAGE HEIGHT PER CITY OF SANTA FE CODE IS 7'-0" TO BOTTOM OF SIGN. LOCATE VAN ACCESSIBLE PARKING SIGN IMMEDIATELY BELOW THE RESERVED PARKING SIGN AT WALL MOUNTED LOCATIONS AND 6'8 TO BOTTOM OF VAN ACCESSIBLE SIGN AT SIGNS LOCATED IN THE PEDESTRIAN WAY. SEE DETAIL, SHEET 10-1.
9. ACCESSIBLE PARKING SPACE GRADES SHALL NOT EXCEED 2% IN ANY DIRECTION.
10. VAN ACCESSIBLE PARKING SPACES SHALL BE 8'-0" WIDE WITH AN 8'-0" WIDE ACCESS AISLE OR 11'-0" WIDE WITH A 5'-0" WIDE ACCESS AISLE. SEE DETAIL, SHEET 10-1.
11. WHEEL STOPS ARE ENCOURAGED AT ALL ADA ACCESSIBLE PARKING SPACES TO HELP ENSURE REQUIRED CLEARANCE ALONG THE ACCESSIBLE PATH OF TRAVEL IS MAINTAINED.
12. WHERE EXISTING SIDEWALKS ADJOIN NEW ADA ACCESSIBLE FEATURES, THE CONTRACTOR SHALL PROVIDE FOR MODIFICATIONS WHERE POSSIBLE AND AS NECESSARY TO PROVIDE FOR UNINTERRUPTED, CONTINUOUS ACCESS BETWEEN EXISTING AND NEW WORK.

0 20 40 80
SCALE: 1" = 40'

ENGINEERS SEAL
ISAAC D. [illegible]
NEW MEXICO
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DATE
REVISIONS

VOID SEE NEXT SHEET.

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

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INFRASTRUCTURE PLANS FOR OCATE APARTMENTS SANTA FE, NEW MEXICO

ADA ACCESS PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	6-7

SHEET KEYNOTES

(1) PROPERTY LINE

LEGEND

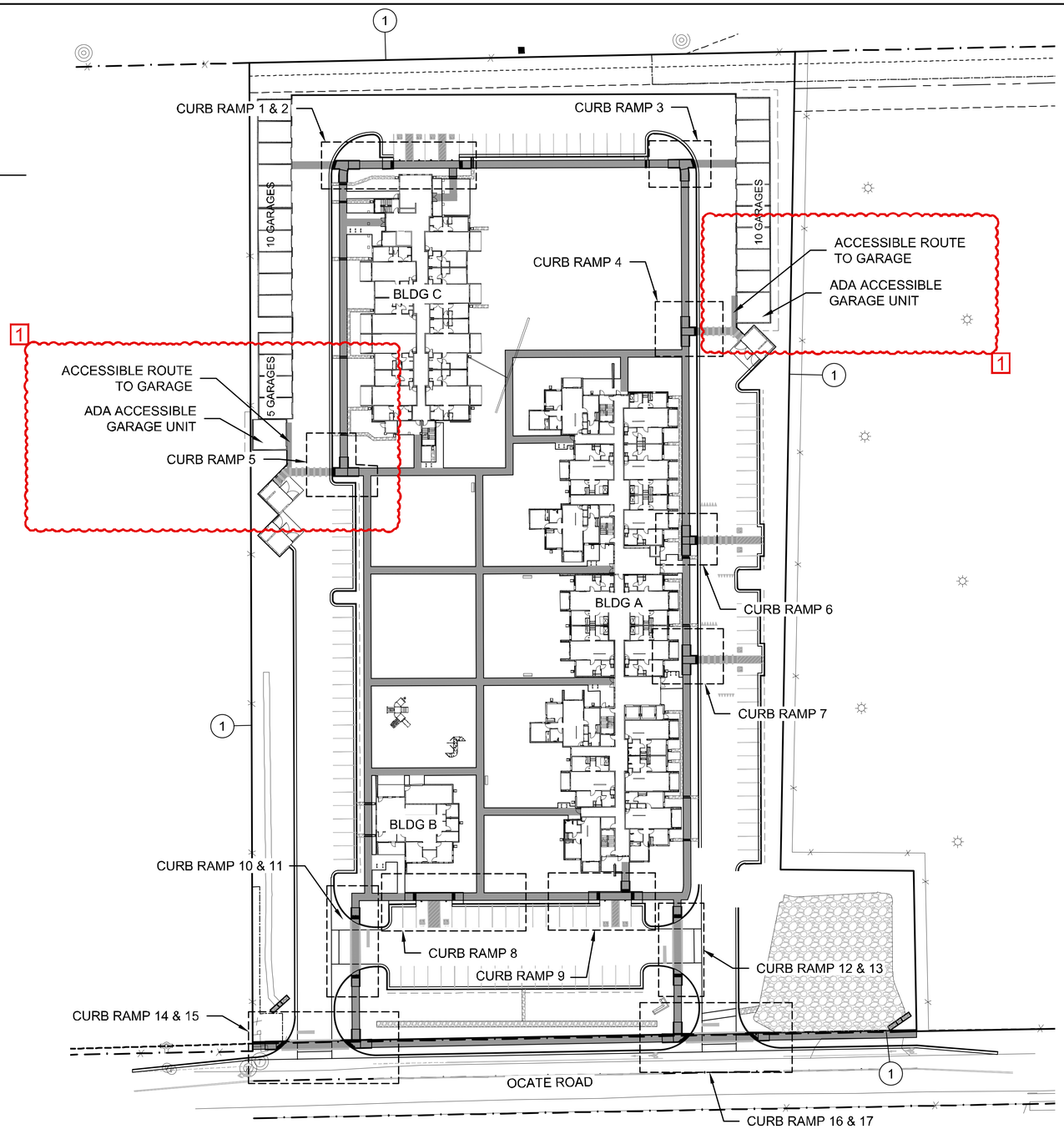
ADA ACCESSIBLE ROUTE

NOTES:

1. ALL CEMENT EXPANSION JOINTS SHALL BE SEALED, MEETING NMDOT SERIES 608.2.2.1-608.3.5.2. (FILL THE EXPANSION JOINTS WITH PRE-MOLDED EXPANSION JOINT FILLER. ALSO, FILL SEALED EXPANSION JOINTS WITH A BACKER ROD AND SILICONE JOINT SEALANT AT THE SPECIFIED INTERVALS)

1. SEE 8 SERIES FOR SIDEWALK GRADING.

2. SEE SHEETS 6-8 & 6-9 FOR CURB RAMP DETAILS



N

ADA ACCESS PLAN
SCALE: 1" = 40'

0 20 40 80
SCALE: 1" = 40'

ADA COMPLIANCE GENERAL NOTES

1. THE CONTRACTOR SHALL ENSURE ADA COMPLIANCE FOR CONSTRUCTION OF REQUIRED ADA ACCESSIBLE FEATURES AND APPURTENANCES, AND AS DETAILED IN THE APPROVED CONSTRUCTION PERMIT DOCUMENTS.
2. ALL CONSTRUCTION WORK SHALL COMPLY WITH, IN ORDER OF PRECEDENCE: SANTA FE CITY CODE, GOVERNOR'S COMMISSION ON DISABILITY (GCD), ICC ANSI A117.1-2009, CHAPTERS 1-5 AND CHAPTER 7, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION), AND AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS.
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ENGINEERS SEAL: FOR REVIEW ONLY
DATE
REVISIONS

1 COMMENTS FROM CITY STAFF
ADDED ACCESSIBLE ROUTE
LABELS TO GARAGES

CASE # _____

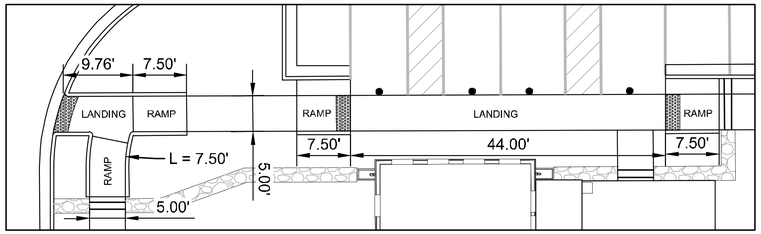
CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
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TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
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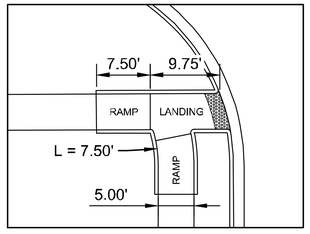
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

ADA ACCESS PLAN

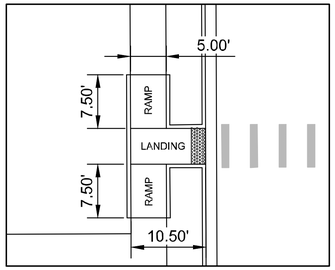
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	6-7



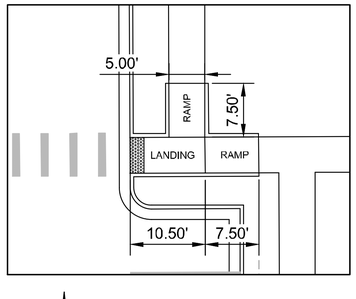
CURB RAMPS 1 & 2
SCALE: 1" = 10'
PARALLEL CURB RAMPS
SEE SHEET 14-8



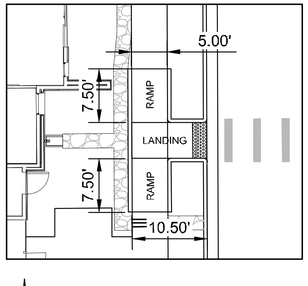
CURB RAMP 3
SCALE: 1" = 10'
PARALLEL CURB RAMPS
SEE SHEET 14-8



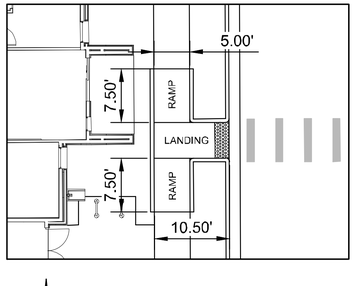
CURB RAMP 4
SCALE: 1" = 10'
PARALLEL CURB RAMPS
SEE SHEET 14-8



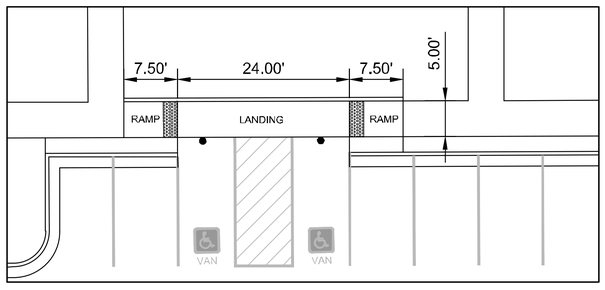
CURB RAMP 5
SCALE: 1" = 10'
PARALLEL CURB RAMPS
SEE SHEET 14-8



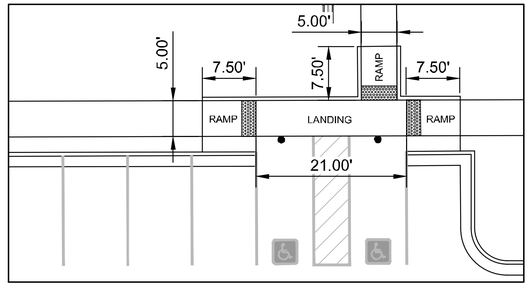
CURB RAMP 6
SCALE: 1" = 10'
PARALLEL CURB RAMPS
SEE SHEET 14-8



CURB RAMP 7
SCALE: 1" = 10'
PARALLEL CURB RAMPS
SEE SHEET 14-8



CURB RAMP 8
SCALE: 1" = 10'
PARALLEL CURB RAMPS
SEE SHEET 14-8



CURB RAMP 9
SCALE: 1" = 10'
PARALLEL CURB RAMPS
SEE SHEET 14-8

0 5 10 20
SCALE: 1" = 10'

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DATE
REVISIONS

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

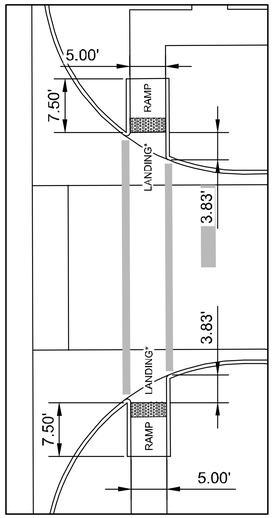
CASE # _____

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http://www.SFENGR.com

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

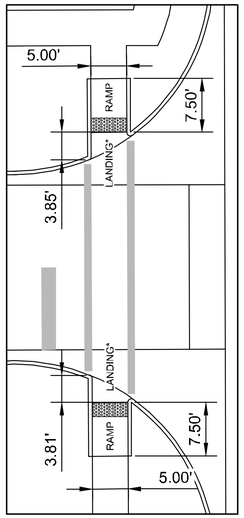
CURB RAMP DETAILS

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	6-8



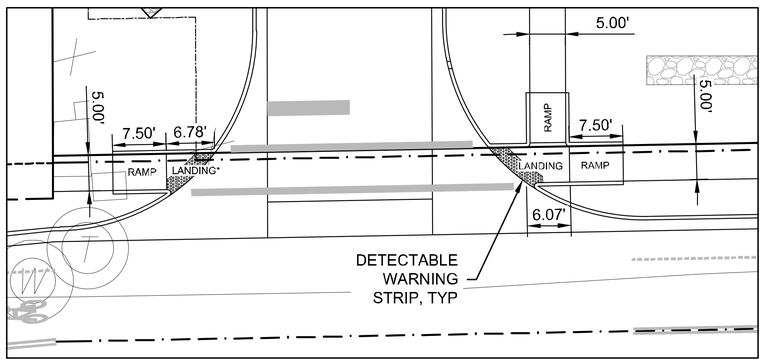
CURB RAMPS 10 & 11

SCALE: 1" = 10'
PARALLEL CURB RAMPS
SEE SHEET 14-8
*NOTE:
ACCESSIBLE GRADES AT ASPHALT
CONSIDERED PART OF LANDING



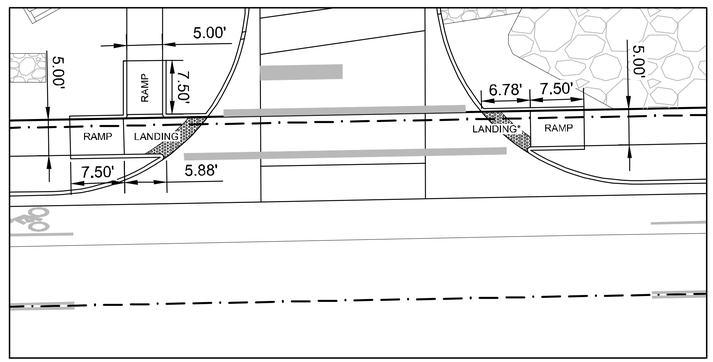
CURB RAMPS 12 & 13

SCALE: 1" = 10'
PARALLEL CURB RAMPS
SEE SHEET 14-8
*NOTE:
ACCESSIBLE GRADES AT ASPHALT
CONSIDERED PART OF LANDING



CURB RAMPS 14 & 15

SCALE: 1" = 10'
PARALLEL CURB RAMPS
SEE SHEET 14-8
*NOTE:
ACCESSIBLE GRADES AT ASPHALT
CONSIDERED PART OF LANDING



CURB RAMPS 16 & 17

SCALE: 1" = 10'
PARALLEL CURB RAMPS
SEE SHEET 14-8
*NOTE:
ACCESSIBLE GRADES AT ASPHALT
CONSIDERED PART OF LANDING

0 5 10 20
SCALE: 1" = 10'

ENGINEERS SEAL
MICHAEL D. [illegible]
NEW MEXICO
REGISTERED
3/31/2025
FOR REVIEW ONLY

DATE

REVISIONS

CASE # _____

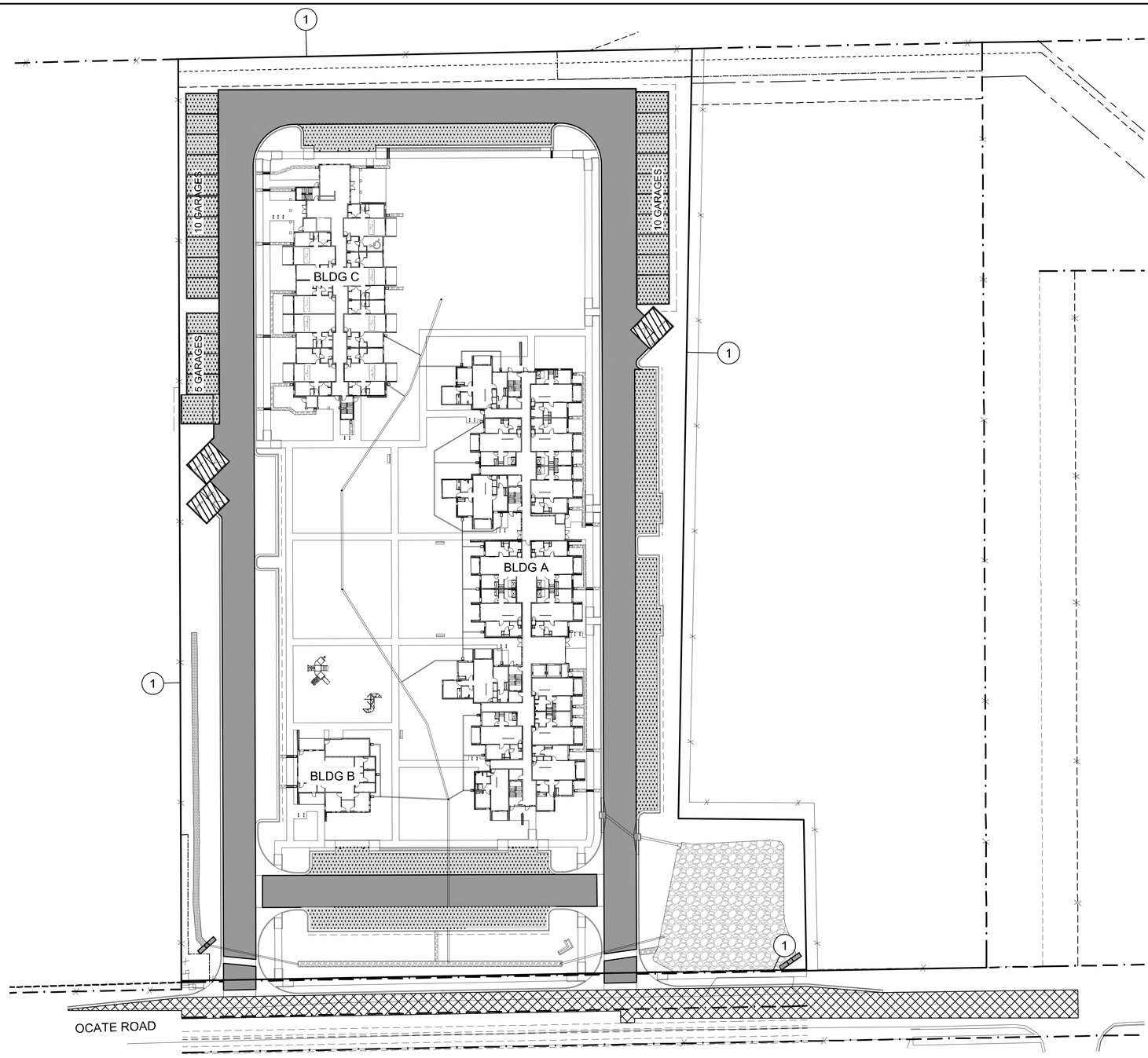
CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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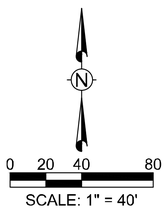
CURB RAMP DETAILS

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	6-9



SHEET KEYNOTES

1. PROPERTY LINE



LEGEND

- HEAVY DUTY PAVING SECTION SEE DETAIL SHEET 6-3
- LIGHT DUTY PAVING SECTION SEE DETAIL SHEET 6-3
- TRASH ENCLOSURE PAD/ CONCRETE PAVING SECTION SEE DETAIL SHEET 6-6
- OCATE ROAD PAVING (MATCH EXISTING)

PAVING PLAN

SCALE: 1" = 40'

ENGINEERS SEAL

FOR REVIEW ONLY

DATE

REVISIONS

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

PAVING PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	6-10

CITY OF SANTA FE WASTEWATER MANAGEMENT DIVISION GENERAL NOTES

1. Prior to the Wastewater Management Division approval of the plan set, a letter will be required from the project engineer indicating they are providing the inspection and record drawing services for the project.
2. The Contractor must obtain all sewer hookup permits from the City's Building Permits Section (sewer lines) prior to commencing any sewer line construction. A copy of the permit must be kept at the construction site.
3. All manholes shall be constructed in accordance with the "Standard Manhole Detail Sheet" shown on the City Standard Drawings.
4. A copy of the approved plans shall be available at the construction site at all times during working hours.
5. All modifications to the sanitary sewer plans must be reviewed and approved by the City's Wastewater Management Division prior to construction.
6. Additional general notes are contained in the standard City detail sheets for sanitary sewer construction.
7. All public gravity sewer lines shall be a minimum 8 inch diameter with a minimum Class C bedding (2006 New Mexico American Public Works Association).
8. All 4 inch and 6 inch diameter gravity sewer pipe shall be private. No private sewer system shall use larger than a 6 inch diameter pipe. No public gravity sewer line to be accepted by the City of Santa Fe for permanent maintenance shall be less than 8 inches diameter.
9. No concrete encasement of new or existing public sewer pipe will be allowed unless approved by the City of Santa Fe Wastewater Management Division.
10. Core drilling is required for all new connections to an existing manhole.
11. No public sewer main line or manhole will be allowed under or within a storm water detention/retention pond.
12. Prior to paving over any sanitary sewer lines, submit T.V.tapes and logs, pressure tests, and the engineer's certification to the City's Wastewater Management Division. After the Wastewater Management Division reviews the above listed information, a preliminary manhole inspection will be conducted. When all the items listed above are completed to meet the standards of the Wastewater Management Division, a letter approving paving will be issued in relation to the sanitary sewer. Note: A final manhole inspection will be conducted after the final paving is completed.
13. All sewer manholes with sewer lines 12 inches in diameter and larger are required to have approved vented and locking manhole covers.
14. Locate wires shall be installed for all sanitary sewers (gravity/force mains). The locate wire must be visible in the manhole or access structure. This will be verified during the preliminary manhole inspection prior to paving. The locate wire is to be a continuous, 12 gauge, solid strand insulated copper wire.
15. Off-road public sewer access will be provided for all public sewer lines and manholes. Access roads are to be a minimum 12 feet wide with a driving surface of 6 inches of compacted base course. No access road shall have a grade greater than 15%. Manholes are to be aligned with the center line of the access road. Sewer easements are to be a minimum of 20 feet in width.
16. Off road sanitary sewer - Call the Wastewater Management Division at 955-4631 for a field review of the grading of all off road sanitary sewer to ensure that the City's maintenance vehicles can access all manholes. The grades may be required to be adjusted based upon this inspection. Additional bank protection may be required based upon a final inspection by the Wastewater Management Division and the project engineer.
17. For Record Drawings, tie manhole to a City of Santa Fe survey monument as part of the final record drawings. Show corrected as-built bearing and distances, slopes, rim and invert elevations and sewer services along the horizontal alignment of the sanitary sewer.
18. The Owner/Developer will be responsible for maintaining, repairing and locating the sewer system until City acceptance for maintenance. Damages resulting from a stoppage in any gravity and/or pressure sewer system will be the sole responsibility of the Owner/Developer until a final acceptance letter for permanent maintenance has been issued by the Wastewater Management Division.
19. Water meters will not be placed until a final acceptance letter has been issued by the Wastewater Division for all on-site sanitary sewer needed in order for the project to connect to the sanitary sewer system.
20. 20 foot wide access gates shall be provided at all fences, walls or other obstructions that cross a public sewer line. Access gates to be located within the sanitary sewer Easement.
21. The Owner/Developer will be responsible for locating each sewer service at the time each lot is ready to connect to the sewer. It is suggested that the Owner/ Developer retain a copy of the television inspection video along with the video logs. Each service shall be clearly marked for each lot at point of connection. All calls received by this Division regarding the location of service will be forwarded to the Owner/Developer.
22. The Contractor shall call the Wastewater Management Division (Douglas Flores at telephone # 955-4613) for a final manhole inspection. This inspection will be isolated to the manholes. The City's Plumbing and Mechanical Inspector's will conduct all other necessary plumbing inspections. Note: The City's Plumbing and Mechanical Inspectors will inspect the individual sewer service taps and laterals, which connect to the public sanitary sewer.
23. The existing sanitary sewer line must be T.V. taped prior to a new service connection being placed as well as taped after the services have been completed. This is to ensure that the existing sanitary sewer line is not damaged and the new service is installed correctly.
24. All costs associated with the operation, maintenance and replacement of grinder pumps for individual lots shall be the responsibility of the lot owner and/or Owners Association. For grinder pumps that connect to a pressure sewer main, the grinder pump will be a model manufactured by Environment-One or a type approved by the City of Santa Fe Wastewater Management Division. For grinder pumps that connect to a gravity main, the grinder pump shall be of a type approved by the City of Santa Fe Plumbing Code.
25. A minimum 12 inches of vertical clearance shall be provided between the sewer line and any storm drain piping.
26. All pressure sewer systems shall be air or hydrostatically pressure tested @ 120 psi for 2 hours minimum. The test is to be witnessed and certified by the project engineer. Prior to being put into service and acceptance by the City of Santa Fe, all pressure sewer system main lines will be filled with water.
27. No public pressure sewer system piping may be installed in a common trench with other utilities.
28. Sewer backflow check valves will be required for all sewer service lateral connections to sewer mains 12 inches or greater in diameter. The sewer service connection must be made at an existing or new manhole. Sewer service connections to sewer mains with pipe size diameter of 12 inches and greater will not be made without approval from the Wastewater Management Division.
29. Sewer backwater check valves shall be required on private sewer service laterals per the City of Santa Fe Plumbing Code.
30. Any 8 inch public sanitary sewer main line placed with a grade of less than 0.60% shall be removed and reconstructed at the Contractor's expense. All public sanitary sewer main lines with slopes of less than 1% require a minimum Class C bedding with select granular material foundation.
31. All as-built sewer line and manhole data shall be obtained and certified by a licensed surveyor or engineer. As-built data supplied by other than a licensed surveyor or engineer shall not be valid for final as-builts.
32. All existing and new public manholes within a project shall have access for City sewer maintenance equipment. All access is subject to field verification and modification as required by the Wastewater Division prior to final project close out with the City of Santa Fe.
33. All sewer line crossings of rivers, streams, arroyos, drainage channels, etc., shall require a basis of design analysis prepared by a licensed engineer.
34. An approved backflow valve and isolation valve are required on all low pressure sewer service lines as per the City of Santa Fe Standard Sewer Specifications.
35. Terminal flushing connections and in-line flushing connections are required on all low pressure sewer systems. The maximum spacing between in-line flushing connections shall be 500 feet. Distances greater the 500 feet between low pressure sewer in-line flushing connections shall be approved by the Wastewater Division.
36. Sewer backflow check valves are required on private sewer service laterals per the City's Plumbing Code. Final determination shall be made by the City of Santa Fe Plumbing Inspection Division

WASTEWATER NOTES:
WASTEWATER UEC CHARGES SHALL BE PAID AT THE TIME OF BUILDING PERMIT APPLICATION.

SANITARY SEWER NOTE:
NO FENCES, WALLS, OR OTHER STRUCTURES SHALL BE CONSTRUCTED WITHIN OR ACROSS SANITARY SEWER EASEMENTS

STREET LIGHTING NOTE:
PROPOSED LUMINAIRES SHALL BE METERED AND INCLUDE LED TYPE FIXTURES EQUIVALENT TO CONVENTIONAL 250 HIGH PRESSURE SODIUM. THE DESIGN AND FIXTURE TYPES SHALL BE REVIEWED AND APPROVED BY THE CITY OF SANTA FE TRAFFIC ENGINEERING DIVISION.

GENERAL NOTES:
GAS SERVICES AND METERS TO BE DESIGNED BY NEW MEXICO GAS COMPANY.

WATER SERVICES TO BE DESIGNED BY CITY OF SANTA FE WATER DISTRICT.

ELECTRIC TRANSFORMERS AND SERVICES TO BE DESIGNED BY PUBLIC SERVICE COMPANY OF NEW MEXICO.

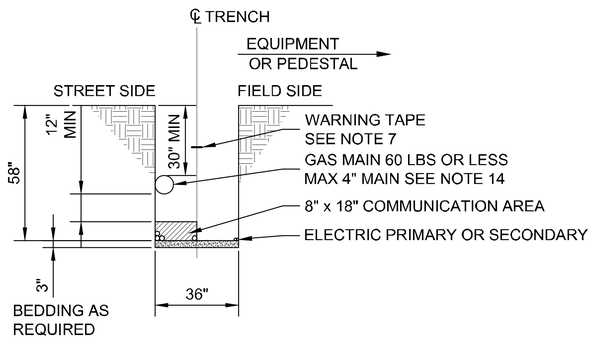
CABLE TELEVISION SERVICE TO BE DESIGNED BY COMCAST.

CONTRACTOR TO COORDINATE WITH ALL UTILITY COMPANIES.

JOINT TRENCH NOTES:
1. Compaction in city or state right-of-ways shall meet or exceed minimum specified requirements.
2. Shading and bedding materials to be type IV. Class 1 for direct buried cable and Type IV, Class 2 for cable in conduit. Type III material is suitable for either type of installation. Refer to DS-10-12.4 for fill material requirements.
3. If trench-run material meets back fill material type requirements, 3" bedding may be omitted provided the trench bottom is smooth, flat and without surface irregularities.
4. Maximum change in the trench bottom elevation shall not exceed 2" over a 10' length.
5. Spoil pile shall be placed on the field side a minimum of 2" from the trench edge.
6. Latest OSHA trench safety requirements shall be strictly observed.
7. Warning tape shall be placed a minimum of 12" above gas line.
8. When bringing cables to pedestals, 12" separation must be maintained from the gas line.
9. PNM owned or maintained street lights may be installed in trench, next to electric cable.
10. Private area lighting or private streetlight circuits must maintain 12" separation from all other joint occupants..
11. Gas service must be 12" away from where it will pass equipment or pedestals.
12. All parties agree that 12" separation between electric and communication may not be met when transitioning up to transformers and or pedestals.
13. Typical subdivision where property line is 9' from back of curb and 10' Public Utility Easements (PUE).
14. Depth of gas measured from final grade.

REFERENCES

1. NESC rule 352, 353, 354



TYPICAL JOINT TRENCH DETAIL
N.T.S.

VOID SEE NEXT SHEET.

ENGINEERS SEAL — FOR REVIEW ONLY

DATE

REVISIONS

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

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(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

UTILITY NOTES AND DETAILS

DATE:	SCALE:	SHEET:
FEBRUARY 2025	N.T.S.	7-1

CITY OF SANTA FE WASTEWATER MANAGEMENT DIVISION GENERAL NOTES

1. Prior to the Wastewater Management Division approval of the plan set, a letter will be required from the project engineer indicating they are providing the inspection and record drawing services for the project.
2. The Contractor must obtain all sewer hookup permits from the City's Building Permits Section (sewer lines) prior to commencing any sewer line construction. A copy of the permit must be kept at the construction site.
3. All manholes shall be constructed in accordance with the "Standard Manhole Detail Sheet" shown on the City Standard Drawings.
4. A copy of the approved plans shall be available at the construction site at all times during working hours.
5. All modifications to the sanitary sewer plans must be reviewed and approved by the City's Wastewater Management Division prior to construction.
6. Additional general notes are contained in the standard City detail sheets for sanitary sewer construction.
7. All public gravity sewer lines shall be a minimum 8 inch diameter with a minimum Class C bedding (2006 New Mexico American Public Works Association).
8. All 4 inch and 6 inch diameter gravity sewer pipe shall be private. No private sewer system shall use larger than a 6 inch diameter pipe. No public gravity sewer line to be accepted by the City of Santa Fe for permanent maintenance shall be less than 8 inches diameter.
9. No concrete encasement of new or existing public sewer pipe will be allowed unless approved by the City of Santa Fe Wastewater Management Division.
10. Core drilling is required for all new connections to an existing manhole.
11. No public sewer main line or manhole will be allowed under or within a storm water detention/retention pond.
12. Prior to paving over any sanitary sewer lines, submit T.V.tapes and logs, pressure tests, and the engineer's certification to the City's Wastewater Management Division. After the Wastewater Management Division reviews the above listed information, a preliminary manhole inspection will be conducted. When all the items listed above are completed to meet the standards of the Wastewater Management Division, a letter approving paving will be issued in relation to the sanitary sewer. Note: A final manhole inspection will be conducted after the final paving is completed.
13. All sewer manholes with sewer lines 12 inches in diameter and larger are required to have approved vented and locking manhole covers.
14. Locate wires shall be installed for all sanitary sewers (gravity/force mains). The locate wire must be visible in the manhole or access structure. This will be verified during the preliminary manhole inspection prior to paving. The locate wire is to be a continuous, 12 gauge, solid strand insulated copper wire.
15. Off-road public sewer access will be provided for all public sewer lines and manholes. Access roads are to be a minimum 12 feet wide with a driving surface of 6 inches of compacted base course. No access road shall have a grade greater than 15%. Manholes are to be aligned with the center line of the access road. Sewer easements are to be a minimum of 20 feet in width.
16. Off road sanitary sewer - Call the Wastewater Management Division at 955-4631 for a field review of the grading of all off road sanitary sewer to ensure that the City's maintenance vehicles can access all manholes. The grades may be required to be adjusted based upon this inspection. Additional bank protection may be required based upon a final inspection by the Wastewater Management Division and the project engineer.
17. For Record Drawings, tie manhole to a City of Santa Fe survey monument as part of the final record drawings. Show corrected as-built bearing and distances, slopes, rim and invert elevations and sewer services along the horizontal alignment of the sanitary sewer.
18. The Owner/Developer will be responsible for maintaining, repairing and locating the sewer system until City acceptance for maintenance. Damages resulting from a stoppage in any gravity and/or pressure sewer system will be the sole responsibility of the Owner/Developer until a final acceptance letter for permanent maintenance has been issued by the Wastewater Management Division.
19. Water meters will not be placed until a final acceptance letter has been issued by the Wastewater Division for all on-site sanitary sewer needed in order for the project to connect to the sanitary sewer system.
20. 20 foot wide access gates shall be provided at all fences, walls or other obstructions that cross a public sewer line. Access gates to be located within the sanitary sewer Easement.
21. The Owner/Developer will be responsible for locating each sewer service at the time each lot is ready to connect to the sewer. It is suggested that the Owner/ Developer retain a copy of the television inspection video along with the video logs. Each service shall be clearly marked for each lot at point of connection. All calls received by this Division regarding the location of service will be forwarded to the Owner/Developer.
22. The Contractor shall call the Wastewater Management Division (Douglas Flores at telephone # 955-4613) for a final manhole inspection. This inspection will be isolated to the manholes. The City's Plumbing and Mechanical Inspector's will conduct all other necessary plumbing inspections. Note: The City's Plumbing and Mechanical Inspectors will inspect the individual sewer service taps and laterals, which connect to the public sanitary sewer.
23. The existing sanitary sewer line must be T.V. taped prior to a new service connection being placed as well as taped after the services have been completed. This is to ensure that the existing sanitary sewer line is not damaged and the new service is installed correctly.
24. All costs associated with the operation, maintenance and replacement of grinder pumps for individual lots shall be the responsibility of the lot owner and/or Owners Association. For grinder pumps that connect to a pressure sewer main, the grinder pump will be a model manufactured by Environment-One or a type approved by the City of Santa Fe Wastewater Management Division. For grinder pumps that connect to a gravity main, the grinder pump shall be of a type approved by the City of Santa Fe Plumbing Code.
25. A minimum 12 inches of vertical clearance shall be provided between the sewer line and any storm drain piping.
26. All pressure sewer systems shall be air or hydrostatically pressure tested @ 120 psi for 2 hours minimum. The test is to be witnessed and certified by the project engineer. Prior to being put into service and acceptance by the City of Santa Fe, all pressure sewer system main lines will be filled with water.
27. No public pressure sewer system piping may be installed in a common trench with other utilities.
28. Sewer backflow check valves will be required for all sewer service lateral connections to sewer mains 12 inches or greater in diameter. The sewer service connection must be made at an existing or new manhole. Sewer service connections to sewer mains with pipe size diameter of 12 inches and greater will not be made without approval from the Wastewater Management Division.
29. Sewer backwater check valves shall be required on private sewer service laterals per the City of Santa Fe Plumbing Code.
30. Any 8 inch public sanitary sewer main line placed with a grade of less than 0.60% shall be removed and reconstructed at the Contractor's expense. All public sanitary sewer main lines with slopes of less than 1% require a minimum Class C bedding with select granular material foundation.
31. All as-built sewer line and manhole data shall be obtained and certified by a licensed surveyor or engineer. As-built data supplied by other than a licensed surveyor or engineer shall not be valid for final as-builts.
32. All existing and new public manholes within a project shall have access for City sewer maintenance equipment. All access is subject to field verification and modification as required by the Wastewater Division prior to final project close out with the City of Santa Fe.
33. All sewer line crossings of rivers, streams, arroyos, drainage channels, etc., shall require a basis of design analysis prepared by a licensed engineer.
34. An approved backflow valve and isolation valve are required on all low pressure sewer service lines as per the City of Santa Fe Standard Sewer Specifications.
35. Terminal flushing connections and in-line flushing connections are required on all low pressure sewer systems. The maximum spacing between in-line flushing connections shall be 500 feet. Distances greater the 500 feet between low pressure sewer in-line flushing connections shall be approved by the Wastewater Division.
36. Sewer backflow check valves are required on private sewer service laterals per the City's Plumbing Code. Final determination shall be made by the City of Santa Fe Plumbing Inspection Division

WASTEWATER NOTES:
WASTEWATER UEC CHARGES SHALL BE PAID AT THE TIME OF BUILDING PERMIT APPLICATION.

SANITARY SEWER NOTE:
NO FENCES, WALLS, OR OTHER STRUCTURES SHALL BE CONSTRUCTED WITHIN OR ACROSS SANITARY SEWER EASEMENTS

STREET LIGHTING NOTE:
PROPOSED LUMINAIRES SHALL BE METERED AND INCLUDE LED TYPE FIXTURES EQUIVALENT TO CONVENTIONAL 250 HIGH PRESSURE SODIUM. THE DESIGN AND FIXTURE TYPES SHALL BE REVIEWED AND APPROVED BY THE CITY OF SANTA FE TRAFFIC ENGINEERING DIVISION.

GENERAL NOTES:
GAS SERVICES AND METERS TO BE DESIGNED BY NEW MEXICO GAS COMPANY.

WATER SERVICES TO BE DESIGNED BY CITY OF SANTA FE WATER DISTRICT.

ELECTRIC TRANSFORMERS AND SERVICES TO BE DESIGNED BY PUBLIC SERVICE COMPANY OF NEW MEXICO.

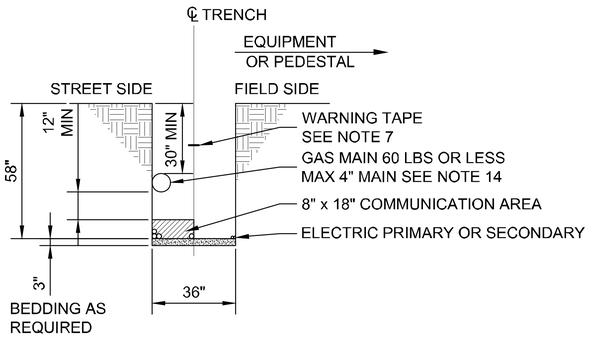
CABLE TELEVISION SERVICE TO BE DESIGNED BY COMCAST.

CONTRACTOR TO COORDINATE WITH ALL UTILITY COMPANIES.

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14. Depth of gas measured from final grade.

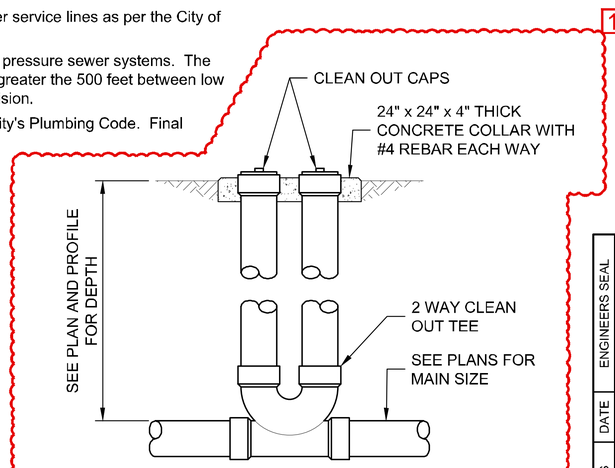
REFERENCES
1. NESC rule 352, 353, 354

1 COMMENTS FROM CITY STAFF ADDED CLEANOUT DETAIL



TYPICAL JOINT TRENCH DETAIL
N.T.S.

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SANITARY SEWER CLEANOUT DETAIL

ENGINEERS SEAL	FOR REVIEW ONLY
DATE	
REVISIONS	

CASE # _____

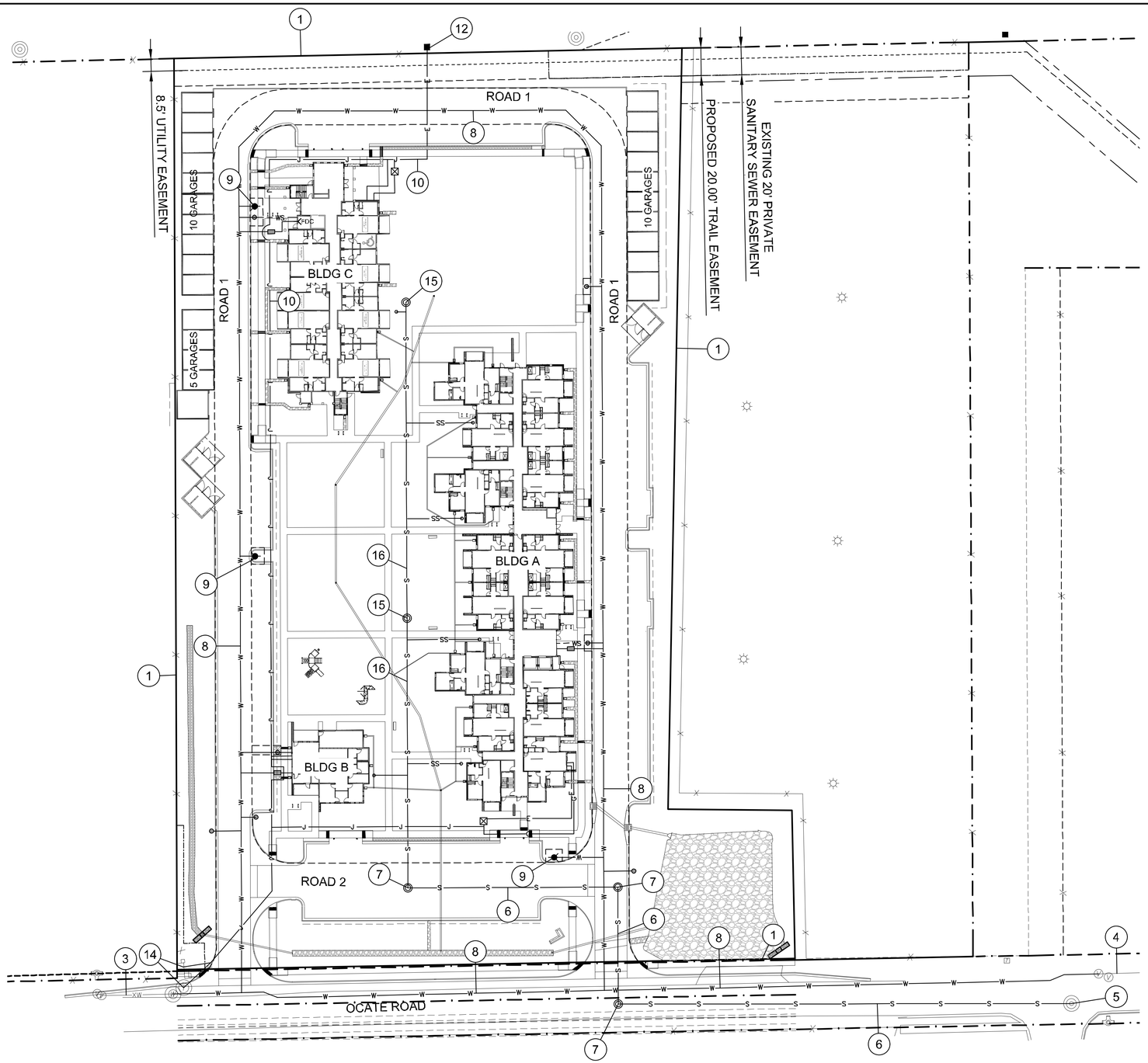
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

UTILITY NOTES AND DETAILS

DATE:	SCALE:	SHEET:
FEBRUARY 2025	N.T.S.	7-1



SHEET KEYNOTES

1. PROPERTY LINE
2. EXISTING 8" PVC WATER LINE
3. EXISTING 12" PVC WATER LINE
4. EXISTING 8" PVC SANITARY SEWER LINE
5. EXISTING SANITARY SEWER MANHOLE
6. PROPOSED PUBLIC 8" PVC SDR-21 SANITARY SEWER LINE
7. PROPOSED PUBLIC SANITARY SEWER MANHOLE
8. PROPOSED 8" PVC WATER LINE
9. PROPOSED FIRE HYDRANT
10. PROPOSED JOINT UTILITY TRENCH
11. PROPOSED METER BANK FOR GAS AND ELECTRIC
12. TIE TO EXISTING ELECTRIC AT POLE
13. PROPOSED 4" SCH40 PVC SANITARY SEWER SERVICE
14. TIE TO EXISTING TELEPHONE AND GAS LINES
15. PROPOSED PRIVATE SANITARY SEWER MANHOLE
16. PROPOSED PRIVATE SANITARY SEWER MANHOLE

LEGEND

EXISTING UTILITIES

- EXISTING SANITARY SEWER LINE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- EXISTING OVERHEAD UTILITY
- UTILITY POLE, OVERHEAD UTILITY LINES, AND POLE GUY ANCHOR WHERE APPLICABLE
- TELEPHONE PEDESTAL
- UTILITY BOX
- MANHOLE COVER
- FIRE HYDRANT
- LIGHT POLE
- GAS CONNECT

PROPOSED UTILITIES

- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED JOINT UTILITY TRENCH
- PROPOSED ELECTRIC LINE
- PROPOSED GAS LINE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER METER
- PROPOSED HOTBOX
- PROPOSED FIRE DEPARTMENT CONNECTION
- PROPOSED TRANSFORMER
- PROPOSED LUMINAIRES (SEE ELECTRICAL SITE PLAN, SHEET 4-1)

UTILITY CONTACT INFORMATION

COMPANY	CONTACT	PHONE NUMBER
PUBLIC SERVICE COMPANY OF NEW MEXICO	ANNETTE DURAN-GONZALES	(505) 473-3269
X-FINITY / LUMEN	KRISTEN FENN	(505) 403-9170
COMCAST	SPENCER DeBORD	(505) 438-1930
NM GAS COMPANY	STEPHEN ASP	(505) 697-3843
CITY OF SANTA FE WATER DIVISION	JOHN DELMAR, P.E.	(505) 955-4231
CITY OF SANTA FE WASTE WATER DIVISION	STAN HOLLAND, P.E.	(505) 955-4650

MASTER UTILITY PLAN
SCALE: 1" = 40'

N

0 20 40 80
SCALE: 1" = 40'

VOID SEE NEXT SHEET.

CASE # _____

CITY REVIEW		
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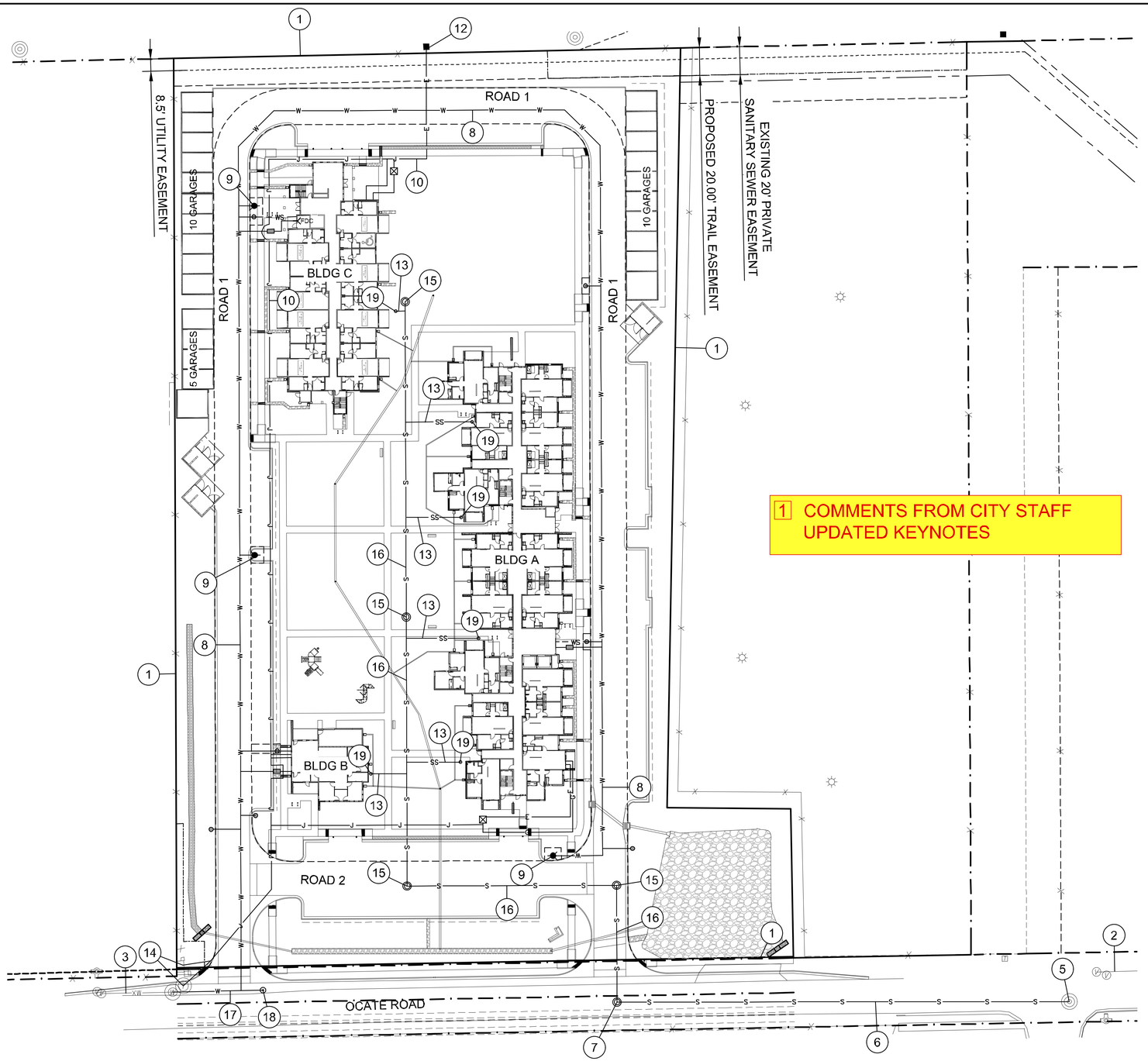
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

MASTER UTILITY PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	7-2



SHEET KEYNOTES

1. PROPERTY LINE
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3. EXISTING 12" PVC WATER LINE
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16. PROPOSED PRIVATE SANITARY SEWER LINE
17. PROPOSED 12" PVC WATER LINE
18. PROPOSED 2" BLOW-OFF VALVE
19. SANITARY SEWER CLEANOUT. SEE DETAIL, SHEET 7-1

1 COMMENTS FROM CITY STAFF
UPDATED KEYNOTES

LEGEND

EXISTING UTILITIES

- EXISTING SANITARY SEWER LINE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
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- PROPOSED SANITARY SEWER SERVICE
- PROPOSED JOINT UTILITY TRENCH
- PROPOSED ELECTRIC LINE
- PROPOSED GAS LINE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER METER
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MASTER UTILITY PLAN

SCALE: 1" = 40'

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INFRASTRUCTURE PLANS
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SANTA FE, NEW MEXICO

MASTER UTILITY PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	7-2

REVISIONS	DATE	ENGINEERS SEAL
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OCATE APARTMENTS
PONDING CALCULATIONS - IMPERVIOUS

THE PROPOSED DEVELOPMENT AT THE SITE CONSISTS OF THE FOLLOWING:

PROPOSED IMPERVIOUS AREAS (ROOFS, SIDEWALKS, DRIVEWAYS, ETC.) = 130,966.05 SQ. FT.

THE CITY OF SANTA FE TERRAIN MANAGEMENT REGULATIONS REQUIRE THAT PEAK DISCHARGE AFTER DEVELOPMENT MUST NOT EXCEED PEAK DISCHARGE BEFORE DEVELOPMENT. EXCESS RUNOFF FROM NEW IMPERVIOUS AREAS (ROOFS, SIDEWALKS, PATIOS, ETC.) WILL BE MITIGATED BY TEMPORARY DETENTION IN LANDSCAPED PONDING AREAS WITH CONTROLLED RELEASE. CALCULATIONS TO DETERMINE VOLUMES ARE AS FOLLOWS:

ACCORDING TO THE USDA & NRCS WEB SOIL SURVEY, THE SOILS ON THE SITE ARE IN HYDROLOGIC GROUP C.

PRIOR TO THE DEVELOPMENT AT THE SITE, THE UNDEVELOPED AREA COULD BE CONSIDERED "HERBACEOUS", IN FAIR CONDITION. ACCORDING TO TR 55, THE DIRECT RUNOFF FOR THE 100 YEAR PRECIPITATION IS AS FOLLOWS:

	CN	DIRECT RUNOFF (INCHES)
HERBACEOUS HYDROLOGIC SOIL GROUP C COVER FAIR	81	1.48

THE DIRECT RUNOFF FOR THE PROPOSED IMPERVIOUS AREAS FOR THE 100 YEAR PRECIPITATION IS AS FOLLOWS:

	CN	DIRECT RUNOFF (INCHES)
IMPERVIOUS AREAS (ROOFS, SIDEWALKS DRIVEWAYS) HYDROLOGIC SOIL GROUP C	98	2.99

TO MITIGATE THE PROPOSED IMPERVIOUS AREAS (ROOFS, SIDEWALKS, PATIOS), THE DIFFERENCE IN DIRECT RUNOFF FROM THE PRE-DEVELOPMENT CONDITIONS AND POST DEVELOPMENT CONDITIONS IS CALCULATED. THE PONDING VOLUME IS CALCULATED AS FOLLOWS:

2.99" DIRECT RUNOFF IMPERVIOUS AREAS
1.48" DIRECT RUNOFF PRE-DEVELOPMENT
STORE 1.51" OF RAINFALL FOR IMPERVIOUS AREAS

IMPERVIOUS AREAS = 130,966 SQ. FT.
POND 1.51" FROM ALL IMPERVIOUS AREAS

THE TOTAL VOLUME OF WATER TO BE STORED FOR IMPERVIOUS AREA:

REQUIRED VOLUME = $\frac{(1.51" \times 130{,}966 \text{ SQ. FT.})}{12}$

= 16,480 CU. FT.

TOTAL PONDING VOLUME REQUIRED = 16,480 CU. FT.

OCATE APARTMENTS
PONDING CALCULATIONS - OPEN SPACE (PARK)

THE PROPOSED DEVELOPMENT AT THE SITE CONSISTS OF THE FOLLOWING:

PROPOSED OPEN SPACE (PARK) = 89,927.43 SQ. FT.

THE CITY OF SANTA FE TERRAIN MANAGEMENT REGULATIONS REQUIRE THAT PEAK DISCHARGE AFTER DEVELOPMENT MUST NOT EXCEED PEAK DISCHARGE BEFORE DEVELOPMENT. EXCESS RUNOFF FROM NEW OPEN SPACE (PARK) WILL BE MITIGATED BY TEMPORARY DETENTION IN LANDSCAPED PONDING AREAS WITH CONTROLLED RELEASE. CALCULATIONS TO DETERMINE VOLUMES ARE AS FOLLOWS:

ACCORDING TO THE USDA & NRCS WEB SOIL SURVEY, THE EXISTING SOILS ON THE SITE ARE IN HYDROLOGIC GROUP C.

PRIOR TO THE DEVELOPMENT AT THE SITE, THE UNDEVELOPED AREA COULD BE CONSIDERED "HERBACEOUS", IN FAIR CONDITION. ACCORDING TO TR 55, THE DIRECT RUNOFF FOR THE 100 YEAR PRECIPITATION IS AS FOLLOWS:

	CN	DIRECT RUNOFF (INCHES)
HERBACEOUS HYDROLOGIC SOIL GROUP C COVER FAIR	81	1.48

THE DIRECT RUNOFF FOR THE PROPOSED LANDSCAPING AREAS CONSIDERED "OPEN SPACE" IN GOOD CONDITION IN HYDROLOGIC GROUP C FOR THE 100 YEAR PRECIPITATION IS AS FOLLOWS:

	CN	DIRECT RUNOFF (INCHES)
OPEN SPACE HYDROLOGIC SOIL GROUP C COVER GOOD	74	1.05

TO MITIGATE THE PROPOSED LANDSCAPE, THE DIFFERENCE IN DIRECT RUNOFF FROM THE PRE-DEVELOPMENT CONDITIONS AND POST DEVELOPMENT CONDITIONS IS CALCULATED. THE PONDING VOLUME IS CALCULATED AS FOLLOWS:

1.05" DIRECT RUNOFF OPEN SPACE (PARK)
1.48" DIRECT RUNOFF PRE-DEVELOPMENT
STORE -0.43" OF RAINFALL FOR NATURAL DESERT

OPEN SPACE AREAS = 89,927 SQ. FT.
POND -0.43" FROM ALL OPEN SPACE

THE TOTAL VOLUME OF WATER TO BE STORED FOR OPEN SPACE:

REQUIRED VOLUME = $\frac{(-0.43" \times 89{,}927 \text{ SQ. FT.})}{12}$

= -3,222 CU. FT.

TOTAL PONDING VOLUME REQUIRED = -3,222 CU. FT.

OCATE APARTMENTS
PONDING CALCULATIONS - GRAVEL AREAS

THE PROPOSED DEVELOPMENT AT THE SITE CONSISTS OF THE FOLLOWING:

PROPOSED GRAVEL AREAS = 3,731.44 SQ. FT.

THE CITY OF SANTA FE TERRAIN MANAGEMENT REGULATIONS REQUIRE
THAT PEAK DISCHARGE AFTER DEVELOPMENT MUST NOT EXCEED PEAK DISCHARGE BEFORE DEVELOPMENT. EXCESS RUNOFF FROM NEW GRAVEL AREAS WILL BE MITIGATED BY TEMPORARY DETENTION IN LANDSCAPED PONDING AREAS WITH CONTROLLED RELEASE. CALCULATIONS TO DETERMINE VOLUMES ARE AS FOLLOWS:

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	CN	DIRECT RUNOFF (INCHES)
HERBACEOUS HYDROLOGIC SOIL GROUP C COVER FAIR	81	1.48

THE DIRECT RUNOFF FOR THE PROPOSED GRAVEL AREAS CONSIDERED IN HYDROLOGIC GROUP C FOR THE 100 YEAR PRECIPITATION IS AS FOLLOWS:

	CN	DIRECT RUNOFF (INCHES)
GRAVEL AREAS HYDROLOGIC SOIL GROUP C	76	1.17

TO MITIGATE THE PROPOSED GRAVEL AREAS, THE DIFFERENCE IN DIRECT RUNOFF FROM THE PRE-DEVELOPMENT CONDITIONS AND POST DEVELOPMENT CONDITIONS IS CALCULATED. THE PONDING VOLUME IS CALCULATED AS FOLLOWS:

1.17" DIRECT RUNOFF GRAVEL AREAS
1.48" DIRECT RUNOFF PRE-DEVELOPMENT
STORE -0.31" OF RAINFALL FOR GRAVEL AREAS

GRAVEL AREAS = 3,731 SQ. FT.
POND -0.31" FROM ALL GRAVEL AREAS

THE TOTAL VOLUME OF WATER TO BE STORED FOR GRAVEL AREAS:

REQUIRED VOLUME = $\frac{(-0.31" \times 3{,}731 \text{ SQ. FT.})}{12}$

= -96 CU. FT.

TOTAL PONDING VOLUME REQUIRED = -96 CU. FT.

ALL ON-SITE SOIL DISTURBING CONSTRUCTION ACTIVITIES SHALL BE ADDRESSED AND PROVIDE MEASURES TO MITIGATE OR CONTROL DUST FROM BEING TRANSPORTED OFFSITE AND POLLUTING NEIGHBORING PROPERTIES.

ANY PERSON, OWNER, CONTRACTOR OR OPERATOR WHO CONDUCTS EARTHMOVING AND/OR DUST GENERATING ACTIVITIES IS RESPONSIBLE FOR IMPLEMENTING BEST MANAGEMENT PRACTICES (BMPs) IN ORDER TO MITIGATE OFF-PROPERTY TRANSPORT OF FUGITIVE DUST EMISSIONS.

A PLAN, OR STORM WATER PREVENTION PLAN (SWPPP) WHEN APPLICABLE, LISTING THE BEST MANAGEMENT PRACTICES (BMPs), SHALL BE PROVIDED TO THE CITY ENGINEER, OR THEIR DESIGNEE, FOR REVIEW AND APPROVAL. THE APPROVED BMPs SHALL BE APPLIED TO THE GRADED AND/OR DISTURBED SOIL IN ORDER TO STABILIZE THE SITE.

THE INITIAL BMP SHALL ADDRESS HOW THE CONTRACTOR WILL MINIMIZE THE AMOUNT OF DISTURBED SOIL, AND HOW THE CONTRACTOR WILL STABILIZE THE DISTURBED SURFACE AREA EXPOSED TO WIND OR VEHICLE TRAFFIC DURING CONSTRUCTION.

SOME BMPs SHALL INCLUDE:

- THE REDUCTION OF VEHICLE SPEEDS: ESTABLISH A MAXIMUM SPEED LIMIT OR INSTALL TRAFFIC CALMING DEVICES TO REDUCE SPEEDS TO A RATE TO MITIGATE OFF-PROPERTY TRANSPORT OF DUST ENTRAINED BY VEHICLES.
- THE MINIMIZATION OF DROP HEIGHT: DRIVERS AND OPERATORS SHALL UNLOAD TRUCK BEDS AND LOADER OR EXCAVATOR BUCKETS SLOWLY AND MINIMIZE DROP HEIGHT OF MATERIALS TO THE LOWEST HEIGHT POSSIBLE, INCLUDING SCREENING OPERATIONS.
- HIGH WINDS RESTRICTION: TEMPORARILY HALT WORK ACTIVITIES DURING HIGH WIND EVENTS GREATER THAN 30 MPH IF OPERATIONS WOULD RESULT IN OFF-PROPERTY TRANSPORT.
- RESTRICT ACCESS: RESTRICT ACCESS TO THE WORK AREA TO ONLY AUTHORIZED VEHICLES AND PERSONNEL.

IN THE EVENT THE ABOVE PRACTICES ARE INEFFECTIVE TO PREVENT OFF PROPERTY TRANSPORT, THE OWNER OR OPERATOR SHALL USE ONE OR MORE OF THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPs):

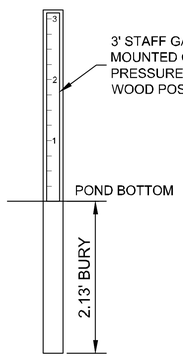
- WET SUPPRESSION: APPLY WATER TO DISTURBED SOIL SURFACES, BACKFILL MATERIALS, SCREENINGS, AND OTHER DUST GENERATING OPERATIONS AS NECESSARY AND APPROPRIATE CONSIDERING CURRENT WEATHER CONDITIONS, AND PREVENT WATER USED FOR DUST CONTROL FROM ENTERING ANY PUBLIC RIGHT-OF-WAY, STORM WATER DRAINAGE FACILITY, OR WATERCOURSE.
- WIND BARRIER: CONSTRUCT A FENCE OR OTHER TYPE OF WIND BARRIER TO PREVENT WIND EROSION OF THE GRADED OR DISTURBED SURFACE.
- VEGETATION: PLANT VEGETATION APPROPRIATE FOR RETAINING SOILS OR CREATING A WIND BREAK.
- SURFACE ROUGHENING: STABILIZE AN ACTIVE CONSTRUCTION AREA DURING PERIODS OF INACTIVITY OR WHEN VEGETATION CANNOT BE IMMEDIATELY ESTABLISHED.
- COVER: INSTALL COVER MATERIALS SUCH AS TACKIFIERS, EROSION CONTROL BLANKETS, GRAVEL, VEGETATION (WHEN APPROPRIATE), COLD-MILLINGS, ETC. DURING PERIODS OF INACTIVITY AND PROPERLY ANCHOR THE COVER.
- SOIL RETENTION: STABILIZE DISTURBED OR EXPOSED SOIL SURFACE AREAS THAT WILL BE INACTIVE FOR MORE THAN 30 DAYS OR WHILE VEGETATION IS BEING ESTABLISHED.

PONDING AREA	
LAND TYPE	PONDING AREA
IMPERVIOUS	16,480
GRAVEL AREA	-96
OPEN SPACE	-3,222
TOTAL	13,162

EARTHWORK NOTES:

1. APPROXIMATE UNADJUSTED EARTHWORK VOLUMES (NOT INCLUDING SUB/OVER EXCAVATION IF REQUIRED):

1.1. CUT = 7,228 C.Y.
1.2. FILL = 1,313 C.Y.



SCALE: N.T.S.

GUNNISON'S PRAIRIE DOG NOTE

THE PROJECT SHALL COMPLY WITH THE PROVISIONS OF THE GUNNISION'S PRAIRIE DOG ORDINANCE (ARTICLE 14-8.12).

WATER LEVEL MEASUREMENT

1. THE CONTRACTOR SHALL INSTALL A STAFF GAUGE AT EACH POND TO MEASURE SEDIMENT ACCUMULATION. STAFF GAUGE MARKINGS SHALL BE IN 0.25' INCREMENTS WITH 0 AT THE BOTTOM OF THE POND AND LABELED FOOT MARKS TO THE TOP OF THE POND. UV RESISTANT MATERIALS SHALL BE USED INCLUDING: FIBERGLASS, STAINLESS STEEL, PVC, ALUMINUM / DIE-BOND BACKED, LEXAN OR POLYCARBONTE COATED MYLAR. SHOP DRAWING SUBMITTALS ARE REQUIRED PRIOR TO CONSTRUCTION.

2. THE STAFF GAUGE SHALL BE CLEANED DURING SPRING AND FALL MAINTENANCE TO REMOVE ANY ACCUMULATION ON THE GAUGE.

CASE # _____

CITY OF SANTA FE DRAINAGE NOTES

1. SUBJECT TO THE APPROVAL OF CITY OF SANTA FE PERMIT AND DEVELOPMENT REVIEW DIVISION STAFF. STORM DRAINAGE AND EROSION/SEDIMENT CONTROL IMPROVEMENTS SHALL BE EXECUTED IN CONJUNCTION WITH THE CONSTRUCTION OF EACH SEGMENT OF ROADS AND UTILITIES. THESE IMPROVEMENTS SHALL BE COMPLETED AND INSPECTED PRIOR TO THE ISSUANCE OF BUILDING PERMITS FOR INDIVIDUAL BUILDINGS.

2. MAINTENANCE OF PRIVATE DRAINAGE EASEMENTS AND DRAINAGE FACILITIES IS THE RESPONSIBILITY OF THE OWNER. THE CITY OF SANTA FE IS HEREBY GRANTED THE RIGHT TO ACCESS AND INSPECT THESE EASEMENTS AND DRAINAGE FACILITIES AT THE DISCRETION OF THE CITY. THE OWNER AGREES TO INDEMNIFY AND TO HOLD HARMLESS FROM ALL DAMAGE TO PERSONS OR PROPERTY RESULTING FROM THE CITY'S REASONABLE EXERCISE TO THEIR ACCESS AND INSPECTION RIGHT.

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
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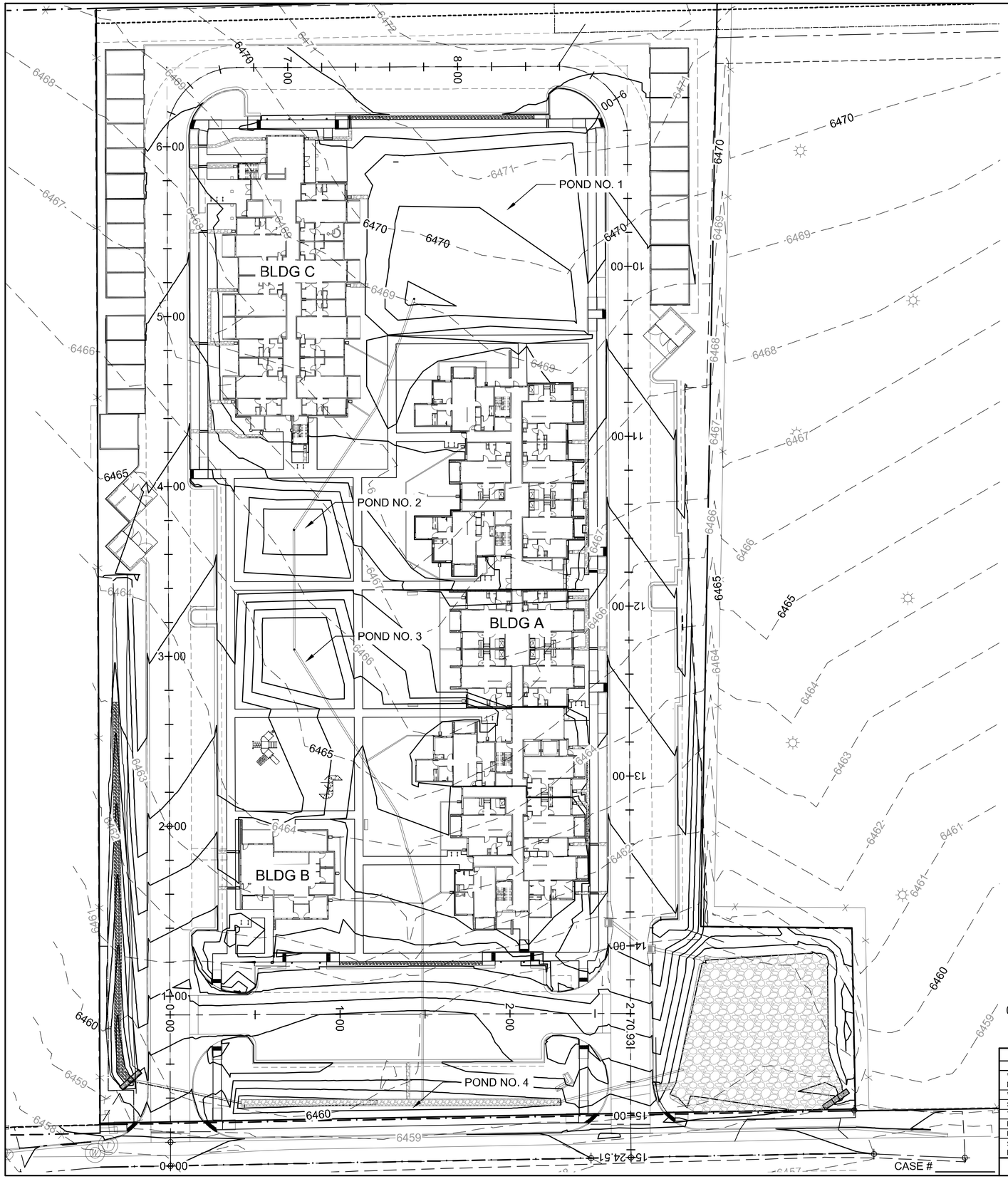
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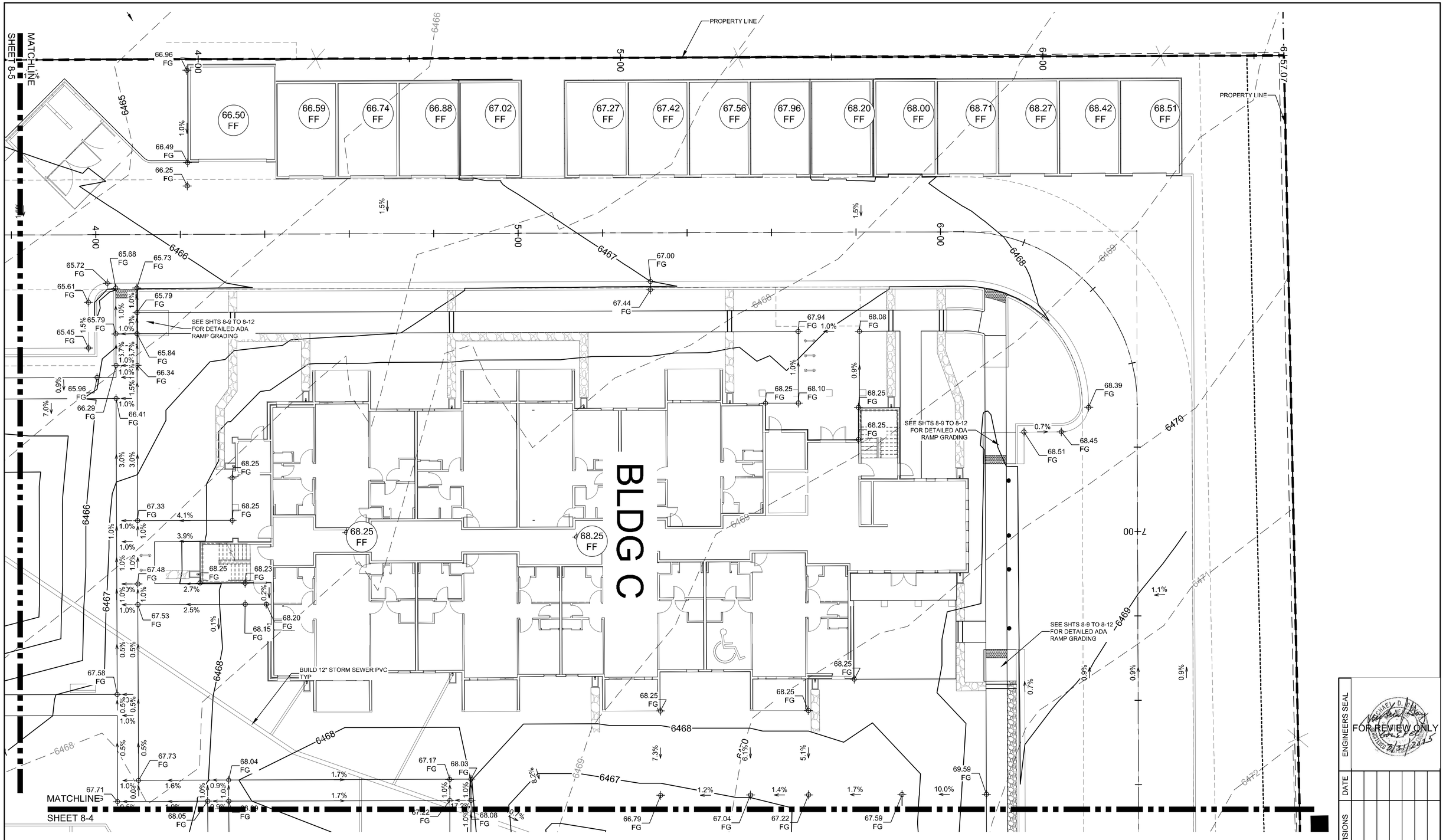
REVISIONS

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

GRADING AND DRAINAGE NOTES

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 30'	8-1


POND NO. 1
POND NO. 2
POND NO. 3
POND NO. 4
BLDG C
BLDG A
BLDG B
6470
6469
6468
6467
6466
6465
6464
6463
6462
6461
6460
6459
6458
6457
6456
6471
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6497
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6499
6500
6501
6502
6503
6504
6505
6506
6507
6508
6509
6510



FF	FINISH FLOOR		FINISH CONTOUR
TOA	TOP OF ASPHALT		EXISTING CONTOUR
EOA	EDGE OF ASPHALT		PROPERTY LINE / ROW
TOS	TOP OF SIDEWALK		DENOTES RIPRAP RUNDOWN
FG	FINISH GROUND		DENOTES BUILDING SPLASHBLOCK

0 5 10 20

SCALE: 1" = 10'

SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
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TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED GRADING AND DRAINAGE PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	8-3

ENGINEERS SEAL

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REVISIONS

SHEET 8-3
MATCHLINE
SHEET 8-6
MATCHLINE

GRAVEL MULCH IN PARKING OVERHANG

BUILD CURB OPENING, SIDEWALK CULVERT AND RIPRAP RUNDOWN SEE DETAIL ON SHT 6-6 & 6-7

65.73 FG
BUILD NYOPLAST CATCH BASIN OR APPROVED EQUAL

SEE SHTS 8-9 TO 8-12 FOR DETAILED ADA RAMP GRADING

SEE SHTS 8-9 TO 8-12 FOR DETAILED ADA RAMP GRADING

PROPERTY LINE

PROPERTY LINE

68.25 FF

67.84 FF | 67.98 FF | 68.14 FF | 68.29 FF | 68.45 FF | 68.61 FF | 68.75 FF | 68.89 FF | 69.05 FF | 69.21 FF

DENOTES BUILDING SPLASHBLOCK

SCALE: 1" = 10'

SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
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STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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RACHEL D. O'CONNOR
NEW MEXICO
FOR REVIEW ONLY
8/1/2025

DATE

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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED GRADING AND DRAINAGE PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	8-4

SHEET 8-7 MATCHLINE

SHEET 8-3 MATCHLINE

MATCHLINE SHEET 8-6

PROPERTY LINE

1V ON 3 H CUT SLOPE

1V ON 3 H CUT SLOPE

BUILD CURB OPENINGS @ 40 FT ON CENTER AND RIPRAP RUNDOWN SEE DETAIL ON SHT 6-6 & 6-7

BUILD CURB OPENINGS @ 40 FT ON CENTER AND RIPRAP RUNDOWN SEE DETAIL ON SHT 6-6 & 6-7

BUILD FLOW THRU CURB

SEE SHTS 8-9 TO 8-12 FOR DETAILED ADA RAMP GRADING

SEE SHTS 8-9 TO 8-12 FOR DETAILED ADA RAMP GRADING

SEE SHTS 8-9 TO 8-12 FOR DETAILED ADA RAMP GRADING

BUILD NYOPLAST CATCH BASIN OR APPROVED EQUAL

BUILD NYOPLAST CATCH BASIN OR APPROVED EQUAL

BUILD 12" STORM SEWER PVC TYP

BUILD 12" STORM SEWER PVC TYP

BUILD 12" STORM SEWER PVC TYP

GRAVEL MULCH IN PARKING OVERHANG

BLDG B

63.75 CORR

62.67 FF

62.67 FF

FF	FINISH FLOOR		FINISH CONTOUR
TOA	TOP OF ASPHALT		EXISTING CONTOUR
EOA	EDGE OF ASPHALT		PROPERTY LINE / ROW
TOS	TOP OF SIDEWALK		DENOTES RIPRAP RUNDOWN
FG	FINISH GROUND		DENOTES BUILDING SPLASHBLOCK

0 5 10 20

SCALE: 1" = 10'

SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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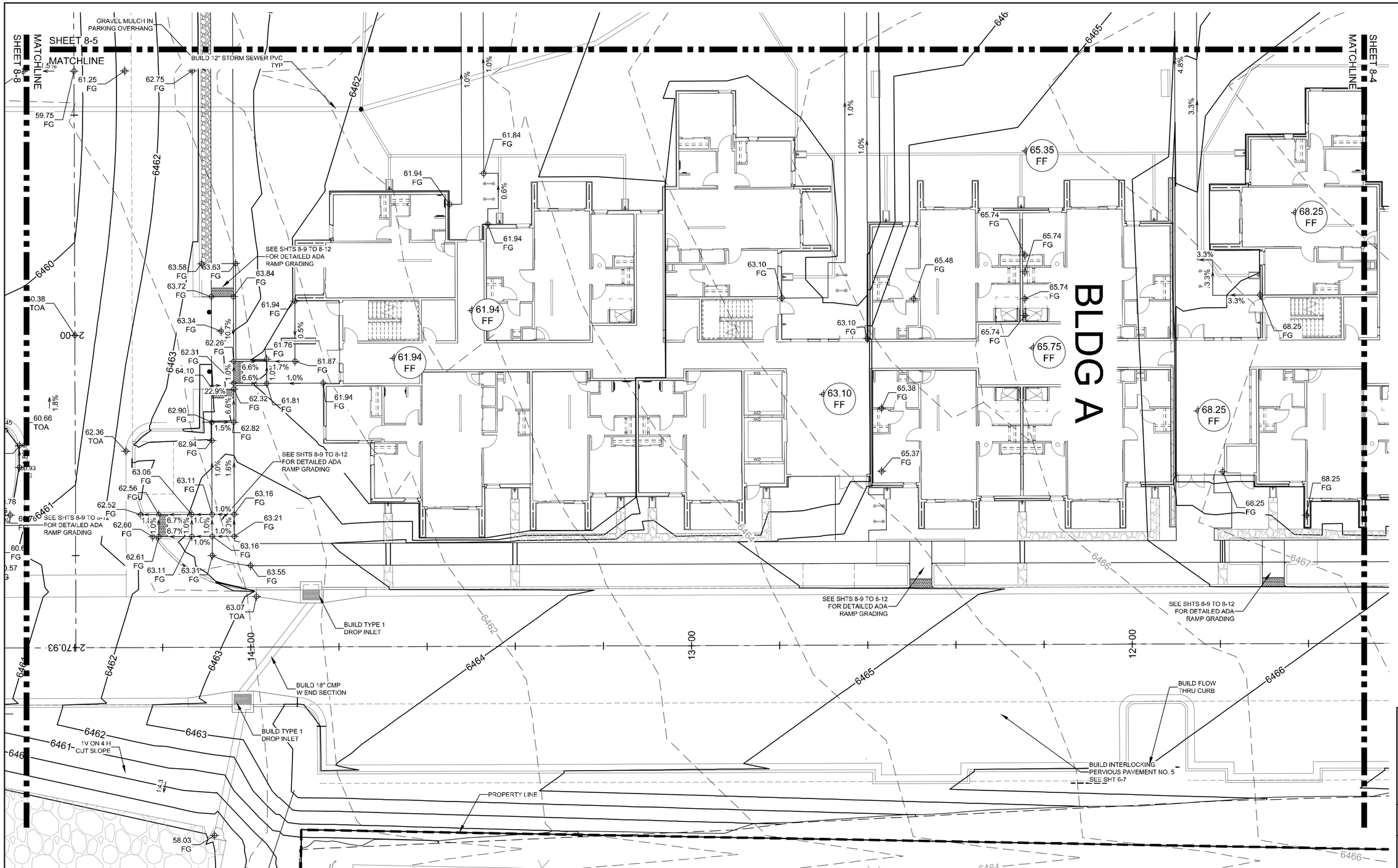
DATE

REVISIONS

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED GRADING AND DRAINAGE PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	8-5



FF	FINISH FLOOR		FINISH CONTOUR
TOA	TOP OF ASPHALT		EXISTING CONTOUR
EOA	EDGE OF ASPHALT		PROPERTY LINE / ROW
TOS	TOP OF SIDEWALK		DENOTES RIPRAP RUNDOWN
FG	FINISH GROUND		DENOTES BUILDING SPLASHBLOCK

0 5 10 20

SCALE: 1" = 10'

SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED GRADING AND DRAINAGE PLAN

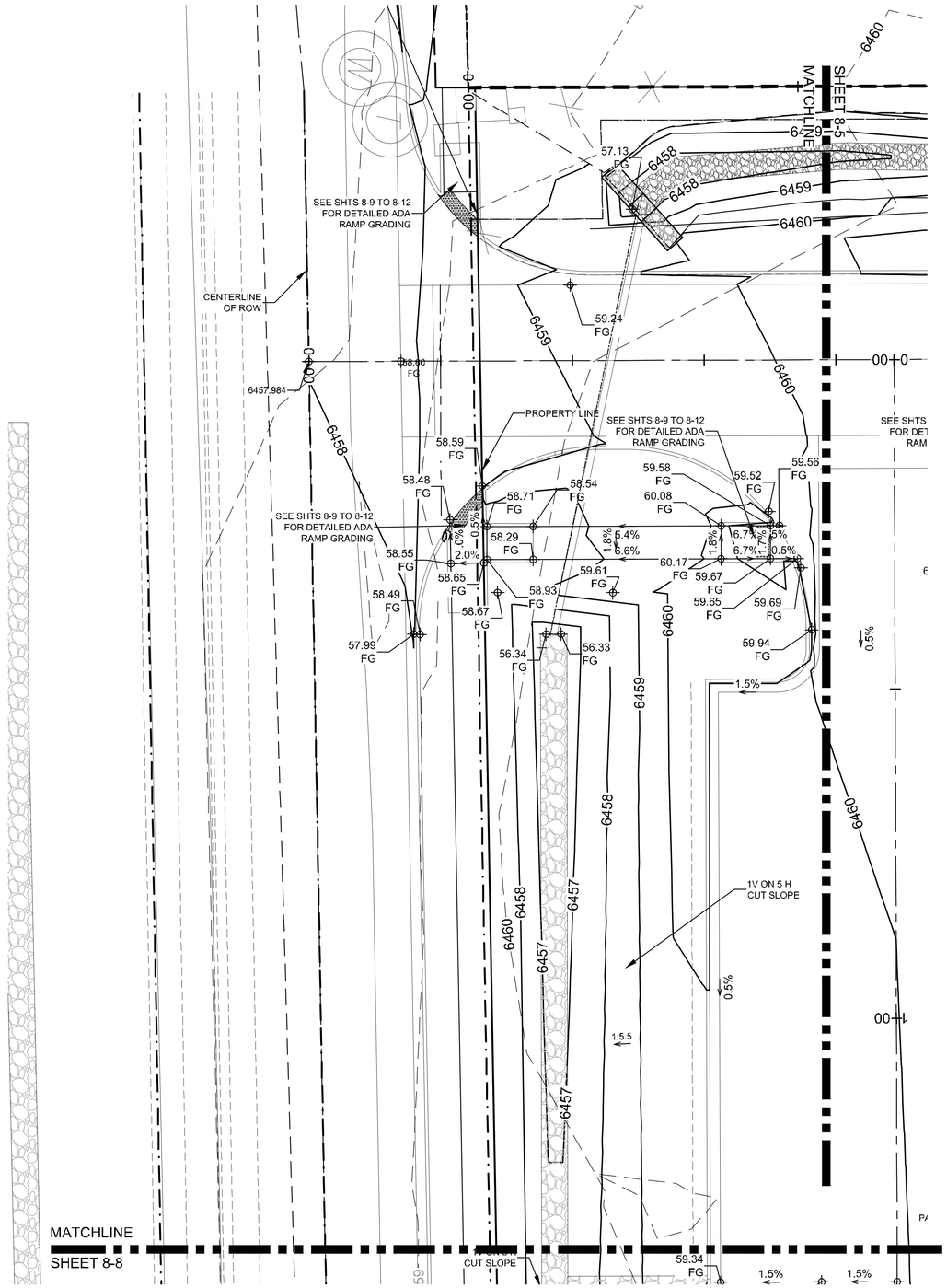
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	8-6

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MICHAEL D. [illegible] 17009 8/31/2025

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DATE	REVISIONS



FF	FINISH FLOOR		FINISH CONTOUR
TOA	TOP OF ASPHALT		EXISTING CONTOUR
EOA	EDGE OF ASPHALT		PROPERTY LINE / ROW
TOS	TOP OF SIDEWALK		DENOTES RIPRAP RUNDOWN
FG	FINISH GROUND		DENOTES BUILDING SPLASHBLOCK

0 5 10 20

SCALE: 1" = 10'

SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
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STREETS DIV.		
TRAFFIC DIV.		
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED GRADING AND DRAINAGE PLAN

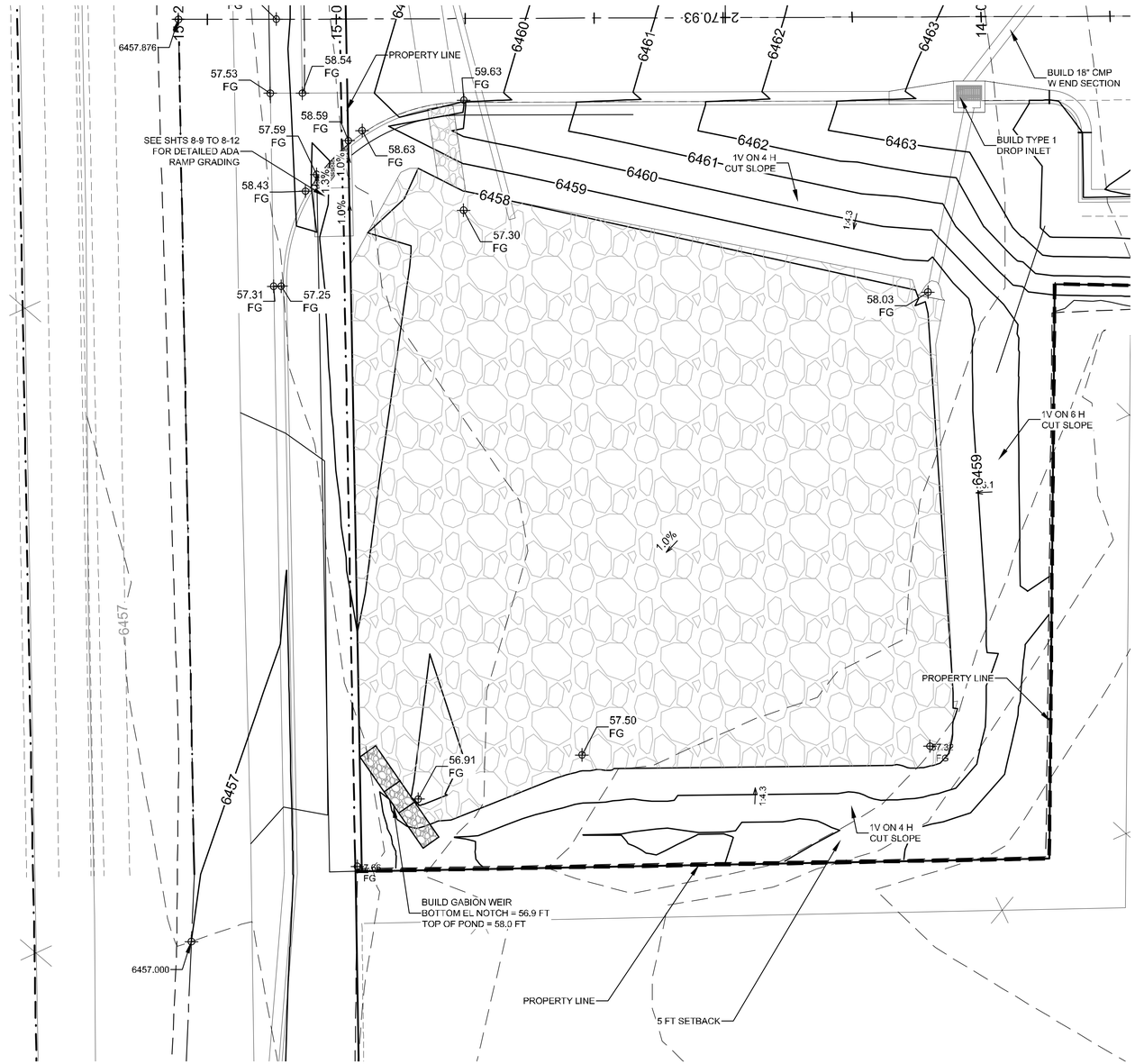
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	8-7

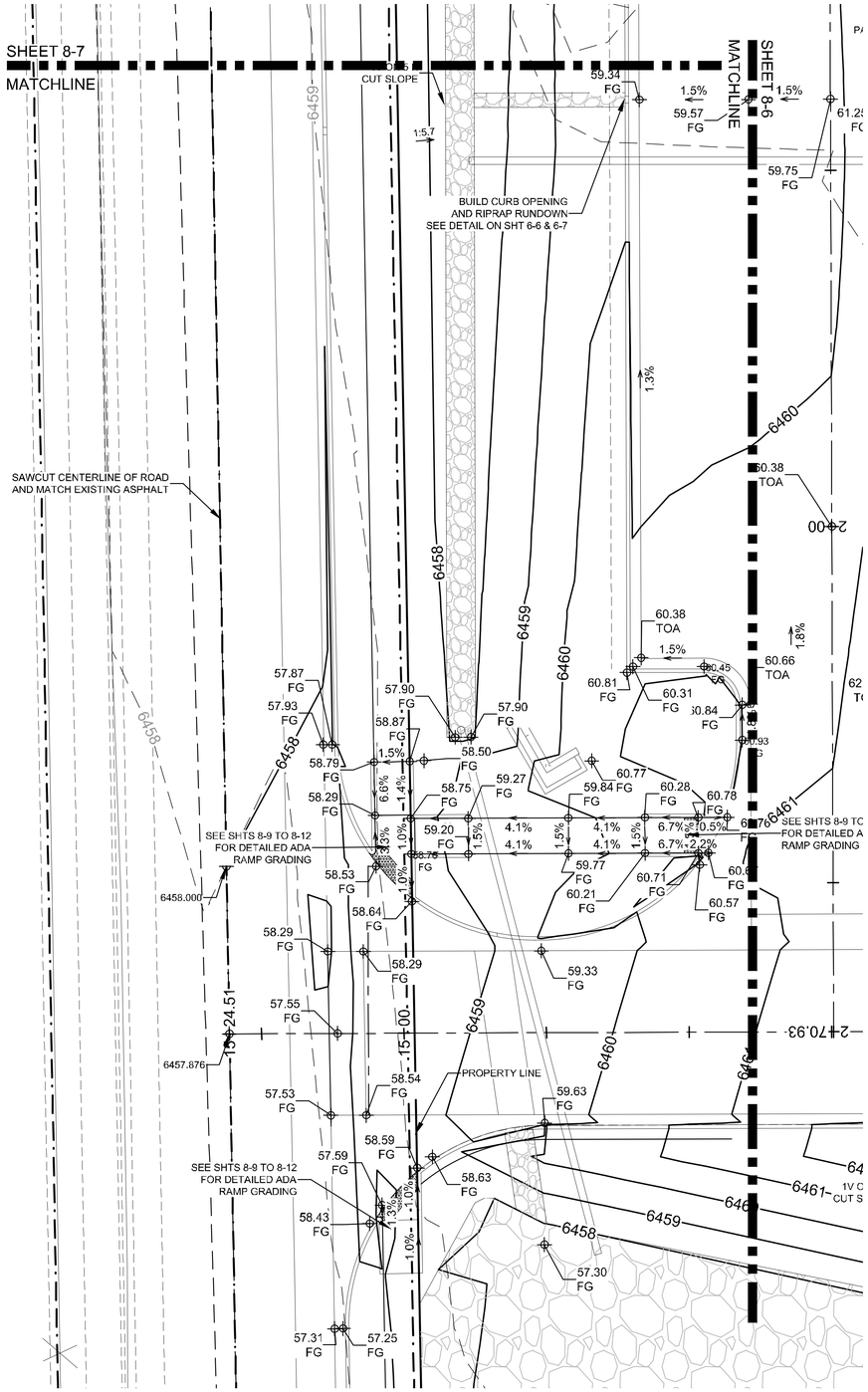
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FF	FINISH FLOOR		FINISH CONTOUR
TOA	TOP OF ASPHALT		EXISTING CONTOUR
EOA	EDGE OF ASPHALT		PROPERTY LINE / ROW
TOS	TOP OF SIDEWALK		DENOTES RIPRAP RUNDOWN
FG	FINISH GROUND		DENOTES BUILDING SPLASHBLOCK

0 5 10 20

SCALE: 1" = 10'

SCALE: 1" = 10'

CASE # _____

CITY REVIEW		
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED GRADING AND DRAINAGE PLAN

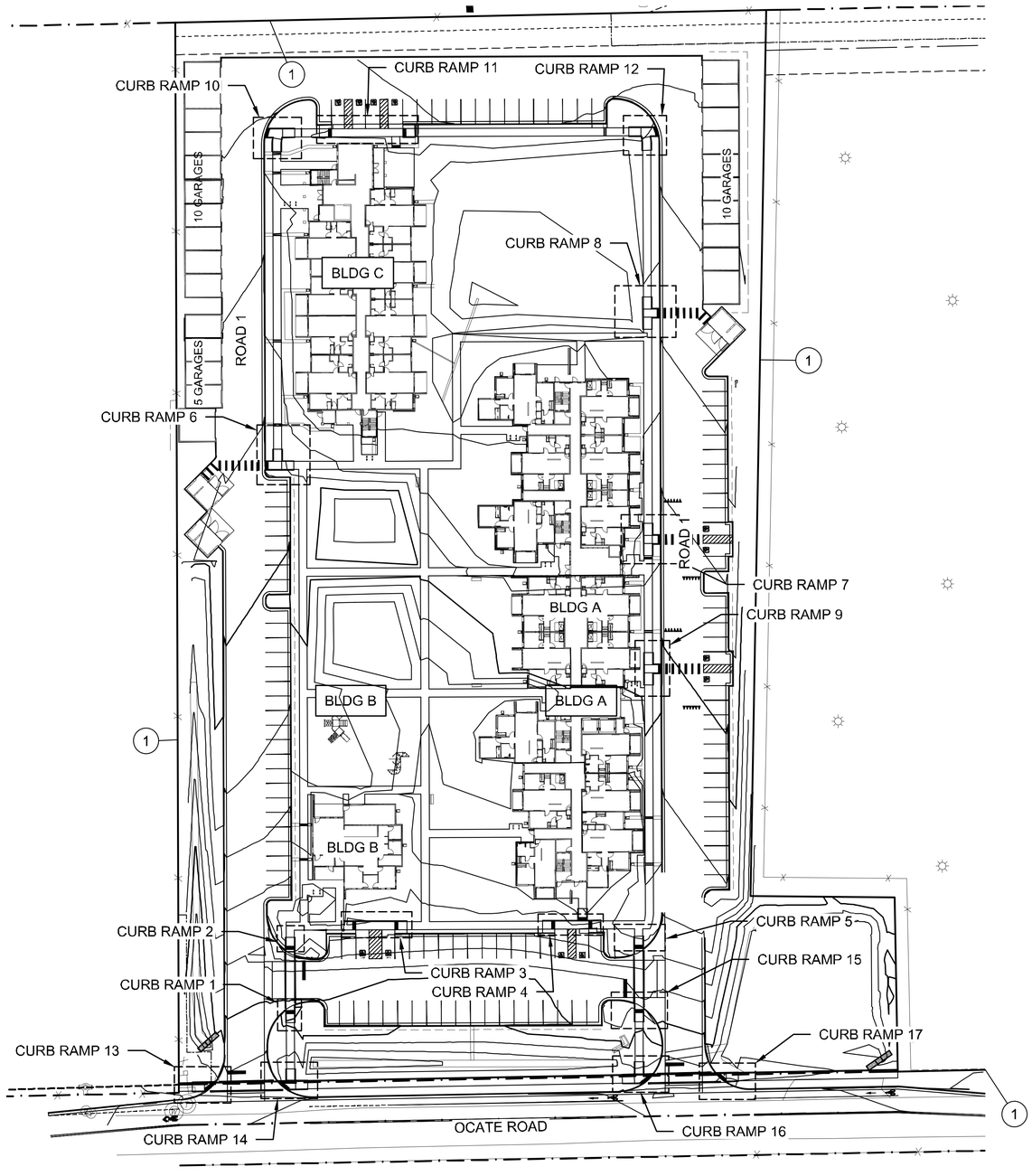
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 10'	8-8

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SHEET KEYNOTES

1. PROPERTY LINE

LEGEND

ADA ACCESSIBLE ROUTE

N

0 20 40 80

SCALE: 1" = 40'

DETAILED ADA GRADING - LOCATION MAP

SCALE: 1" = 40'

CASE # _____

CITY REVIEW		
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED ADA GRADING

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	8-9

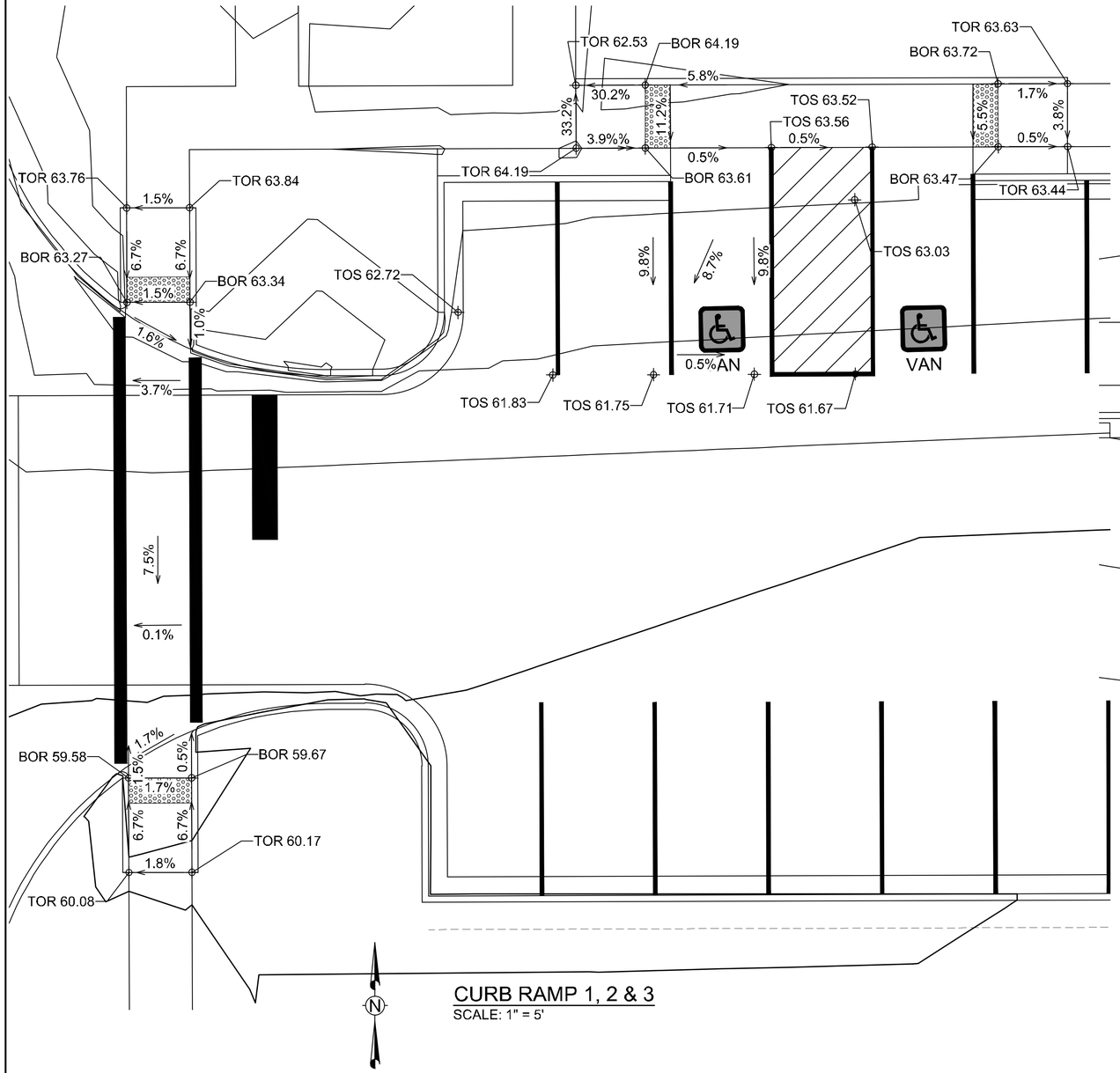
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CHARLES D. NAY
NEW MEXICO
12857
REGISTERED PROFESSIONAL ENGINEER
3/3/2025

FOR REVIEW ONLY

DATE

REVISIONS



LEGEND

6300	FINISHED CONTOUR
TOS	TOP OF SURFACE ELEVATION
TOR	TOP OF RAMP
BOR	BOTTOM OF RAMP

0 2.5 5 10
SCALE: 1" = 5'

ENGINEERS SEAL
FOR REVIEW ONLY
DATE
REVISIONS

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

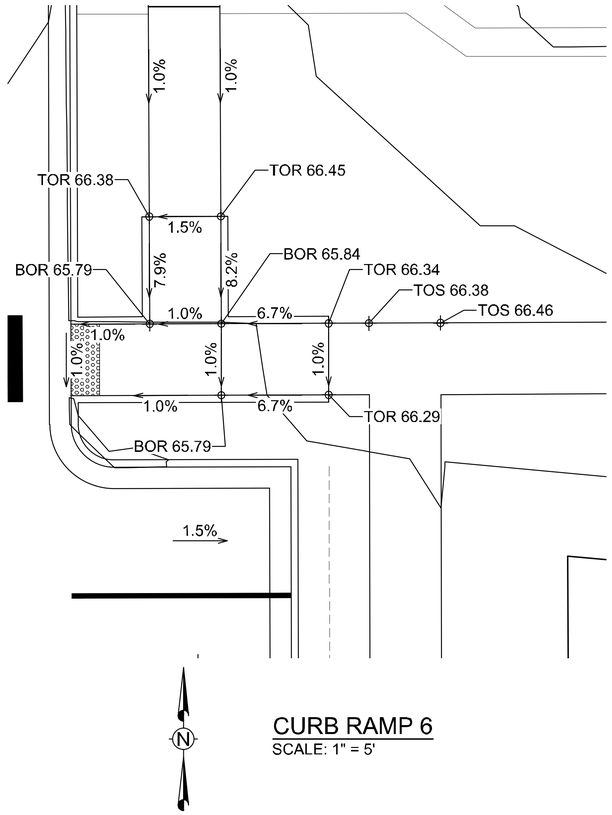
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

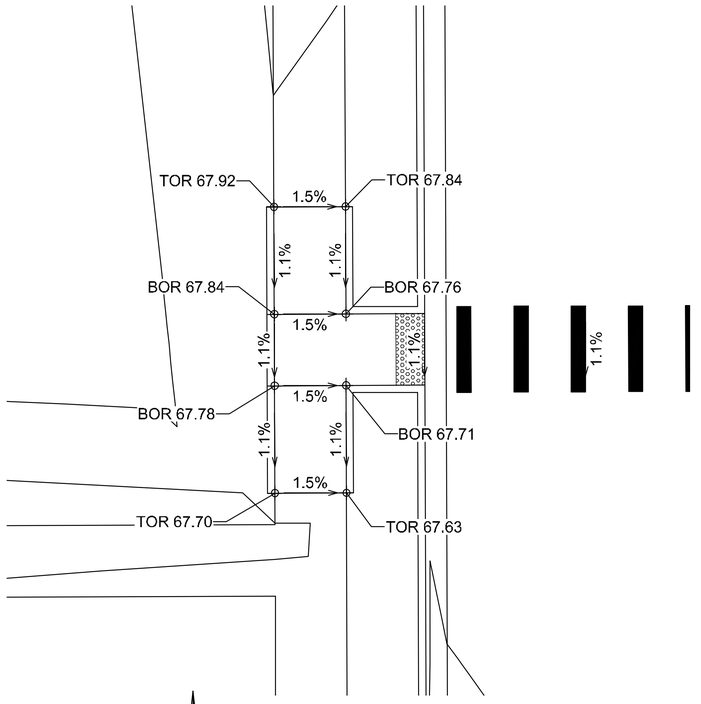
DETAILED ADA GRADING (CONT'D)

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 5'	8-10



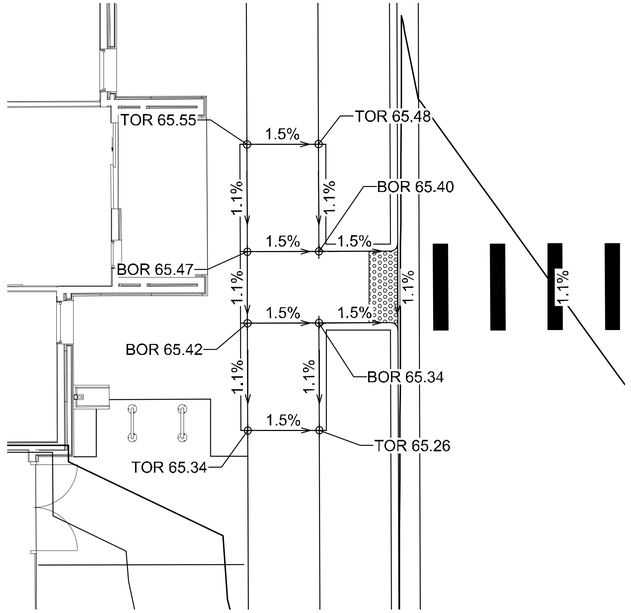
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CURB RAMP 6
SCALE: 1" = 5'



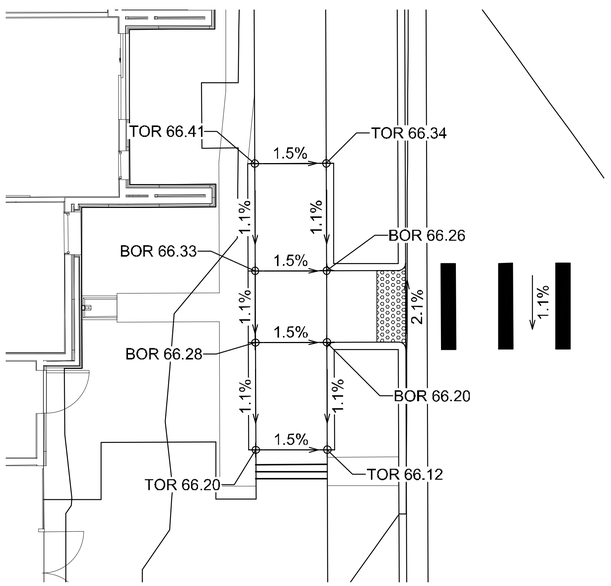
N

CURB RAMP 8
SCALE: 1" = 5'



N

CURB RAMP 9
SCALE: 1" = 5'



N

CURB RAMP 7
SCALE: 1" = 5'

LEGEND

6300	FINISHED CONTOUR
TOS	TOP OF SURFACE ELEVATION
TOR	TOP OF RAMP
BOR	BOTTOM OF RAMP

0 2.5 5 10
SCALE: 1" = 5'

ENGINEERS SEAL

FOR REVIEW ONLY

DATE

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CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
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STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

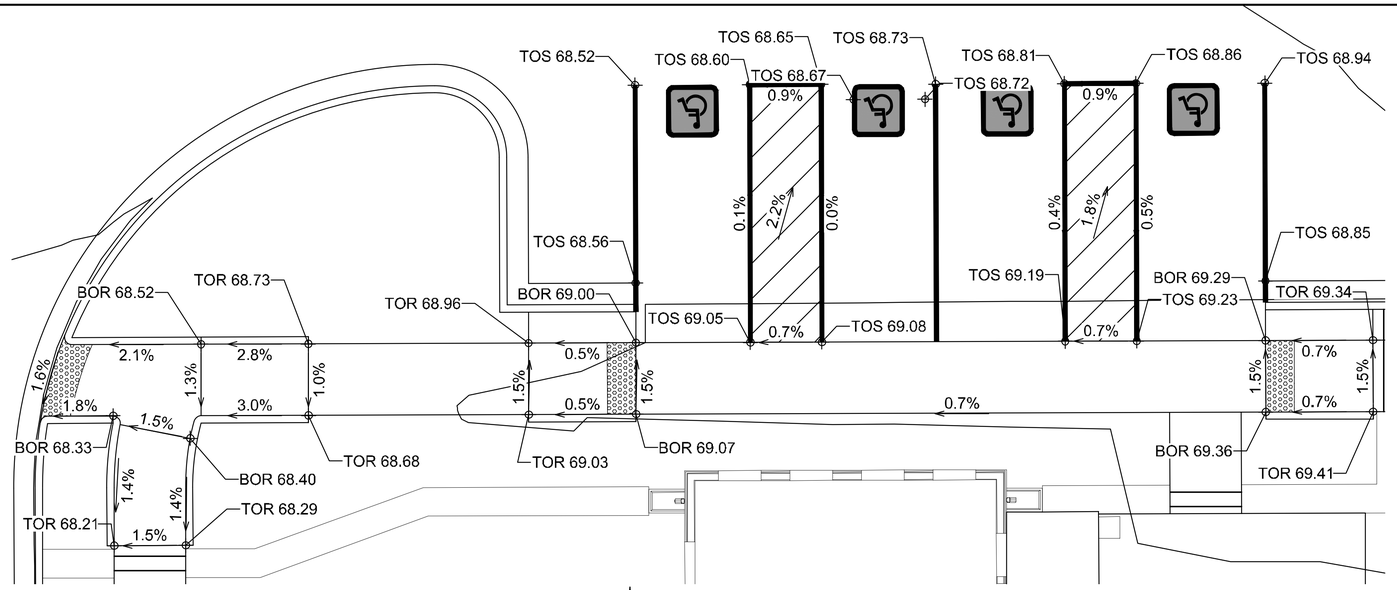
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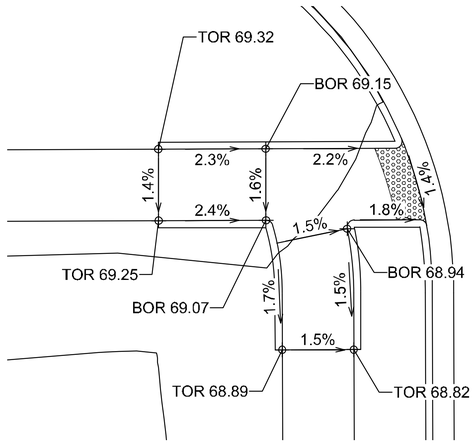
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED ADA GRADING (CONT'D)

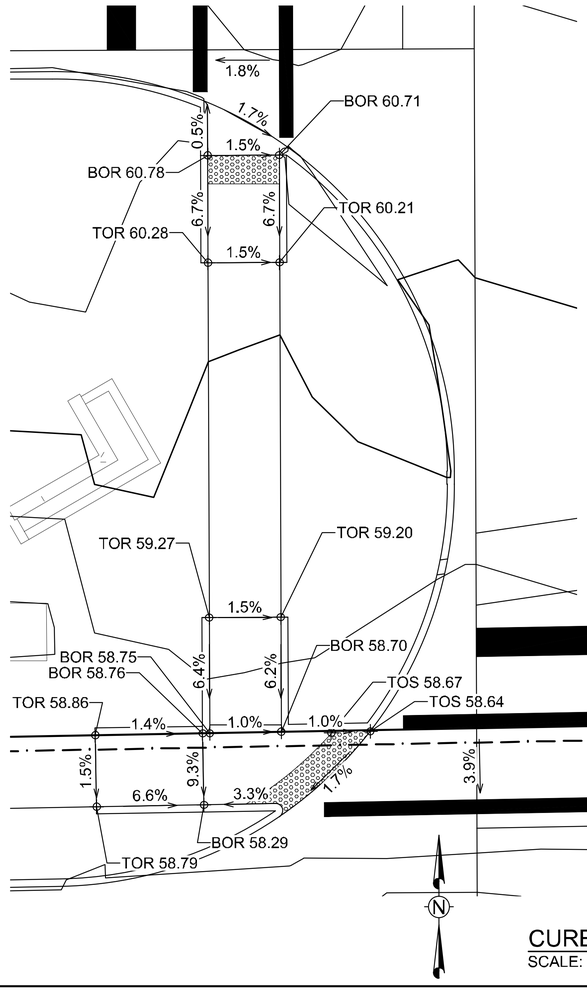
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 5'	8-11

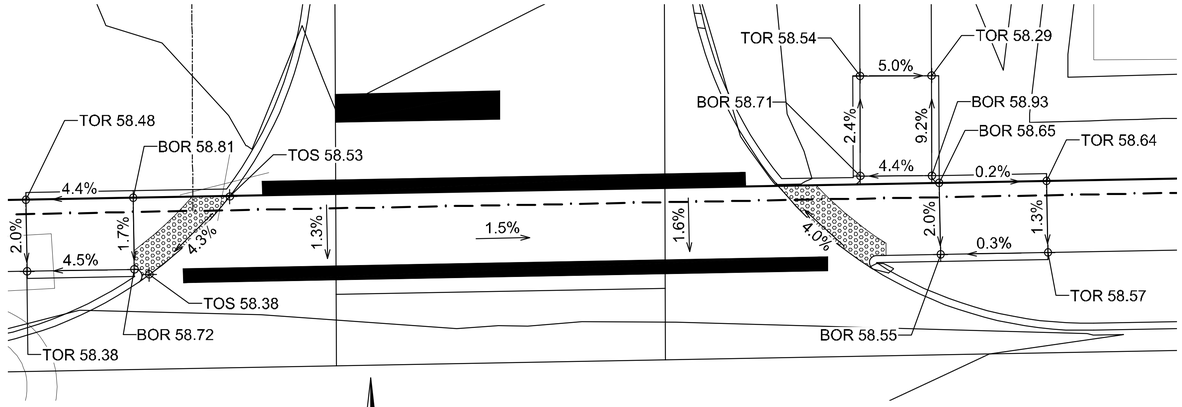


CURB RAMP 10 & 11
SCALE: 1" = 5'



CURB RAMP 12
SCALE: 1" = 5'





CURB RAMP 13 & 14
SCALE: 1" = 5'

CURB RAMP 15, 16 & 17
SCALE: 1" = 5'

LEGEND

6300	FINISHED CONTOUR
TOS	TOP OF SURFACE ELEVATION
TOR	TOP OF RAMP
BOR	BOTTOM OF RAMP

0 2.5 5 10
SCALE: 1" = 5'

ENGINEERS SEAL



DATE

REVISIONS

CASE # _____

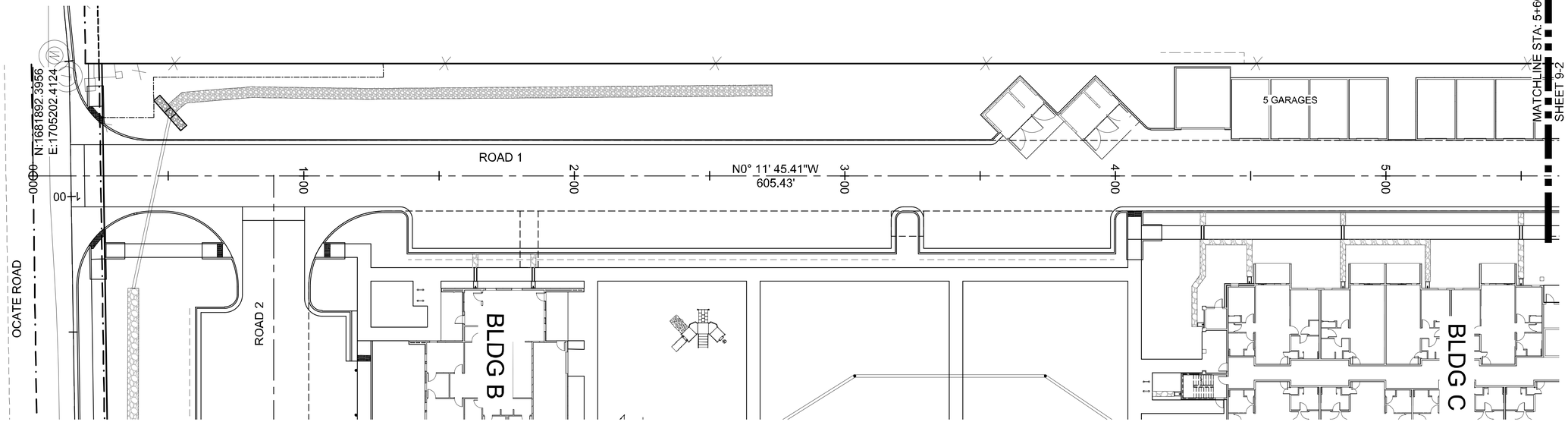
CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
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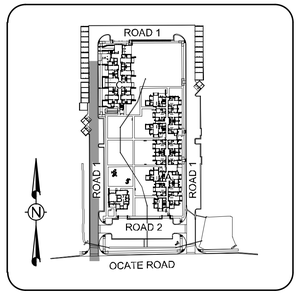
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

DETAILED ADA GRADING (CONT'D)

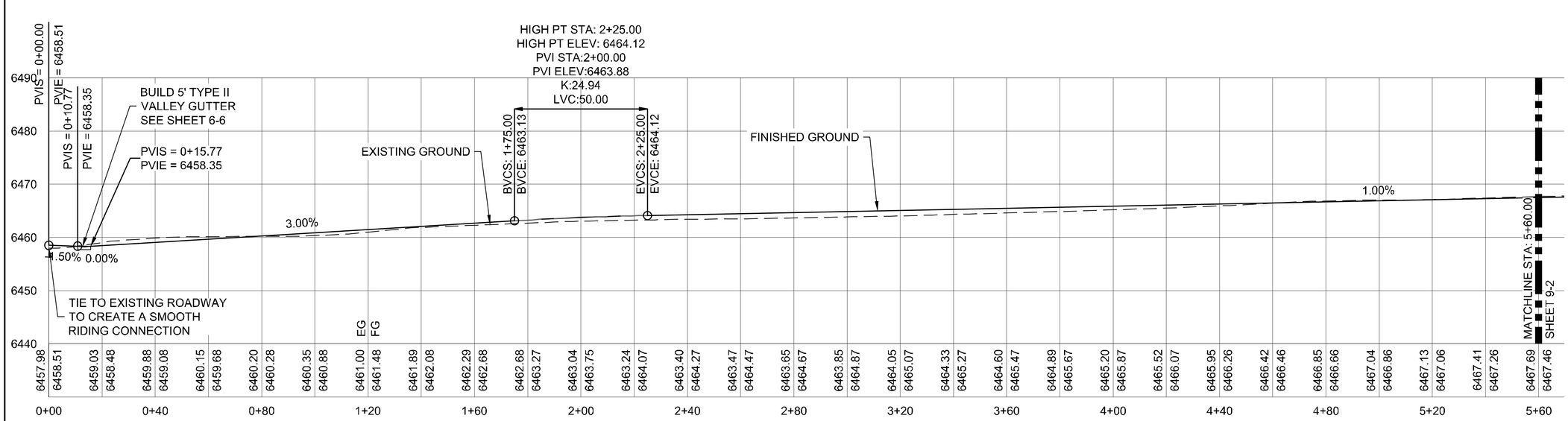
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 5'	8-12



ROAD 1 - PLAN VIEW
SCALE: 1" = 20'



KEYMAP
SCALE: 1" = 200'



ROAD 1 - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 10 20 40
SCALE: 1" = 20'

0 5 10 20
SCALE: 1" = 10'

ENGINEERS SEAL

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CITY REVIEW		
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WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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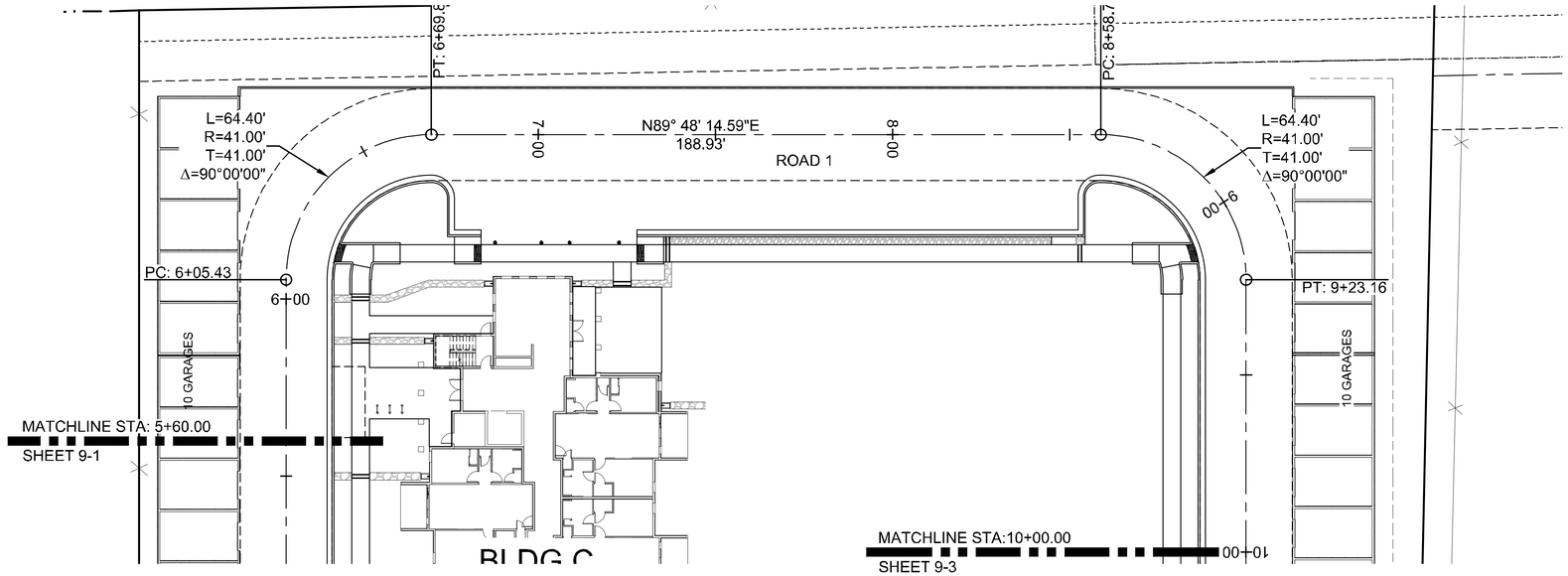
CASE # _____

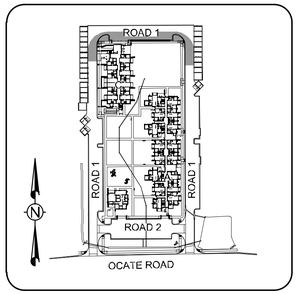
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

ROADWAY PLAN AND PROFILE - ROAD 1

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	9-1

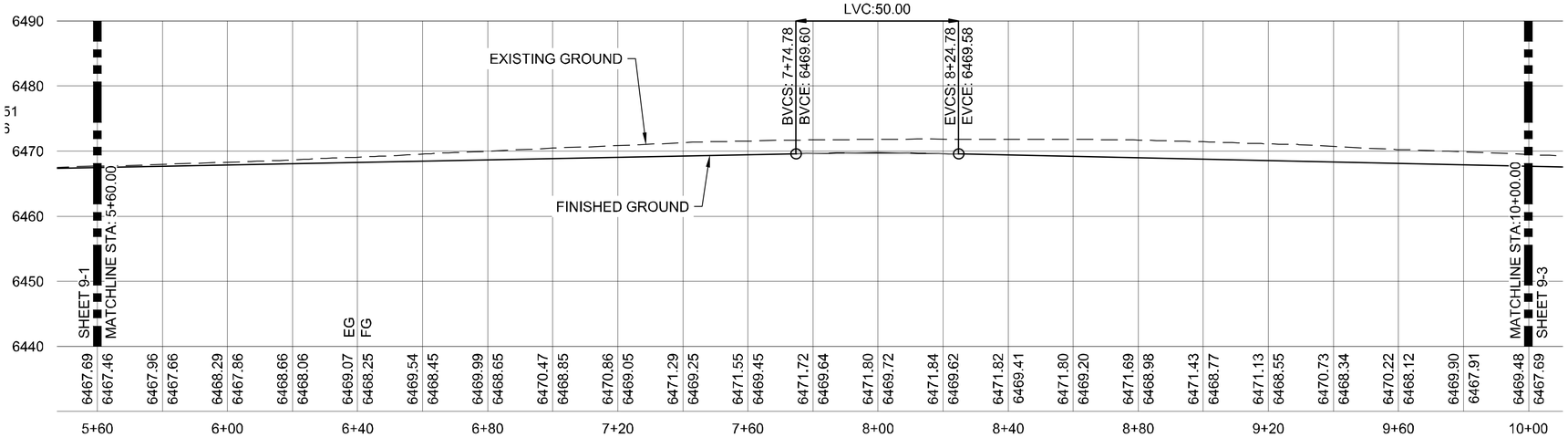




KEYMAP
SCALE: 1" = 200'

ROAD 1 - PLAN VIEW (CONT'D)
SCALE: 1" = 20'

HIGH PT STA: 7+98.83
HIGH PT ELEV: 6469.72
PVI STA:7+99.78
PVI ELEV:6469.85
K:24.16
LVC:50.00



ROAD 1 - PROFILE VIEW (CONT'D)
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 10 20 40
SCALE: 1" = 20'

0 5 10 20
SCALE: 1" = 10'

ENGINEERS SEAL
FOR REVIEW ONLY
DATE
REVISIONS

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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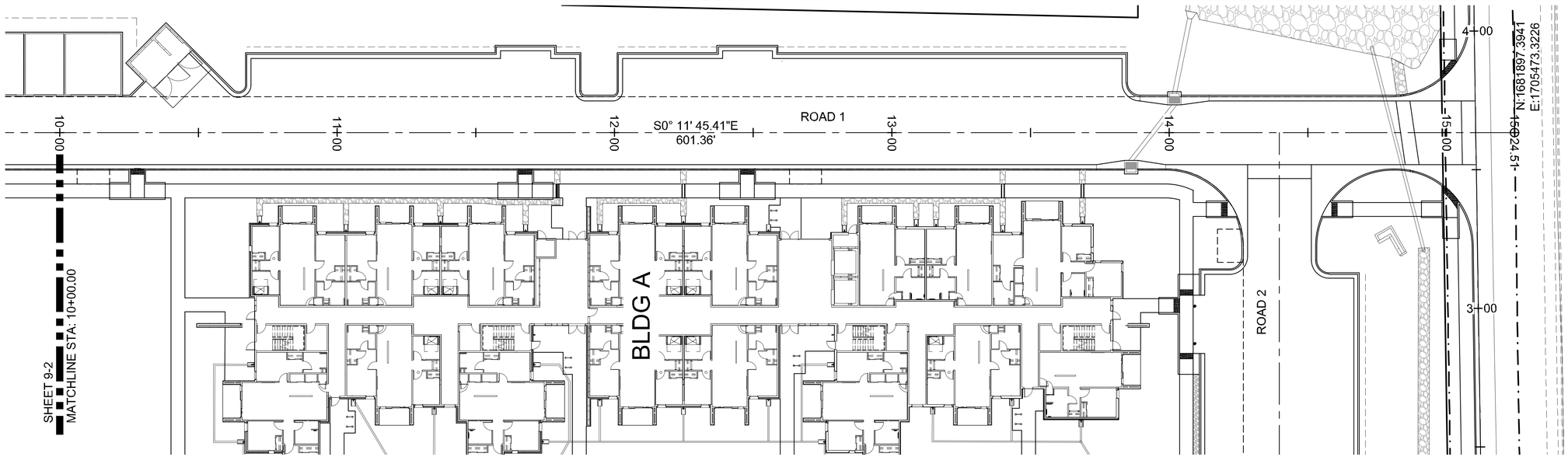
CASE # _____

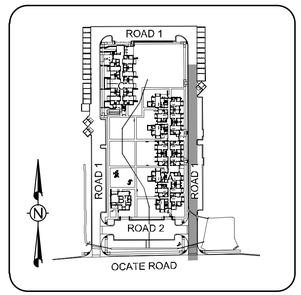
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

ROADWAY PLAN AND PROFILE - ROAD 1 (CONT'D)

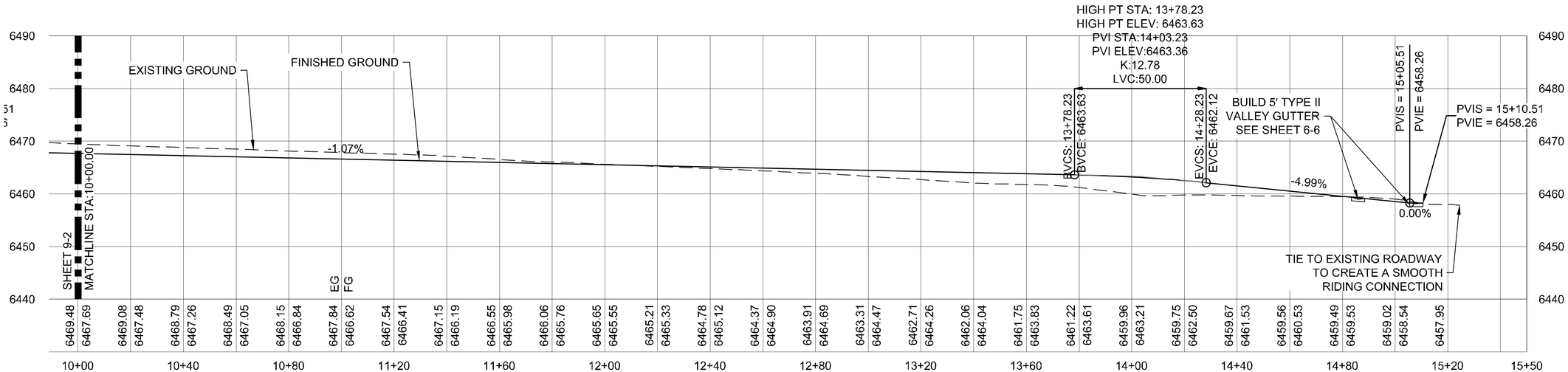
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	9-2





KEYMAP
SCALE: 1" = 200'

ROAD 1 - PLAN VIEW (CONT'D)
SCALE: 1" = 20'



ROAD 1 - PROFILE VIEW (CONT'D)
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 10 20 40
SCALE: 1" = 20'

0 5 10 20
SCALE: 1" = 10'

ENGINEERS SEAL
FOR REVIEW ONLY
DATE
REVISIONS

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

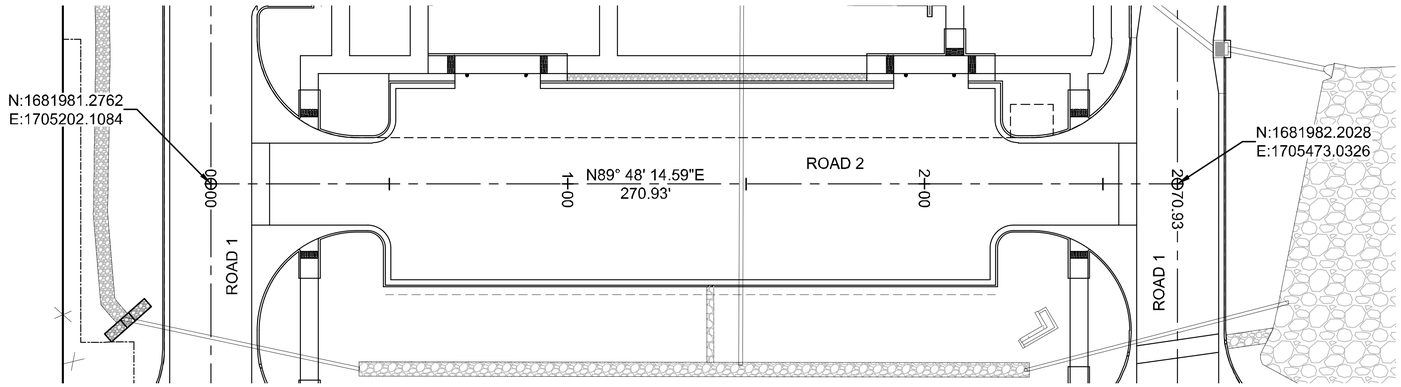
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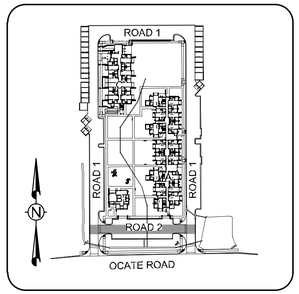
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

ROADWAY PLAN AND PROFILE - ROAD 1 (CONT'D)

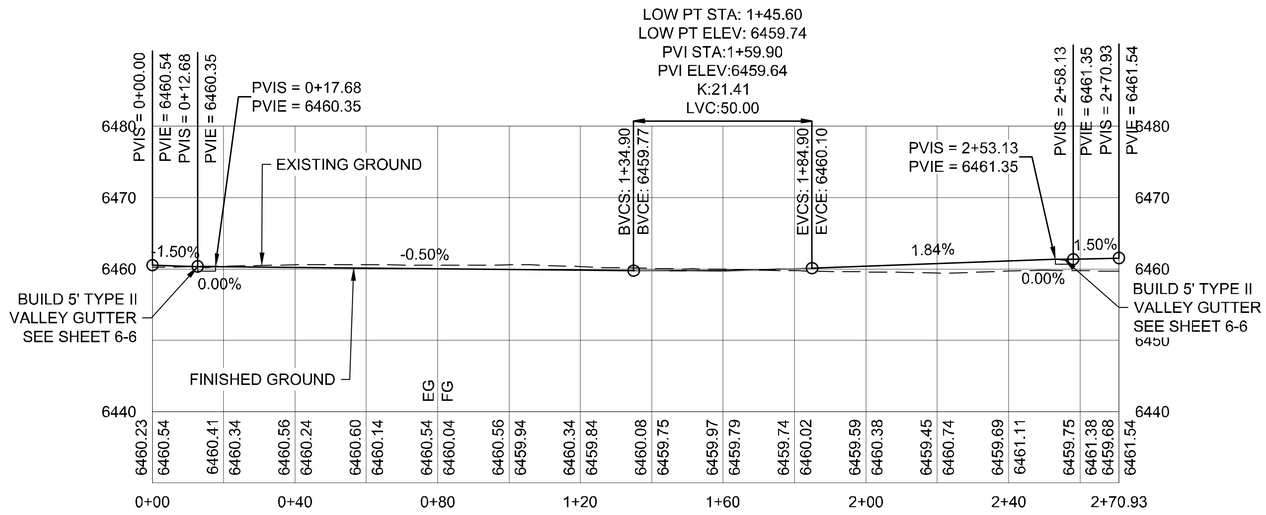
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	9-3



ROAD 2 - PLAN VIEW
SCALE: 1" = 20'



KEYMAP
SCALE: 1" = 200'



ROAD 2 - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 10 20 40
SCALE: 1" = 20'

0 5 10 20
SCALE: 1" = 10'

ENGINEERS SEAL

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Dec 5, 2025

DATE

REVISIONS

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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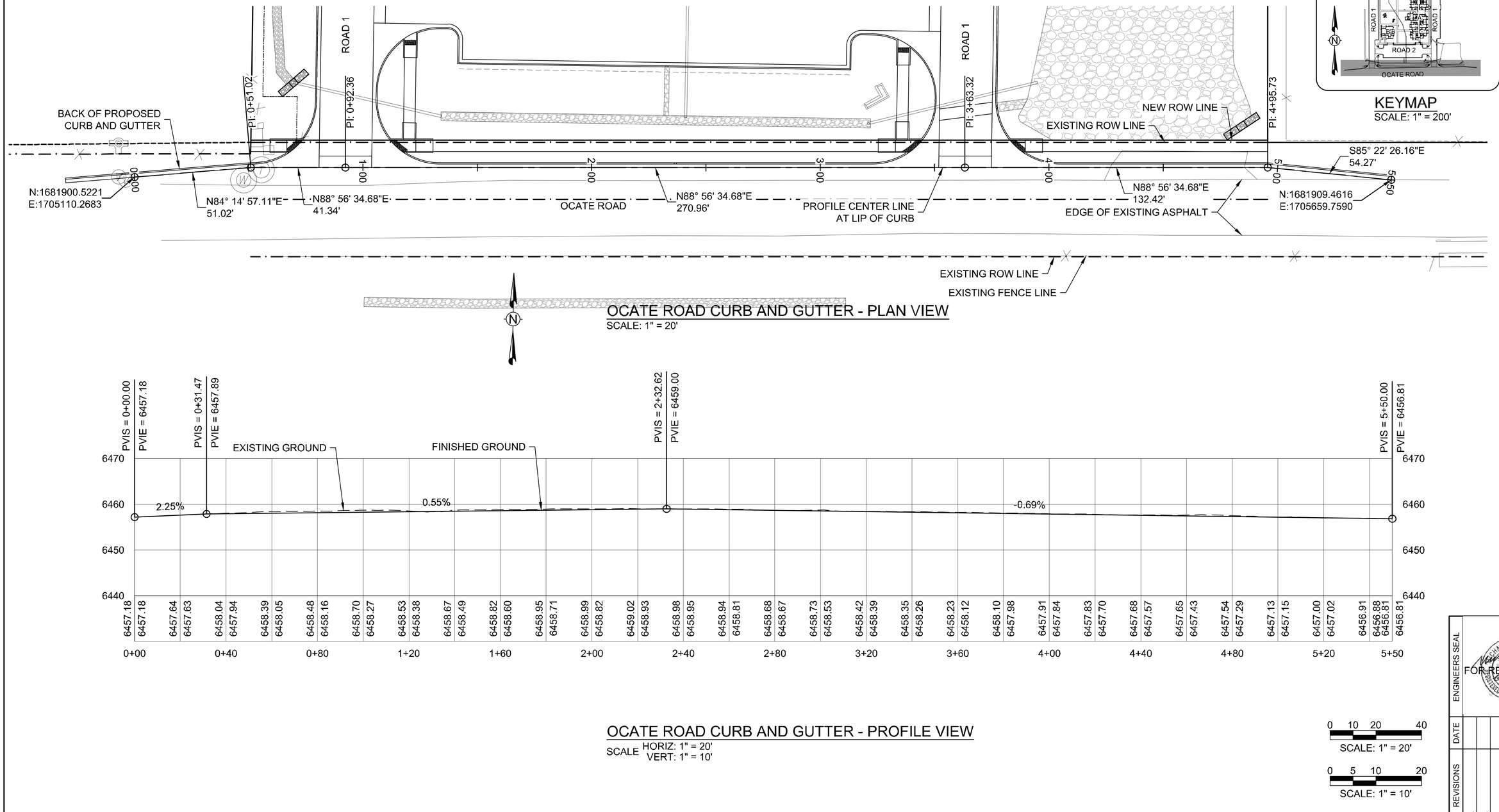
CASE # _____

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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

ROADWAY PLAN AND PROFILE - ROAD 2

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	9-4



OCATE ROAD CURB AND GUTTER - PLAN VIEW

SCALE: 1" = 20'

OCATE ROAD CURB AND GUTTER - PROFILE VIEW

SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 10 20 40
SCALE: 1" = 20'

0 5 10 20
SCALE: 1" = 10'

ENGINEERS SEAL

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DATE

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CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

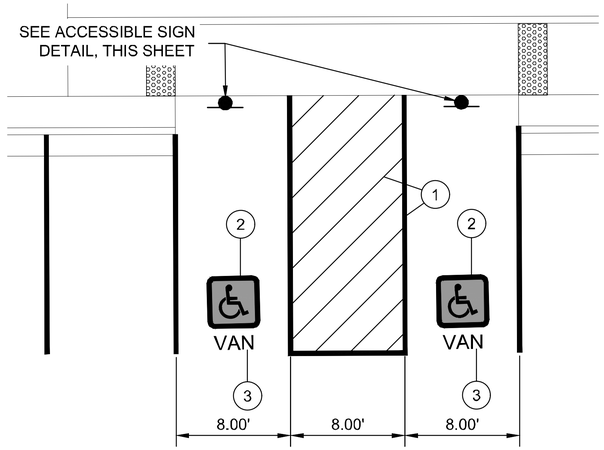
CASE # _____

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INFRASTRUCTURE PLANS
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SANTA FE, NEW MEXICO

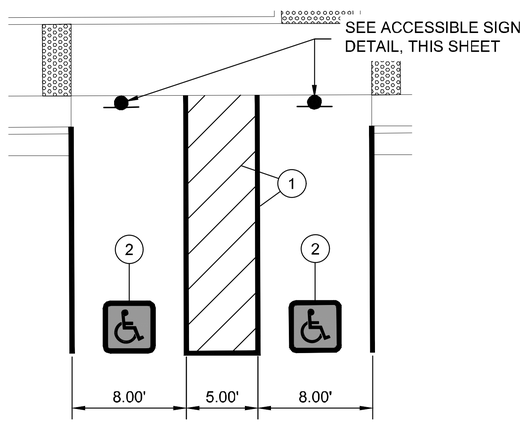
CURB AND GUTTER PLAN AND PROFILE - OCATE ROAD

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	9-5



#	STRIPING KEY
1	RETROREFLECTORIZED PAINTED PAVEMENT MARKING STRIPE - 4" SOLID BLUE [PAINT] (DOUBLE APPLICATION TO BE APPLIED WITHIN 14 DAYS)
2	THERMOPLASTIC PRE-FORMED ADA ACCESSIBLE PAVEMENT MARKING
3	THERMOPLASTIC PRE-FORMED PAVEMENT MARKING WORD "VAN"

VAN ACCESSIBLE ADA PARKING DETAIL
SCALE: 1" = 5'



STANDARD ADA PARKING DETAIL
SCALE: 1" = 5'

NON-VAN ACCESSIBLE SPACES BOTTOM OF THIS SIGN 78" MIN ABOVE GROUND ANSI 502.7



SIGN TYPE R7-8 (12"x18")
- SIGN FIELD IS WHITE
- SIGN LETTERING AND BORDER ARE GREEN
- INTERNATIONAL SYMBOL OF ACCESSIBLITY IS WHITE ON A BLUE BACKGROUND

VAN ACCESSIBLE SPACES BOTTOM OF THIS SIGN 78" MIN ABOVE GROUND ANSI 502.7



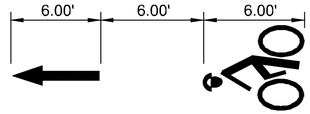
SIGN TYPE R7-8A (6"x12")
- SIGN FIELD IS WHITE
- SIGN LETTERING AND BORDER ARE GREEN

ACCESSIBLE SIGN DETAIL
SCALE: N.T.S.

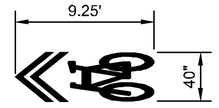
CITY OF SANTA FE SIGNING AND STRIPING NOTES:

SIGN AND POST REQUIREMENTS
1. ALL ALUMINUM PANEL SIGNING AND STEEL POSTS SHALL COMPLY WITH THE NEW MEXICO DEPARTMENT OF TRANSPORTATION (NMDOT); *CURRENT* EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (SSHBC).
2. ALL SIGNING SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - *CURRENT* EDITION.
3. SIGNPOSTS WITH APPROVED BREAKAWAY DEVICE SHALL BE "MARION" BRAND 4 LB. / FT. U CHANNEL - BLACK; NO SUBSTITUTES ALLOWED.
4. SIGN SHEETING SHALL BE "3M" BRAND HIGH INTENSITY; NO SUBSTITUTIONS ALLOWED.
5. SIGN HEIGHT SHALL BE A MINIMUM OF 7' HIGH FROM THE BOTTOM OF THE LOWEST SIGN ABOVE THE TOP OF CURB, UNLESS OTHERWISE NOTED; AND SHALL BE PLACED IN ACCORDANCE WITH NMDOT STANDARD DRAWINGS AND SPECIFICATIONS.
6. STREET NAME LETTERING SHALL COMPLY WITH THE STANDARDS IN THE CURRENT EDITION OF THE MUTCD; THAT IS THE LETTERING SHALL BE LOWER CASE LETTERS WITH UPPERCASE INITIAL LETTERS.

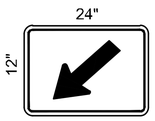
STRIPING AND PAINT NOTES
1. ALL RETROREFLECTIVE PREFORMED PATTERNED PAVEMENT STRIPE SHALL BE 380 IES BY "3M", NO SUBSTITUTIONS.
2. STOP BARS SHALL BE A MINIMUM 12" WIDE; WHITE THERMOPLASTIC RETROREFLECTIVE PREFORMED PATTERED PAVEMENT STRIPE.
3. CROSSWALK STRIPES SHALL BE 12" WIDE; WHITE THERMOPLASTIC RETROREFLECTIVE PREFORMED PATTERNED PAVEMENT STRIPE. WHERE HIGH VISIBILITY IS REQUIRED, CROSSWALK STRIPES SHALL BE ARRANGED IN A CONTINENTAL PATTERN, THAT IS, LONGITUDINAL LINES PARALLEL TO THE FLOW OF TRAFFIC AND ARRANGED TO AVOID WHEEL PATHS, (MUTCD P. 384, SECTION 3B.18).
4. ALL RETROREFLECTIVE PREFORMED PATTERNED PAVEMENT MARKINGS (WORD OR SYMBOL) SHALL BE 380 IES BY "3M", NO SUBSTITUTIONS.
5. *RETRO-REFLECTORIZED PAINTED PAVEMENT MARKING STRIPES* - FOR HIGH-BUILT *PAINT*, USE TWO COATS AND FOR REGULAR PAINT USE THREE COATS. (DOUBLE APPLICATION TO BE APPLIED WITHIN 14 DAYS.)
6. ALL STRIPING SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) - CURRENT EDITION, AND THE NMDOT SSHBC.



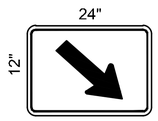
DETAIL "A" BICYCLE LANE STRIPING
SEE FIGURE 9C-3, MUTCD 2009 EDITION



DETAIL "B" SHARED LANE MARKING
SEE FIGURE 9C-9, MUTCD 2009 EDITION



W16-7PL
B/Y
(24" X 12")



W16-7PR
B/Y
(24" X 12")



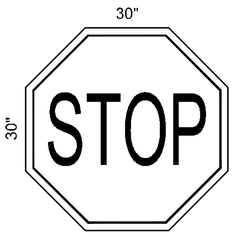
R1-5
B/W
(36" X 36")



SP-1
B/Y
(18" X 24")



W11-2
B/Y
(36" X 36")



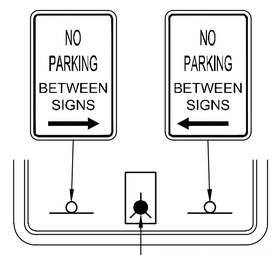
R1-1-30
W/R
(30" X 30")



R7-1(L)
R/W

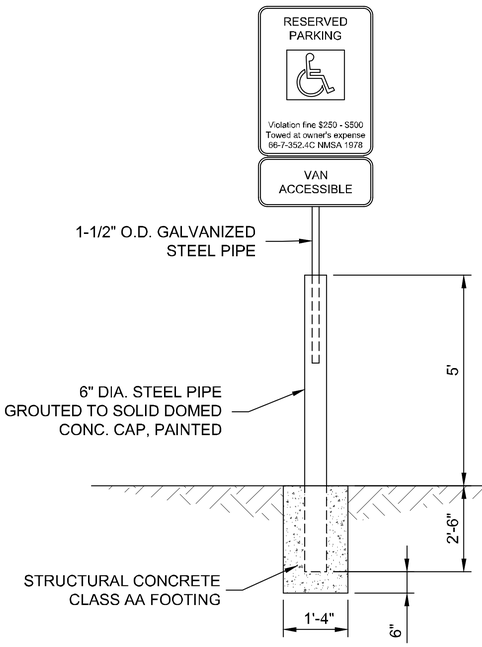


R7-1(R)
R/W

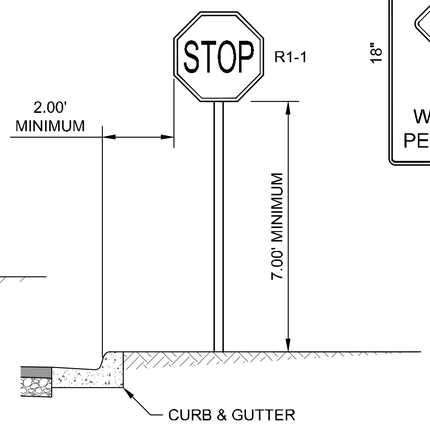


SIGN FACE DETAILS
SCALE: N.T.S.

FIRE HYDRANT SIGNING DETAIL
SCALE: N.T.S.



SIGN MOUNTED ON BOLLARD DETAIL
SCALE: N.T.S.



TYPICAL SIGN PLACEMENT
SCALE: N.T.S.

ENGINEERS SEAL — FOR REVIEW ONLY

DATE

REVISIONS

CASE # _____

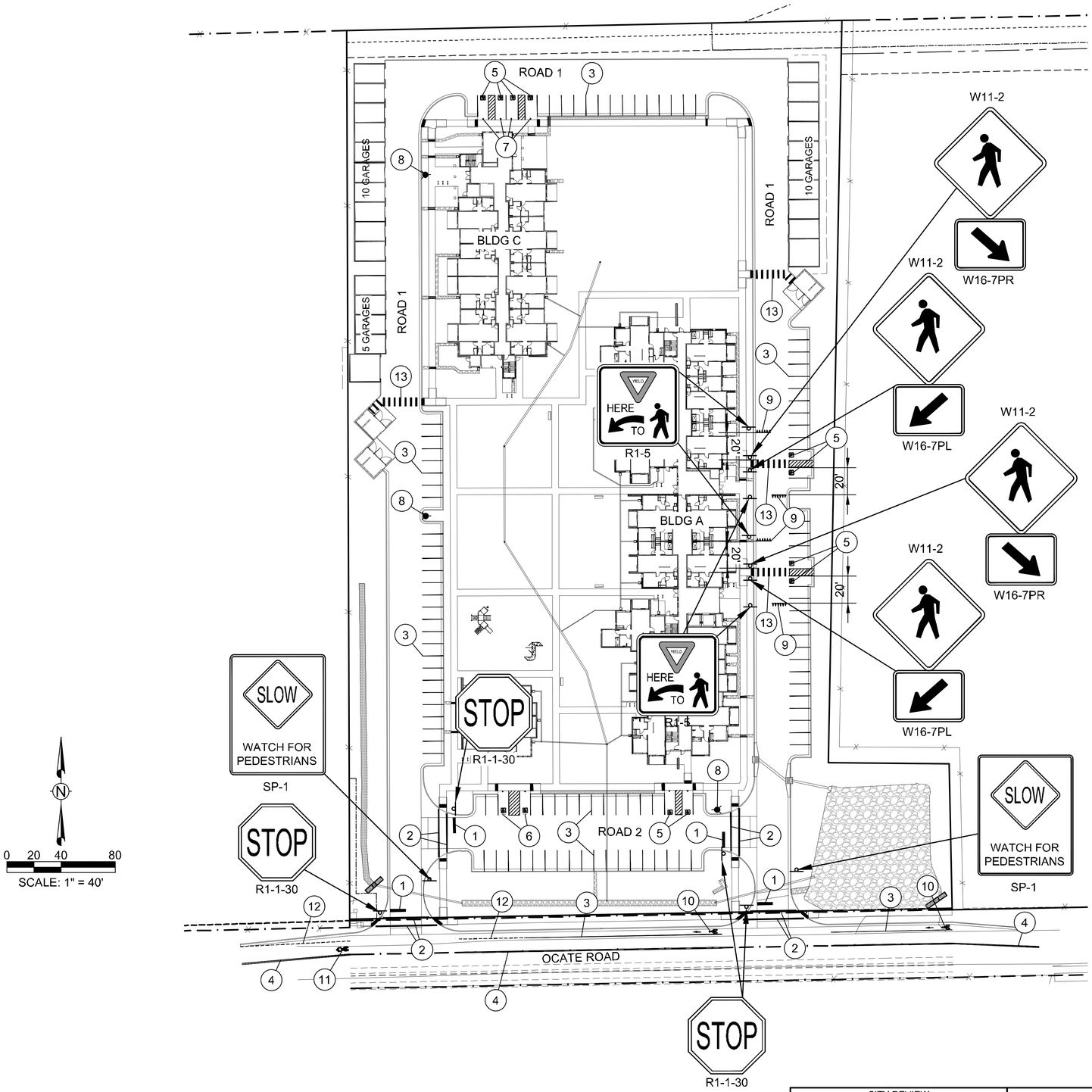
CITY REVIEW		
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

SIGNING AND STRIPING NOTES AND DETAILS

DATE:	SCALE:	SHEET:
FEBRUARY 2025	AS NOTED	10-1



STRIPING KEY (X)

1	24" WHITE STOP BAR - RETROREFLECTIVE THERMOPLASTIC PREFORMED PATTERNED PAVEMENT STRIPE
2	12" WHITE CROSSWALK - RETROREFLECTIVE THERMOPLASTIC PREFORMED PATTERNED PAVEMENT STRIPE (STOP CONTROLLED CROSSING)
3	4" WHITE STRIPE [PAINT] DOUBLE APPLICATION AFTER 14 DAYS
4	4" DOUBLE YELLOW STRIPE [PAINT] DOUBLE APPLICATION AFTER 14 DAYS
5	STANDARD ADA PARKING - SEE DETAILS SHEET 10-1
6	VAN ACCESSIBLE ADA PARKING - SEE DETAIL SHEET 10-1
7	SIGN MOUNTED ON BOLLARD - SEE DETAIL SHEET 10-1
8	FIRE HYDRANT - SEE DETAIL SHEET 10-1
9	RETROREFLECTORIZED PRE-FORMED PAVEMENT MARKING YIELD LINE [TAPE]
10	RETROREFLECTORIZED PRE-FORMED PAVEMENT MARKING BIKE LANE [TAPE]
11	RETROREFLECTORIZED PRE-FORMED PAVEMENT MARKING BIKE LANE SHARED USE SYMBOL [TAPE]
12	4" WHITE DOTTED STRIPE [PAINT] DOUBLE APPLICATION AFTER 14 DAYS
13	12" WHITE CROSSWALK - RETROREFLECTIVE THERMOPLASTIC PREFORMED PATTERNED PAVEMENT STRIPE (HIGH VISIBILITY)

SIGNING AND STRIPING PLAN
SCALE: 1" = 40'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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STREETS DIV.		
TRAFFIC DIV.		
FIRE		
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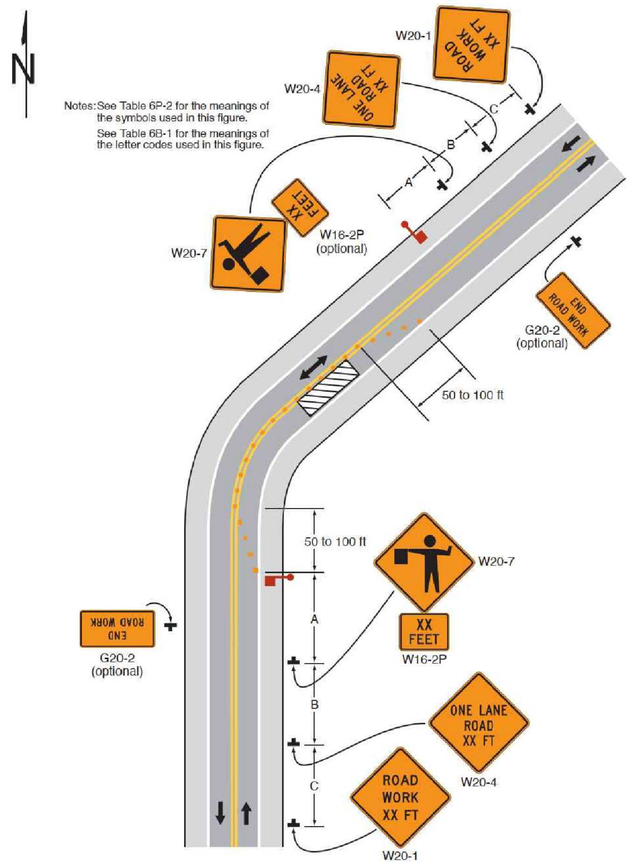
REVISIONS

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

SIGNING AND STRIPING PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	10-2

Figure 6P-10. Lane Closure on a Two-Lane Road Using Flaggers (TA-10)



Typical Application 10

Notes for Figure 6P-10—Typical Application 10 Lane Closure on a Two-Lane Road Using Flaggers

Option:

1. Positive protection devices may be used per Section 6M.02.
2. For low-volume situations with short TTC zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger, positioned to be visible to road users approaching from both directions, may be used (see Chapter 6D).
3. The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short-duration operations.
4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs. A BE PREPARED TO STOP sign may be added to the sign series.
5. Automated Flagger Assistance Devices (see Section 6L.02) may be used in situations where there is only one lane of approaching traffic in the direction to be controlled.

Guidance:

6. *The buffer space should be extended so that the two-way traffic taper is placed before a horizontal (or crest vertical) curve to provide adequate sight distance for the flagger and a queue of stopped vehicles.*

Standard:

7. **At night, flagger stations shall be illuminated, except in emergencies.**

Guidance:

8. *When used, the BE PREPARED TO STOP sign should be located between the Flagger sign and the ONE LANE ROAD sign.*
9. *When a grade crossing exists within or upstream of the transition area and it is anticipated that queues resulting from the lane closure might extend through the grade crossing, the TTC zone should be extended so that the transition area precedes the grade crossing.*
10. *When a grade crossing equipped with active warning devices exists within the activity area, provisions should be made for keeping flaggers informed as to the activation status of these warning devices.*
11. *When a grade crossing exists within the activity area, drivers operating on the left-hand side of the normal center line should be provided with comparable warning devices as for drivers operating on the right-hand side of the normal center line.*
12. *Early coordination with the railroad company or transit agency should occur before work starts.*

Option:

13. A flagger or a uniformed law enforcement officer may be used at the grade crossing to minimize the probability that vehicles are stopped within 15 feet of the grade crossing, measured from both sides of the outside rails.

Table 6B-1. Recommended Advance Warning Sign Minimum Spacing

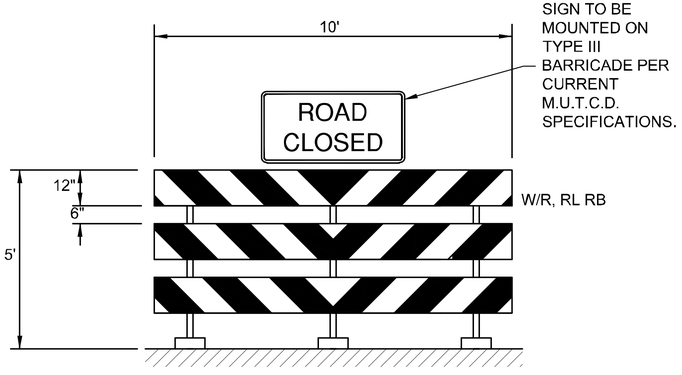
Road Type	Distance between Signs**		
	A	B	C
Urban (low speed)*	100 feet	100 feet	100 feet
Urban (high speed)*	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* Speed category to be determined by the highway agency or owner of site roadways open to public travel.

** The column headings A, B, and C are the dimensions shown in Figures 6P-1 through 6P-54 The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

Table 6P-2. Meaning of Symbols on Typical Application Diagrams

Arrow board	Shadow vehicle
Arrow board support or trailer (shown facing down)	Sign (shown facing left)
Changeable message sign or support trailer	Surveyor
Channelizing device	Temporary barrier
Crash cushion	Temporary barrier with warning light
Direction of temporary traffic detour	Traffic or pedestrian signal
Direction of travel	Truck-mounted attenuator
Flagger	Type 3 barricade
High-level warning device (Flag tree)	Warning light
Longitudinal channelizing device	Work space
Luminaire	Work vehicle
Pavement markings that should be removed for a long-term project	



TYPE III BARRICADE

TRAFFIC CONTROL NOTES:

1. ALL TRAFFIC CONTROL DEVICES AND THEIR PLACEMENT SHALL CONFORM TO CURRENT M.U.T.C.D. SPECIFICATIONS.
2. THIS PLAN IS PROVIDED FOR GUIDANCE ONLY. THE CONTRACTOR SHALL SUBMIT HIS OWN CONSTRUCTION TRAFFIC CONTROL PLAN TO BE APPROVED BY THE CITY OF SANTA FE TRAFFIC ENGINEER. ADDITIONAL PHASES AND SUB PHASES MAY BE NEEDED BASED ON THE CONTRACTOR'S DAY TO DAY VARIED OPERATIONS.
3. THIS IS AN URBAN LOW SPEED AREA. POSTED SPEED LIMIT IS 35 MPH. SIGN SPACING PER MUTCD IS 100 FEET.
4. SPACING OF PANELS SHALL BE NO GREATER (IN FEET) THAN THE POSTED SPEED.
5. 10' MINIMUM WIDTH DRIVING LANES TO BE MAINTAINED AT ALL TIMES.
6. HOURS OF OPERATIONS SHALL BE LIMITED TO MONDAY THROUGH FRIDAY, 8:00 AM TO 5:00 PM.
7. THE CONTRACTOR SHALL REMOVE OR COVER ALL CONFLICTING PERMANENT SIGNING AS DIRECTED BY THE PROJECT MANAGER.
8. THE CONTRACTOR SHALL PROVIDE INGRESS AND EGRESS TO LOCAL BUSINESSES AND RESIDENCES FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL ADVISE OF AND SCHEDULE ACCESS CLOSURES, AT LEAST 24 HOURS IN ADVANCE, WITH PROPERTY OWNERS AND THE PROJECT MANAGER.
9. THE CONTRACTOR SHALL DESIGNATE PERSONNEL WHO WILL BE AVAILABLE DURING NON-WORKING HOURS AND DAYS TO MAINTAIN TEMPORARY CONSTRUCTION TRAFFIC CONTROL.
10. CONSTRUCTION EQUIPMENT & MATERIAL STORAGE: THE CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIAL WITHIN CLEAR ZONE UNLESS THE EQUIPMENT OR MATERIAL IS PROPERLY SHIELDED UTILIZING CURRENT SAFETY DESIGN AND INSTALLATION METHODS. THE SAFETY DESIGN FOR SHIELDING SHALL BE PROVIDED BY THE CONTRACTOR AND MUST BE APPROVED BY THE PROJECT MANAGER BEFORE IMPLEMENTING THE WORK, INCLUDING DESIGN, INSTALLATION AND REMOVAL OF THE SHIELDING, SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETING OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFORE.
11. ADVANCE SIGNING SHALL BE SET UP AT THE BEGINNING OF ACTUAL WORK AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED. SIGNS SHALL BE REMOVED OR COVERED WHEN NOT APPLICABLE.



TEMPORARY SIGN FACE DETAILS

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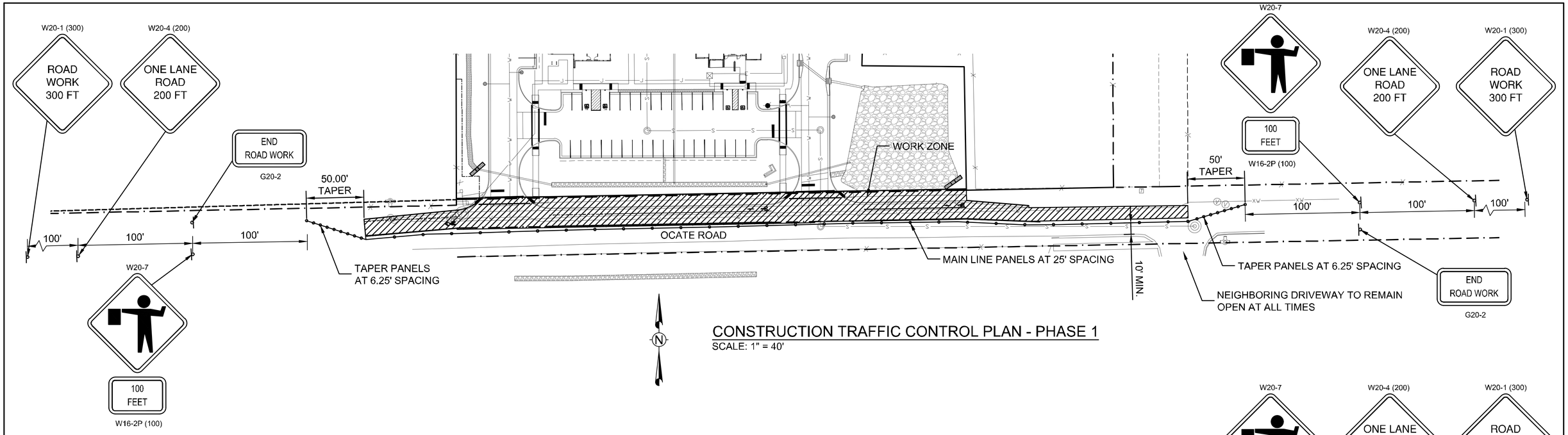
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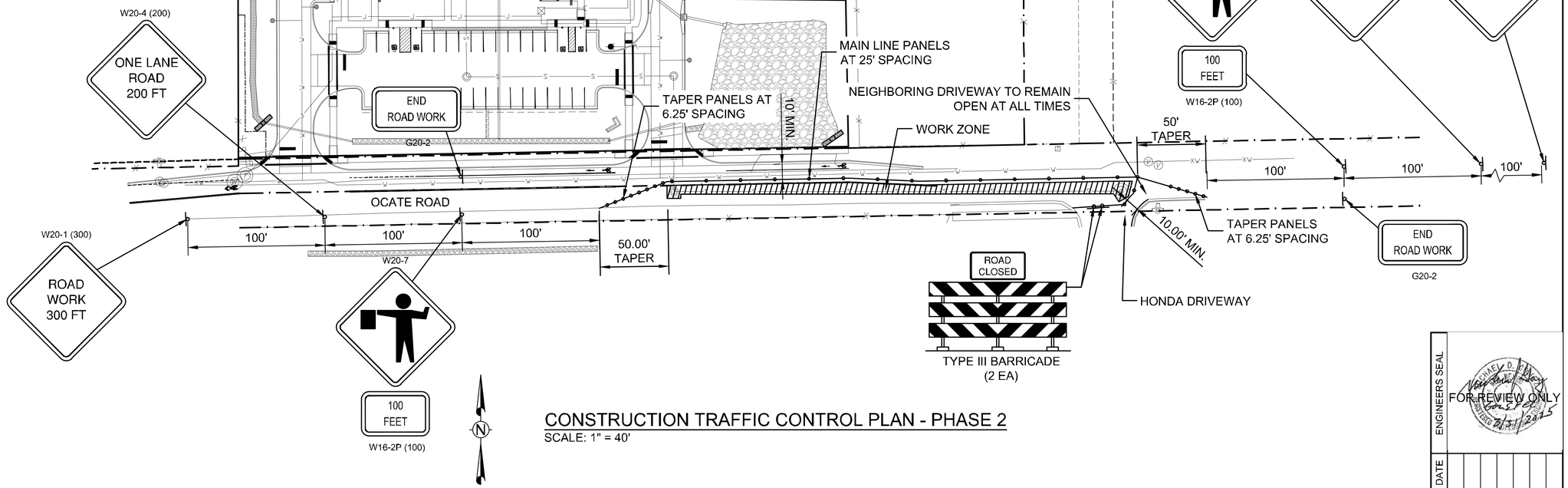
CONSTRUCTION TRAFFIC CONTROL NOTES

DATE:	SCALE:	SHEET:
FEBRUARY 2025	N.T.S.	10-3



CONSTRUCTION TRAFFIC CONTROL PLAN - PHASE 1

SCALE: 1" = 40'



CONSTRUCTION TRAFFIC CONTROL PLAN - PHASE 2

SCALE: 1" = 40'

0 20 40 80

SCALE: 1" = 40'

CASE # _____

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FIRE		
LANDSCAPE		
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MICHAEL D. WOOD
NEW MEXICO
11/3/2025
REGISTERED PROFESSIONAL ENGINEER

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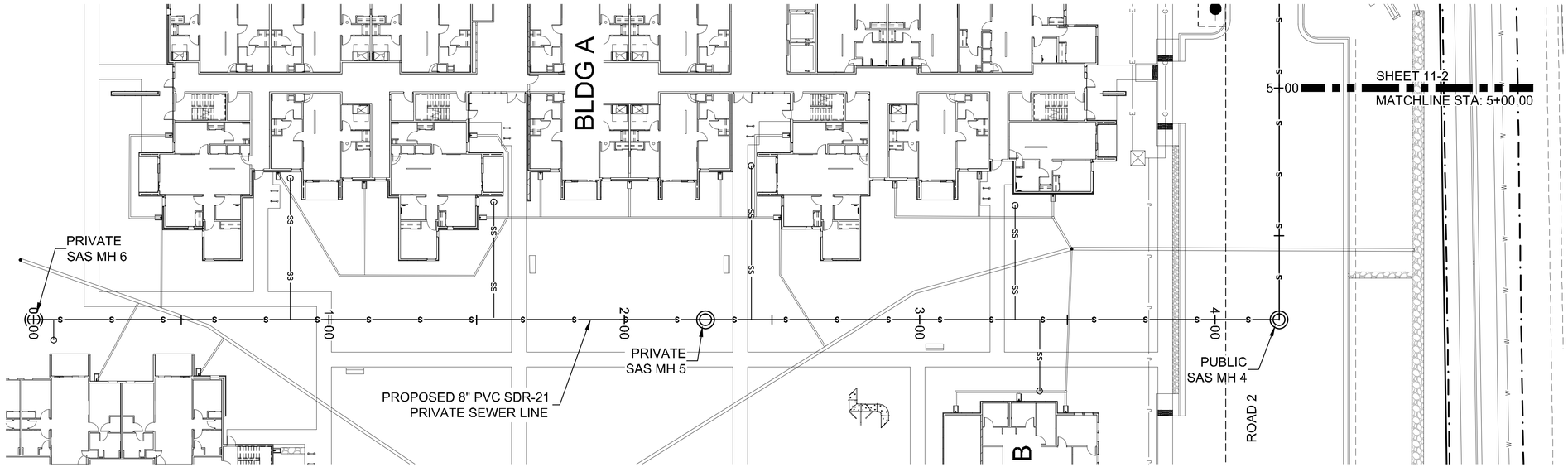
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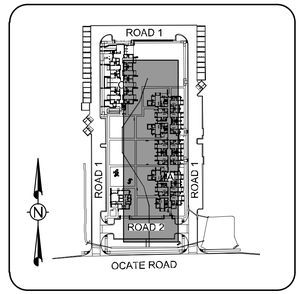
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CONSTRUCTION TRAFFIC CONTROL PLAN

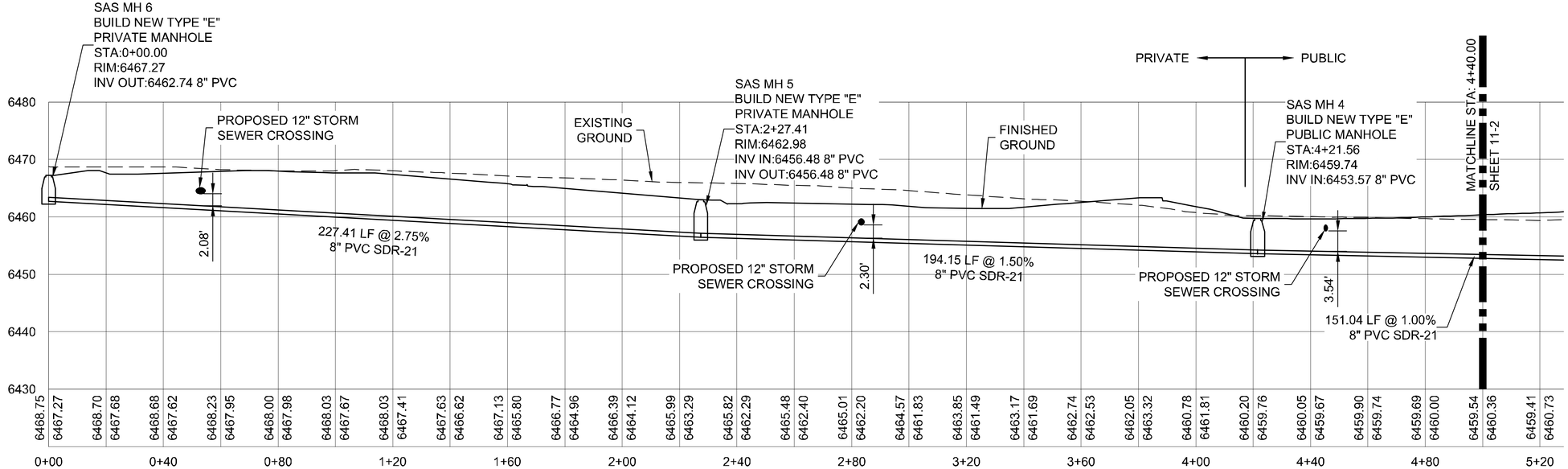
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	10-4





KEYMAP
SCALE: 1" = 200'

PROPOSED SANITARY SEWER - PLAN VIEW
SCALE: 1" = 20'



PROPOSED SANITARY SEWER - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

VOID SEE NEXT SHEET.

0 10 20 40
SCALE: 1" = 20'

0 5 10 20
SCALE: 1" = 10'

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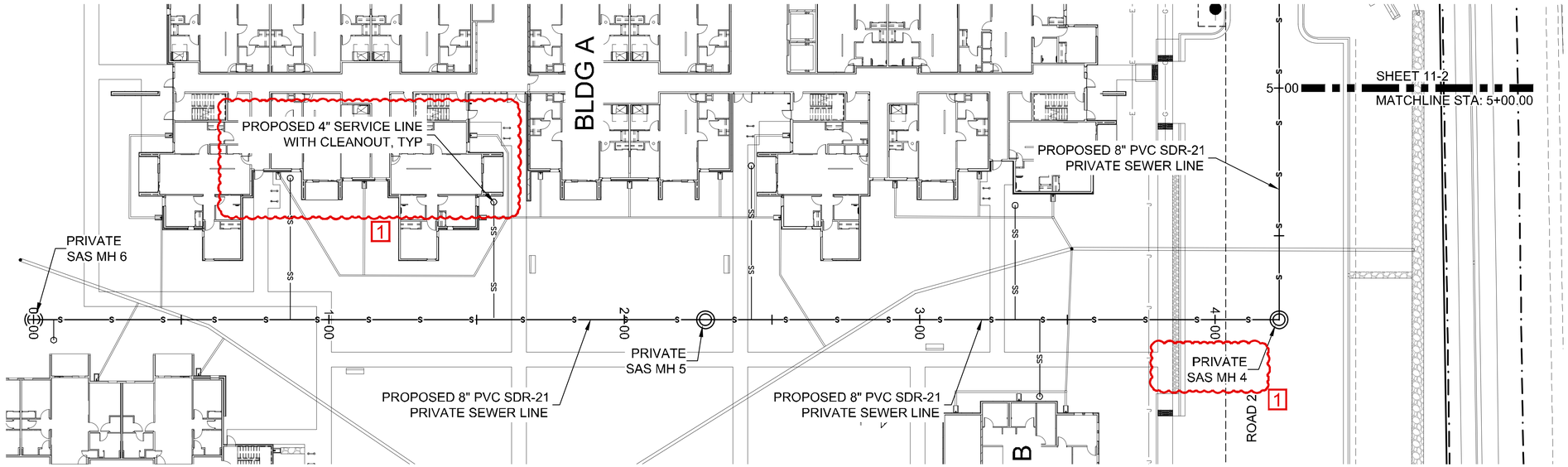
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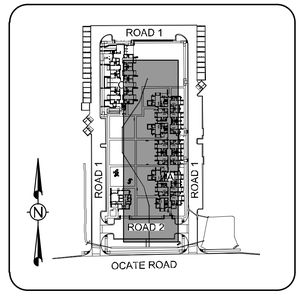
SANITARY SEWER PLAN AND PROFILE

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	11-1



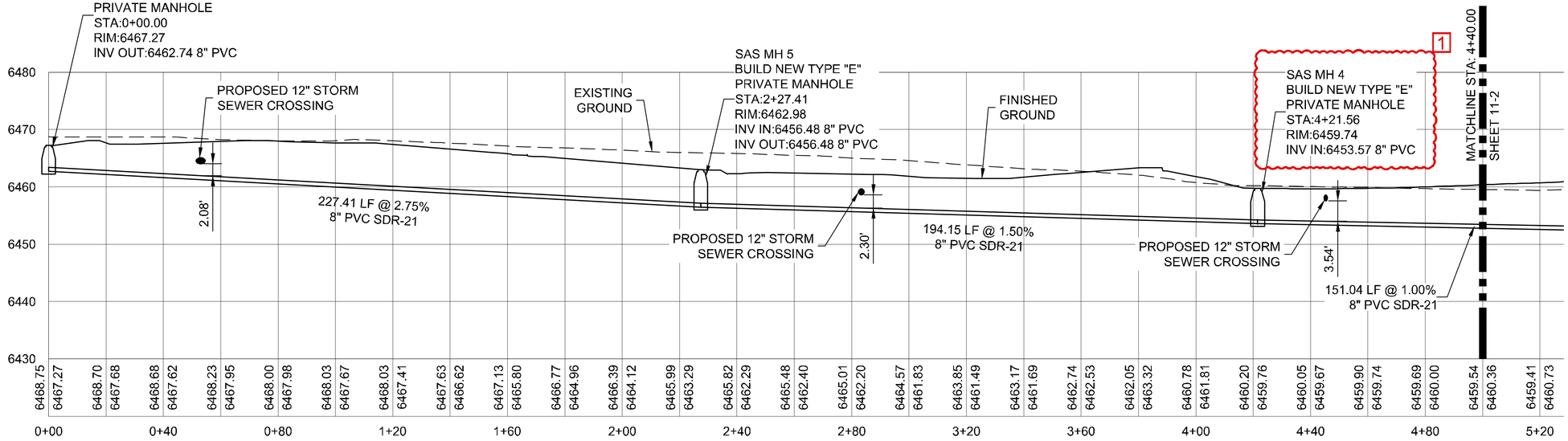
PROPOSED SANITARY SEWER - PLAN VIEW

SCALE: 1" = 20'



KEYMAP

SCALE: 1" = 200'



PROPOSED SANITARY SEWER - PROFILE VIEW

SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

SCALE: 1" = 20'

SCALE: 1" = 10'

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LANDSCAPE		
SUBDIVISION ENGINEER		

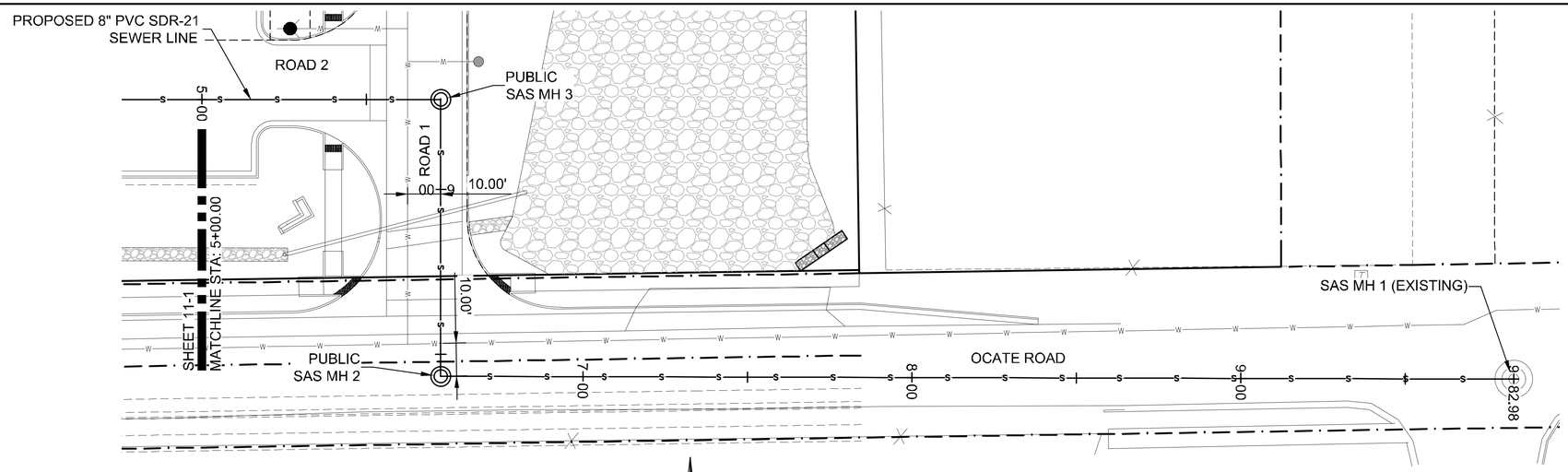
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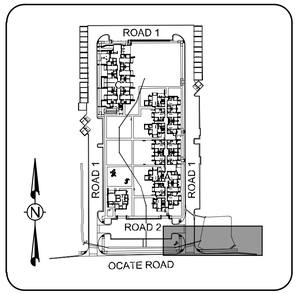
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DATE:	SCALE:	SHEET:
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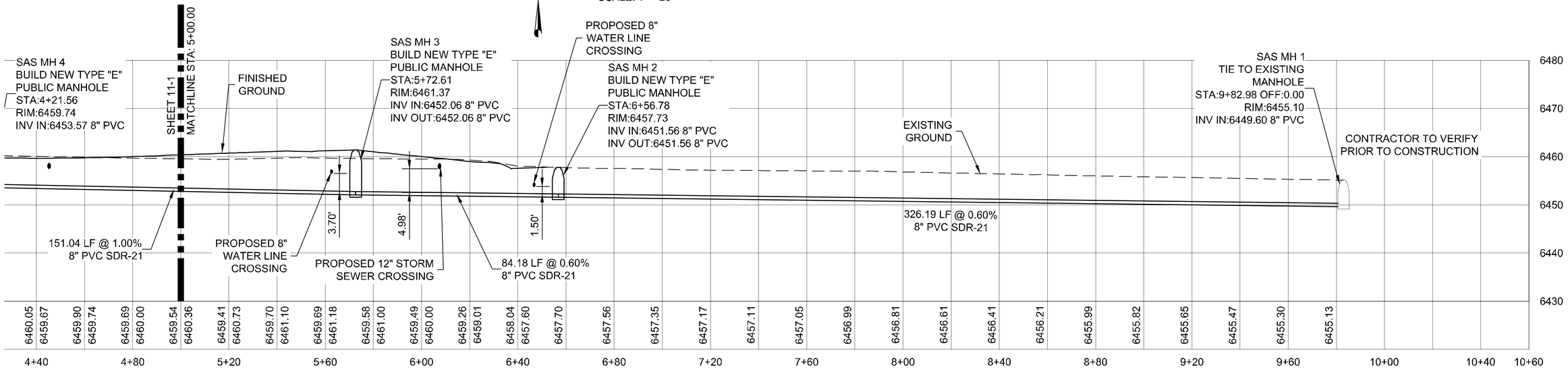




KEYMAP
SCALE: 1" = 200'

PROPOSED SANITARY SEWER - PLAN VIEW (CONT'D)

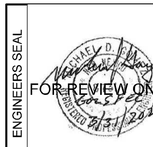
SCALE: 1" = 20'



PROPOSED SANITARY SEWER - PROFILE VIEW (CONT'D)

SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

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SCALE: 1" = 20'

0 5 10 20
SCALE: 1" = 10'

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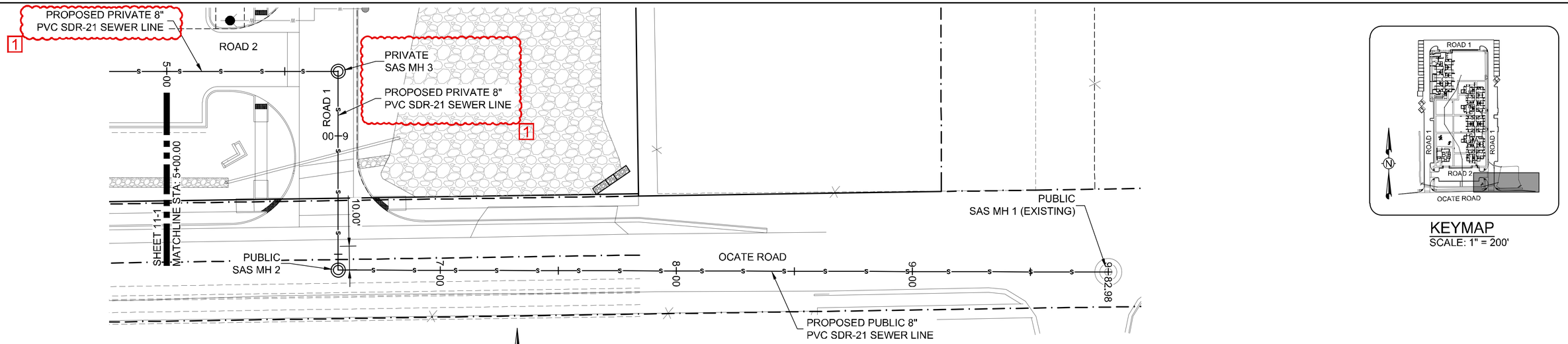
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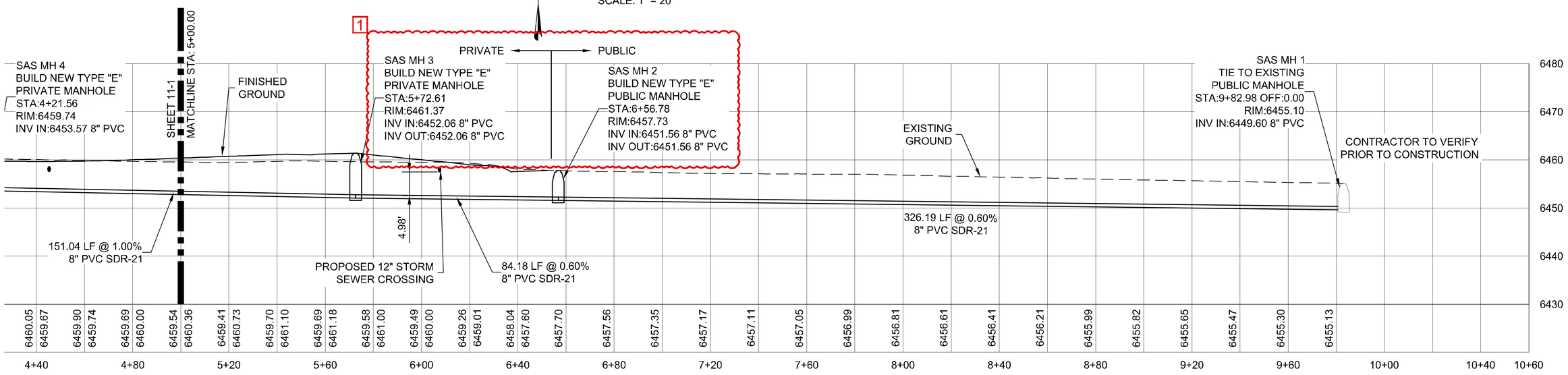
SANITARY SEWER PLAN AND PROFILE (CONT'D)

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	11-2



KEYMAP
SCALE: 1" = 200'

PROPOSED SANITARY SEWER - PLAN VIEW (CONT'D)
SCALE: 1" = 20'



PROPOSED SANITARY SEWER - PROFILE VIEW (CONT'D)
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

1 COMMENTS FROM CITY STAFF MODIFIED MANHOLE AND SERVICE CALLOUTS

0 10 20 40
SCALE: 1" = 20'

0 5 10 20
SCALE: 1" = 10'

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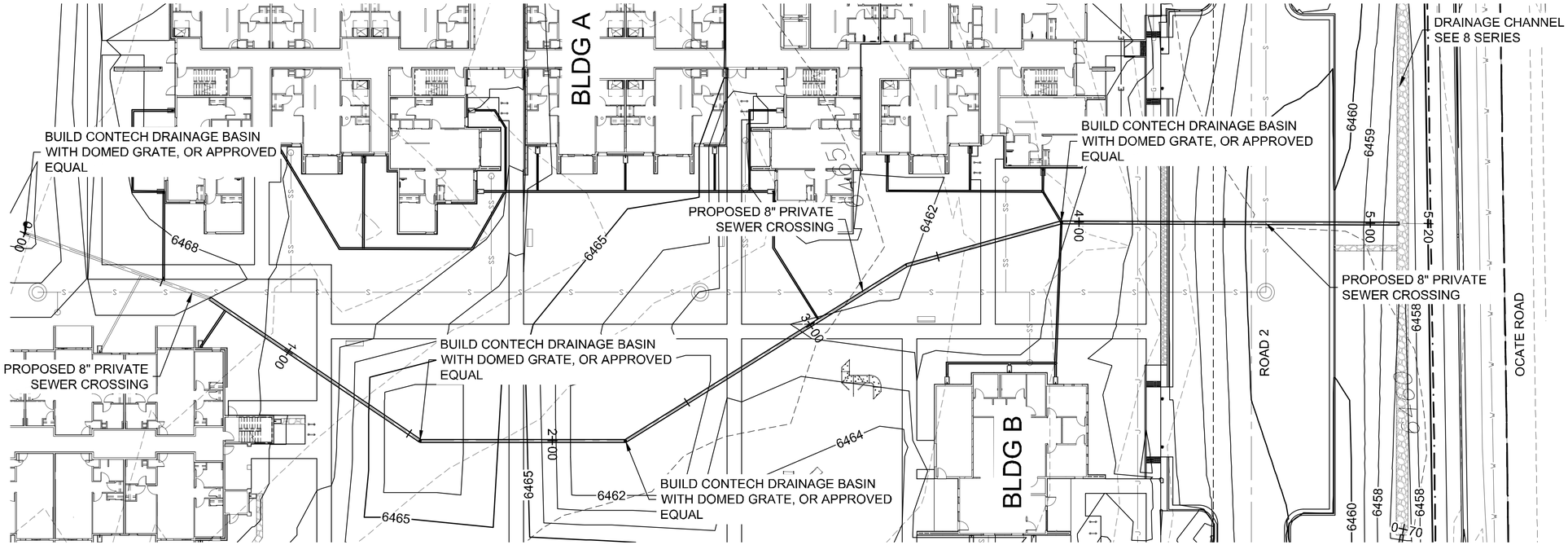
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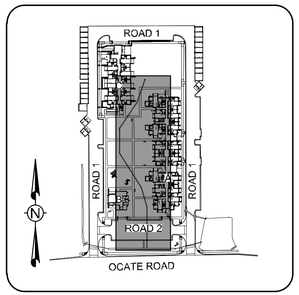
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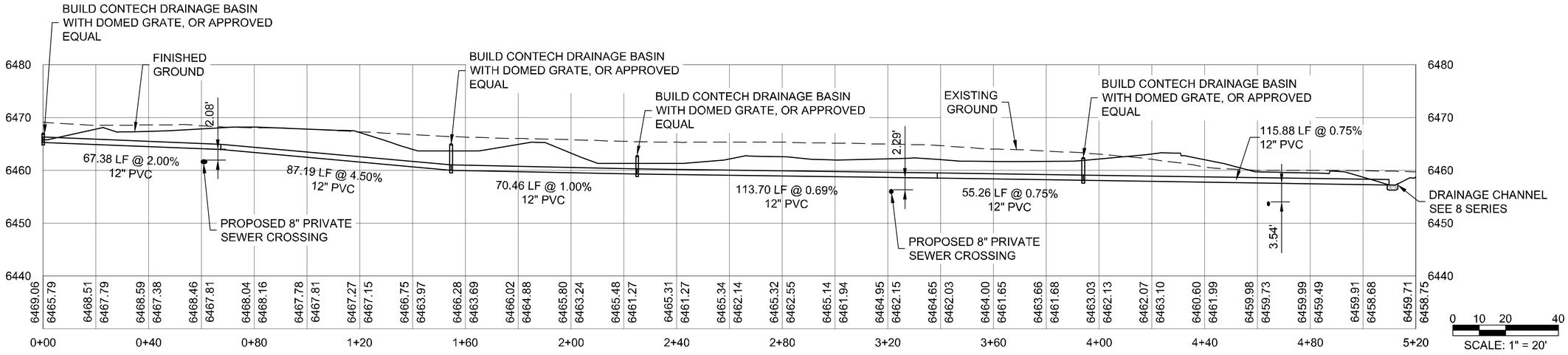


PROPOSED STORM SEWER 1 - PLAN VIEW
SCALE: 1" = 20'



KEYMAP
SCALE: 1" = 200'

NOTE:
CONTRACTOR TO SUPPLY SHOP DRAWINGS OF DOMED INLET GRATES PRIOR TO CONSTRUCTION



PROPOSED STORM SEWER 1 - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 10 20 40
SCALE: 1" = 20'

0 5 10 20
SCALE: 1" = 10'

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STREETS DIV.		
TRAFFIC DIV.		
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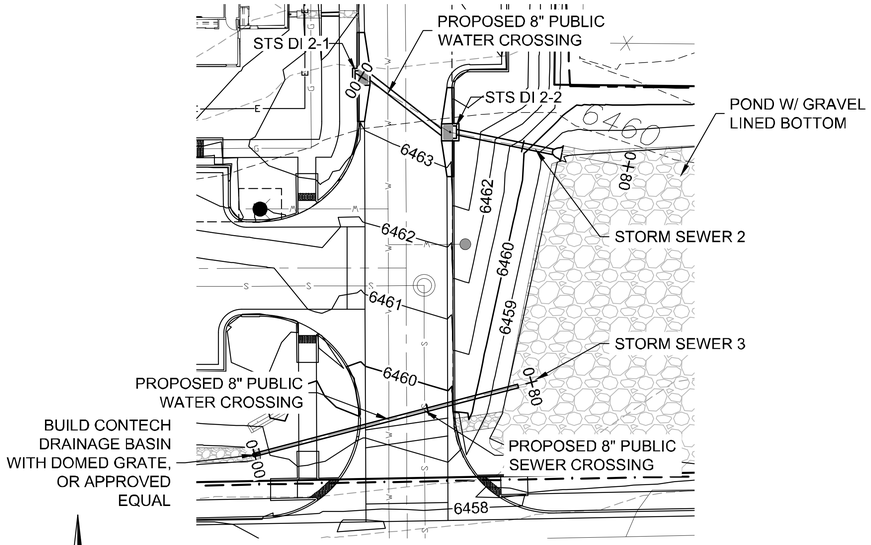
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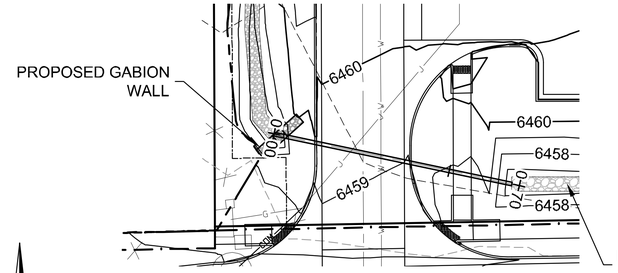
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STORM SEWER PLAN AND PROFILES

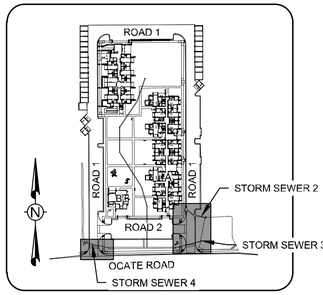
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PROPOSED STORM SEWERS 2 & 3 - PLAN VIEW
SCALE: 1" = 20'

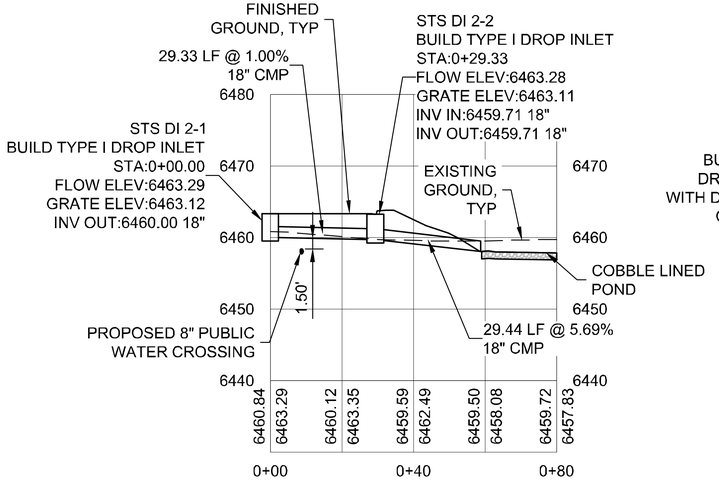


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SCALE: 1" = 20'

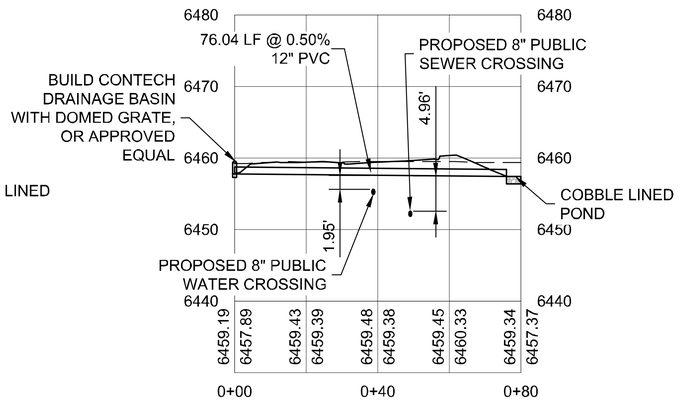


KEYMAP
SCALE: 1" = 200'

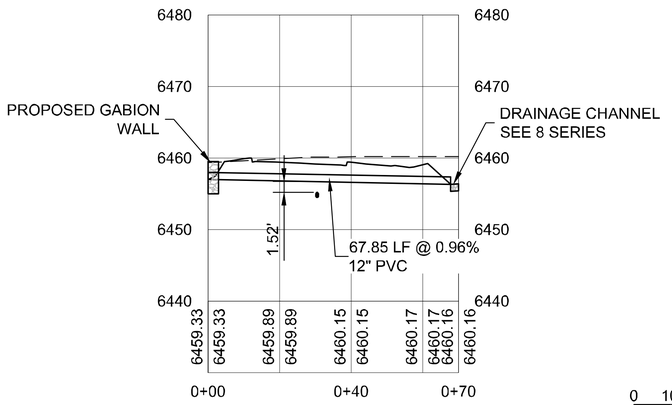
NOTE:
CONTRACTOR TO SUPPLY SHOP DRAWINGS OF DOMED INLET GRATES PRIOR TO CONSTRUCTION



PROPOSED STORM SEWER 2 - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'



PROPOSED STORM SEWER 3 - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'



PROPOSED STORM SEWER 4 - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

0 10 20 40
SCALE: 1" = 20'

0 5 10 20
SCALE: 1" = 10'

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VOID SEE NEXT SHEET.

CASE # _____

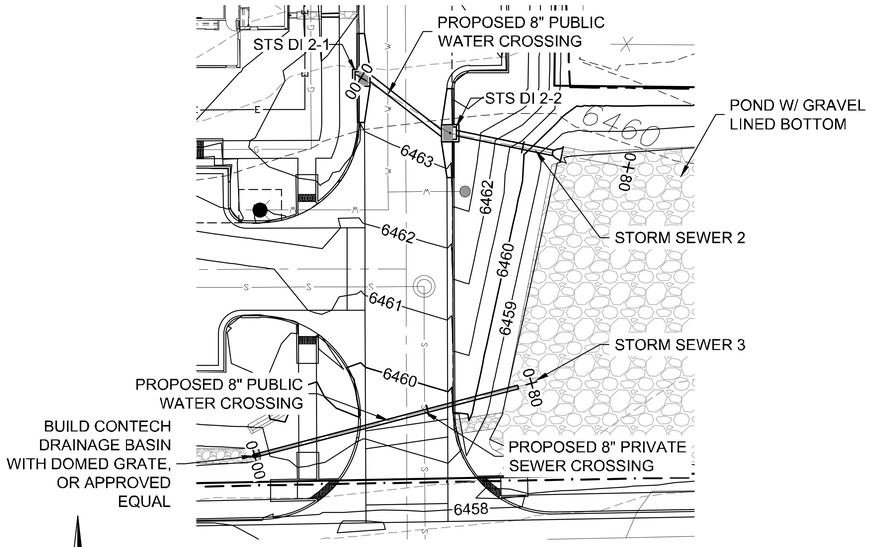
CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
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Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
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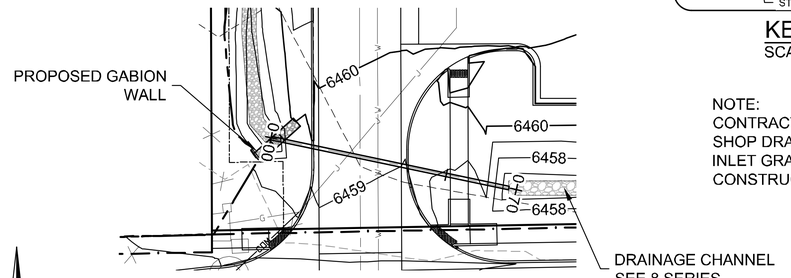
INFRASTRUCTURE PLANS FOR OCATE APARTMENTS SANTA FE, NEW MEXICO

STORM SEWER PLAN AND PROFILES (CONT'D)

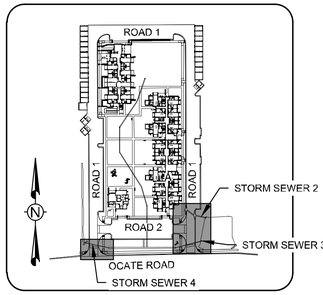
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	11-4



PROPOSED STORM SEWERS 2 & 3 - PLAN VIEW
SCALE: 1" = 20'

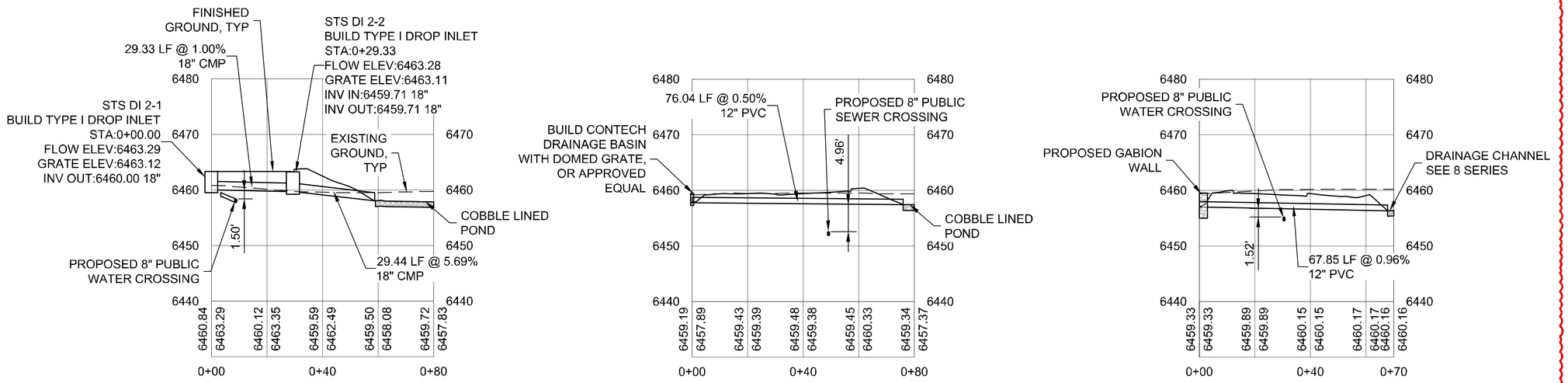


PROPOSED STORM SEWER 4 - PLAN VIEW
SCALE: 1" = 20'



KEYMAP
SCALE: 1" = 200'

NOTE:
CONTRACTOR TO SUPPLY SHOP DRAWINGS OF DOMED INLET GRATES PRIOR TO CONSTRUCTION



0 10 20 40
SCALE: 1" = 20'

0 5 10 20
SCALE: 1" = 10'

PROPOSED STORM SEWER 2 - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

PROPOSED STORM SEWER 3 - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

PROPOSED STORM SEWER 4 - PROFILE VIEW
SCALE HORIZ: 1" = 20'
VERT: 1" = 10'

1 COMMENTS FROM CITY STAFF
REVISED WATER LINE (CROSSINGS REMOVED)

ENGINEERS SEAL	FOR REVIEW ONLY
DATE	
REVISIONS	

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

CITY USE ONLY

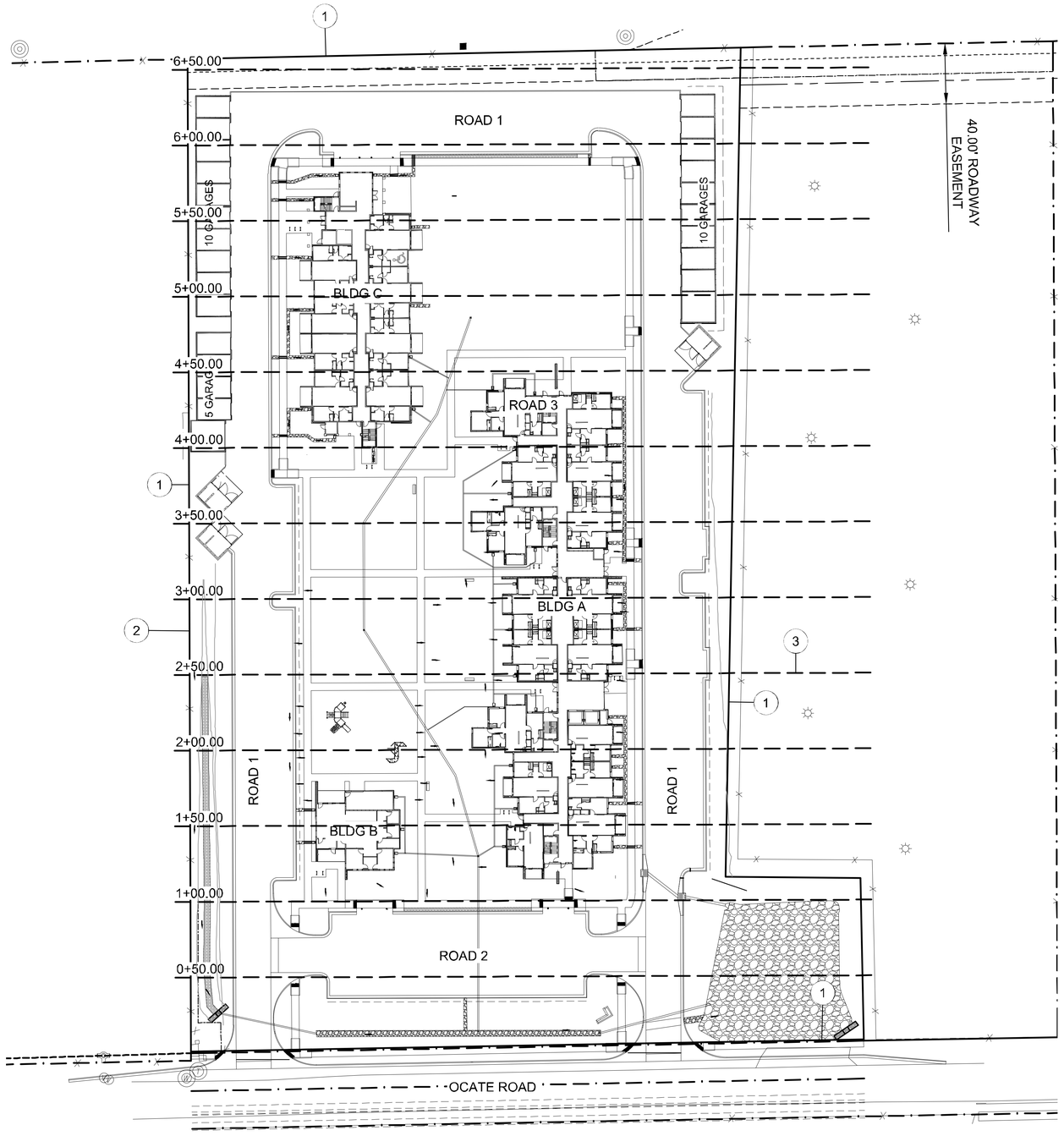
CASE # _____

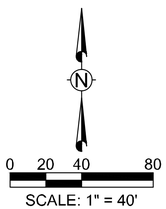
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

STORM SEWER PLAN AND PROFILES (CONT'D)

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	11-4





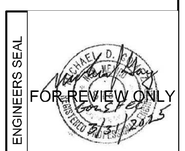
SHEET KEYNOTES

1. PROPERTY LINE
2. CROSS SECTION BASE LINE
3. CROSS SECTION SAMPLE LINE, TYP

SITE CROSS SECTION LOCATION PLAN

SCALE: 1" = 40'

ENGINEERS SEAL



DATE

REVISIONS

CITY REVIEW		
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WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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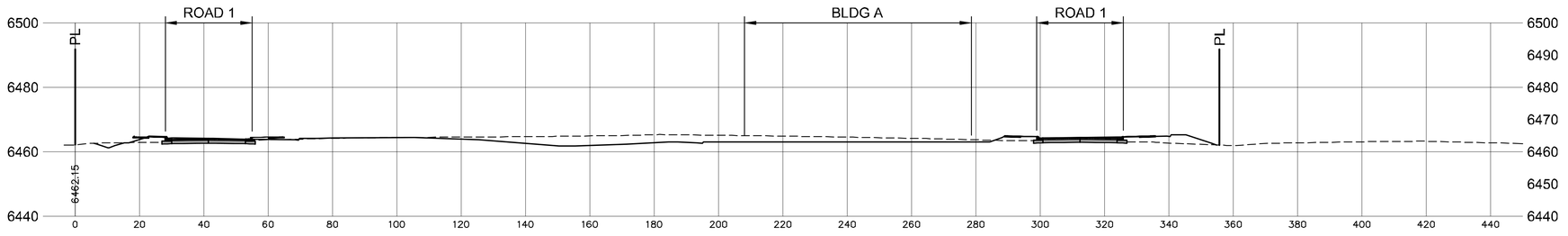
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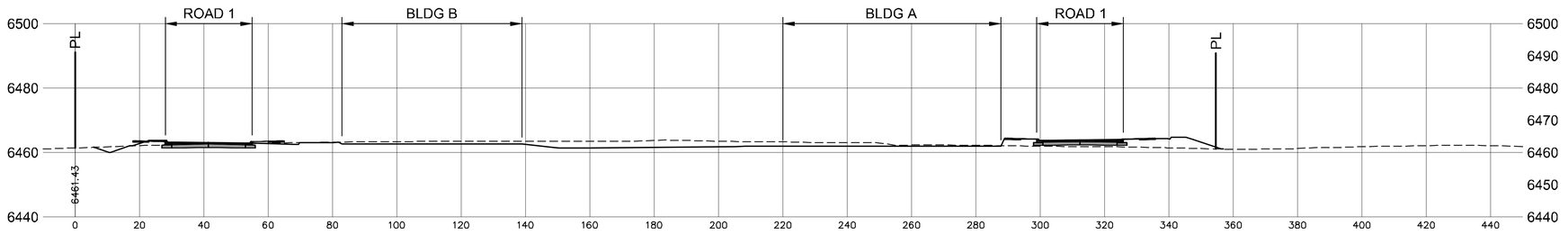
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

SITE CROSS SECTION LOCATION PLAN

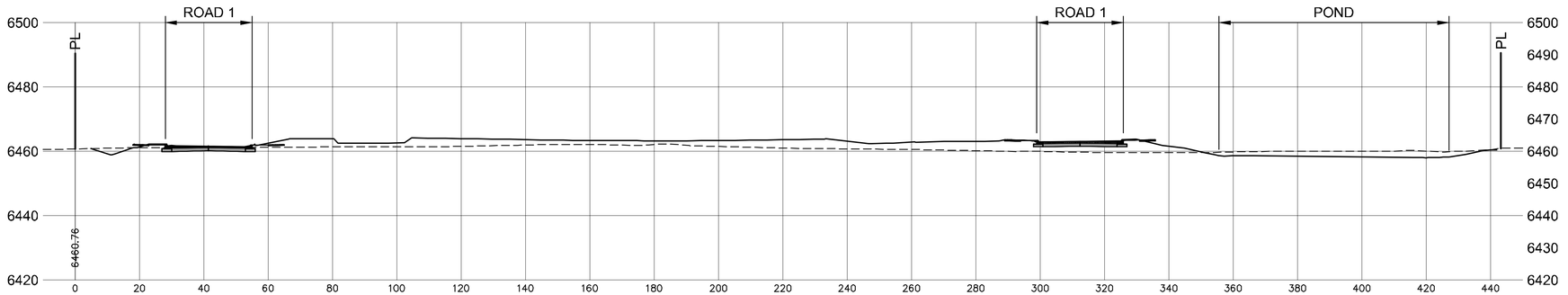
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	12-1



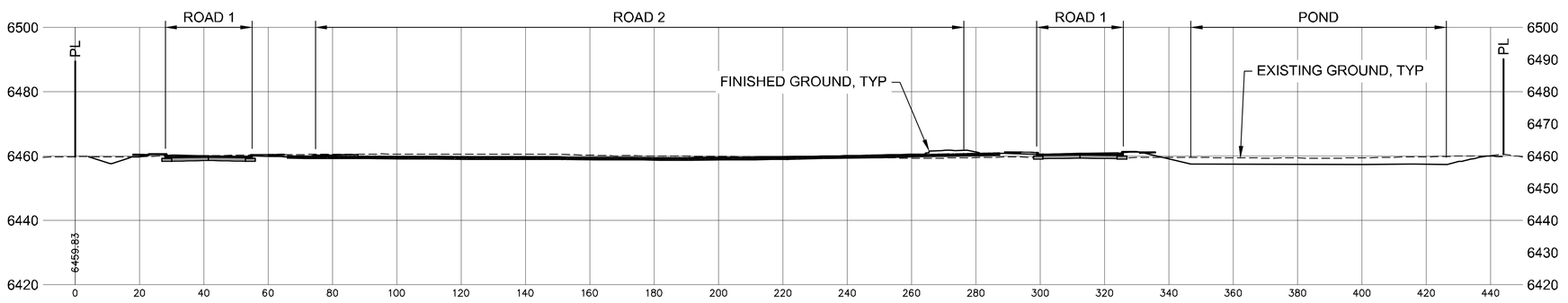
2+00



1+50



1+00



0+50

0 10 20 40
SCALE: 1" = 20'

SITE CROSS SECTIONS
SCALE: 1" = 20'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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TRAFFIC DIV.		
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FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

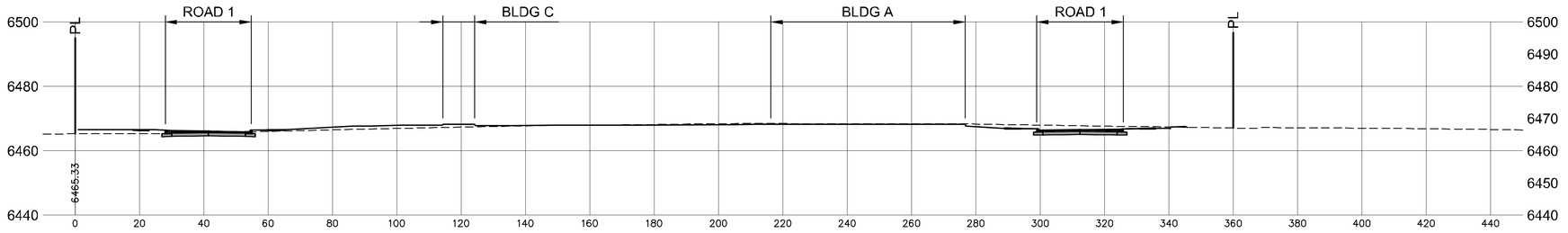
SITE CROSS SECTIONS

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	12-2

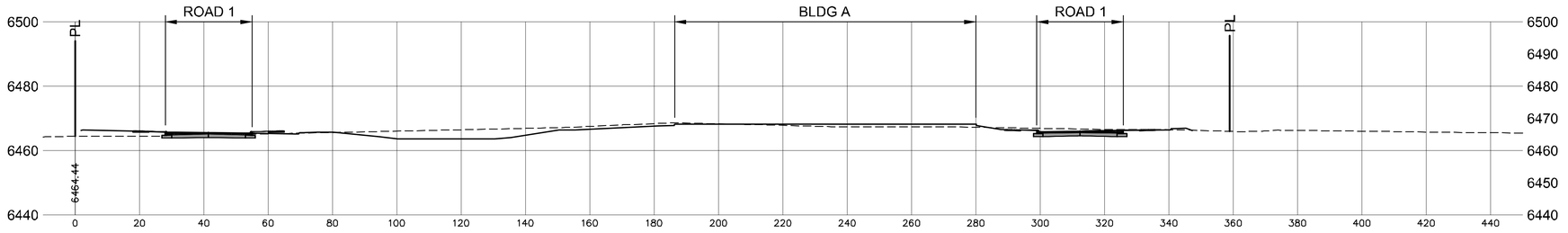
ENGINEERS SEAL
MICHAEL D. HARRIS
NEW MEXICO
FOR REVIEW ONLY
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3/3/2025

DATE

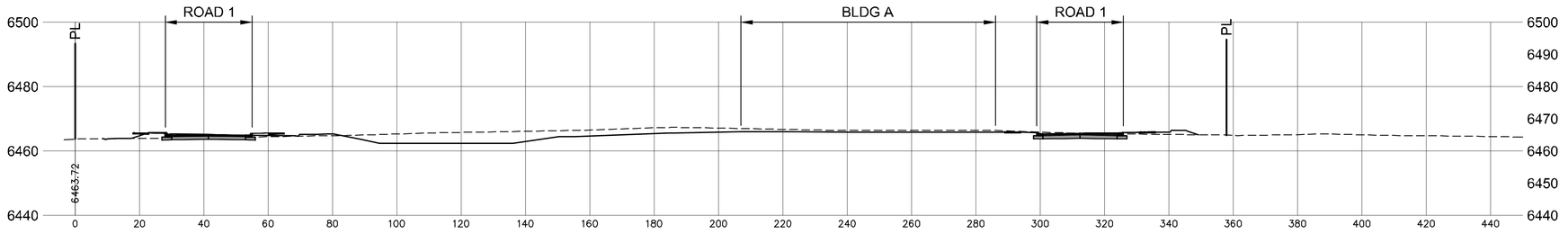
REVISIONS



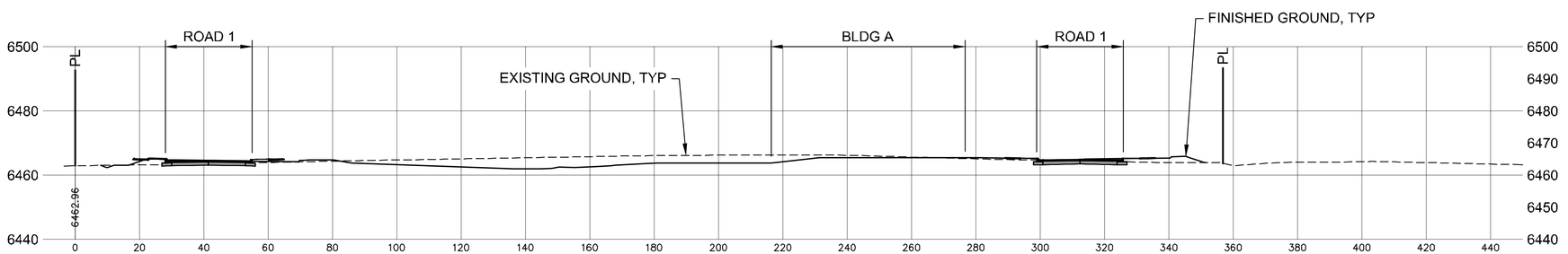
4+00



3+50



3+00



2+50

0 10 20 40
SCALE: 1" = 20'

SITE CROSS SECTIONS (CONT'D)
SCALE: 1" = 20'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

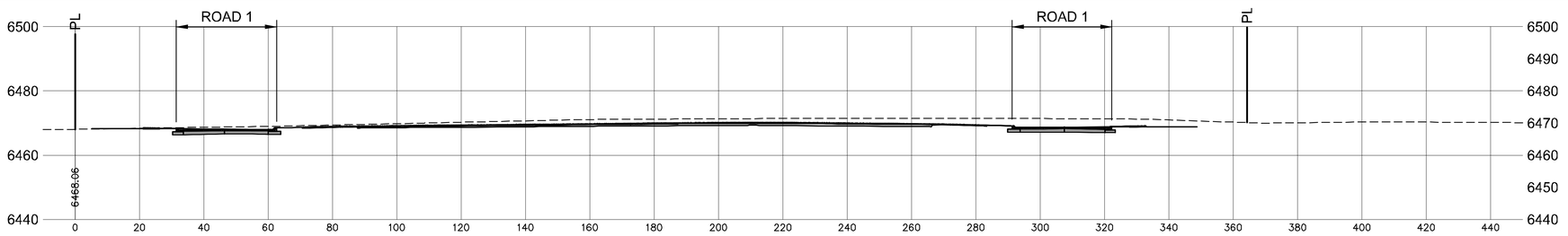
SITE CROSS SECTIONS (CONT'D)

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	12-3

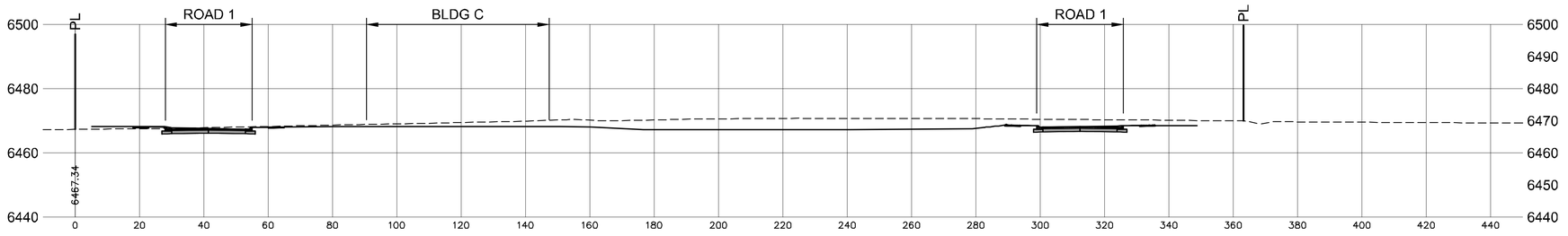
ENGINEERS SEAL
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NOT FOR CONSTRUCTION
APPROVED 2/13/2025

DATE

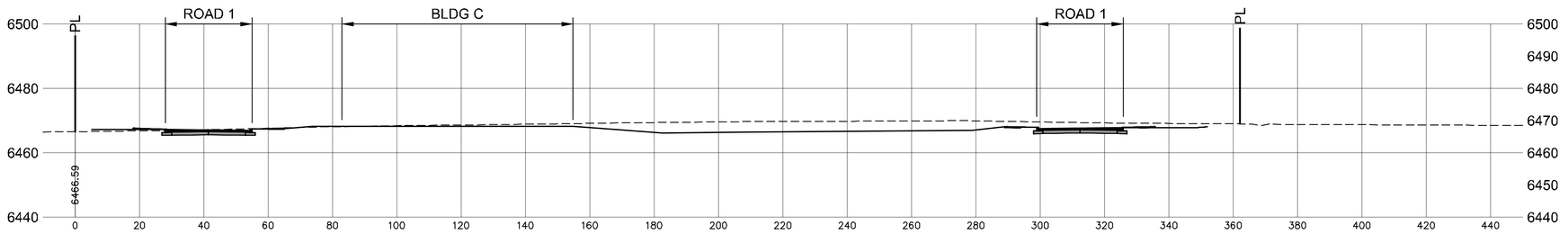
REVISIONS



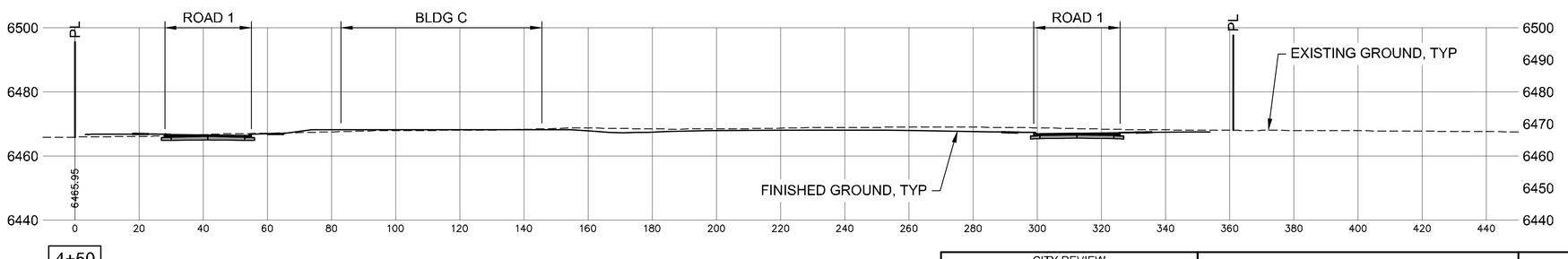
6+00



5+50



5+00



4+50

0 10 20 40
SCALE: 1" = 20'

SITE CROSS SECTIONS (CONT'D)
SCALE: 1" = 20'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
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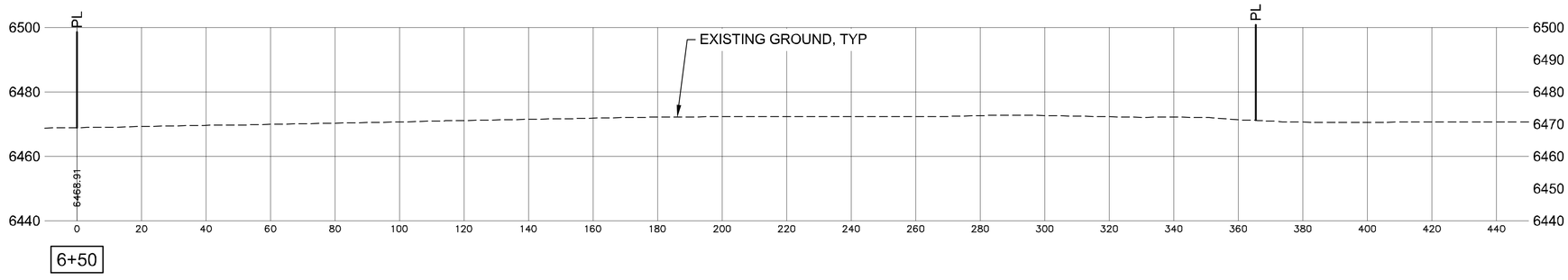
ENGINEER'S SEAL
MICHAEL D. HARRIS
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER
FOR REVIEW ONLY
Not for Construction
2/5/2025

DATE
REVISIONS

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

SITE CROSS SECTIONS (CONT'D)

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	12-4



6+50

SITE CROSS SECTIONS (CONT'D)

SCALE: 1" = 20'

0 10 20 40

SCALE: 1" = 20'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
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TRAFFIC DIV.		
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

SITE CROSS SECTIONS (CONT'D)

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 20'	12-5

ENGINEERS SEAL

FOR REVIEW ONLY

DATE

REVISIONS

SWPP Plan Inspection Report

Project Name: _____

Purpose of Inspection: _____ Date: _____

Inspector: _____

Weather Information: Type, Time, Amount, and Duration of Each Storm Event since Last Inspection. List Dates and Location for Storm Events:

_____

_____

_____

Location of NPDES Notice of Permit Coverage Posting: _____

_____

Has Land Disturbance Log been maintained: [ ] Yes [ ] No [ ] N/A

Does the site map reflect current BMPs and Site Characteristics? [ ] Yes [ ] No

Does the site map reflect current BMPs and Site Characteristics? [ ] Yes [ ] No

Comments: _____

_____

_____

Evidence of Discharges of Sediment or other Pollutants from the Site (Describe Below): [ ] Yes [ ] No

Evidence of Spills or Leaks (Describe Below): [ ] Yes [ ] No

Evidence of Offsite Sediment Tracking (Describe Below) [ ] Yes [ ] No

Comments: _____

_____

Is Facility in Compliance with SWPP Plan and Permit? [ ] Yes [ ] No

Incidents of Non-Compliance with SWPP Plan: _____

_____

_____

Land Disturbance Log, including Location and Date of Soil Disturbance, Activities and Stabilization Initiated:

_____

_____

SWPP Plan Inspection Report (Continued)

Certification Statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

_____

(Signature)

_____

(Please Print Name, Title)

STORM WATER POLLUTION PREVENTION PLAN
OCATE APARTMENTS
SANTA FE, NEW MEXICO

1. SITE AND PROJECT DESCRIPTION

The project site is largely undeveloped, with the exception of two metal buildings with parking facilities on the South side. The property is bordered by Ocate Road to the South, Santa Fe Mobile Home Hacienda to the West, a graveled parking area to the East, and neighboring NM School for the Deaf, and NMDOT District 5 properties to the North.

1.1 Owner Operator:

Construction Operator (Separate NPDES Permit needed).

_____

_____

_____

_____

Telephone: _____

Fax: _____

1.2 Location of the site:

The site is located in Township 16 North, Range 9 East, Section 18 in Santa Fe, New Mexico.

The latitude and longitude are as follows:

Latitude: 35°37'25" N
Longitude: 106°1'53" W

1.3 The total area of the site:

5.64 ± acres

1.4 The area of the site that is expected to be disturbed:

5.64 ± acres

1.5 Endangered Species:

Based on the instruction provided by the EPA Compliance Assurance and Enforcement Division Water Enforcement Branch, Region 6 "Storm Water Region 6 NPDES General Permit for Storm Water Discharge from Construction Activity," there are no endangered or threaten species, or designated critical habitat, which are likely to be adversely affected by the construction activity's storm water discharge or storm water discharge related activities.

1.6 Intended sequence of major construction activities:

1. Install Best Management Practices (BMP's). The contractor shall minimize soil disturbance and insure the proper stockpiling of materials.

2. Site Grading. The contractors shall use site-specific controls as shown on the Temporary Erosion Control Plans and Grading and Drainage Plans. Soil disturbance shall be minimized.

3. Stabilization. The contractors shall use site-specific controls as shown on the Permanent Erosion Control Plans.

1.7 The following maps have been prepared:

1.7.1 Vicinity Map

See Sheet 1-1.

1.7.2 Drainage patterns:

See Grading and Drainage Plan, See 8 Series.

1.7.3 Approximate slopes after major grading.

See Permanent Erosion Control, Sheet 13-3.

1.7.4 Outline area of disturbance:

See Permanent Erosion Control, Sheet 13-3.

1.7.5 Outline of areas which won't be disturbed:

See Permanent Erosion Control, Sheet 13-3.

1.7.6 Location of major structural and non-structural concepts:

See Temporary Erosion Control Plan, Sheet 13-2.

1.7.7 Areas where stabilization practices are expected to occur.

See Permanent Erosion Control Plan, Sheet 13-3.

2. DESCRIPTION OF CONTROLS

2.1 Posting Requirements:

The Contractor will post conspicuously near the entrance to the site the following items:

Copies of NOIs
Name and telephone number of contact persons.

2.2 "Good Housekeeping":

The contractors shall practice "Good Housekeeping." This includes the proper disposal of construction and demolition debris on a daily basis, proper wash down methods of construction vehicles, the proper stockpiling of materials. The construction site shall be kept in a neat and orderly manner and exposure of material to storm water will be minimized to the extent practicable.

2.3 Concrete Washout

Concrete washout is a process wastewater and must be controlled in a designated area (e.g. bermed pit) and disposed of properly and noted on the Temporary Erosion Control Plans.

2.4 Minimize Disturbance and Preserve Natural Vegetation:

The Contractor shall minimize disturbance. The limits of construction shall be clearly delineated and enforced. Special attention will be given to protecting established vegetation. The contractor will be responsible for replacing vegetation that is unnecessarily disturbed.

2.5 Inspections:

Disturbed areas, stabilization and structural control measures shall be inspected as required and at least once every two weeks, and within 24 hours or the next working day of the end of a storm event. If a portion of the site has been finally or temporarily stabilized, and runoff is unlikely due to winter conditions, or during seasonal arid periods, inspections shall be conducted on a monthly basis.

Inspections shall be documented on the inspection and maintenance form. Inspections shall be continued by the Owner and final stabilization of an area is achieved and/or the Notice of Termination is submitted.

2.6 Record Keeping:

A copy of the SWPP Plan will be maintained onsite for the use of all Operators and those identified in the SWPP Plan as having on site responsibilities. Items that will be maintained and attached to the SWPP include:

Inspection Reports: The inspection reports shall be signed by a qualified inspector assigned by the Contractor. The SWPP package and reports shall be available to EPA representatives at all times during construction.

Land Disturbance Log containing: dates when major soil disturbing activities occur, dates when construction activities temporarily or permanently cease on a portion of the site, and dates when stabilization measures are initiated.

Spill Tracking

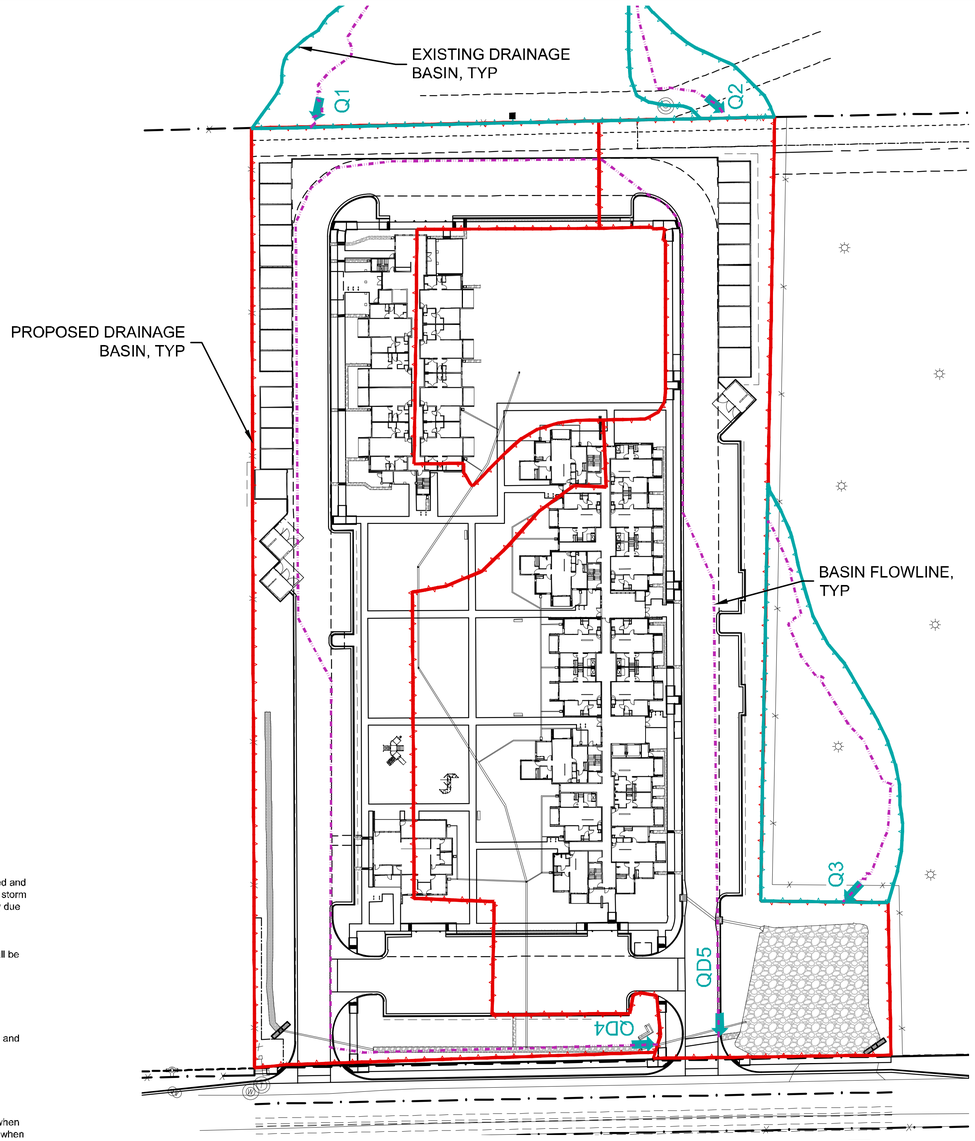
Copies of SWPP Plans, inspection records, spill reports, all reports required by NPDES Permit coverage, and data used to complete the NOI shall be retained by the permitees.

2.7 Plan Amendment:

This SWPP Plan will be amended when:

There is a change in design, construction, operation, or maintenance.

If the inspection report identifies problems or inadequacies with the current BMPs, the SWPP Plan shall be modified as necessary to include additional or modified BMP's designed to correct the problems.



SEE REPORT ENTITLED "TERRAIN MANAGEMENT REPORT SOILS, GRADING, AND DRAINAGE FOR DEVELOPMENT PLAN APPROVAL OCATE APARTMENTS 1111 OCATE ROAD SANTA FE, NEW MEXICO", PREPARED BY SANTA FE ENGINEERING CONSULTANTS, LLC, DATED SEPTEMBER 2024

DRAINAGE MAP
SCALE: 1" = 50'

0 25 50 100
SCALE: 1" = 50'

ENGINEERS SEAL

FOR REVIEW ONLY

DATE

REVISIONS

CASE # _____

CITY REVIEW		
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INFRASTRUCTURE PLANS FOR OCATE APARTMENTS SANTA FE, NEW MEXICO

STORM WATER POLLUTION PREVENTION PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 50'	13-1

MAINTENANCE RESPONSIBILITIES AND INSPECTIONS

1. DISTURBED AREAS, STABILIZATION AND STRUCTURAL CONTROL MEASURES SHALL BE INSPECTED AS REQUIRED AND AT LEAST ONCE EVERY TWO WEEKS, AND WITHIN 24 HOURS OR THE NEXT WORKING DAY OF THE END OF A STORM EVENT. IF A PORTION OF THE SITE HAS BEEN FINALLY OR TEMPORARILY STABILIZED AND RUNOFF IS UNLIKELY DUE TO WINTER CONDITIONS, OR DURING SEASONAL ARID PERIODS, INSPECTIONS SHALL BE CONDUCTED ON A MONTHLY BASIS.
2. THE STORM WATER MANAGEMENT SYSTEM SHALL BE MAINTAINED IN GOOD CONDITION AND PROMPTLY REPAIRED TO ENSURE THAT THE SYSTEM IS MAINTAINED IN PROPER WORKING CONDITION.
3. IF AFTER NOTICE BY THE CITY TO CORRECT A VIOLATION REQUIRING MAINTENANCE WORK, SATISFACTORY CORRECTIONS ARE NOT MADE WITHIN A REASONABLE PERIOD OF TIME. THE CITY MAY PERFORM ALL NECESSARY WORK TO PLACE THE FACILITY IN PROPER WORKING CONDITION. THE CONTRACTOR SHALL BE ASSESSED THE ASSOCIATED COSTS OF THE WORK.

DUST CONTROL

ALL ON-SITE SOIL DISTURBING CONSTRUCTION ACTIVITIES SHALL BE ADDRESSED AND PROVIDE MEASURES TO MITIGATE OR CONTROL DUST FROM BEING TRANSPORTED OFFSITE AND POLLUTING NEIGHBORING PROPERTIES. ANY PERSON, OWNER, CONTRACTOR OR OPERATOR WHO CONDUCTS EARTHMOVING AND/OR DUST GENERATING ACTIVITIES IS RESPONSIBLE FOR IMPLEMENTING BEST MANAGEMENT PRACTICES (BMPS) IN ORDER TO MITIGATE OFF-PROPERTY TRANSPORT OF FUGITIVE DUST EMISSIONS.A PLAN, OR STORM WATER POLLUTION PREVENTION PLAN (SWPPP) WHEN APPLICABLE, LISTING THE BEST MANAGEMENT PRACTICES (BMPS), SHALL BE PROVIDED TO THE CITY ENGINEER, OR THEIR DESIGNEE FOR REVIEW AND APPROVAL. THE APPROVED BMPS SHALL BE APPLIED TO THE GRADED AND/OR DISTURBED SOIL IN ORDER TO STABILIZE THE SITE. THE INITIAL BMP SHALL ADDRESS HOW THE CONTRACTOR WILL MINIMIZE THE AMOUNT OF DISTURBED SOIL, AND HOW THE CONTRACTOR WILL STABILIZE THE DISTURBED SURFACE AREA EXPOSED TO WIND OR VEHICLE TRAFFIC DURING CONSTRUCTION. SOME BMPS SHALL INCLUDE:

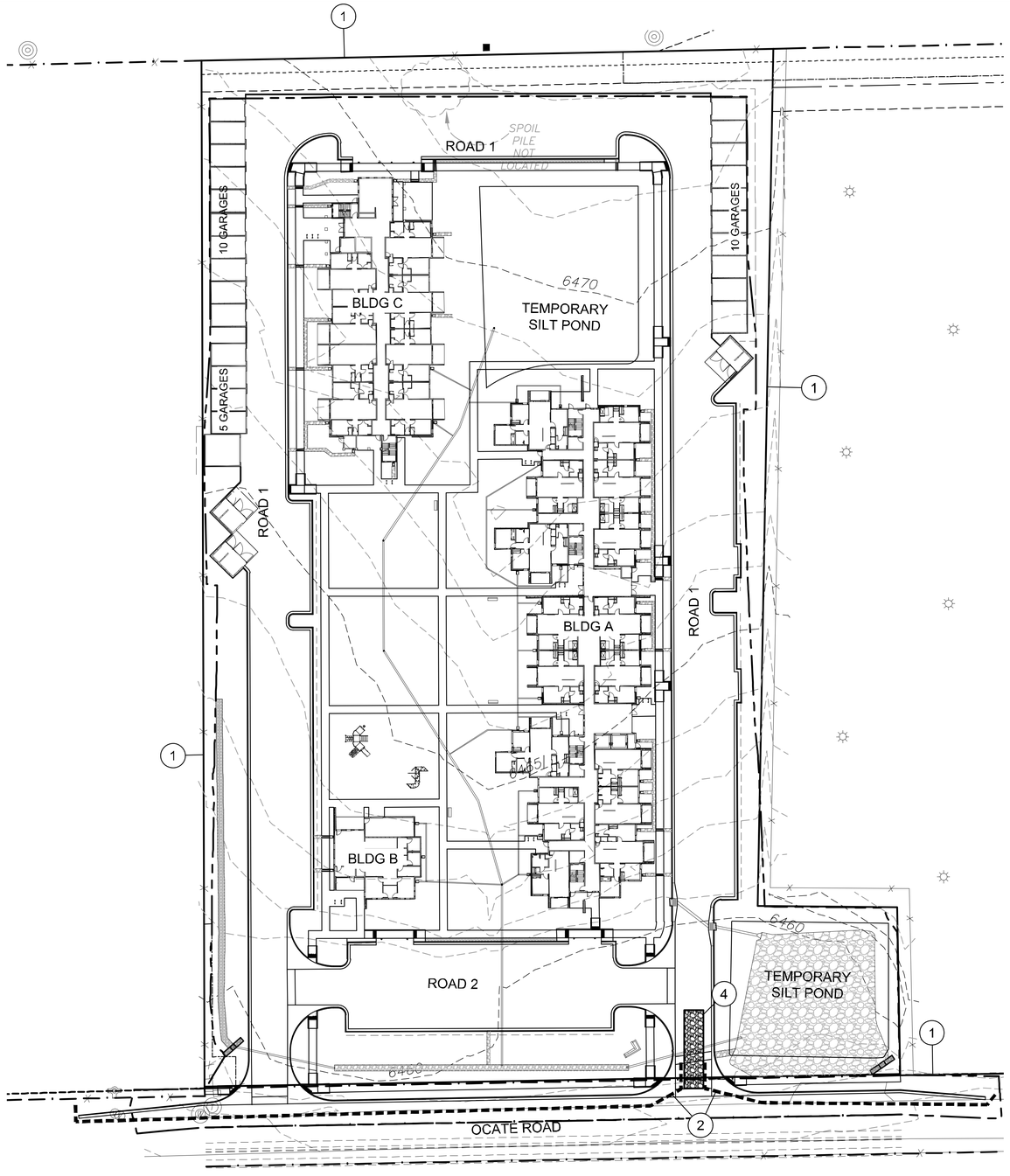
1. THE REDUCTION OF VEHICLE SPEEDS: ESTABLISH A MAXIMUM SPEED LIMIT OR INSTALL TRAFFIC CALMING DEVICES TO REDUCE SPEEDS TO A RATE TO MITIGATE OFF-PROPERTY TRANSPORT OF DUST ENTRAINED BY VEHICLES.
2. THE MINIMIZATION OF DROP HEIGHT: DRIVERS AND OPERATORS SHALL UNLOAD TRUCK BEDS AND LOADER OR EXCAVATOR BUCKETS SLOWLY, AND MINIMIZE DROP HEIGHT OF MATERIALS TO THE LOWEST HEIGHT POSSIBLE, INCLUDING SCREENING OPERATIONS.
3. HIGH WINDS RESTRICTION: TEMPORARILY HALT WORK ACTIVITIES DURING HIGH WIND EVENTS GREATER THAN 30 MPH IF OPERATIONS WOULD RESULT IN OFF-PROPERTY TRANSPORT.
4. RESTRICT ACCESS: RESTRICT ACCESS TO THE WORK AREA TO ONLY AUTHORIZED VEHICLES AND PERSONNEL.

IN THE EVENT THE ABOVE PRACTICES ARE INEFFECTIVE TO PREVENT OFF PROPERTY TRANSPORT, THE OWNER OR OPERATOR SHALL USE AT ONE OR MORE OF THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPS):

1. WET SUPPRESSION: APPLY WATER TO DISTURBED SOIL SURFACES, BACKFILL MATERIALS, SCREENINGS, AND OTHER DUST GENERATING OPERATIONS AS NECESSARY AND APPROPRIATE CONSIDERING CURRENT WEATHER CONDITIONS, AND PREVENT WATER USED FOR DUST CONTROL FROM ENTERING ANY PUBLIC RIGHT-OF-WAY, STORM WATER DRAINAGE FACILITY, OR WATERCOURSE.
2. WIND BARRIER: CONSTRUCT A FENCE OR OTHER TYPE OF WIND BARRIER TO PREVENT WIND EROSION OF THE GRADED OR DISTURBED SURFACE.
3. VEGETATION: PLANT VEGETATION APPROPRIATE FOR RETAINING SOILS OR CREATING A WIND BREAK.
4. SURFACE ROUGHENING: STABILIZE AN ACTIVE CONSTRUCTION AREA DURING PERIODS OF INACTIVITY OR WHEN VEGETATION CANNOT BE IMMEDIATELY ESTABLISHED.
5. COVER: INSTALL COVER MATERIALS SUCH AS TACKIFIERS, EROSION CONTROL BLANKETS, GRAVEL, VEGETATION (WHEN APPROPRIATE), COLD-MILLINGS, ETC. DURING PERIODS OF INACTIVITY AND PROPERLY ANCHOR THE COVER.
6. SOIL RETENTION: STABILIZE DISTURBED OR EXPOSED SOIL SURFACE AREAS THAT WILL BE INACTIVE FOR MORE THAN 30 DAYS OR WHILE VEGETATION IS BEING ESTABLISHED.

BEST MANAGEMENT PRACTICES - NOTES

1. DISTURBED AREAS SHALL BE PROTECTED FROM EROSION DURING CONSTRUCTION BY MEANS ADEQUATE TO RETAIN SOIL ON SITE.
2. EXCEPT AS NECESSARY TO INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES, LAND SHALL NOT BE GRADED OR CLEARED UNTIL ALL SUCH TEMPORARY DEVICES HAVE BEEN PROPERLY INSTALLED AND INSPECTED. CONTROL DEVICES SHALL BE KEPT IN PLACE AND USED UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.
3. SIGNIFICANT TREES, AREAS WITH SUBSTANTIAL GRASS COVERAGE, AND DRAINAGE WAYS THAT ARE TO REMAIN UNDISTURBED SHALL BE FENCED OFF PRIOR TO THE USE OF ANY HEAVY MACHINERY ON-SITE AND DURING THE ENTIRE CONSTRUCTION PROCESS. FENCING SHALL BE PLACED FIVE FEET TO THE OUTSIDE OF THE DRIP LINE OF SIGNIFICANT TREES. THERE ARE NO SIGNIFICANT TREES.
4. SOIL STOCKPILES SHALL BE PROTECTED FROM EROSION THROUGHOUT CONSTRUCTION BY USING APPROPRIATE EROSION CONTROL TECHNIQUES. STAGING AND SOIL STOCKPILE AREAS SHALL BE CLEARLY DESIGNATED ON THE SITE. ALL TOPSOIL SHALL BE KEPT ON SITE, WITHIN THE DISTURBANCE ZONE OF CONSTRUCTION, AND REINTRODUCED IN TO PLANTING AREAS TO THE EXTENT POSSIBLE. THERE ARE NO SOIL STOCKPILES ASSOCIATED WITH THIS PROJECT.
5. WATERING DOWN EXPOSED AREAS IS REQUIRED TO PREVENT THE BLOWING OF DUST OR SEDIMENT.
6. PROTECTION FOR STORM DRAIN INLETS SHALL BE PROVIDED TO PREVENT THE ENTRY OF SEDIMENT WHILE STILL ALLOWING THE ENTRY OF STORM WATER.
7. EROSION AND SEDIMENT CONTROL SHALL BE ACCOMPLISHED BY WATERING AND/OR FIBER MULCH WITH TACKIFIER.
8. ALL CONSTRUCTION TRAFFIC SHALL USE TIRE WASHES.



SHEET KEYNOTES

1. PROPERTY LINE
2. TYPE I SILT FENCE
3. GRADING LIMITS
4. DRY TIRE WASH, SEE SHEET 13-4 FOR DETAILS

LEGEND

- TYPE I SILT FENCE SEE SHEETS 13-5 & 13-6 FOR DETAILS
- GRADING LIMITS
- DRAINAGE FLOW ARROW

TEMPORARY EROSION CONTROL PLAN

SCALE: 1" = 40'

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		
CITY USE ONLY		

ENGINEERS SEAL — FOR REVIEW ONLY — REGISTERED 3/31/2025

DATE

REVISIONS

Santa Fe Engineering Consultants, LLC
1599 St. Francis Drive, Suite B
Santa Fe, N. M. 87505
(505) 982-2845 Fax (505) 982-2641
http://www.SFENGR.com

INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

TEMPORARY EROSION CONTROL PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	13-2

LONG TERM MAINTENANCE RESPONSIBILITIES AND INSPECTIONS

1. ALL STORM WATER FACILITIES SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
2. THE STORM WATER MANAGEMENT SYSTEM SHALL BE MAINTAINED IN GOOD CONDITION AND PROMPTLY REPAIRED.
3. THE CITY OR ITS AUTHORIZED AGENT MAY ENTER UPON THE PROPERTY, AT REASONABLE TIMES TO ENSURE THAT THE SYSTEM IS MAINTAINED IN PROPER WORKING CONDITION.
4. IF AFTER NOTICE BY THE CITY TO CORRECT A VIOLATION REQUIRING MAINTENANCE WORK, SATISFACTORY CORRECTIONS ARE NOT MADE WITHIN A REASONABLE PERIOD OF TIME. THE CITY MAY PERFORM ALL NECESSARY WORK TO PLACE THE FACILITY IN PROPER WORKING CONDITION. THE OWNER(S) OR RESPONSIBLE PARTY OF THE FACILITY SHALL BE ASSESSED THE ASSOCIATED COSTS OF THE WORK.

INSPECTIONS AND VIOLATIONS DURING CONSTRUCTION PROCESS

1. INSPECTIONS BY CITY ARE DUE WHEN STORM WATER MANAGEMENT MEASURES ARE COMPLETED AND WHEN THE FINAL SITE RESTORATION MEASURES ARE COMPLETED. HOWEVER, IF FINAL SITE RESTORATION MEASURES ARE BEING DELAYED DUE TO THE SEASON, THE CITY SHALL BE NOTIFIED WHEN TEMPORARY EROSION CONTROL MEASURES FOR USE UNTIL RESTORATION IS COMPLETE, IN PLACE AND READY FOR INSPECTION.
2. FURTHER CONSTRUCTION OR ISSUANCE OF ANY PERMITS SHALL NOT OCCUR UNTIL WRITTEN APPROVAL HAS BEEN GRANTED BY THE CITY.

DRAINAGE FACILITIES MAINTENANCE

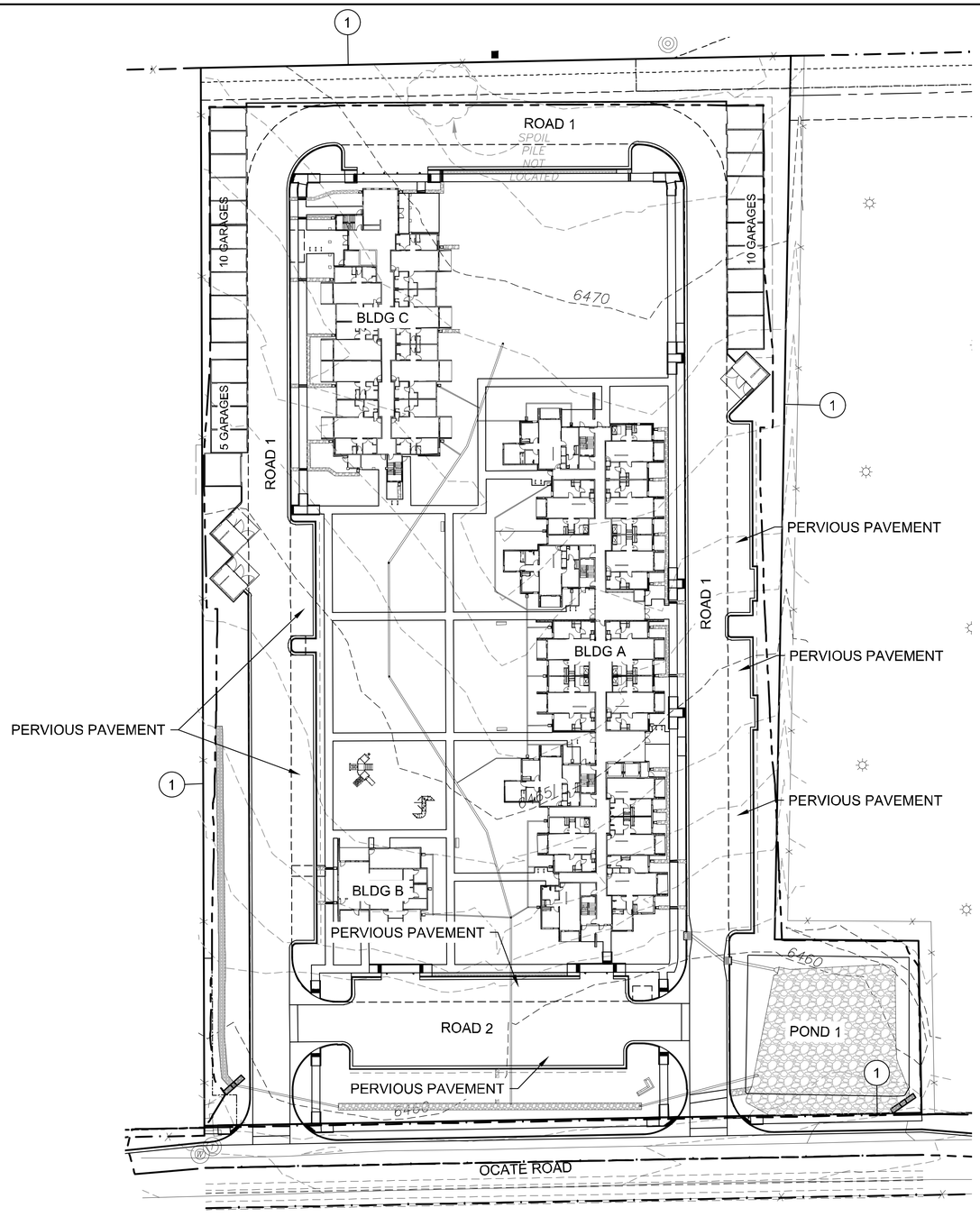
1. THE DRAINAGE FACILITIES ARE PRIVATE AND SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
2. INSPECTIONS OF THE DRAINAGE FACILITIES SHALL BE CONDUCTED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

   ON OR ABOUT MARCH 15, ON OR ABOUT SEPTEMBER 15, AND AFTER EACH STORM EVENT OF 1-INCH OR GREATER. PROPERTY OWNERS SHALL MAINTAIN A FILE OF THE INSPECTIONS AND REMEDIAL ACTION CONDUCTED ON THE DRAINAGE FACILITIES.
3. THE REMEDIAL ACTION SHALL CONSIST OF (1) REMOVAL AND DISPOSAL OF SEDIMENT IN PONDS THAT IS GREATER THAN 6-INCHES IN DEPTH; (2) FLUSHING ALL CULVERTS, DROP INLETS AND DRAINAGE PIPES TO REMOVE SEDIMENT AND POLLUTANTS THAT PREVENTS OR HINDERS THE FLOW OF STORM WATER IN THE DRAINAGE STRUCTURES; AND (3) INSPECT FOR SOIL EROSION AT ALL DRAINAGE PONDS AND INSPECT FOR THE STRUCTURAL INTEGRITY OF ALL APPURTENANT DRAINAGE STRUCTURES AND REPAIR OR STABILIZE ACCORDINGLY.

DRAINAGE FACILITIES MAINTENANCE SCHEDULE

SPRING MAINTENANCE:	MARCH 15th	CLEARING AND MAINTENANCE FOR ALL STORMWATER MANAGEMENT FACILITIES SHALL OCCUR WITHIN 30 DAYS OF DATE. REMOVE SEDIMENT BUILD UP IN ALL PONDS AND RESEED.
FALL MAINTENANCE:	SEPTEMBER 15th	CLEARING AND MAINTENANCE FOR ALL STORMWATER MANAGEMENT FACILITIES SHALL OCCUR WITHIN 30 DAYS OF DATE.
PERIODIC MAINTENANCE:	AFTER SIGNIFICANT STORMS (1" OR GREATER)	CLEARING AND MAINTENANCE FOR ALL STORMWATER MANAGEMENT FACILITIES SHALL OCCUR WITHIN 30 DAYS OF STORM.

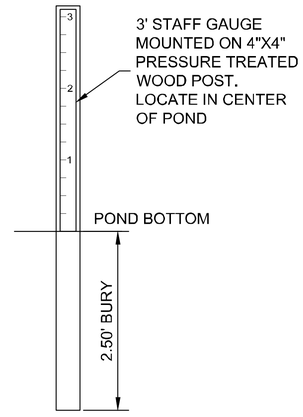
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PERMANENT EROSION CONTROL PLAN
SCALE: 1" = 40'

SHEET KEYNOTES

1. PROPERTY LINE



POST AND STAFF GAUGE
SCALE: N.T.S.

VOID SEE NEXT SHEET.

ENGINEERS SEAL — FOR REVIEW ONLY

DATE

REVISIONS

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
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INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

PERMANENT EROSION CONTROL PLAN

DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	13-3

LONG TERM MAINTENANCE RESPONSIBILITIES AND INSPECTIONS

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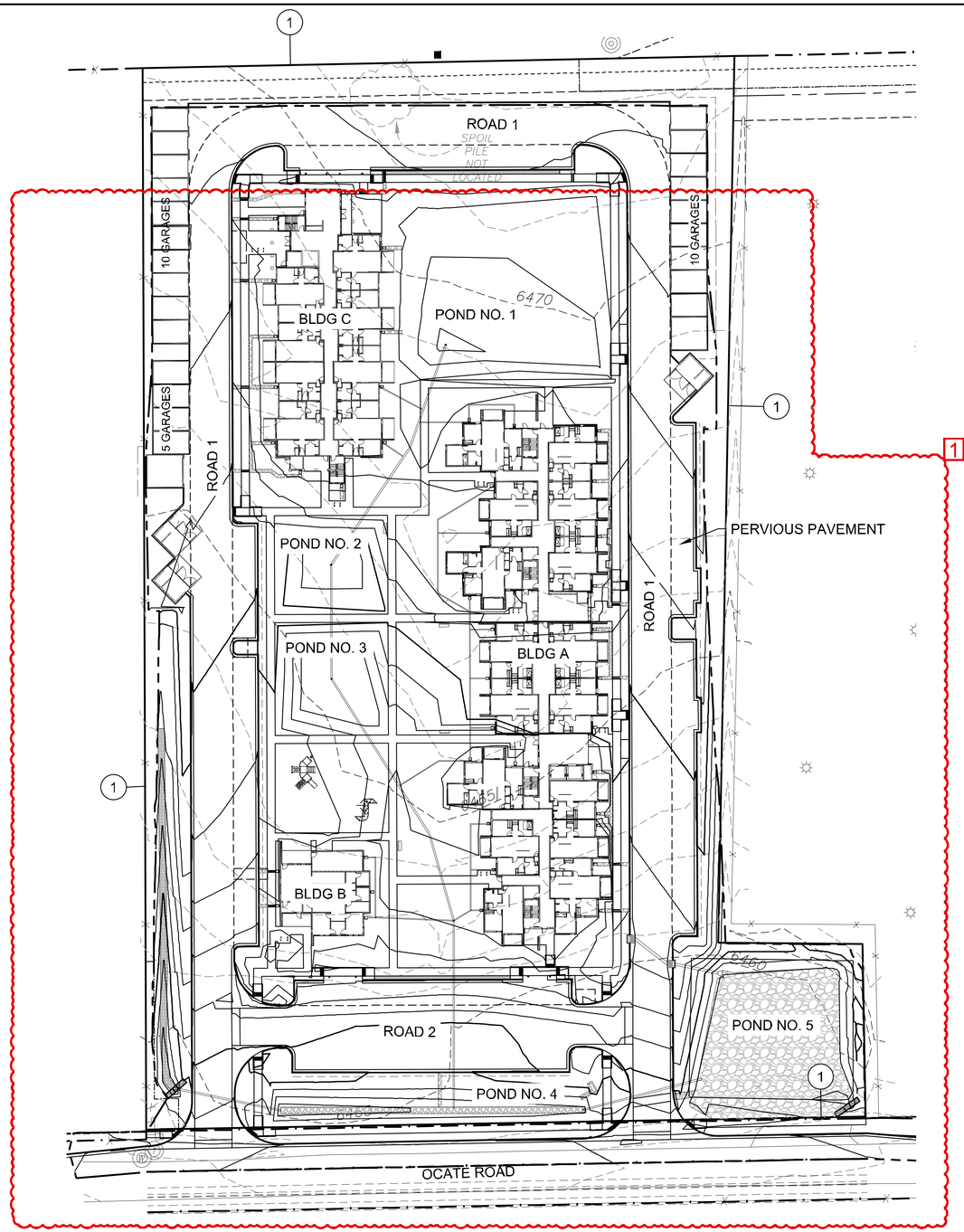
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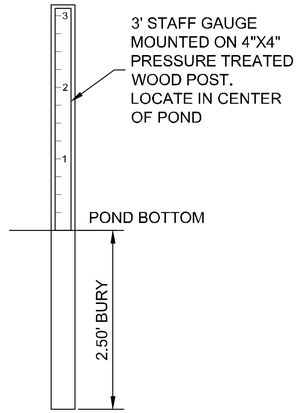
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PERMANENT EROSION CONTROL PLAN
SCALE: 1" = 40'

SHEET KEYNOTES

1. PROPERTY LINE



POST AND STAFF GAUGE
SCALE: N.T.S.

1 COMMENTS FROM CITY STAFF
UPDATED POND LABELS

CASE # _____

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
STREETS DIV.		
TRAFFIC DIV.		
FIRE		
LANDSCAPE		
SUBDIVISION ENGINEER		

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REVISIONS	DATE	ENGINEERS SEAL
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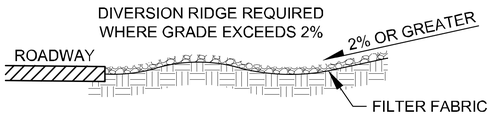
INFRASTRUCTURE PLANS
FOR OCATE APARTMENTS
SANTA FE, NEW MEXICO

PERMANENT EROSION CONTROL PLAN

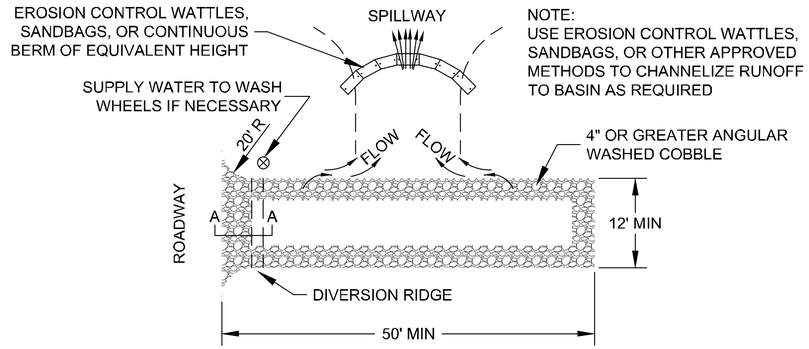
DATE:	SCALE:	SHEET:
FEBRUARY 2025	1" = 40'	13-3

NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL MINIMIZE SEDIMENT TRACKING OR TRANSPORT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE ADDING ADDITIONAL LAYERS OF GRAVEL, REPAIR AND/OR CLEANOUT OF MEASURE USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC ROADWAYS.
3. VEHICLE WASHING SHALL BE CONDUCTED IN A STABILIZED AREA WITH APPROPRIATE STORM WATER CONTROLS IN PLACE.



SECTION A-A

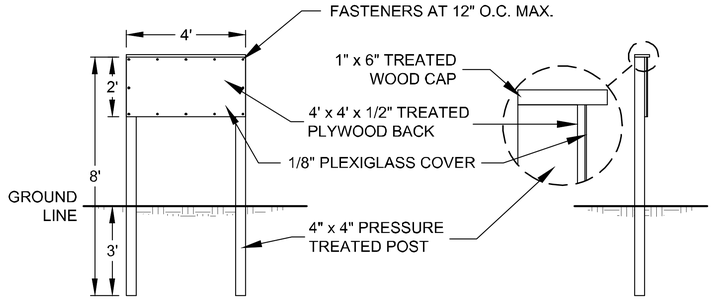


PLAN VIEW

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE / EXIT

CITY OF SANTA FE NPDES STORMWATER MANAGEMENT NOTES

1. DEVELOPMENT IS SUBJECT TO THE REQUIREMENTS OF THE SFCC CHAPTER XIII STORMWATER UTILITY INCLUDING THE STORMWATER UTILITY SERVICE CHARGE AND STORMWATER ILLICIT DISCHARGE CONTROL REQUIREMENTS.
2. DEVELOPMENT IS SUBJECT TO THE REQUIREMENTS OF NPDES GENERAL MS4 DISCHARGE PERMIT NO. NMR 040000 AND NPDES CONSTRUCTION GENERAL PERMIT NO. NMR 100000.
3. CONSTRUCTION GENERAL DISCHARGE PERMIT NO. NMR 100000
   A STORMWATER POLLUTION PREVENTION PLAN MUST BE PREPARED BY A QUALIFIED PROFESSIONAL AND A NOTICE OF INTENT (NOI) FOR COVERAGE MUST BE FILED WITH THE EPA. CONSTRUCTION STORMWATER DISCHARGES **ARE NOT PERMITTED** UNTIL A MINIMUM OF SEVEN (7) CALENDAR DAYS AFTER EPA ACKNOWLEDGEMENT OF A COMPLETE NOI.
4. CITY OF SANTA FE STORMWATER ILLICIT DISCHARGE CONTROL
   SFCC 13-2 PROHIBITS THE DISCHARGE OF POLLUTANTS INCLUDING SEDIMENT, SLURRIES, MUD, PLASTERS, CONCRETE RINSATES AND ANY CONSTRUCTION MATERIALS, WASTES AND GARBAGE, ETC. INTO THE STORM DRAIN SYSTEM. THE STORM DRAIN SYSTEM INCLUDES ROADS, STREETS, CURBS, GUTTERS, DROP INLETS, PIPED STORM DRAINS, CULVERTS, RETENTION AND DETENTION BASINS, NATURAL AND MAN-MADE DRAINAGE CHANNELS, ARROYOS, RIVERS AND ANY FACILITY AND APPURTENANCE BY WHICH STORMWATER IS COLLECTED AND/OR CONVEYED.
5. CITY OF SANTA FE TERRAIN AND STORMWATER REGULATIONS
   SFCC 14-8.2 REQUIRES THAT CONSTRUCTION DISTURBED AREA SHALL BE PROTECTED AGAINST EROSION. SEDIMENT MUST BE CONTAINED ON THE DISTURBED AREA BY THE USE OF TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES SUCH AS SILT FENCING, SWALES, BERMS, GEOTEXTILES, SEDIMENT BASINS AND TRAPS. PROTECTION FOR STORM DRAIN INLETS SHALL BE PROVIDED TO PREVENT THE ENTRY OF SEDIMENT FROM THE SITE WHILE STILL ALLOWING THE ENTRY OF STORMWATER. CONTROL DEVICES SHALL BE KEPT IN PLACE AND USED UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.
6. THE CONTRACTOR SHALL NOT REMOVE SILT FENCE AND MULCH SOCKS OR OTHER TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES UNTIL DISTURBED AREAS ARE STABILIZED. SOIL STABILIZATION AND EROSION CONTROL MEASURES SHALL BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER COMPLETION OF CONSTRUCTION OR OTHER SOIL DISTURBANCE ACTIVITIES ON THE SITE. IF THE TIME OF YEAR IS NOT CONDUCIVE TO PLANTING, THEN PLANTING MAY BE DELAYED UNTIL THE NEXT APPROPRIATE PLANTING SEASON PROVIDED THAT ALL TEMPORARY EROSION CONTROL MEASURES ARE MAINTAINED UNTIL PERMANENT EROSION CONTROL MEASURES ARE IMPLEMENTED. TEMPORARY EROSION CONTROL MEASURES SHALL BE SELECTED, DESIGNED AND INSTALLED WITH AN APPROPRIATE SEED BASE TO PROVIDE EROSION CONTROL FOR AT LEAST THREE YEARS WITHOUT ACTIVE MAINTENANCE. TEMPORARY EROSION CONTROL MEASURES SHALL BE SELECTED, DESIGNED AND INSTALLED TO ACHIEVE 70 PERCENT VEGETATIVE COVER WITHIN THREE YEARS.



N.P.D.E.S. PERMIT POSTING BOARD
(LOCATED AT MAIN ENTRANCE)

ENGINEERS SEAL



DATE

REVISIONS

CITY REVIEW		
DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MANAGEMENT DIV.	SIGNATURE ON FILE	
WATER SERVICES		
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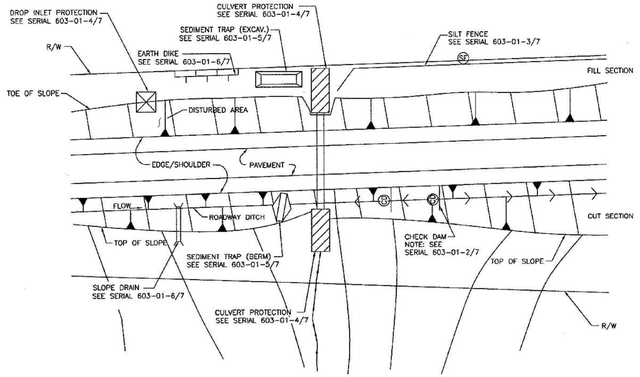
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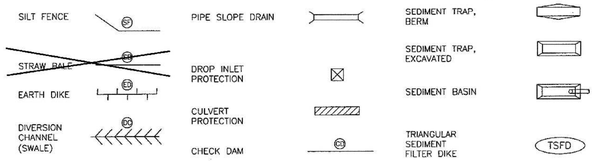
STORM WATER CONTROL DETAILS

DATE:	SCALE:	SHEET:
FEBRUARY 2025	N.T.S.	13-4



TYPICAL USAGE OF SELECTED EROSION AND SEDIMENT CONTROL MEASURES

STANDARD SYMBOLS FOR EROSION AND SEDIMENT CONTROL MEASURES



TEMPORARY EROSION & SEDIMENT CONTROL MEASURES (T.E.S.C.M.)

GENERAL NOTES

1. THE SOIL RETENTION BLANKET INSTALLATION DETAILS SHOWN FOR CULVERT PROTECTION SHALL BE USED FOR ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES UTILIZING SOIL RETENTION BLANKETS UNLESS OTHERWISE NOTED.
2. ROCK PLATING USED IN THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THESE SHEETS SHALL HAVE A MINIMUM THICKNESS OF 6 INCHES UNLESS OTHERWISE INDICATED.
3. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES PLACED WITHIN THE CONSTRUCTION CLEAR ZONE SHALL BE INSTALLED WITH 8:1 SLOPES PARALLEL TO TRAFFIC AND 4:1 SLOPES PERPENDICULAR TO TRAFFIC.
4. SEDIMENT TRAPS SHALL BE CLEANED OF ACCUMULATED SEDIMENT WHEN APPROXIMATELY 50% FILLED.
5. CHECK DAMS SHALL BE CLEANED OF ACCUMULATED SEDIMENT WHEN THE DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE CHECK DAM.
6. CULVERT PROTECTIONS SHALL BE INSTALLED UPON INITIATION OF EARTH WORK ACTIVITIES AND MAINTAINED AS MUCH AS PRACTICAL UNTIL STABILIZATION IS COMPLETED AND ACCEPTED. CULVERT PROTECTIONS MAY BE REMOVED FOR PERIODS OF TIME AS REQUIRED DURING CONSTRUCTION TO COMPLETE ADJACENT IMPROVEMENTS.
7. THE CONTRACTOR MAY CONSTRUCT AN EARTH DIKE AS SHOWN, OR RELOCATE THE CHECK DAMS AS CONSTRUCTION PROGRESSES. NO DIRECT PAYMENT SHALL BE MADE FOR RELOCATION OF THE CHECK DAMS.
8. STRAW BALES ARE NOT INTENDED FOR USE ON NEW MEXICO DEPARTMENT OF TRANSPORTATION PROJECTS.

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

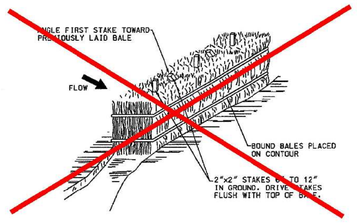
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

TEMPORARY EROSION & SEDIMENT CONTROL MEASURES

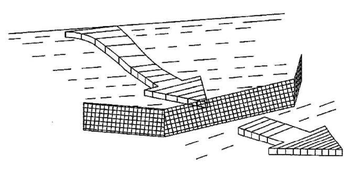
APPROVED _____ DESIGN ENGINEER DATE _____

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TYPE II
STRAW BALE OPTION



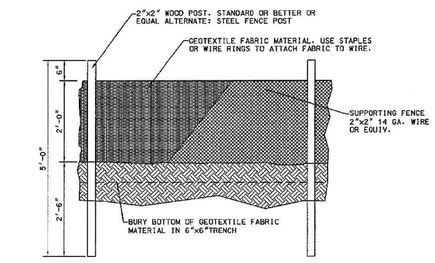
TYPE I
SILT FENCE

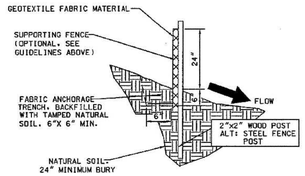
NOTES: SILT FENCE AND CHECK DAM

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE POST SPACING FOR SILT FENCES TO MINIMIZE MAINTENANCE.

1. POST SPACING SHALL BE 4 FT. MAXIMUM WITHOUT SUPPORTING FENCE. 10 FT. MAXIMUM WITH SUPPORTING FENCE.
2. POSTS FOR 4 FT. MAXIMUM POST SPACING SHALL BE 2 INCH SQUARE NOMINAL SIZE OR HEAVIER WOOD POSTS, OR STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 2 LBS. PER. LINEAR FOOT.

   POSTS FOR 10 FT. MAXIMUM POST SPACING SHALL BE 4 INCH SQUARE NOMINAL SIZE OR HEAVIER WOOD POSTS, OR STEEL POSTS AS SPECIFIED ABOVE.
3. SUPPORTING FENCE SHALL BE WIRE MESH (14 GA. MIN., 1 INCH MAX. MESH OPENINGS). SNOW FENCE, PLASTIC FENCE OR APPROVED.
4. SUPPORTING FENCE SHALL BE FASTENED SECURELY TO POSTS WITH STAPLES OR WIRE TIES. GEOTEXTILE FABRIC SHALL BE FASTENED SECURELY TO SUPPORTING FENCE WITH WIRE TIES SPACED AT 2 FT. CENTERS ALONG THE TOP AND MID-SECTION. WHEN A SUPPORTING FENCE IS NOT USED, GEOTEXTILE FABRIC SHALL BE SECURELY FASTENED TO POSTS WITH STAPLES OR WIRE TIES.
5. WHEN SILT FENCE IS USED FOR CHECK DAMS INSTALLED IN DITCHES, A SUPPORTING FENCE SHALL BE PROVIDED, WITH MAXIMUM POST SPACING OF 10 FT.
6. STANDARD "T" OR "U" SECTION STEEL POSTS SHALL NOT BE USED WITHIN THE CONSTRUCTION CLEAR ZONE RECOVERY AREA.
7. STRAW BALES ARE NOT INTENDED FOR USE ON NEW MEXICO DEPARTMENT OF TRANSPORTATION PROJECTS.





NO.	DATE	REV. BY	DESCRIPTION
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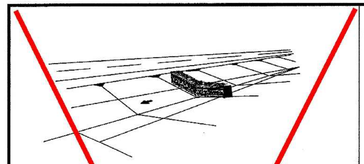
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

TEMPORARY EROSION & SEDIMENT CONTROL MEASURES SILT FENCE

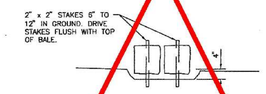
APPROVED _____ DESIGN ENGINEER DATE _____

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603-01-3/7



PLAN

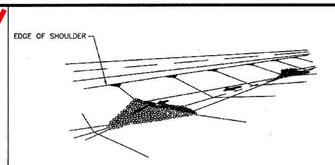


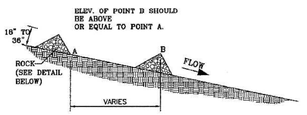
SECTION A-A



SECTION B-B

TYPE III
(STRAW BALE)

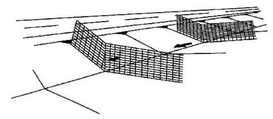


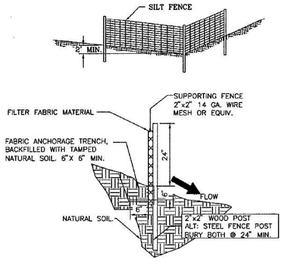






TYPE II
STONE DAM





TYPE I SILT FENCE

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

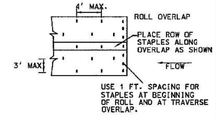
TEMPORARY EROSION & SEDIMENT CONTROL MEASURES CHECK DAMS

APPROVED _____ DESIGN ENGINEER DATE _____

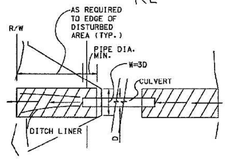
DESIGNED BY___ DRAWN BY___ CHECKED BY___

603-01-2/7 SHEET 2 OF 7

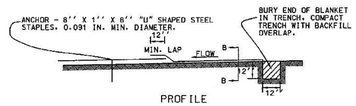




SOIL RETENTION BLANKET
STAPLE PATTERN



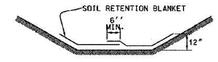
TYPICAL DITCH LINER
INSTALLATIONS AT CULVERTS



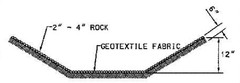
PROFILE
DITCH LINER

NOTES: CULVERT PROTECTION

1. WHEN CULVERT PROTECTION IS SPECIFIED, EITHER SOIL RETENTION BLANKETS OR SOIL RETENTION ROCK MAY BE PROVIDED.
2. THE CULVERT PROTECTION WIDTH REQUIRED SHALL BE IN ACCORDANCE WITH THESE DETAILS UNLESS SPECIFIED OTHERWISE.
3. THE SOIL RETENTION BLANKET INSTALLATION SHOWN OUTLINES MINIMUM REQUIREMENTS. MANUFACTURER'S RECOMMENDATIONS SHALL BE USED IF THEY ARE MORE STRINGENT.

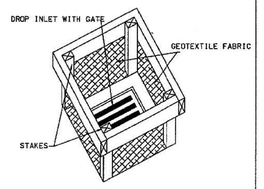


SECTION B-B



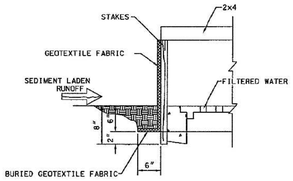
SECTION B-B

CULVERT PROTECTION

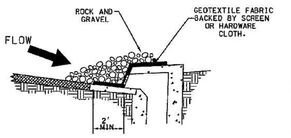


TYPE I

NOTE: WHEN SPECIFIED, ROCKS OR STRAW BALES CAN BE SUBSTITUTED FOR SILT FENCE.



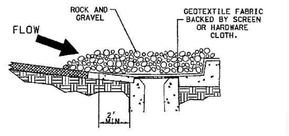
DROP INLET PROTECTION



TYPE I
CURB OPENING

NOTES: GRAVEL INLET PROTECTION

1. THIS INSTALLATION IS FOR A TYPE I CURB DROP INLET ONLY. THE TYPE II, III TO "N" INSTALLATION IS SIMILAR.
2. THE SPACING OF THE LONGITUDINAL BRACING SHALL NOT EXCEED 5 FT.



TYPE II
CURB DROP INLET

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

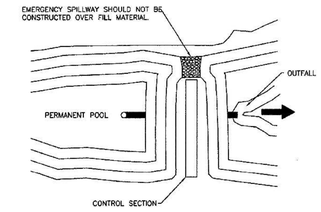
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

TEMPORARY EROSION & SEDIMENT CONTROL MEASURES CULVERT & DROP INLET PROTECTION

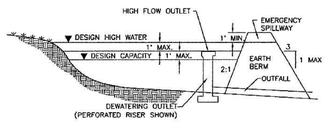
APPROVED _____ DESIGN ENGINEER DATE _____

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603-01-4/7

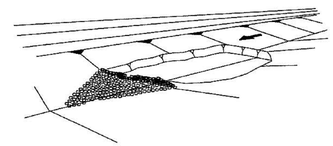


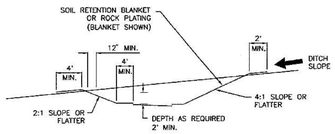
PLAN VIEW



CROSS SECTION

SEDIMENT BASIN



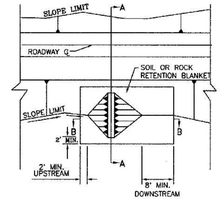


SEDIMENT BASIN, EXCAVATED

NOTES: SEDIMENT TRAP

1. TEMPORARY SEDIMENT TRAPS MAY BE CONSTRUCTED BY EXCAVATION ALONE OR BY EXCAVATION IN COMBINATION WITH AN EMBANKMENT.
2. TEMPORARY SEDIMENT TRAPS ARE OFTEN USED IN CONJUNCTION WITH A DIVERSION DIKE OR SWELL.
3. THE DRAINAGE AREA FOR THE SEDIMENT TRAP SHOULD NOT EXCEED 5 DISTURBED ACRES.
4. THE TRAP MUST BE ACCESSIBLE FOR EASE OF REGULAR MAINTENANCE, WHICH IS CRITICAL TO ITS PROPER FUNCTIONING.
5. SEDIMENT TRAPS ARE TEMPORARY MEASURES AND SHOULD NOT REMAIN IN PLACE LONGER THAN 18 TO 24 MONTHS.
6. THE EMBANKMENT MAY NOT EXCEED 5 FT. IN HEIGHT.
7. THE RECOMMENDED MINIMUM WIDTH AT THE TOP OF THE EMBANKMENT IS BETWEEN 2 FT. AND 5 FT.

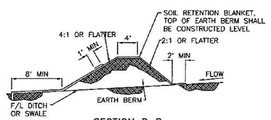
SEDIMENT TRAP



PLAN



SECTION A–A



SECTION B–B

EARTH DIKE (BERM)

NO.	DATE	REV. BY	DESCRIPTION
		REVISIONS (OR CHANGE NOTICES)	

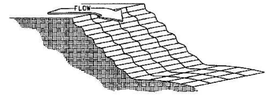
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

T.E.S.C.M. SEDIMENT BASIN, SEDIMENT TRAP & EARTH DIKE

APPROVED Raymundo Van Horn 11/24/09 (DESIGN ENGINEER) DATE

DESIGNED BY ___ DRAWN BY ___ CHECKED BY ___

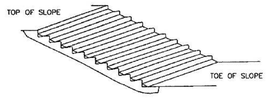
603-01-5/7 SHEET 5 OF 7

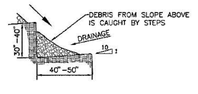




GROOVING IS CUTTING FURROWS ALONG THE CONTOUR OF A SLOPE. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND PROVIDE SOME RETENTION OF LIME, FERTILIZER AND SEED.

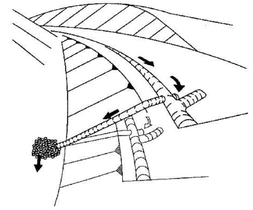
GROOVING SLOPES

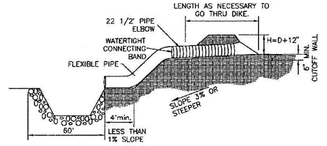


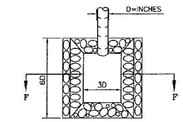


STAIR STEPPING CUT SLOPE

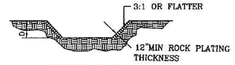
SURFACE ROUGHENING







RIPRAP APRON PLAN



SECTION F–F

SLOPE DRAIN

NOTES: PIPE SLOPE DRAIN

1. THE FLEXIBLE PIPE SHALL BE THE SAME DIAMETER AS THE INLET PIPE AND SHALL BE CONSTRUCTED OF A DURABLE MATERIAL WITH HOLD-DOWN GROMMETS SPACED AT 10 FT. ON CENTER.
2. THE FLEXIBLE PIPE SHALL BE SECURELY FASTENED TO THE CORRUGATED METAL OR HIGH DENSITY POLYETHYLENE PIPE WITH METAL STRAPPING OR WATERTIGHT CONNECTING COLLARS.
3. THE FLEXIBLE PIPE SHALL BE STAKED AT 10 FT. CENTERS ALONG THE SLOPE USING MINIMUM 4 INCH SQUARE WOOD POSTS OR STANDARD STEEL POSTS DRIVEN 2 FT. MINIMUM INTO THE GROUND.
4. RIGID PIPE SHALL BE ANCHORED AT BENDS. ANCHORAGE SHALL CONSIST OF A MINIMUM 4 INCH SQUARE WOOD POSTS OR STANDARD STEEL POSTS DRIVEN 2 FT. MINIMUM INTO GROUND, OR EARTHEN THRUST BLOCK.
5. PAYMENT OF BASIN ITEMS ARE INCIDENTAL TO THE COST OF FLEXIBLE STORM DRAIN PIPE.
6. FOR PIPE DIAMETER ON TEMPORARY SLOPE DRAIN SEE TABLE BELOW

TEMPORARY SLOPE DRAIN PIPES

Runoff Flow Rate (cfs)	Pipe Diameter Required (inches)
0 – 6.0	18
6.0 – 9.0	21
9.0 – 12.0	24
12.0 – 20.0	30

NO.	DATE	REV. BY	DESCRIPTION
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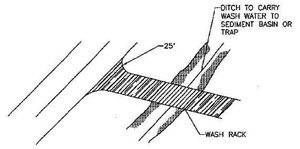
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

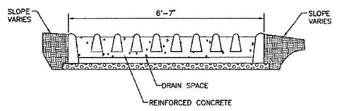
TEMPORARY EROSION & SEDIMENT CONTROL MEASURES PIPE SLOPE DRAIN & SURFACE ROUGHENING

APPROVED Raymundo Van Horn 11/24/09 (DESIGN ENGINEER) DATE

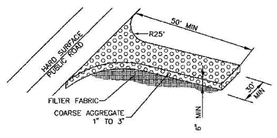
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603-01-6/7 SHEET 6 OF 7

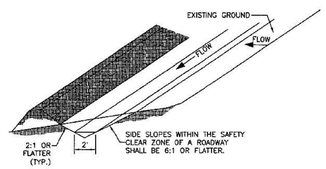




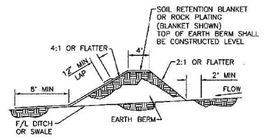
WASH RACK



OFFSITE TRACKING PREVENTION



TYPICAL SWALE CONFIGURATION



FILTER FABRIC DIVERSION DIKE

DIVERSION DIKE

NO.	DATE	REV. BY	DESCRIPTION
		REVISIONS (OR CHANGE NOTICES)	

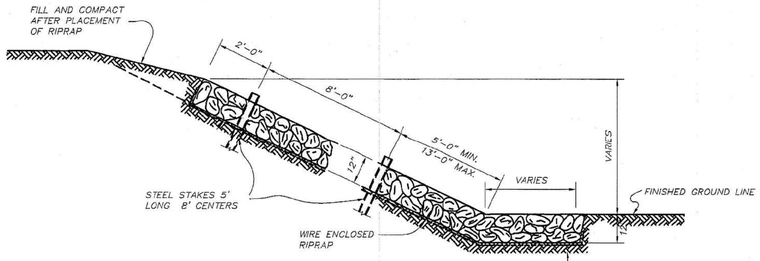
NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD DRAWING

T.E.S.C.M. OFFSITE TRACKING PREVENTION & DIVERSION DIKE

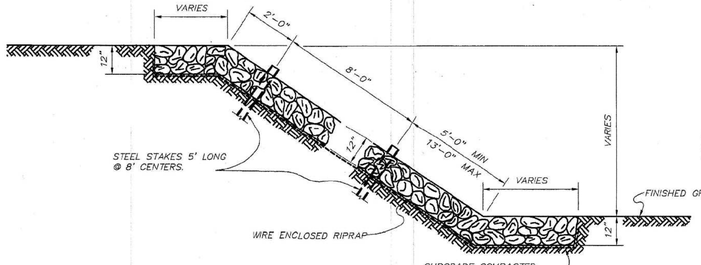
APPROVED Raymundo Van Horn 11/24/09 (DESIGN ENGINEER) DATE

DESIGNED BY ___ DRAWN BY ___ CHECKED BY ___

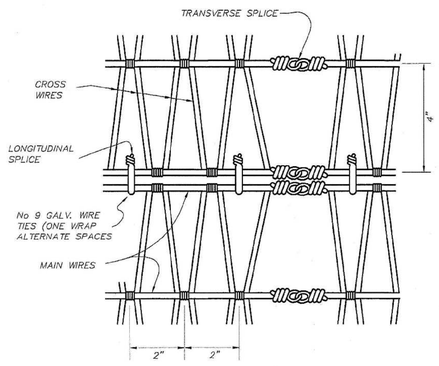
603-01-7/7 SHEET 7 OF 7



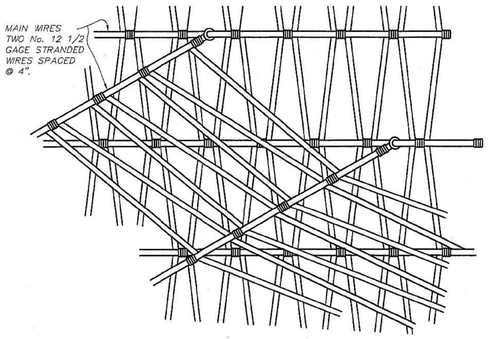
RIPRAP SECTION TYPE A



RIPRAP SECTION TYPE B



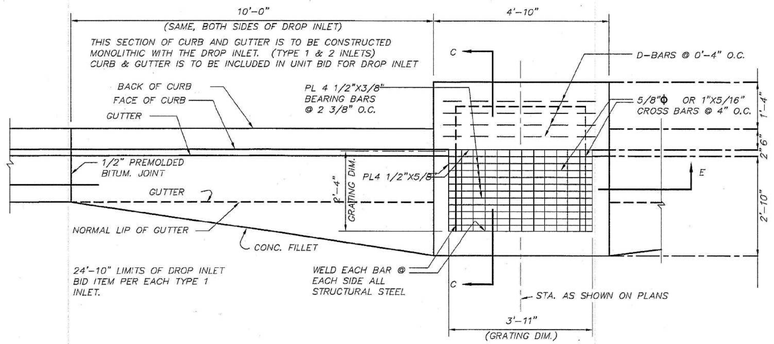
DETAIL OF WIRE FABRIC AND NORMAL SPLICE



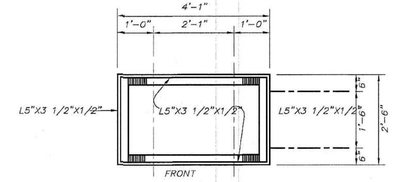
DETAIL OF SPLICE @ SKEWED INTERSECTION

RIPRAP – GENERAL NOTES:

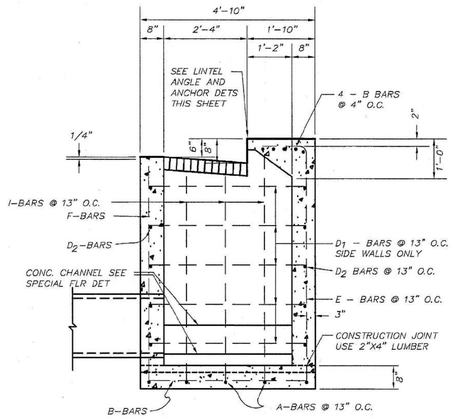
1. WIRE FABRIC IS TO BE GALVANIZED "V" MESH OF THE FOLLOWING CONSTRUCTION: MAIN WIRES: TWO NO. 12 1/2 GAGE STRANDED WIRES SPACED AT 4" CROSS WIRES: SINGLE NO 12 1/2 GAGE WIRES SPACED AT 2" WITH NOT LESS THAN TWO TURNS AROUND THE MAIN WIRES. APPROXIMATE WEIGHT: 48 POUNDS PER 100 SQUARE FEET
2. STEEL STAKES MAY BE RAILROAD RAILS WEIGHING NOT LESS THAN 30 LBS PER YARD, 4" O.D. STANDARD STRENGTH GALVANIZED STEEL PIPE OR 4X4X3/8 STEEL ANGLES. STEEL STAKES SHALL PROJECT 6" ABOVE TOP OF RIPRAP. STEEL STAKES ARE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE WORK AND NO DIRECT MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
3. IF LENGTH OF SLOPE IS 15 FEET OR LESS ONLY ONE ROW OF STEEL STAKES, 2 FEET FROM THE TOP EDGE OF THE RIPRAP, WILL BE REQUIRED UNLESS OTHERWISE NOTED ON PLANS
4. AS AN ALTERNATE, WIRE FABRIC MAY BE GALVANIZED STEEL WIRE MEETING THE REQUIREMENTS FOR CLASS 3, FINISH 5. MEDIUM TENSILE STRENGTH COATED WIRE AS SET FORTH IN FEDERAL SPECIFICATION QQ-W-461. THE WIRES SHALL BE CONTINUOUS, HAVE A DIAMETER OF NOT LESS THAN 0.118 INCH AND SHALL BE TRIPLE TWISTED TO FORM A UNIFORM HEXAGONAL MESH PATTERN WITH A MAXIMUM OPENING SIZE OF 3"X4 3/4"
5. DETAIL FROM N M S H D DETAIL, SERIAL BRR-001-05



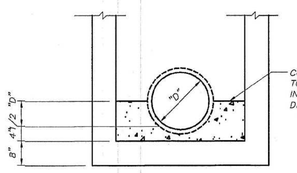
TYPE – 1 INLET PLAN

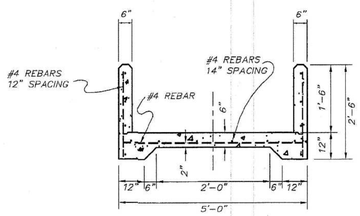


GRATING FRAME DETAIL



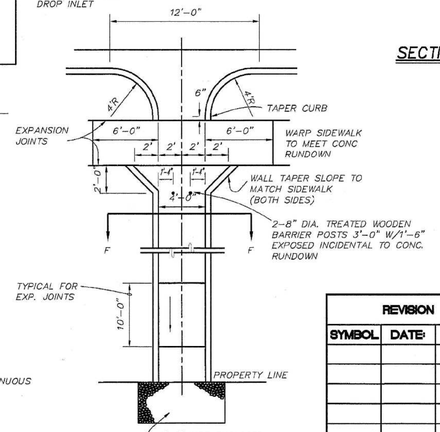
SECTION C–C



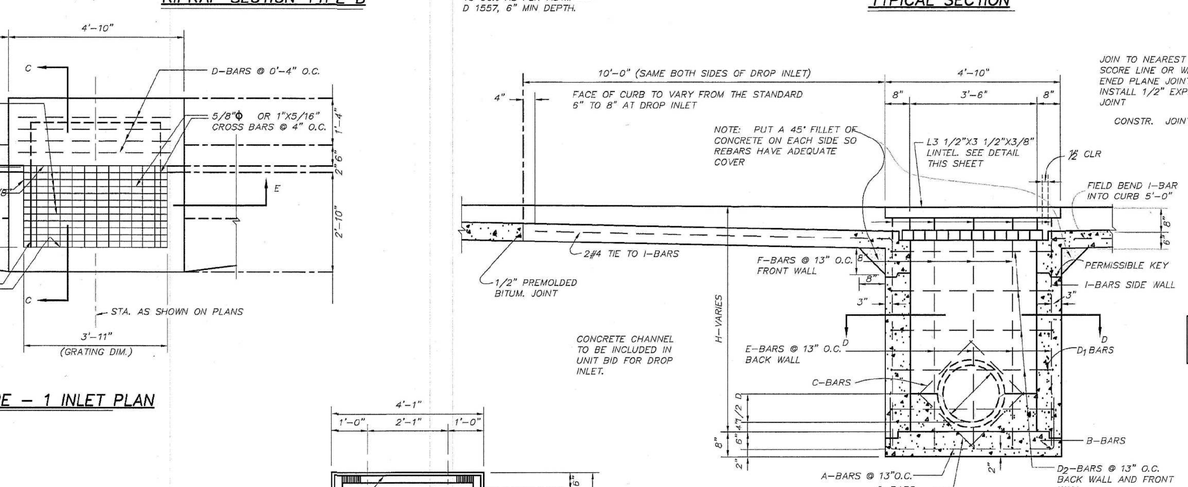


NOTE: REINFORCING IS TO BE CONTINUOUS THRU EXPANSION JOINT

TYPICAL RUNDOWN DETAIL SECTION F–F



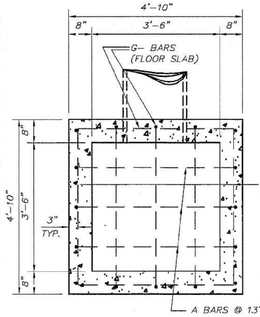
CONCRETE DRAINAGE RUNDOWN



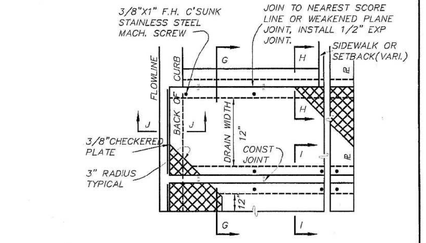
SECTION E–E

RE–BAR SCHEDULE

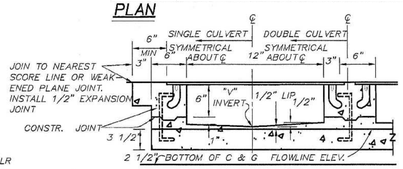
BAR TYPE	SIZE & SHAPE	BAR NO.	BAR TYPE & QUANTITY
A	1'-6" 1 1/2" 4'-6" 6'-6"	#4	TYPE-1-8 REQUIRED TYPE-2-12 REQUIRED TYPE-2-8 REQUIRED
B	4'-6" 6'-6"	#4	TYPE-1-6 REQUIRED TYPE-2-6 REQUIRED
C	3'-6"	#4	TYPE-1-2 REQ'D PER OUTLET TYPE-2-2 REQ'D PER OUTLET
D_1	4'-6"	#4	TYPE-1-2 REQ'D PER FT HT. TYPE-2-2 REQ'D PER FT HT.
D_2	1'-6" 1 1/2" 4'-6" 6'-6"	#4	TYPE-1-2 REQ'D PER 13" HT. TYPE-2-2 REQ'D PER 13" HT.
E	1'-6" "H" LESS 0'-4"	#4	TYPE-1-5 REQUIRED TYPE-2-9 REQUIRED
F	1'-6" "H" LESS 0'-8"	#4	TYPE-1-3 REQUIRED TYPE-2-7 REQUIRED
G	2'-6"	#4	TYPE-1-2 REQ'D PER OUTLET TYPE-2-2 REQ'D PER OUTLET
H	5'-0" 1 1/2" "H" LESS 0'-11"	#4	TYPE-1-8 REQ'D FIELD BEND TYPE-2-8 REQ'D INTO CURB



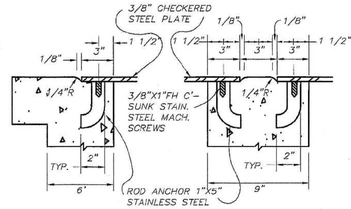
SECTION D–D



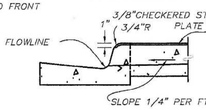
SINGLE AND OR MULTIPLE CULVERT PLAN



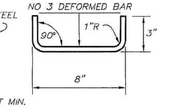
SECTION G–G



SECTION H–H



SECTION I–I



SECTION J–J DOWEL DETAIL

SIDEWALK CULVERT DETAIL

GENERAL NOTES:

1. PLACING OF DRAIN THRU EXIST. SIDEWALK, C & G REQUIRE THAT ENTIRE SIDEWALK C & G STONES BE REMOVED & REPLACED AS DETAILED HEREIN.
2. BOTTOM SLAB OF CULVERT SHALL BE POURED MONOLITHICALLY WITH NEW GUTTER.
3. ALL EXPOSED CONC. SURFACE SHALL MATCH GRADE, COLOR, FINISH AND SCORING OF ADJACENT CURB AND SIDEWALK
4. SIDEWALK REPLACED DURING CONSTRUCTION TO BE POURED MONOLITHICALLY WITH CULVERT WALLS
5. FOR ALL CONCRETE, THE MINIMUM DESIGN COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 4000 POUNDS PER SQUARE INCH, 7–BAG MIX AND THAT THE MINIMUM COARSE AGGREGATE SIZE ALLOWED WILL BE 1 INCH. PERCENTAGE OF AIR–ENTRAINMENT IN THE CONCRETE AT THE PROJECT SITE SHALL BE IN THE RANGE OF 4 TO 7 PERCENT.
6. THE CITY WILL NOT ASSUME RESPONSIBILITY FOR MAINTENANCE OF ANY SIDEWALK CULVERT INSTALLED BY OR FOR PRIVATE PROPERTY OWNERS.

REVISION		
SYMBOL	DATE:	BY:

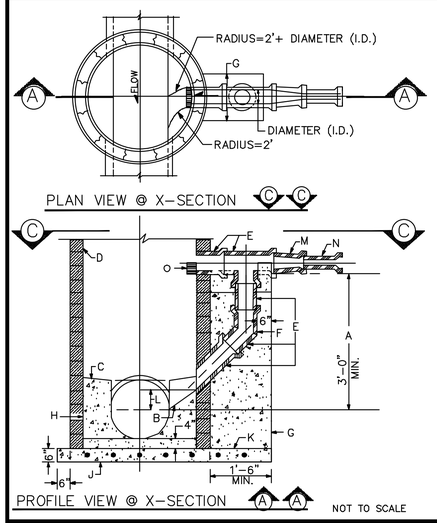
CITY OF SANTA FE

DRAINAGE DETAILS

DRAWN BY: CHARLIE GONZ. CHECKED BY: DATE: SHT

LEGEND

ITEM	DESCRIPTION
1	MANHOLE FRAME & COVER, refer to manhole frame and cover detail Dwg. No. SAS-4
2	CONCRETE ADJUSTMENT RINGS or CONCRETE BRICK, refer to concrete adjustment detail Dwg. No. SAS-5
3	CONCRETE COLLAR, refer to concrete collar detail Dwg. No. SAS-6
4	PRECAST REINFORCED CONCRETE RISER, CONE or FLAT TOP, with 5"(in) wall thickness, refer to general note CM-2
5	PRECAST REINFORCED CONCRETE BASE RISER, with suitable sized openings, refer to general note CM-2A
6	CONCRETE BASE, refer to concrete base detail Dwg. No. SAS-7
7	SEWER PIPE, refer to general note CM-1
8	6"(in) GROUT FILLET, on upper half of pipe and around base
9	ADAPTER, MANHOLE, refer to manhole adapter detail Dwg. No. SAS-8
10	PIPE PENETRATION INTO MANHOLE, refer to manhole adapter detail Dwg. No. SAS-8
11	PIPE SUPPORT, CONCRETE, shall extend out-side of manhole a maximum of 18"(in) to bell of first joint and shall cradle pipe half pipe
12	CONCRETE FILL, 3000 p.s.i., refer to general note CR-6
13	SHELF, to be 9"(in) minimum width with 1"(in) per 1'-0" slope, from crown of pipe
14	CUT UPPER HALF OF PIPE, after manhole has been completed and inspected by engineer
15	HAND FORMED CHANNELS, shall be on a uniform radius and shall not hold water
16	INVERT ELEVATIONS OF LATERAL LINES, shall be the same as the springline elevation of the sewer main, where possible
17	CHANGE SLOPE OF PIPE, at center of manhole
18	APPROVED WATER STOP, to be with type of pipe



NOT TO SCALE

CONSTRUCTION NOTES

A. 3' (FT) MINIMUM DISTANCE OF VERTICAL DROP. LESS THAN 3'(FT) DISALLOWS DROP MANHOLE.

B. FORM PIPE INVERT IN SHELF. INVERT TO SPRINGLINE.

C. SHELF SLOPE, 1"(IN) PER FT.

D. MANHOLE TYPE FOR UPPER PORTION IS SPECIFIED IN MANHOLE TYPE "E" DETAIL DWG NO. SAS-2.

E. USE D.I. OR P.V.C.(SDR 35) PIPE THROUGHOUT DROP. ALL PIPING IN DROP STRUCTURE FROM THE TEE IS INCREASED ONE PIPE SIZE FROM THE SERVICE LINE. (SERVICE=8" DROP=10")

F. USE BELL AND SPIGOT 45° LONG RADIUS BEND.

G. CONCRETE SUPPORT WIDTH EQUALS PIPE O.D. PLUS 6"(IN) MINIMUM EACH SIDE.

H. CONCRETE FILL.

J. CAST IN PLACE REINFORCED CONCRETE BASE REQUIRED. CONCRETE BASE TO BE POURED IN PLACE USING NO.4 BARS AT 6"(IN) O.C. EACH WAY FOR MANHOLE DEPTH OF 18'(FT) OR GREATER. NO4 BARS AT 12"(IN) O.C. EACH WAY FOR MANHOLE DEPTH LESS THAN 18'(FT) IN DEPTH.

K. FOR NEW DROP ON EXISTING MANHOLE CONSTRUCT 3X3 REINFORCED CONCRETE BASE BEFORE CONSTRUCTING DROP SUPPORT.

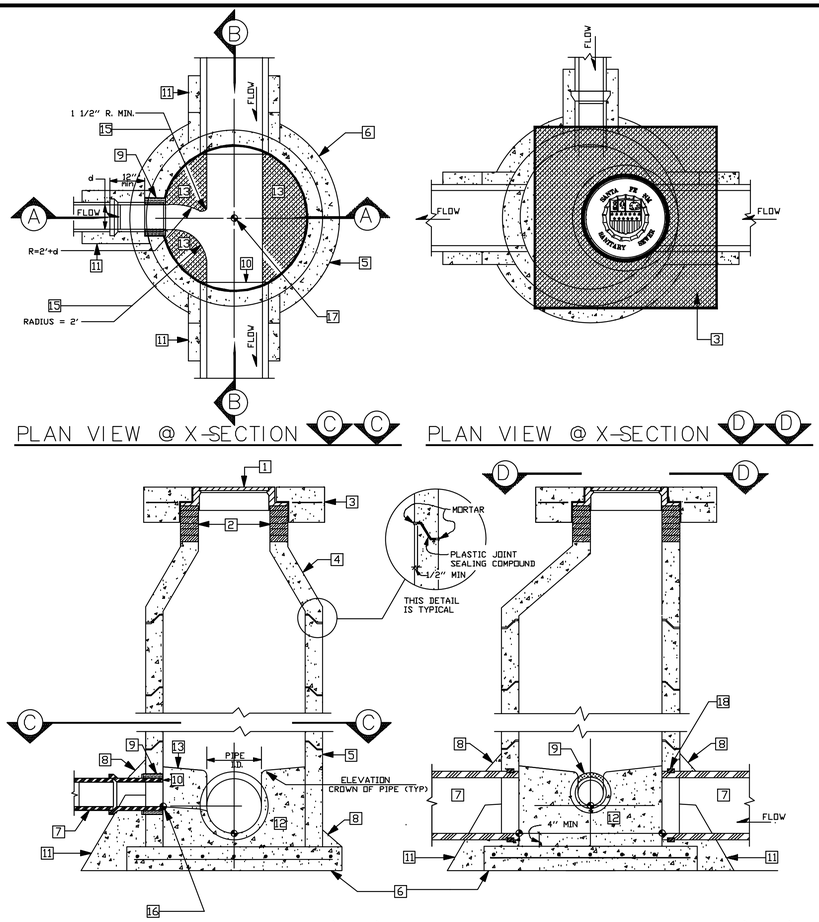
L. MINIMUM 2"(IN) ABOVE SPRINGLINE OR AS SHOWN ON PLAN.

M. REDUCER

N. SERVICE LINE

O. EXTEND PIPE 3"(IN) MINIMUM 6"(IN) MAXIMUM INTO MANHOLE TOP. 1/2 PIPE REMOVED.

DROP MANHOLE DETAIL
DWG. #: SAS-1



NOT TO SCALE

MANHOLE TYPE "E" DETAIL/DWG # SAS-2

(See Dwg. # SAS-14 for Type "C" Flat Top)

GENERAL NOTES

CONSTRUCTION REQUIREMENTS

CR-1 MATERIALS AND WORK:
CURRENT NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (referred to as NM APWA) WITH MODIFICATIONS NOTED BY THE CITY OF SANTA FE.

CR-2 APPROVED PLANS:
USE PLANS BEARING THE OFFICIAL STAMP OF THE DESIGN ENGINEER AND BEARING THE APPROVAL SIGNATURE OF THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE. CONSTRUCTION PERFORMED WITHOUT APPROVED PLANS WILL BE REJECTED.

CR-3 SEWER HOOK-UP PERMIT:
OBTAIN PERMITS FOR THE PROJECT BEFORE COMMENCING ANY SEWER CONSTRUCTION. CONSTRUCTION PERFORMED WITHOUT OBTAINING PERMITS SHALL BE REJECTED.
A. CONSTRUCTION PLANS SHALL INDICATE THE CLASS OF BEDDING TO BE USED. CHANGE OF BEDDING MAY REQUIRE A CHANGE IN PIPE CLASSIFICATION OR WALL THICKNESS.

CR-4 SUBSTITUTIONS OR CHANGES:
ALL SUBSTITUTIONS OR CHANGES MUST BE APPROVED BY THE CITY WATER QUALITY DIVISION OR CITY APPROVED REPRESENTATIVE PRIOR TO CONSTRUCTION. ALL SUBSTITUTIONS OR CHANGES MUST BE SUBMITTED BY THE DESIGN ENGINEER TO THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE. WHERE APPROPRIATE, SUBMITTAL MUST INCLUDE FABRICATION DRAWINGS, WORKING DRAWINGS AND MATERIAL SPECIFICATIONS OR TEST DATA TO JUSTIFY SUBSTITUTIONS OR CHANGES. DESIGN ENGINEER SHALL AUTHORIZE ANY DRAWINGS FOR SUBSTITUTIONS AND CHANGES AND SUBMIT THEM TO THE CITY WATER QUALITY DIVISION FOR APPROVAL. UNAUTHORIZED SUBMITTALS WILL BE REJECTED.

CR-5 MANUFACTURER'S CERTIFICATES:
WHEN CERTIFICATES OF COMPLIANCE AND TEST REPORTS ARE REQUIRED FOR MATERIALS, DOCUMENTS SHALL BE SUBMITTED TO THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE AT THE TIME OF MATERIALS DELIVERY TO THE JOBSITE.

CR-6 CONTRACTOR REQUIREMENTS:
CONTRACTOR PERFORMING WORK ON PUBLIC SEWER LINES SHALL BE A LICENSED UTILITY CONTRACTOR.

INSTALLATION

I-1 LAYING PIPE:
AS PER SECTION 900, NM APWA; PIPE SHALL BE PLACED AND BEDDED IN A FROST FREE TRENCH; GASKET SHALL BE FULLY SEATED AND NOT SLIPPED; PIPE SHALL BE LAID THROUGH MANHOLE LOCATIONS ON STRAIGHT AND UP TO 22 1/2 DEGREE DEFLECTIONS.
A. IF PIPE TRENCH INSTALLATION CONFIGURATION EXCEEDS THE LIMITS OF NM APWA STANDARDS, SECTION 700, OR AS DEFINED ON THE CONSTRUCTION PLANS, THE DESIGN ENGINEER WILL SPECIFY THE NEW PIPE CLASSIFICATION OR WALL THICKNESS.
B. TYPE I TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 8'(FT.) OR LESS. TYPE II TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 9'(FT.) AND OVER, DEPENDING ON SOIL CONDITIONS. REFER TO NM APWA STANDARDS SECTION 700.

I-2 MANHOLE CONSTRUCTION:
A. BASE:
1. CAST IN PLACE: ON UNDISTURBED FROST FREE SUBGRADE
2. PRECAST UNIT: ON PEA GRAVEL WITH COMPLETE EVEN BEARING
B. PRECAST BARREL:
1. JOINTS: FILL COMPLETELY WITH NON-SHRINK GROUT AND TROWEL
2. MANHOLE ADAPTOR: INSTALL OVER PVC PIPE AND FILL IN PENETRATION WITH NON-SHRINK GROUT.
3. CAST IN PLACE BASES: SHALL ACHIEVE A MINIMUM OF 2500 PSI COMPRESSIVE STRENGTH BEFORE SETTING PRECAST BARREL SECTIONS.

I-3 EXCAVATION AND BACKFILL:
AS PER SECTION 700, NM APWA; SATURATION BY FLOODING OR JETTING METHODS IS NOT PERMITTED WITHOUT A SOILS ENGINEERING REPORT RECOMMENDING THESE METHODS. MECHANICAL OR VIBRATORY COMPACTORS SHALL NOT BE USED ON THE BEDDING AND 12"(IN.) OF INITIAL BACKFILL. COMPACTION SHALL BE DETERMINED PER AASHTO T-180.

CONSTRUCTION MATERIALS

CM-1 SEWER PIPE: (CERTIFICATES REQUIRED)
A. VITRIFIED CLAY: REFER TO SECTION 125, NM APWA FOR EXTRA STRENGTH VCP.
B. PLASTIC (PVC): REFER TO SECTION 121, NM APWA, AS MODIFIED BY THE CITY.
1. 4" THRU 15" (inch) DIAMETER, ASTM D-3034 OR ASTM F-789 PIPE. MINIMUM PS-46 STRENGTH. SDR-35 OR EQUAL
2. LARGER THAN 15" (IN.) DIAMETER: ASTM F 679 VOL. 08.04.
C. HDPE PIPE PER ASTM D-1248 CLASS III WHEN APPROVED BY WATER QUALITY DIVISION ENGINEER.
D. PVC RESTRAINED JOINTS: SERIES 1350 OR SERIES 1390 FOR COUPLINGS PRODUCED BY UNI-FLANGE CORPORATION, LOCKING COUPLINGS WITH NYLON SPLINE, MARKETED AS "YELLOWMINE" AND PRODUCED BY CERTAINTEED CORPORATION, OR APPROVED EQUAL.
E. MANHOLE ADAPTERS: ASBESTOS CEMENT (AC) MANHOLE ADAPTERS, OR AC/PVC ADAPTER COUPLINGS.
F. BUILDING SERVICE STUBS: CAST IRON DWV, PVC SCH. 40 DWV.
G. SERVICE CONNECTIONS:
1. VCP PIPE: FACTORY TEE FITTINGS; SECTION 125 NM APWA.
2. PVC PIPE: CAST IRON BODIES TAPPING SADDLE WITH STAINLESS STEEL TENSION STRAP AND FITTINGS: FOWLER "QUICKWAY",GENECO, HERSEY "PIONEER", OR APPROVED EQUAL.
H. SOIL CLASSIFICATION: THE UNIFIED SOIL CLASSIFICATION SYSTEM PER ASTM D 2487 TABLE 701.3.5 NM APWA.

CM-2 MANHOLES:
A. CONCRETE MANHOLES: PRECAST REINFORCED CONCRETE RISERS, REDUCING CONES, AND ADJUSTMENT RINGS PER ASTM C 478 VOL. 04.05. BASES MAY BE FIELD PLACED CONCRETE OR PRECAST CONCRETE PER ASTM C 478 VOL. 04.05 (CERTIFICATES REQUIRED). CRACKED OR VISIBLY DEFECTIVE UNITS WILL BE REJECTED.
B. PIPE PENETRATIONS: PRECAST UNITS SHALL HAVE SUITABLE SIZED OPENINGS CAST INTO BARREL AT PROPER ANGLES FOR PIPE AND MANHOLE ADAPTERS.
C. MANHOLE STEPS: REFER TO SECTION 920.4.7 NM APWA POLYPROPYLENE ENCASED GRADE 60 STEEL BY M.A. INC. OR APPROVED EQUAL; 14"(IN.) WIDE, 16"(IN.) MAXIMUM SPACING.
D. FRAMES AND COVERS:
1. CASTING: SHALL CONFORM TO SECTION 160, 161 & 162, NM, APWA CLASS 30B. (CERTIFICATES AND SHOP DRAWINGS REQUIRED)
2. MINIMUM COVER WEIGHT: 165 POUNDS
3. MINIMUM COMBINED WEIGHT: 365 POUNDS +/- 5%
4. BEARING SURFACES: SHALL BE MATCHED FOR A FIRM NON ROCKING SEAT BETWEEN FRAME AND COVER. MINIMUM SEATING WIDTH: 7/8"(IN.)
5. COATING: NONE
6. COVER LETTERINGS: SANTA FE, N.M. SANITARY SEWER
7. CASTINGS: CAST MANUFACTURER AND MODEL NUMBER ON FRAME AND COVER.
8. CASTINGS TOLERANCE: +/- 1/16"(IN.) PER FOOT OF OVERALL DIMENSION. OUT OF ROUND CASTINGS AND LOOSE FITTING UNITS WILL BE REJECTED IN THE FIELD.

CM-3 CONCRETE ENCASEMENT:
A. REQUIREMENTS:
1. WHEN THE PIPE COVER IS 36" (IN.) OR LESS.
2. WHEN VITRIFIED CLAY CROSSES AN ARROYO.
3. WHEN A WATER LINE PASSES BELOW OR LESS THAN 18" (IN.) ABOVE THE EXISTING SEWER LINE.
4. WHEN A PARALLEL WATER LINE IS LESS THAN 10'(FT.) HORIZONTALLY AND LESS THAN 2'(FT.) ABOVE THE SEWER LINE.
5. THE SEWER LINE SHALL BE ENCASED IN CONCRETE 6"(IN.) THICK AS DETAILED, AND EXTEND AT LEAST 10'(FT.) ON EACH SIDE OF THE WATER LINE.

FIELD QUALITY CONTROL

FQC-1 TESTING AND INSPECTION:
A. SUPERVISION: CONDUCTED BY DESIGN ENGINEER.
B. CERTIFICATION: DESIGN ENGINEER SHALL CERTIFY THAT THE PROJECT HAS BEEN COMPLETED IN ACCORDANCE TO PLANS & SPECIFICATIONS AND SHALL SUBMIT A CERTIFICATION OF COMPLIANCE STATEMENT WITH STAMP AND SIGNATURE.
C. EQUIPMENT AND ASSISTANCE: PROVIDED BY CONTRACTOR.

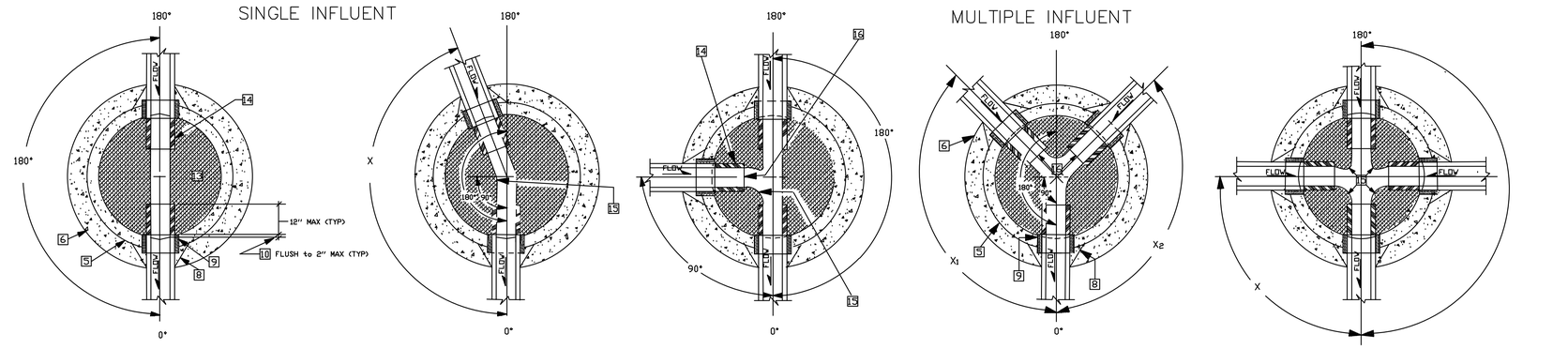
FQC-2 LINE AND GRADE: ALLOWABLE TOLERANCE BETWEEN STRUCTURES FROM DESIGN;
A. LINE: 0.20 FOOT
B. GRADE: 0.02 FOOT; PIPE SHALL NOT HOLD BACK ANY WATER.

FQC-3 LEAKAGE TEST:
AIR TEST REQUIRED; REFER TO SECTION 901.7 NM APWA.

FQC-4 TELEVISION INSPECTION:
CONTRACTOR SHALL PROVIDE A CERTIFIED CCTV SEWERLINE INSPECTION AND RECORD TAPES AT HIS OWN EXPENSE.

FQC-5 ALL CONNECTIONS TO EXISTING MANHOLES INCLUDES REHABILITATING THE TIE IN MANHOLE TO MEET THESE STANDARD CONSTRUCTION DETAILS.

NOTE: REVISIONS TO THIS SHEET SHALL BE MADE UNDER THE AUTHORITY OF THE CITY OF SANTA FE ONLY.



NOT TO SCALE

PLAN VIEW OF MANHOLE BASE CONNECTION/DWG. # SAS-3

SCDT1-4 - 6/7/00

WATER QUALITY DIVISION — UTILITY DEVELOPMENT

CITY OF SANTA FE
WATER QUALITY DIVISION

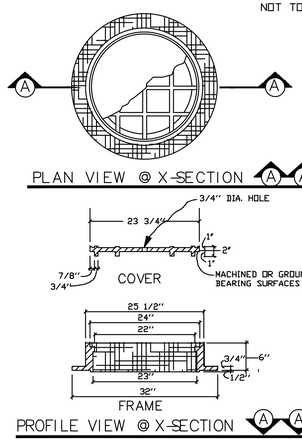
TITLE: SANITARY SEWER STANDARD CONSTRUCTION DETAILS

	REVISIONS	
DATE: JULY 1992		FILE #: E:\AUTO\DWG\SCDT1-4
DRAWN BY: G. CHAVEZ	1 8-3-92	
CADD RENDITION BY: G. CHAVEZ	2 12-14-92	SHEET 14-2
APPROVED BY: E. BROWN	3 11-16-94	

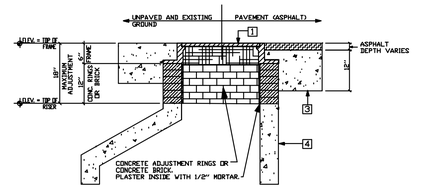
LEGEND

ITEM	DESCRIPTION
1	MANHOLE FRAME & COVER, refer to manhole frame and cover detail Dwg. No. SAS-4
2	CONCRETE ADJUSTMENT RINGS or CONCRETE BRICK, refer to concrete adjustment detail Dwg. No. SAS-5
3	CONCRETE COLLAR, refer to concrete collar detail Dwg. No. SAS-6
4	PRECAST REINFORCED CONCRETE RISER, CONE or FLAT TOP, with 5"(in) wall thickness, refer to general note CM-2
5	PRECAST REINFORCED CONCRETE BASE RISER, with suitable sized openings, refer to general note CM-2A
6	CONCRETE BASE, refer to concrete base detail Dwg. No. SAS-7
7	SEWER PIPE, refer to general note CM-1
8	6"(in) GROUT FILLET, on upper half of pipe and around base
9	ADAPTER, MANHOLE, refer to manhole adapter detail Dwg. No. SAS-8
10	PIPE PENETRATION INTO MANHOLE, refer to manhole adapter detail Dwg. No. SAS-8
11	PIPE SUPPORT, CONCRETE, shall extend out-side of manhole a maximum of 18"(in) to bell of first joint and shall cradle pipe half pipe
12	CONCRETE FILL, 3000 p.s.i., refer to general note CR-6
13	SHELF, to be 9"(in) minimum width with 1"(in) per 1'-0" slope, from crown of pipe
14	CUT UPPER HALF OF PIPE, after manhole has been completed and inspected by engineer
15	HAND FORMED CHANNELS, shall be on a uniform radius and shall not hold water
16	INVERT ELEVATIONS OF LATERAL LINES, shall be the same as the springline elevation of the sewer main, where possible
17	CHANGE SLOPE OF PIPE, at center of manhole
18	APPROVED WATER STOP, to be with type of pipe

NOT TO SCALE

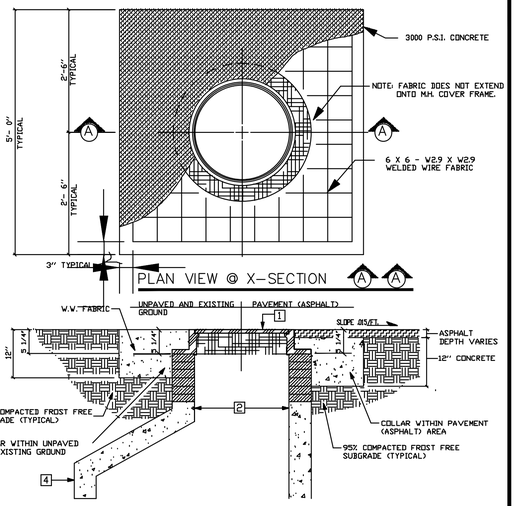


MANHOLE FRAME & COVER DETAIL/DWG # SAS-4



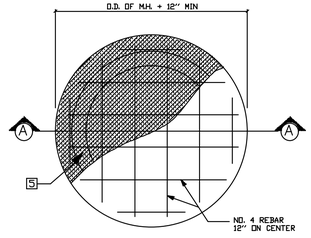
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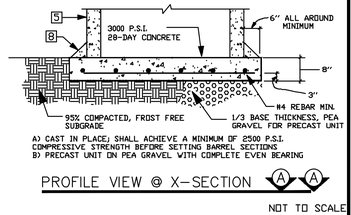
MANHOLE ADJUSTMENT DETAIL/DWG # SAS-5



CONCRETE COLLAR DETAIL/DWG. # SAS-6 NOT TO SCALE

- MAXIMUM COMBINED WEIGHT: 365 POUNDS ± 5%
- BEARING SURFACES SHALL BE MACHINED FOR A FIRM NON ROCKING SEAT BETWEEN FRAME AND COVER

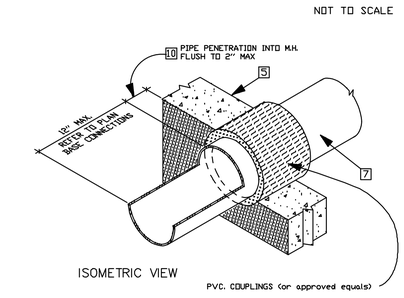




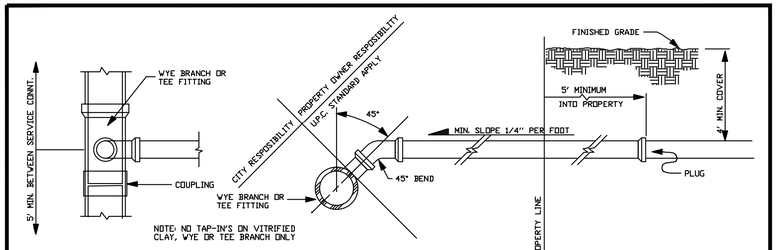
NOT TO SCALE

CONCRETE BASE DETAIL/DWG. # SAS-7

NOT TO SCALE

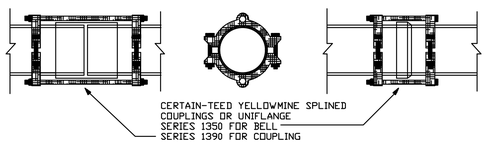


MANHOLE ADAPTER DETAIL/DWG. # SAS-8



NOT TO SCALE

SERVICE CONNECTION DETAILS/DWG. # SAS-10



NOTE: AT RIVER AND ARROYO CROSSINGS

SCDT2-4 - 6/7/00

RESTRAINED JOINT DETAIL/DWG. # SAS-9 NOT TO SCALE

GENERAL NOTES

CONSTRUCTION REQUIREMENTS

CR-1 MATERIALS AND WORK:
CURRENT NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (referred to as NM APWA) WITH MODIFICATIONS NOTED BY THE CITY OF SANTA FE.

CR-2 APPROVED PLANS:
USE PLANS BEARING THE OFFICIAL STAMP OF THE DESIGN ENGINEER AND BEARING THE APPROVAL SIGNATURE OF THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE. CONSTRUCTION PERFORMED WITHOUT APPROVED PLANS WILL BE REJECTED.

CR-3 SEWER HOOK-UP PERMIT:
OBTAIN PERMITS FOR THE PROJECT BEFORE COMMENCING ANY SEWER CONSTRUCTION. CONSTRUCTION PERFORMED WITHOUT OBTAINING PERMITS SHALL BE REJECTED.
A. CONSTRUCTION PLANS SHALL INDICATE THE CLASS OF BEDDING TO BE USED. CHANGE OF BEDDING MAY REQUIRE A CHANGE IN PIPE CLASSIFICATION OR WALL THICKNESS.

CR-4 SUBSTITUTIONS OR CHANGES:
ALL SUBSTITUTIONS OR CHANGES MUST BE APPROVED BY THE CITY WATER QUALITY DIVISION OR CITY APPROVED REPRESENTATIVE PRIOR TO CONSTRUCTION. ALL SUBSTITUTIONS OR CHANGES MUST BE SUBMITTED BY THE DESIGN ENGINEER TO THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE. WHERE APPROPRIATE, SUBMITTAL MUST INCLUDE FABRICATION DRAWINGS, WORKING DRAWINGS AND MATERIAL SPECIFICATIONS OR TEST DATA TO JUSTIFY SUBSTITUTIONS OR CHANGES. DESIGN ENGINEER SHALL AUTHORIZE ANY DRAWINGS FOR SUBSTITUTIONS AND CHANGES AND SUBMIT THEM TO THE CITY WATER QUALITY DIVISION FOR APPROVAL. UNAUTHORIZED SUBMITTALS WILL BE REJECTED.

CR-5 MANUFACTURER'S CERTIFICATES:
WHEN CERTIFICATES OF COMPLIANCE AND TEST REPORTS ARE REQUIRED FOR MATERIALS, DOCUMENTS SHALL BE SUBMITTED TO THE CITY WATER QUALITY DIVISION OR APPROVED REPRESENTATIVE AT THE TIME OF MATERIALS DELIVERY TO THE JOBSITE.

CR-6 CONTRACTOR REQUIREMENTS:
CONTRACTOR PERFORMING WORK ON PUBLIC SEWER LINES SHALL BE A LICENSED UTILITY CONTRACTOR.

INSTALLATION

I-1 LAYING PIPE:
AS PER SECTION 900, NM APWA; PIPE SHALL BE PLACED AND BEDDED IN A FROST FREE TRENCH; GASKET SHALL BE FULLY SEATED AND NOT SLIPPED; PIPE SHALL BE LAID THROUGH MANHOLE LOCATIONS ON STRAIGHT AND UP TO 22 1/2 DEGREE DEFLECTIONS.
A. IF PIPE TRENCH INSTALLATION CONFIGURATION EXCEEDS THE LIMITS OF NM APWA STANDARDS, SECTION 700, OR AS DEFINED ON THE CONSTRUCTION PLANS, THE DESIGN ENGINEER WILL SPECIFY THE NEW PIPE CLASSIFICATION OR WALL THICKNESS.
B. TYPE I TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 8'(FT.) OR LESS. TYPE II TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 9'(FT.) AND OVER, DEPENDING ON SOIL CONDITIONS. REFER TO NM APWA STANDARDS SECTION 700.

I-2 MANHOLE CONSTRUCTION:
A. BASE:
1. CAST IN PLACE: ON UNDISTURBED FROST FREE SUBGRADE
2. PRECAST UNIT: ON PEA GRAVEL WITH COMPLETE EVEN BEARING
B. PRECAST BARREL:
1. JOINTS: FILL COMPLETELY WITH NON-SHRINK GROUT AND TROWEL
2. MANHOLE ADAPTOR: INSTALL OVER PVC PIPE AND FILL IN PENETRATION WITH NON-SHRINK GROUT.
3. CAST IN PLACE BASES: SHALL ACHIEVE A MINIMUM OF 2500 PSI COMPRESSIVE STRENGTH BEFORE SETTING PRECAST BARREL SECTIONS.

I-3 EXCAVATION AND BACKFILL:
AS PER SECTION 700, NM APWA; SATURATION BY FLOODING OR JETTING METHODS IS NOT PERMITTED WITHOUT A SOILS ENGINEERING REPORT RECOMMENDING THESE METHODS. MECHANICAL OR VIBRATORY COMPACTORS SHALL NOT BE USED ON THE BEDDING AND 12"(IN.) OF INITIAL BACKFILL. COMPACTION SHALL BE DETERMINED PER AASHTO T-180.

CONSTRUCTION MATERIALS

CM-1 SEWER PIPE: (CERTIFICATES REQUIRED)
A. VITRIFIED CLAY: REFER TO SECTION 125, NM APWA FOR EXTRA STRENGTH VCP.
B. PLASTIC (PVC): REFER TO SECTION 121, NM APWA, AS MODIFIED BY THE CITY.
1. 4" THRU 15" (inch) DIAMETER, ASTM D-3034 OR ASTM F-789 PIPE. MINIMUM PS-46 STRENGTH. SDR-35 OR EQUAL
2. LARGER THAN 15" (IN.) DIAMETER: ASTM F 679 VOL. 08.04.
C. HDPE PIPE PER ASTM D-1248 CLASS III WHEN APPROVED BY WATER QUALITY DIVISION ENGINEER.
D. PVC RESTRAINED JOINTS: SERIES 1350 OR SERIES 1390 FOR COUPLINGS PRODUCED BY UNI-FLANGE CORPORATION, LOCKING COUPLINGS WITH NYLON SPLINE, MARKETED AS "YELLOWMINE" AND PRODUCED BY CERTAINTEED CORPORATION, OR APPROVED EQUAL.
E. MANHOLE ADAPTERS: ASBESTOS CEMENT (AC) MANHOLE ADAPTERS, OR AC/PVC ADAPTER COUPLINGS.
F. BUILDING SERVICE STUBS: CAST IRON DWV, PVC SCH. 40 DWV.
G. SERVICE CONNECTIONS:
1. VCP PIPE: FACTORY TEE FITTINGS; SECTION 125 NM APWA.
2. PVC PIPE: CAST IRON BODIES TAPPING SADDLE WITH STAINLESS STEEL TENSION STRAP AND FITTINGS; FOWLER "QUICKWAY",GENECO, HERSEY "PIONEER", OR APPROVED EQUAL.
H. SOIL CLASSIFICATION: THE UNIFIED SOIL CLASSIFICATION SYSTEM PER ASTM D 2487 TABLE 701.3.5 NM APWA.

CM-2 MANHOLES:
A. CONCRETE MANHOLES: PRECAST REINFORCED CONCRETE RISERS, REDUCING CONES, AND ADJUSTMENT RINGS PER ASTM C 478 VOL. 04.05. BASES MAY BE FIELD PLACED CONCRETE OR PRECAST CONCRETE PER ASTM C 478 VOL. 04.05 (CERTIFICATES REQUIRED). CRACKED OR VISIBLY DEFECTIVE UNITS WILL BE REJECTED.
B. PIPE PENETRATIONS: PRECAST UNITS SHALL HAVE SUITABLE SIZED OPENINGS CAST INTO BARREL AT PROPER ANGLES FOR PIPE AND MANHOLE ADAPTERS.
C. MANHOLE STEPS: REFER TO SECTION 920.4.7 NM APWA POLYPROPYLENE ENCASED GRADE 60 STEEL BY M.A. INC. OR APPROVED EQUAL; 14"(IN.) WIDE, 16"(IN.) MAXIMUM SPACING.
D. FRAMES AND COVERS:
1. CASTING: SHALL CONFORM TO SECTION 160, 161 & 162, NM, APWA CLASS 30B. (CERTIFICATES AND SHOP DRAWINGS REQUIRED)
2. MINIMUM COVER WEIGHT: 165 POUNDS
3. MINIMUM COMBINED WEIGHT: 365 POUNDS +/- 5%
4. BEARING SURFACES: SHALL BE MATCHED FOR A FIRM NON ROCKING SEAT BETWEEN FRAME AND COVER. MINIMUM SEATING WIDTH: 7/8"(IN.)
5. COATING: NONE
6. COVER LETTERINGS: SANTA FE, N.M. SANITARY SEWER
7. CASTINGS: CAST MANUFACTURER AND MODEL NUMBER ON FRAME AND COVER.
8. CASTINGS TOLERANCE: +/- 1/16"(IN.) PER FOOT OF OVERALL DIMENSION. OUT OF ROUND CASTINGS AND LOOSE FITTING UNITS WILL BE REJECTED IN THE FIELD.

CM-3 CONCRETE ENCASEMENT:
REQUIREMENTS:
A. WHEN THE PIPE COVER IS 36" (IN.) OR LESS.
B. WHEN VITRIFIED CLAY CROSSES AN ARROYO.
C. WHEN A WATER LINE PASSES BELOW OR LESS THAN 18" (IN.) ABOVE THE EXISTING SEWER LINE.
D. WHEN A PARALLEL WATER LINE IS LESS THAN 10'(FT.) HORIZONTALLY AND LESS THAN 2'(FT.) ABOVE THE SEWER LINE.
E. THE SEWER LINE SHALL BE ENCASED IN CONCRETE 6"(IN.) THICK AS DETAILED, AND EXTEND AT LEAST 10'(FT.) ON EACH SIDE OF THE WATER LINE.

FIELD QUALITY CONTROL

FQC-1 TESTING AND INSPECTION:
A. SUPERVISION: CONDUCTED BY DESIGN ENGINEER.
B. CERTIFICATION: DESIGN ENGINEER SHALL CERTIFY THAT THE PROJECT HAS BEEN COMPLETED IN ACCORDANCE TO PLANS & SPECIFICATIONS AND SHALL SUBMIT A CERTIFICATION OF COMPLIANCE STATEMENT WITH STAMP AND SIGNATURE.
C. EQUIPMENT AND ASSISTANCE: PROVIDED BY CONTRACTOR.

FQC-2 LINE AND GRADE: ALLOWABLE TOLERANCE BETWEEN STRUCTURES FROM DESIGN:
A. LINE: 0.20 FOOT
B. GRADE: 0.02 FOOT; PIPE SHALL NOT HOLD BACK ANY WATER.

FQC-3 LEAKAGE TEST:
AIR TEST REQUIRED; REFER TO SECTION 901.7 NM APWA.

FQC-4 TELEVISION INSPECTION:
CONTRACTOR SHALL PROVIDE A CERTIFIED CCTV SEWERLINE INSPECTION AND RECORD TAPES AT HIS OWN EXPENSE.

FQC-5 ALL CONNECTIONS TO EXISTING MANHOLES INCLUDES REHABILITATING THE TIE IN MANHOLE TO MEET THESE STANDARD CONSTRUCTION DETAILS.

NOTE: REVISIONS TO THIS SHEET SHALL BE MADE UNDER THE AUTHORITY OF THE CITY OF SANTA FE ONLY.

WATER QUALITY DIVISION UTILITY DEVELOPMENT

CITY OF SANTA FE
WATER QUALITY DIVISION

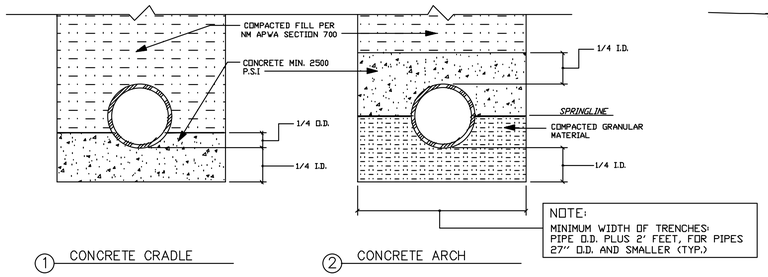
TITLE: SANITARY SEWER STANDARD CONSTRUCTION DETAILS

DATE: JULY 1992	REVISIONS	FILE #: E:\AUTO\DWG\SCDT2-4
DRAWN BY: G. CHAVEZ	1 8-3-92	
CADD RENDITION BY: G. CHAVEZ	2 12-10-92	SHEET 14-3
APPROVED BY: E. BROWN	3 11-16-94	

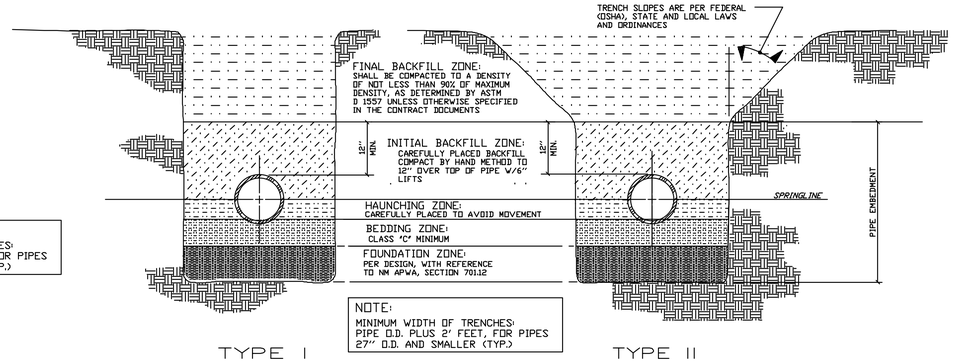
TRENCH BEDDING AND INSTALLATION DETAILS/DWG. # SAS-11

NOT TO SCALE

CLASS "A"

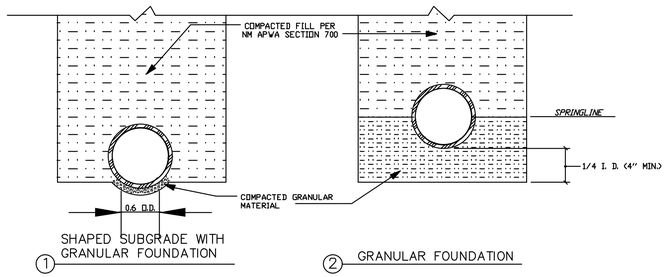


① CONCRETE CRADLE ② CONCRETE ARCH



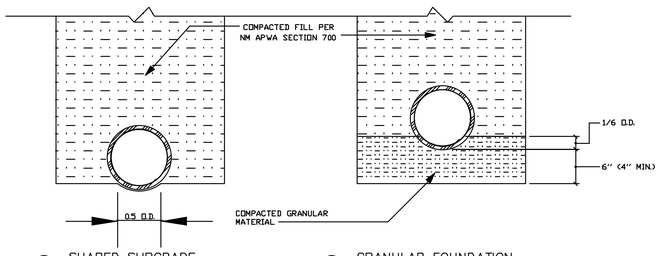
TYPE I TYPE II

CLASS "B"

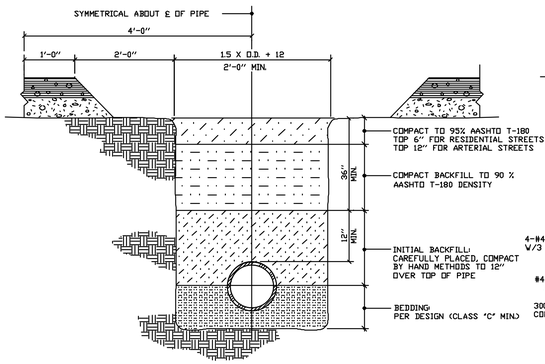


① SHAPED SUBGRADE WITH GRANULAR FOUNDATION ② GRANULAR FOUNDATION

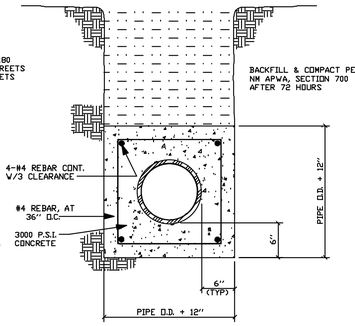
CLASS "C"



① SHAPED SUBGRADE ② GRANULAR FOUNDATION



PAVED AREAS



CONCRETE ENCASEMENT

GENERAL NOTES

CONSTRUCTION REQUIREMENTS

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CR-6 CONTRACTOR REQUIREMENTS:
CONTRACTOR PERFORMING WORK ON PUBLIC SEWER LINES SHALL BE A LICENSED UTILITY CONTRACTOR.

INSTALLATION

I-1 LAYING PIPE:
AS PER SECTION 900, NM APWA; PIPE SHALL BE PLACED AND BEDDED IN A FROST FREE TRENCH; GASKET SHALL BE FULLY SEATED AND NOT SLIPPED; PIPE SHALL BE LAID THROUGH MANHOLE LOCATIONS ON STRAIGHT AND UP TO 22 1/2 DEGREE DEFLECTIONS.
- A. IF PIPE TRENCH INSTALLATION CONFIGURATION EXCEEDS THE LIMITS OF NM APWA STANDARDS, SECTION 700, OR AS DEFINED ON THE CONSTRUCTION PLANS, THE DESIGN ENGINEER WILL SPECIFY THE NEW PIPE CLASSIFICATION OR WALL THICKNESS.
- B. TYPE I TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 8'(FT.) OR LESS. TYPE II TRENCH CONFIGURATION IS NORMALLY USED WHEN TRENCH DEPTHS ARE 8'(FT.) AND OVER, DEPENDING ON SOIL CONDITIONS. REFER TO NM APWA STANDARDS SECTION 700.

I-2 MANHOLE CONSTRUCTION:
- A. BASE:
  1. CAST IN PLACE: ON UNDISTURBED FROST FREE SUBGRADE
  2. PRECAST UNIT: ON PEA GRAVEL WITH COMPLETE EVEN BEARING
- B. PRECAST BARREL:
  1. JOINTS: FILL COMPLETELY WITH NON-SHRINK GROUT AND TROWEL
  2. MANHOLE ADAPTOR: INSTALL OVER PVC PIPE AND FILL IN PENETRATION WITH NON-SHRINK GROUT.
  3. CAST IN PLACE BASES: SHALL ACHIEVE A MINIMUM OF 2500 PSI COMPRESSIVE STRENGTH BEFORE SETTING PRECAST BARREL SECTIONS.

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CONSTRUCTION MATERIALS

CM-1 SEWER PIPE: (CERTIFICATES REQUIRED)
- A. VITRIFIED CLAY: REFER TO SECTION 125, NM APWA FOR EXTRA STRENGTH VCP.
- B. PLASTIC (PVC): REFER TO SECTION 121, NM APWA, AS MODIFIED BY THE CITY.
  1. 4" THRU 15" (inch) DIAMETER, ASTM D-3034 OR ASTM F-789 PIPE. MINIMUM PS-46 STRENGTH. SDR-35 OR EQUAL.
  2. LARGER THAN 15" (IN.) DIAMETER: ASTM F 679 VOL. 08.04.
- C. HDPE PIPE PER ASTM D-1248 CLASS III WHEN APPROVED BY WATER QUALITY DIVISION ENGINEER.
- D. PVC RESTRAINED JOINTS: SERIES 1350 OR SERIES 1380 FOR COUPLINGS PRODUCED BY UNI-FLANGE CORPORATION, LOCKING COUPLINGS WITH NYLON SPLINE, MARKETED AS "YELLOWMINE" AND PRODUCED BY CERTAINTEED CORPORATION, OR APPROVED EQUAL.
- E. MANHOLE ADAPTERS: ASBESTOS CEMENT (AC) MANHOLE ADAPTERS, OR AC/PVC ADAPTER COUPLINGS.
- F. BUILDING SERVICE STUBS: CAST IRON DWV, PVC SCH. 40 DWV.
- G. SERVICE CONNECTIONS:
  1. VCP PIPE: FACTORY TEE FITTINGS; SECTION 125 NM APWA.
  2. PVC PIPE: CAST IRON BODIES TAPPING SADDLE WITH STAINLESS STEEL TENSION STRAP AND FITTINGS; FOWLER "QUICKWAY",GENECO, HERSEY "PIONEER", OR APPROVED EQUAL.
- H. SOIL CLASSIFICATION: THE UNIFIED SOIL CLASSIFICATION SYSTEM PER ASTM D 2487 TABLE 701.3.5 NM APWA.

CM-2 MANHOLES:
- A. CONCRETE MANHOLES: PRECAST REINFORCED CONCRETE RISERS, REDUCING CONES, AND ADJUSTMENT RINGS PER ASTM C 478 VOL. 04.05. BASES MAY BE FIELD PLACED CONCRETE OR PRECAST CONCRETE PER ASTM C 478 VOL. 04.05 (CERTIFICATES REQUIRED). CRACKED OR VISIBLY DEFECTIVE UNITS WILL BE REJECTED.
- B. PIPE PENETRATIONS: PRECAST UNITS SHALL HAVE SUITABLE SIZED OPENINGS CAST INTO BARREL AT PROPER ANGLES FOR PIPE AND MANHOLE ADAPTERS.
- C. MANHOLE STEPS: REFER TO SECTION 920.4.7 NM APWA POLYPROPYLENE ENCASED GRADE 60 STEEL BY M.A. INC. OR APPROVED EQUAL; 14"(IN.) WIDE, 16"(IN.) MAXIMUM SPACING.
- D. FRAMES AND COVERS:
  1. CASTING: SHALL CONFORM TO SECTION 160, 161 & 162, NM APWA CLASS 30B. (CERTIFICATES AND SHOP DRAWINGS REQUIRED)
  2. MINIMUM COVER WEIGHT: 165 POUNDS
  3. MINIMUM COMBINED WEIGHT: 385 POUNDS +/- 5%
  4. BEARING SURFACES: SHALL BE MATCHED FOR A FIRM NON ROCKING SEAT BETWEEN FRAME AND COVER. MINIMUM SEATING WIDTH: 7/8"(IN.)
  5. COATING: NONE
  6. COVER LETTERINGS: SANTA FE, N.M. SANITARY SEWER
  7. CASTINGS: CAST MANUFACTURER AND MODEL NUMBER ON FRAME AND COVER.
  8. CASTINGS TOLERANCE: +/- 1/16"(IN.) PER FOOT OF OVERALL DIMENSION. OUT OF POUND CASTINGS AND LOOSE FITTING UNITS WILL BE REJECTED IN THE FIELD.

CM-3 CONCRETE ENCASEMENT:
- A. REQUIREMENTS:
  1. WHEN THE PIPE COVER IS 36" (IN.) OR LESS.
  2. WHEN VITRIFIED CLAY CROSSES AN ARROYO.
  3. WHEN A WATER LINE PASSES BELOW OR LESS THAN 18" (IN.) ABOVE THE EXISTING SEWER LINE.
  4. WHEN A PARALLEL WATER LINE IS LESS THAN 10'(FT.) HORIZONTALLY AND LESS THAN 2'(FT.) ABOVE THE SEWER LINE.
  5. THE SEWER LINE SHALL BE ENCASED IN CONCRETE 6"(IN.) THICK AS DETAILED, AND EXTEND AT LEAST 10'(FT.) ON EACH SIDE OF THE WATER LINE.

FIELD QUALITY CONTROL

FQC-1 TESTING AND INSPECTION:
- A. SUPERVISION: CONDUCTED BY DESIGN ENGINEER.
- B. CERTIFICATION: DESIGN ENGINEER SHALL CERTIFY THAT THE PROJECT HAS BEEN COMPLETED IN ACCORDANCE TO PLANS & SPECIFICATIONS AND SHALL SUBMIT A CERTIFICATION OF COMPLIANCE STATEMENT WITH STAMP AND SIGNATURE.
- C. EQUIPMENT AND ASSISTANCE: PROVIDED BY CONTRACTOR.

FQC-2 LINE AND GRADE: ALLOWABLE TOLERANCE BETWEEN STRUCTURES FROM DESIGN;
- A. LINE: 0.20 FOOT
- B. GRADE: 0.02 FOOT; PIPE SHALL NOT HOLD BACK ANY WATER.

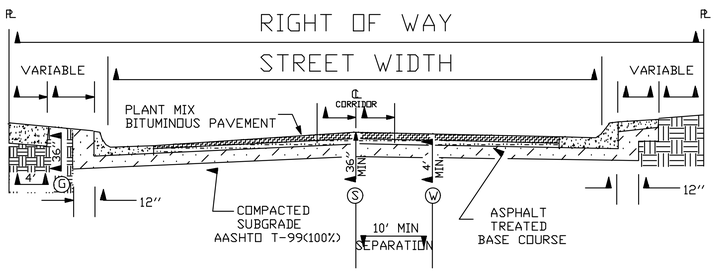
FQC-3 LEAKAGE TEST:
AIR TEST REQUIRED; REFER TO SECTION 901.7 NM APWA.

FQC-4 TELEVISION INSPECTION:
CONTRACTOR SHALL PROVIDE A CERTIFIED CCTV SEWERLINE INSPECTION AND RECORD TAPES AT HIS OWN EXPENSE.

FQC-5 ALL CONNECTIONS TO EXISTING MANHOLES INCLUDES REHABILITATING THE TIE IN MANHOLE TO MEET THESE STANDARD CONSTRUCTION DETAILS.

NOTE: REVISIONS TO THIS SHEET SHALL BE MADE UNDER THE AUTHORITY OF THE CITY OF SANTA FE ONLY.

TYPICAL UTILITIES SEPARATION DETAIL/DWG. # SAS-12



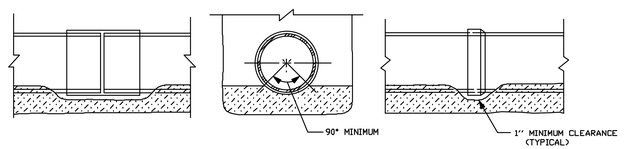
LEGEND

- Ⓢ SEWER
- Ⓖ GAS
- Ⓦ WATER
- ℄ PROPERTY LINE
- ℄ CENTER LINE

NOT TO SCALE

SCDT3-4 - 6/7/00

BELL OR COUPLING INSTALLATION DETAIL/DWG. # SAS-13



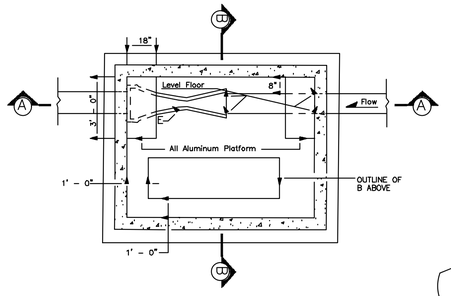
NOT TO SCALE

WATER QUALITY DIVISION — UTILITY DEVELOPMENT

CITY OF SANTA FE
WATER QUALITY DIVISION

TITLE: SANITARY SEWER STANDARD CONSTRUCTION DETAILS

DATE: JULY 1992	REVISIONS		FILE #: E:\AUTO\DWG\SCDT3-4
DRAWN BY: G. CHAVEZ	1 8-4-92	4	
CADD RENDITION BY: G. CHAVEZ	2 12-14-92	5	SHEET 14-4
APPROVED BY: E. BROWN	3 11-18-94	6	



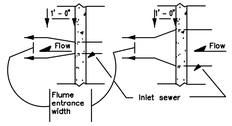
PLAN VIEW @ X-SECTION (C)(C)

TABLE 1

Pipe Size	Required Inlet Slope
4 in.	0.0060 ft/ft
6	0.0050
8	0.0040
10	0.0028
12	0.0022
15	0.0015
18	0.0012

NOTE

WHEN THE INLET SEWER IS SMALLER OR LARGER, IN DIAMETER THAN THE FLUME ENTRANCE WIDTH, A SMOOTH TRANSITION SHALL BE PROVIDED CHANGING FROM THE INLET SEWER DIAMETER TO THE FLUME ENTRANCE CHANNEL WIDTH OVER THE FIRST FOOT INSIDE THE MH.

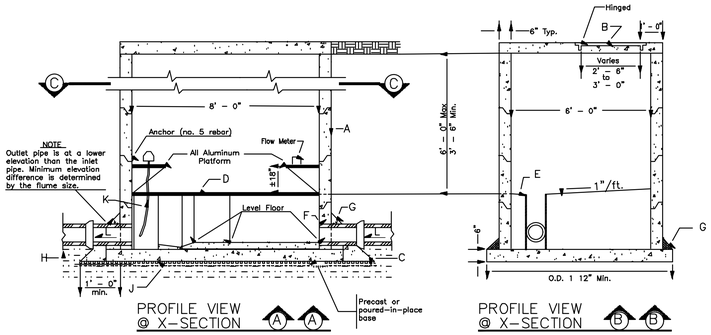


GENERAL NOTES

1. THIS DESIGN IS APPLICABLE FOR MANHOLES 8.0 FT. & LESS IN DEPTH MEASURED FROM FLOOR TO CONCRETE COVER. DEPTHS GREATER THAN 8.0 FT. WILL REQUIRE THE 8' DIAMETER, ROUND MANHOLE PER DWG NO. IP-1.
2. INDUSTRIAL MANHOLE SHALL BE LOCATED ON PRIVATE PROPERTY OUTSIDE OF CITY RIGHT-OF-WAY. CITY PERSONNEL SHALL HAVE ACCESS TO THE MANHOLE AT ALL TIMES OF THE DAY OR NIGHT.
3. NOT ALL INSTALLATIONS WILL REQUIRE THE ALUMINUM PLATFORMS. SAMPLER AND FLOW METERING APPARATUS TO BE PROVIDED BY THE INDUSTRIAL USER. FINAL DECISIONS RELATIVE TO THE REQUIREMENT FOR MONITORING EQUIPMENT AND THE SPECIFIC TYPE OF FLUME WILL BE MADE BY THE PRETREATMENT SECTION, WATER QUALITY DIVISION FOR EACH INDIVIDUAL CASE.
4. A PARSHALL FLUME OR PALMER BOWLUS FLUME SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THIS DETAIL. THE FLUME MUST BE SIZED TO ACCURATELY MEASURE ALL ANTICIPATED FLOW LEVELS. PRIOR TO INSTALLATION THE FLUME SIZE, AND TYPE MUST BE APPROVED BY THE PRETREATMENT SECTION, WATER QUALITY DIVISION.
5. IN ORDER TO CONTROL VELOCITIES AT A LEVEL THAT ALLOWS FOR ACCURATE FLOW MEASUREMENT, SLOPES ON THE INLET SEWER LINES FOR 20 FT. OUTSIDE THE MANHOLE MUST BE AS SPECIFIED IN TABLE 1 FOR THE VARIOUS SIZE LINES. OUTLET SEWER LINES MUST BE DESIGNED TO CONVEY THE MAXIMUM DESIGN FLOWS WITHOUT CREATING A SURCHARGE CONDITION IN THE FLUME.

CONSTRUCTION NOTES

A. ALL MANHOLE BASES, RISER SECTIONS AND FLAT SLAB TOP SECTIONS SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH CITY SPECIFICATIONS.
B. FRAME & COVER FOR NON-TRAFFIC AREAS SHALL BE NEENAH R-8661-VH OR EQ. FOR TRAFFIC OR PARKING AREAS, IT SHALL BE NEENAH R-6663-DH OR EQUAL.
C. CONCRETE PIPE SUPPORTS SHALL EXTEND OUTSIDE THE MANHOLE TO BELL OF FIRST JOINT AND SHALL CRADLE PIPE TO THE SPRING LINE.
D. PREFABRICATED MONITORING FLUME TO BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND SHALL BE MANUFACTURED BY MANNING, PLASTI-FAB OR APPROVED EQUAL. A PARSHALL FLUME OR A PALMER BOWLUS FLUME SHALL BE INSTALLED AS DIRECTED BY THE PRETREATMENT SECTION, WATER QUALITY CONTROL DIVISION.
E. CONCRETE FILLETS, USE 3000 PSI CONC. WITH TYPE II CEMENT. FILLETS TO MATCH TOP OF FLUME AND SLOPE ONE INCH PER FOOT.
F. MANHOLE PIPE CONNECTIONS TO BE PER ASTM C-923, STANDARD SPEC. FOR RESILIENT CONNECTORS BETWEEN REINFORCED CONCRETE MANHOLE STRUCTURES AND PIPES. RESILIENT CONNECTORS TO BE A-LOK OR APPROVED EQUAL.
G. 6 IN. GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.
H. 6" SUBGRADE AND BACKFILL COMPACTED TO 95% MODIFIED PROCTOR.
J 2 IN. GRAVEL CRUSHED STONE LEVELING COURSE.
K FLUME OUTLET END ADAPTER, PLASTI-FAB OR APPROVED EQUAK
L SLOPE PER TABLE 1

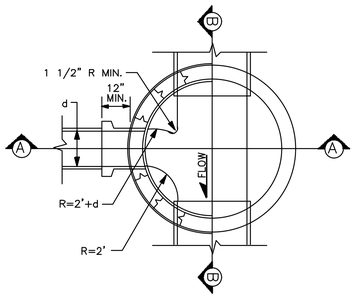


PROFILE VIEW @ X-SECTION (A)(A)

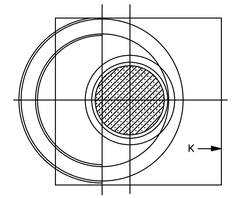
PROFILE VIEW @ X-SECTION (B)(B)

NOT TO SCALE

SANITARY SEWER SAMPLING & METERING MANHOLE DETAIL (6x8 RECTANGULAR)/DWG # IP-2



PLAN VIEW @ X-SECTION (C)(C)



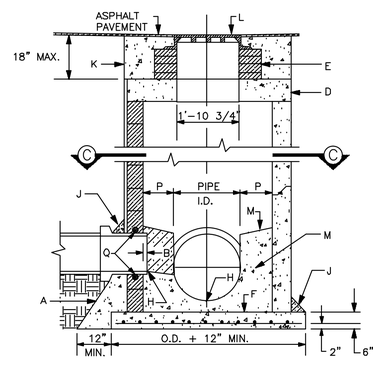
PLAN VIEW @ X-SECTION (D)(D)

GENERAL NOTES

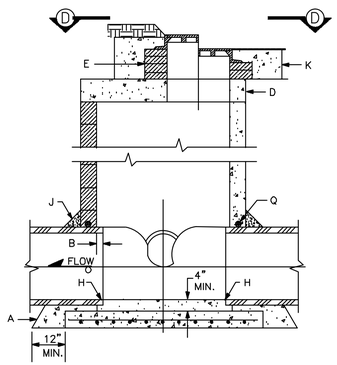
1. USE APPROVED MASTIC JOINT MATERIAL FOR ALL JOINTS.
2. CONTRACTOR HAS OPTION TO CONSTRUCT TYPE "C" M.H. IN LIEU OF TYPE "E" M.H. FOR DEPTHS OF 6' OR MORE.
3. DESIGN APPLIES TO 4', 6' & 8' MANHOLES.
4. M.H. GREATER THAN 18' IN DEPTH SHALL ONLY BE CONSTRUCTED OF PRECAST CONCRETE SECTION.
5. USE NON-SHRINK GROUT FOR FILLETS AND PENETRATIONS.
6. POSITION M.H. OPENING OVER THE UPSTREAM SIDE OF MAIN LINE.

CONSTRUCTION NOTES

A. CONCRETE PIPE SUPPORT SHALL EXTEND OUTSIDE OF M.H. TO BELL OF FIRST JOINT & SHALL CRADLE PIPE TO SPRING LINE. NOT APPLICABLE FLEXIBLE PIPE.
B. PIPE PENETRATION INTO MANHOLE SHALL BE FLUSH TO 2" MAX., MEASURED AT SPRING LINE OF PIPE.
D. PRECAST CONCRETE COVER
E. USE MAX. 4 COURSES GR. MS BRICK ON UNPAVED STREET FOR FUTURE ADJ. OF M.H. FRAME TO PAVEMENT GRADE. PLASTER INSIDE WITH 1/2" MORTAR.
F. CONCRETE BASE TO BE POURED IN PLACE USING NO. 4 BARS AT 6" O.C. EA. WAY FOR M.H. DEPTH OF 16' OR GREATER. NO 4 BARS AT 12" O.C. EA. WAY FOR M.H. LESS THAN 16' IN DEPTH.
H. INV. ELEV. OF STUB OR LATERAL AS SHOWN ON PLANS.
J. 6" GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.
K. USE A 5'x 5' CONCRETE PAD IN ALL AREAS SLOPE FOR GRADER USE UNPAVED AREAS.
L. FRAME AND COVER, SEE DWG. # SAS-4
M. CONCRETE FILL, 3000 PSI
N. SLOPE 1" PER FT. FROM PIPE CROWN
P. SHELF TO BE 9" WIDE MIN.
Q. APPROVED WATERSTOP TO BE COMPATIBLE WITH TYPE OF PIPE.



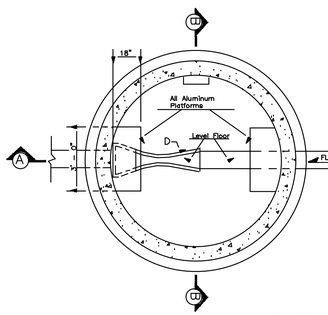
PROFILE VIEW @ X-SECTION (A)(A)



PROFILE VIEW @ X-SECTION (B)(B)

NOT TO SCALE

MANHOLE TYPE "C" DETAIL/DWG. # SAS-14



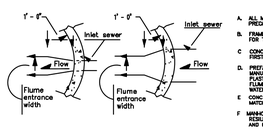
PLAN VIEW @ X-SECTION (C)(C)

TABLE 1

Pipe Size	Required Inlet Slope
4 in.	0.0060 ft/ft
6	0.0050
8	0.0040
10	0.0028
12	0.0022
15	0.0015
18	0.0012

NOTE

WHEN THE INLET SEWER IS SMALLER OR LARGER, IN DIAMETER THAN THE FLUME ENTRANCE WIDTH. A SMOOTH TRANSITION SHALL BE PROVIDED CHANGING FROM THE INLET SEWER DIAMETER TO THE FLUME ENTRANCE CHANNEL WIDTH OVER THE FIRST FOOT INSIDE THE MH.

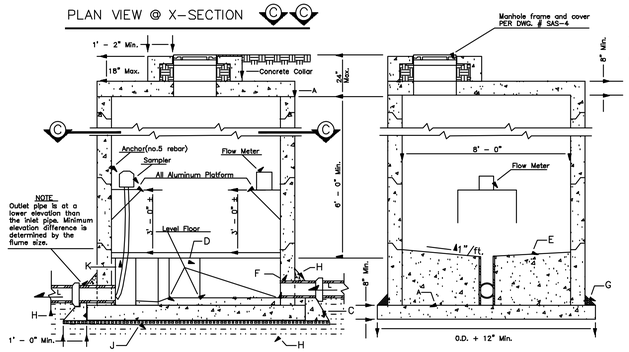


GENERAL NOTES

1. THIS DESIGN IS APPLICABLE FOR MANHOLES 8.0 FT. & GREATER IN DEPTH MEASURED FROM FLOOR TO CONCRETE COVER. DEPTHS LESS THAN 8.0 FT. WILL REQUIRE THE 6x8 RECTANGULAR MANHOLE PER DWG. # IP-2.
2. INDUSTRIAL MANHOLE SHALL BE LOCATED ON PRIVATE PROPERTY OUTSIDE OF CITY RIGHT-OF-WAY. CITY PERSONNEL SHALL HAVE ACCESS TO THE MANHOLE AT ALL TIMES OF THE DAY OR NIGHT.
3. NOT ALL INSTALLATIONS WILL REQUIRE THE ALUMINUM PLATFORMS. SAMPLER AND FLOW METERING APPARATUS TO BE PROVIDED BY THE INDUSTRIAL USER. FINAL DECISIONS RELATIVE TO THE REQUIREMENT FOR MONITORING EQUIPMENT AND THE SPECIFIC TYPE OF FLUME WILL BE MADE BY THE PRETREATMENT SECTION, WATER QUALITY DIVISION FOR EACH INDIVIDUAL CASE.
4. A PARSHALL FLUME OR PALMER BOWLUS FLUME SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THIS DETAIL. THE FLUME MUST BE SIZED TO ACCURATELY MEASURE ALL ANTICIPATED FLOW LEVELS. PRIOR TO INSTALLATION THE FLUME SIZE, AND TYPE MUST BE APPROVED BY THE PRETREATMENT SECTION, WATER QUALITY DIVISION.
5. IN ORDER TO CONTROL VELOCITIES AT A LEVEL THAT ALLOWS FOR ACCURATE FLOW MEASUREMENT, SLOPES ON THE INLET SEWER LINES FOR 20 FT. OUTSIDE THE MANHOLE MUST BE AS SPECIFIED IN TABLE 1 FOR THE VARIOUS SIZE LINES. OUTLET SEWER LINES MUST BE DESIGNED TO CONVEY THE MAXIMUM DESIGN FLOWS WITHOUT CREATING A SURCHARGE CONDITION IN THE FLUME.

CONSTRUCTION NOTES

A. ALL MANHOLE BASES, RISER SECTIONS AND FLAT SLAB TOP SECTIONS SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH CITY SPECIFICATIONS.
B. FRAME & COVER FOR NON-TRAFFIC AREAS SHALL BE NEENAH R-8661-VH OR EQ. FOR TRAFFIC OR PARKING AREAS, IT SHALL BE NEENAH R-6663-DH OR EQUAL.
C. CONCRETE PIPE SUPPORTS SHALL EXTEND OUTSIDE THE MANHOLE TO BELL OF FIRST JOINT AND SHALL CRADLE PIPE TO THE SPRING LINE.
D. PREFABRICATED MONITORING FLUME TO BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND SHALL BE MANUFACTURED BY MANNING, PLASTI-FAB OR APPROVED EQUAL. A PARSHALL FLUME OF A PALMER BOWLUS FLUME SHALL BE INSTALLED AS DIRECTED BY THE PRETREATMENT SECTION, WATER QUALITY CONTROL DIVISION.
E. CONCRETE FILLETS, USE 3000 PSI CONC. WITH TYPE II CEMENT FILLETS TO MATCH TOP OF FLUME AND SLOPE ONE INCH PER FOOT.
F. MANHOLE PIPE CONNECTIONS TO BE PER ASTM C-923, STANDARD SPEC. FOR RESILIENT CONNECTORS BETWEEN REINFORCED CONCRETE MANHOLE STRUCTURES AND PIPES. RESILIENT CONNECTORS TO BE A-LOK OR APPROVED EQUAL.
G. 6 IN. GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.
H 6" SUBGRADE AND BACKFILL COMPACTED TO 95% MODIFIED PROCTOR.
J. 2 IN. GRAVEL CRUSHED STONE LEVELING COURSE.
K. FLUME OUTLET END ADAPTER, PLASTI-FAB OR APPROVED EQUAK.
L. SLOPE PER TABLE 1.



PROFILE VIEW @ X-SECTION (A)(A)

PROFILE VIEW @ X-SECTION (B)(B)

NOT TO SCALE

SANITARY SEWER SAMPLING & METERING MANHOLE DETAIL (8 FT. DIA.)/DWG. # IP-1

SCDT4-4X - 6/7/00

CITY OF SANTA FE
WATER QUALITY DIVISION

TITLE: SANITARY SEWER STANDARD CONSTRUCTION DETAILS

DATE: JULY 1992	REVISIONS	FILE #: E:\AUTO\DWG\SCDT4-4
DRAWN BY: G. CHAVEZ	8-4-92	
CADD RENDITION BY: G. CHAVEZ		SHEET 14-5
APPROVED BY: E. BROWN		

TABLE 1–R

HELICAL CORRUGATED STEEL PIPE–2 2/3" X 1/2" CORRUGATION

DIAMETER OF PIPE (INCHES)	MAX. DEPTH OF COVER ABOVE TOP OF PIPE (FEET) 15	16–20	21–25	26–30	31–35	36–40	MIN. CVR (INCHES)
	SPECIFIED WALL THICKNESS (INCH)						
12	0.064	0.064	0.064	0.064	0.064	0.064	12
18	0.064	0.064	0.064	0.064	0.064	0.064	12
24	0.064	0.064	0.064	0.064	0.064	0.064	12
30	0.064	0.064	0.064	0.064	0.064	0.064	12
36	0.064	0.064	0.064	0.064	0.064	0.064	12
42	0.064	0.064	0.064	0.064	0.064	0.064	12
48	0.064	0.064	0.064	0.064	0.064	0.064	12
54	0.079	0.079	0.079	0.079	0.079	0.079	12
60	0.109	0.109	0.109	0.109	0.109	0.109	12
66	0.138	0.138	0.138	0.138	0.138	0.138	12
72	0.138	0.138	0.138	0.138	0.138	0.138	12
78	0.168	0.168	0.168	0.168	0.168	0.168	12
84	0.168	0.168	0.168	0.168	0.168	0.168	12

TABLE 2–R

HELICAL CORRUGATED STEEL PIPE – 3" X 1" CORRUGATION

DIAMETER OF PIPE (INCHES)	MAX. DEPTH OF COVER ABOVE TOP OF PIPE (FEET) 15	16–20	21–25	26–30	31–35	36–40	MIN. CVR (INCHES)
	SPECIFIED WALL THICKNESS (INCH)						
54	0.064	0.064	0.064	0.064	0.064	0.064	12
60	0.064	0.064	0.064	0.064	0.064	0.064	12
66	0.064	0.064	0.064	0.064	0.064	0.064	12
72	0.064	0.064	0.064	0.064	0.064	0.079	12
78	0.064	0.064	0.064	0.064	0.064	0.079	12
84	0.064	0.064	0.064	0.064	0.079	0.079	12
90	0.064	0.064	0.064	0.064	0.079	0.109	12
96	0.079	0.079	0.079	0.079	0.079	0.109	12
102	0.079	0.079	0.079	0.079	0.109	0.109	18
108	0.109	0.109	0.109	0.109	0.109	0.109	18
114	0.109	0.109	0.109	0.109	0.109	0.109	18
120	0.109	0.109	0.109	0.109	0.109	0.109	18
126	0.138	0.138	0.138	0.138	0.138	0.138	18
132	0.138	0.138	0.138	0.138	0.138	0.138	18
138	0.138	0.138	0.138	0.138	0.138	0.138	18
144	0.168	0.168	0.168	0.168	0.168	0.168	18

TABLE 3–R

HELICAL CORRUGATED STEEL PIPE – 5" X 1" CORRUGATION

DIAMETER OF PIPE (INCHES)	MAX. DEPTH OF COVER ABOVE TOP OF PIPE (FEET) 15	16–20	21–25	26–30	31–35	36–40	MIN. CVR (INCHES)
	SPECIFIED WALL THICKNESS (INCH)						
54	0.064	0.064	0.064	0.064	0.064	0.064	12
60	0.064	0.064	0.064	0.064	0.064	0.064	12
66	0.064	0.064	0.064	0.064	0.064	0.079	12
72	0.064	0.064	0.064	0.064	0.079	0.079	12
78	0.064	0.064	0.064	0.064	0.079	0.079	12
84	0.064	0.064	0.064	0.079	0.079	0.109	12
90	0.064	0.064	0.064	0.079	0.079	0.109	12
96	0.079	0.079	0.079	0.079	0.109	0.109	12
102	0.079	0.079	0.079	0.079	0.109	0.109	18
108	0.109	0.109	0.109	0.109	0.109	0.109	18
114	0.109	0.109	0.109	0.109	0.109	0.138	18
120	0.109	0.109	0.109	0.109	0.109	0.138	18
126	0.138	0.138	0.138	0.138	0.138	0.138	18
132	0.138	0.138	0.138	0.138	0.138	0.138	18
138	0.138	0.138	0.138	0.138	0.138	0.138	18
144	0.168	0.168	0.168	0.168	0.168	0.168	18

NOTES: 1. BACKFILL AROUND PIPE MUST BE COMPACTED TO SPECIFIED AASHTO T–99 DENSITY OF 100%.
2. USE REASONABLE CARE IN HANDLING AND INSTALLATION.

TABLE 4–R

STEEL SPIRAL RIB PIPE – 3/4" X 3/4" X 7 1/2"

DIAMETER OF PIPE (INCHES)	MAX. DEPTH OF COVER ABOVE TOP OF PIPE (FEET) 3/4" x 3/4" x 7 1/2" CORRUGATION 0.064	0.079	0.109	0.138	MIN. CVR (INCHES)
24	67	95	156		12
30	54	75	126		12
36	45	63	105		12
42	38	54	90		12
48	* 33	47	78	114	12
54	29	41	70	101	15
60		37	63	91	15
66		* 34	57	83	18
72			52	76	18
78			48	70	21
84			* 44	65	21
90				60	24
96				* 56	24
102				* 50	27

TABLE 5–R

STEEL SPIRAL RIB PIPE – 3/4" X 1" X 11 1/2"

DIAMETER OF PIPE (INCHES)	MAX. DEPTH OF COVER ABOVE TOP OF PIPE (FEET) 3/4" X 1" X 11 1/2" CORRUGATION 0.064	0.079	0.109	MIN. CVR (INCHES)
24	40	40	40	12
30	36	40	40	12
36	32	40	40	12
42	28	39	40	12
48	24	34	40	12
54	21	30	40	18
60		27	40	18
66		25	40	18
72		* 22	38	18
78			35	24
84			33	24
90			* 31	24

NOTES: 1. FOR TABLES 4–R AND 5–R, COVER LIMITS INDICATED WITH * ARE FOR TRENCH INSTALLATION ONLY. FOR EMBANKMENT CONDITIONS, USE NEXT HEAVIER GAGE IF AVAILABLE.
2. SEE "INSTALLATION AND BACKFILL OF SPIRAL RIB PIPE" SECTION OF "HANDBOOK OF STEEL DRAINAGE & HIGHWAY CONSTRUCTION PRODUCTS" BY AISI OF 1994 EDITION FOR MORE DETAILS ON INSTALLATION.

GENERAL NOTES:

1. WHERE ABRASIVE OR CORROSIVE CONDITIONS EXIST, A HEAVIER WALL THICKNESS OR A PROTECTIVE COATING MAY BE REQUIRED. SEE SECTION 570 OF SPECIFICATIONS FOR CORROSION RESISTANCE NUMBER.
2. THE CONTRACTOR MAY FURNISH A HEAVIER WALL THICKNESS THAN THE MINIMUM SHOWN IN THE TABLES AT NO ADDITIONAL COST TO THE DEPARTMENT.
3. ALL PIPES SHALL BE PROTECTED BY A COVER OF AT LEAST 4 FEET BEFORE PERMITTING HEAVY CONSTRUCTION EQUIPMENT TO PASS OVER THEM DURING CONSTRUCTION.
4. MINIMUM COVERS SHOWN IN THE TABLES SHALL BE MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE THE FLEXIBLE PAVEMENT OR TO THE TOP OF THE RIGID PAVEMENT. FOR MINIMUM COVERS, A MINIMUM 6" CUSHION OF BACKFILL MATERIAL SHALL BE PROVIDED BETWEEN THE BOTTOM OF THE RIGID PAVEMENT AND THE TOP OF THE PIPE.
5. ALL STEEL CORRUGATED METAL AND AND STRUCTURAL PLATE SHALL CONFORM TO AASHTO SPECIFICATION M–36 AND M–167.
6. ALL PIPES ARE TO BE CAMBERED TO ACCOMMODATE SOIL SETTLEMENT AND CONSOLIDATION. THE AMOUNT OF CAMBER IS DEPEND ON SOIL CHARACTERISTICS, COVER, LENGTH OF CULVERT, SLOPE, AND OTHER FACTORS AND SHALL BE APPROVED BY THE PROJECT MANAGER.
7. SEE 208–07–1/1 – CORRUGATED METAL CULVERT AND PIPE ARCHES BEDDING AND BACKFILL DETAILS FOR INSTALLATION.
8. SEE SECTION 570 PIPE CULVERT SPECIFICATIONS AND SECTION 571 STRUCTURAL PLATE STRUCTURES SPECIFICATIONS.
9. 703 PIPE SIZES NOT SHOWN, THE GAUGE WILL BE THAT REQUIRED BY THE MINIMUM AND MAXIMUM COVERS FOR THE NEXT LARGER TABULARD PIPE SIZE.
10. COVER HEIGHTS OVER 40 FEET SHALL BE USED ONLY AFTER A THOROUGH INVESTIGATION OF THE FOUNDATION MATERIALS.

GAUGE	THICKNESS (INCHES)
1	0.280
3	0.249
5	0.218
7	0.188
8	0.168
10	0.138
12	0.109
14	0.079
16	0.064
18	0.052

NOTE: GAUGES SHOWN ARE "US STANDARD GAUGE" FOR UNCOATED STEEL SHEETS AND PLATES. THICKNESS SHOWN IN INCHES INCLUDE GALVANIZED COATING.

R = ROUND PIPE

DESIGN DATA:

SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12, 2007 EDITION, WITH 2008 INTERIM REVISIONS.

DEAD LOAD: 120 POUNDS PER CUBIC FOOT" EARTH.

LIVE LOAD: HL–93

SAFETY FACTORS: APPROXIMATELY, 3.0 FOR LONGITUDINAL SEAM STRENGTH, 2.0, FOR PIPE WALL BUCKLING.

BACKFILL: SOIL STIFFNESS COEFFICIENT (k) = 0.22.

◆ DENOTES THAT THE FURNISHED TABLE IS STILL BASED ON DESIGN SPECIFICATION OF LRD, NOT LRFD YET.

◆ TABLE 6–R

STRUCTURAL PLATE PIPE – 6" X 2" CORRUGATION

DIAMETER OF PIPE (FEET)	MAX. DEPTH OF COVER ABOVE TOP OF PIPE (FEET) 15	16–20	21–25	26–30	31–35	36–40	MIN. CVR (INCHES)
	SPECIFIED WALL THICKNESS (INCH)						
5.0	0.11*	0.111	0.111	0.111	0.111	0.111	12
5.5	0.11*	0.111	0.111	0.111	0.111	0.111	12
6.0	0.11*	0.111	0.111	0.111	0.111	0.111	12
6.5	0.11*	0.111	0.111	0.111	0.111	0.111	12
7.0	0.11*	0.111	0.111	0.111	0.111	0.111	12
7.5	0.11*	0.111	0.111	0.111	0.111	0.111	12
8.0	0.111	0.111	0.111	0.111	0.111	0.111	12
8.5	0.111	0.111	0.111	0.111	0.111	0.111	18
9.0	0.111	0.111	0.111	0.111	0.111	0.111	18
9.5	0.111	0.111	0.111	0.111	0.111	0.111	18
10.0	0.111	0.111	0.111	0.111	0.111	0.111	18
10.5	0.111	0.111	0.111	0.111	0.111	0.140	18
11.0	0.111	0.111	0.111	0.111	0.111	0.140	18
11.5	0.111	0.111	0.111	0.111	0.111	0.140	18
12.0	0.111	0.111	0.111	0.111	0.111	0.140	18
12.5	0.111	0.111	0.111	0.111	0.111	0.140	24
13.0	0.111	0.111	0.111	0.111	0.111	0.140	24
13.5	0.111	0.111	0.111	0.111	0.140	0.140	24
14.0	0.111	0.111	0.111	0.111	0.140	0.140	24
14.5	0.111	0.111	0.111	0.111	0.140	0.140	24
15.0	0.111	0.111	0.111	0.140	0.140	0.140	24
15.5	0.111	0.111	0.111	0.140	0.140	0.170	24
16.0	0.111	0.111	0.111	0.140	0.140	0.170	24
16.5	0.140	0.140	0.140	0.140	0.140	0.170	30
17.0	0.140	0.140	0.140	0.140	0.140	0.170	30
17.5	0.140	0.140	0.140	0.140	0.140	0.170	30
18.0	0.140	0.140	0.140	0.140	0.140	0.170	30
18.5	0.170	0.170	0.170	0.170	0.170	0.170	30
19.0	0.170	0.170	0.170	0.170	0.170	0.188	30
19.5	0.170	0.170	0.170	0.170	0.170	0.188	30
20.0	0.170	0.170	0.170	0.170	0.170	0.188	30
20.5	0.188	0.188	0.188	0.188	0.188	0.218	36
21.0	0.188	0.188	0.188	0.188	0.188	0.218	36
21.5	0.218	0.218	0.218	0.218	0.218	0.218	36
22.0	0.218	0.218	0.218	0.218	0.218	0.243	36
22.5	0.218	0.218	0.218	0.218	0.218	0.243	36
23.0	0.218	0.218	0.218	0.218	0.218	0.243	36
23.5	0.243	0.243	0.243	0.243	0.243	0.243	36
24.0	0.243	0.243	0.243	0.243	0.243	0.280	42
24.5	0.243	0.243	0.243	0.243	0.243	0.280	42
25.0	0.280	0.280	0.280	0.280	0.280	0.280	42
25.5	0.280	0.280	0.280	0.280	0.280	0.280	42
26.0	0.280	0.280	0.280	0.280	0.280	0.280	42
26.5	0.280	0.280	0.280	0.280	0.280	0.280	42
27.0	0.280	0.280	0.280	0.280	0.280	0.280	42

NOTES: 1. BACKFILL AROUND PIPE MUST BE COMPACTED TO SPECIFIED AASHTO T–99 DENSITY OF 100%.
2. USE REASONABLE CARE IN HANDLING AND INSTALLATION.

TIMOTHY A. GARCIA, NEW MEXICO, 14072, REGISTERED PROFESSIONAL ENGINEER, 4-10

DATE	BY	DESCRIPTION

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

MAXIMUM AND MINIMUM COVER
STEEL–ROUND PIPES
HELICAL CORRUGATED METAL
AND
STRUCTURAL PLATES

DESIGNED BY: ____ DRAWN BY: SIG. CHECKED BY: YML/TM

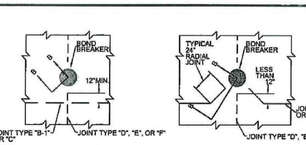
206–03–1/1 1 of 1

Sheet 206-03

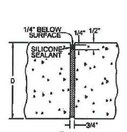
NOTES

A – ISOLATION JOINTS
B – LONGITUDINAL CONSTRUCTION JOINTS
C – LONGITUDINAL CONTRACTION JOINTS
D – TRANSVERSE CONTRACTION JOINT
E – PLANNED TRANSVERSE CONSTRUCTION JOINT
F – EMERGENCY TRANSVERSE CONSTRUCTION JOINT

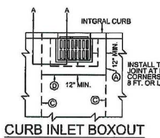
* IF PAVEMENT THICKNESS OF ADJACENT SLAB AT JOINT ARE THE SAME, USE JOINT TYPE "D"
IF PAVEMENT THICKNESS IS NOT THE SAME, USE JOINT TYPE "A"



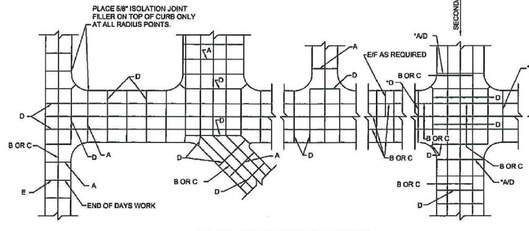
INLET OR MANHOLE CAST IN PAVEMENT



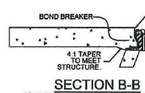
EXPANSION JOINT



CURB INLET BOXOUT

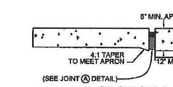


PLAN OF JOINT LOCATION

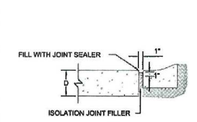


SECTION B-B

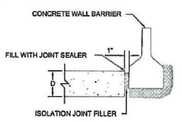
BOND BREAKER SHALL BE COMPOSED OF PLASTIC SHEET, BUILDING PAPER OR OTHER APPROVED MATERIAL THAT PREVENTS BONDING



SECTION A-A

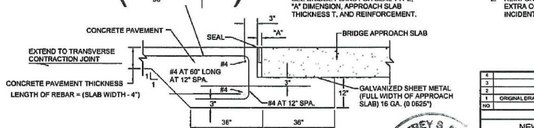


DETAIL C



DETAIL D

CURB/CWB JOINT DETAILS



JOINT DETAIL AT BRIDGE APPROACH SLAB

NOTES

1. ALL REINFORCING STEEL SHALL CONFORM TO AASHTO SPECIFICATIONS ALL DIMENSIONS REFER TO THE CENTERLINE OF BAR.
2. REINFORCING STEEL, SHEET METAL, AND EXTRA CONCRETE FOR SLEEPER ARE INCIDENTAL TO CONSTRUCTION.

4		
3		
2		
1	ORIGINAL DRAWING	5/4/14 JTM
NO.	DESCRIPTION	DATE BY

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION

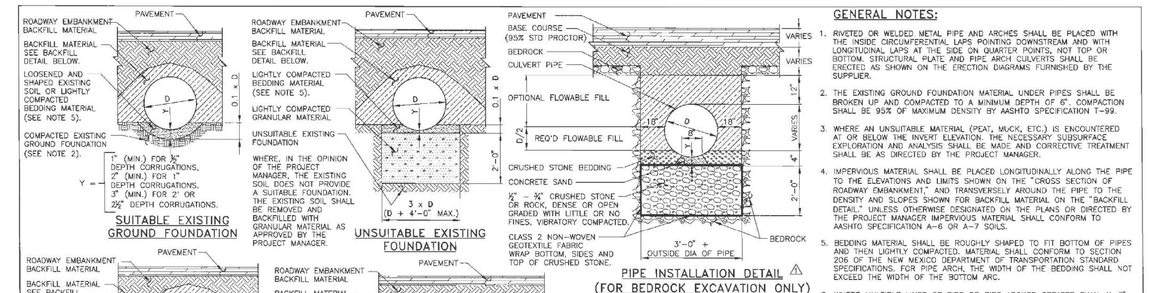
PCCP JOINT DETAILS

KEITH POLING, 9 Dec 14, 12:13 PM

Drawing File: C:\USERS\KPOLING\DOCUMENTS\MANUALS-01-2012 REVISED\JULY 11 2014.DWG

SHEET NO. 450 - 01 - 2/2

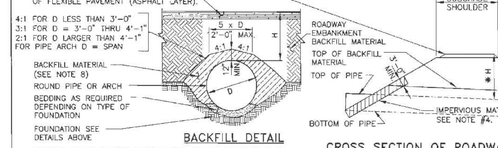
Sheet 450-02

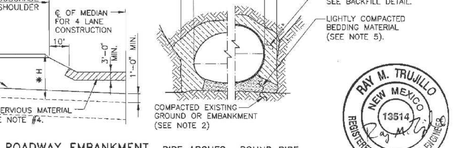


GENERAL NOTES:

1. RIVETED OR WELDED METAL PIPE AND ARCHES SHALL BE PLACED WITH THE INSIDE CIRCUMFERENTIAL LAPS POINTING DOWNSTREAM AND WITH LONGITUDINAL LAPS AT THE SIDE ON QUARTER POINTS, NOT TOP OR BOTTOM. STRUCTURAL PLATE AND PIPE ARCH CULVERTS SHALL BE ERECTED AS SHOWN ON THE ERECTION DIAGRAMS FURNISHED BY THE SUPPLIER.
2. THE EXISTING GROUND FOUNDATION MATERIAL UNDER PIPES SHALL BE BROKEN UP AND COMPACTED TO A MINIMUM DEPTH OF 6". COMPACTION SHALL BE 95% OF MAXIMUM DENSITY BY AASHTO SPECIFICATION T–99.
3. WHERE AN UNSUITABLE MATERIAL (PEAT, MUCK, ETC.) IS ENCOUNTERED AT OR BELOW THE INVERT ELEVATION, THE NECESSARY SUBSURFACE EXPLORATION AND ANALYSIS SHALL BE MADE AND CORRECTIVE TREATMENT SHALL BE AS DIRECTED BY THE PROJECT MANAGER.
4. IMPERVIOUS MATERIAL SHALL BE PLACED LONGITUDINALLY ALONG THE PIPE TO THE ELEVATIONS AND LIMITS SHOWN ON THE "CROSS SECTION OF ROADWAY EMBANKMENT," AND TRANSVERSELY AROUND THE PIPE TO THE DENSITY AND SLOPES SHOWN FOR BACKFILL MATERIAL ON THE "BACKFILL DETAIL," UNLESS OTHERWISE DESIGNATED ON THE PLANS OR DIRECTED BY THE PROJECT MANAGER. IMPERVIOUS MATERIAL SHALL CONFORM TO AASHTO SPECIFICATION A–6 OR A–7 SOILS.
5. BEDDING MATERIAL SHALL BE ROUGHLY SHAPED TO FIT BOTTOM OF PIPES AND THEN LIGHTLY COMPACTED. MATERIAL SHALL CONFORM TO SECTION 206 OF THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. FOR PIPE ARCH, THE WIDTH OF THE BEDDING SHALL NOT EXCEED THE WIDTH OF THE BOTTOM ARC.
6. WHERE MULTIPLE LINES OF PIPE OR PIPE ARCHES GREATER THAN 4'–0" IN DIAMETER OR SPAN ARE USED, THEY SHALL BE SPACED SO THAT ADJACENT SIDES OF THE PIPE SHALL BE AT LEAST ONE–HALF DIAMETER OR 3'–0" APART, WHICHEVER IS LESS, TO PERMIT ADEQUATE COMPACTION OF BACKFILL MATERIAL. FOR DIAMETERS 4'–0" AND LESS, THE MINIMUM SPACING SHALL BE NOT LESS THAN 2'–0". SEE 570–02–1/2 OR 570–02–2/2 FOR FLARED END SECTIONS.
7. A CONTINUOUS CONCRETE CRADLE SHALL BE USED ONLY WHEN CALLED FOR ON THE PLANS.
8. BACKFILL MATERIAL SHALL CONFORM TO SECTION 206 OF THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. SPECIAL CARE SHALL BE TAKEN WHEN COMPACTING BACKFILL AT THE HUNCHES AND SIDES OF PIPES.
9. REFER TO 206–03–1/1 THRU 206–06–1/1 FOR TABLE OF MINIMUM AND MAXIMUM COVER AND CORRESPONDING GAUGE.

KEY	SYMBOL	DESCRIPTION
①		100% COMPACTION
②		90% COMPACTION





RAY M. TRUJILLO, NEW MEXICO, 13514, REGISTERED PROFESSIONAL ENGINEER, 5/29/08

DATE	BY	DESCRIPTION
⚠ 2/14/07	YML	REVISIONS TO BEDROCK DETAIL
NO.	DATE	REV BY DESCRIPTION

REVISIONS (OR CHANGE NOTICES)

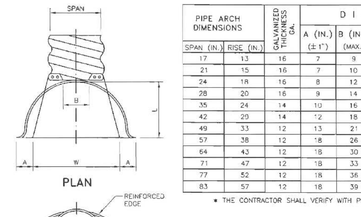
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

CORRUGATED METAL CULVERT
AND PIPE ARCHES
BEDDING AND BACKFILL
DETAILS

DESIGNED BY: ____ DRAWN BY: SKL CHECKED BY: TM/YML

206–07–1/1 1 OF 1

Sheet 206-09

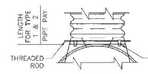


PIPE ARCH DIMENSIONS SPAN (IN.)	RISE (IN.)	GALVANIZED THICKNESS	DIMENSIONS A (IN.) (±1")	B (IN.) (MAX.)	H (IN.) (±1")	L (IN.) (±1½")	W (IN.) (±2")	APPROX. SLOPE	BODY
17	13	16	7	9	6	19	30	2 1/2:1	1 PC.
21	15	16	7	10	6	23	36	2 1/2:1	1 PC.
24	18	16	8	12	6	26	42	2 1/2:1	1 PC.
28	20	16	9	14	6	32	48	2 1/2:1	1 PC.
35	24	14	10	16	6	38	60	2 1/2:1	1 PC.
42	29	14	12	18	6	46	75	2 1/2:1	1 PC.
49	33	12	13	21	9	53	85	2 1/2:1	2 PC.
57	38	12	18	26	12	63	90	2 1/2:1	2 PC.
64	43	12	18	30	12	70	102	2 1/4:1	2 PC.
71	47	12	18	33	12	77	114	2 1/4:1	3 PC.
77	52	12	18	36	12	77	126	2:1	3 PC.
83	57	12	18	39	12	77	138	2:1	3 PC.

* THE CONTRACTOR SHALL VERIFY WITH PROVIDERS FOR CURRENT INDUSTRY SIZES.

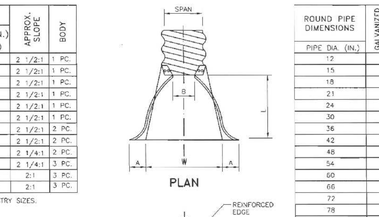
NOTE:
1. ALL 3 PIECE BODIES TO HAVE 12 GAUGE THICK SIDES AND 10 GAUGE THICK CENTER PANELS. WIDTH OF CENTER PANELS TO BE GREATER THAN 20% OF THE PIPE PERIPHERY. MULTIPLE PANEL BODIES TO HAVE LAP SEAMS WHICH ARE TO BE TIGHTLY JOINED BY 3/8" GALVANIZED RIVETS OR BOLTS.
⚠ 2. FOR 77" X 52" AND 83" X 57" SIZES, REINFORCED EDGED TO BE SUPPLEMENTED BY L 2" X 2" X 1/4" GALVANIZED ANGLES. THE ANGLES TO BE ATTACHED BY 3/8" GALVANIZED NUTS AND BOLTS.
3. ANGLE REINFORCEMENT WILL BE PLACED UNDER THE CENTER PANEL SEAMS ON THE 77" X 52" AND 83" X 57" SIZES.
* 4. TOE PLATE TO BE CONSTRUCTED WHERE SHOWN ON PLANS.

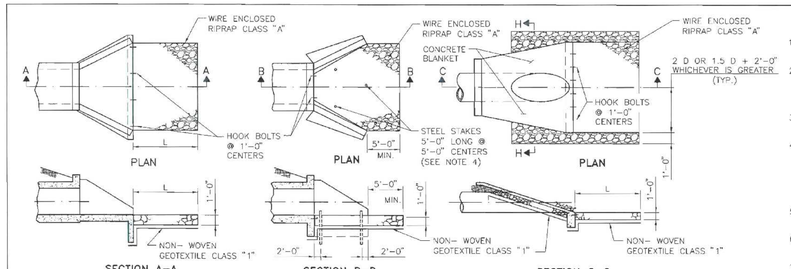
NOTE: SIZES EQUIVALENT TO THE ABOVE, USING 3" x 1" CORRUGATIONS, MAY BE USED PROVIDING THAT THEY MEET THE SIZES SHOWN UNDER TABLE 6 OF SERIAL 206–04–1/3 THRU 206–04–3/3.



TYPE 2
FOR 17" x 13" THRU 57" x 38"

STANDARD CONNECTION
STANDARD END SECTIONS FOR PIPE–ARCH STEEL PIPE

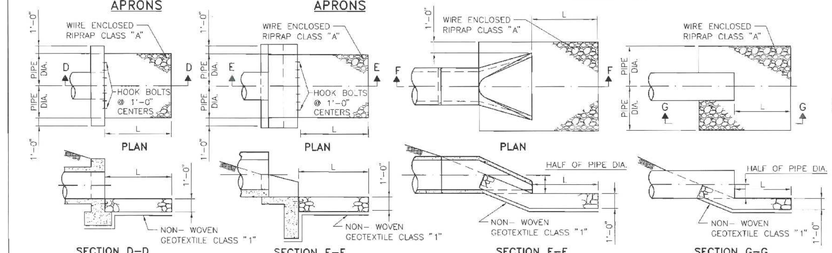

SPAN
W
A
A
PLAN



BOX CULVERTS WITH APRONS

BOX CULVERTS WITHOUT APRONS

CONCRETE BLANKETS

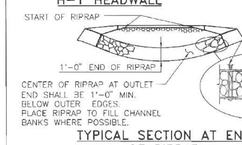


H-1 HEADWALL

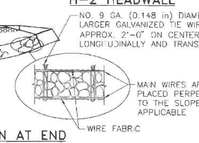
H-2 HEADWALL

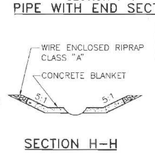
PIPE WITH END SECTIONS

PIPE WITHOUT HEADWALLS

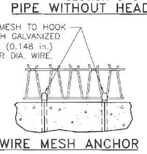


TYPICAL SECTION AT END OF RIPRAP





SECTION H-H

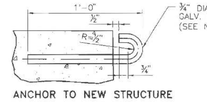


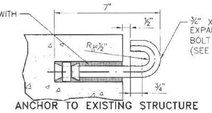
WIRE MESH ANCHOR

NOTE: SEE SHEET 602-01-1/1 FOR WIRE MESH SPLICE DETAILS.

GENERAL NOTES

1. ALL RIPRAP SHALL BE CLASS "A" UNLESS SPECIFIED OTHERWISE IN THE PLANS. DIMENSIONS OF RIPRAP CLASS "A" SHALL BE VERIFIED IN FIELD.
2. RIPRAP ON THIS STANDARD IS SHOWN FOR SINGLE PIPES AND CULVERTS ONLY. FOR MULTIPLE PIPE AND CULVERT INSTALLATIONS, EXTEND RIPRAP BEYOND OUTLET OPENING AS SHOWN IN PLAN DETAILS AND PLACE RIPRAP BETWEEN OUTLET OPENINGS AS SHOWN IN ELEVATION DETAILS.
3. SERIAL 602-02-1/1 MAY BE REFERENCED FOR DESCRIPTIONS OF WIRE MESH AND ALTERNATE PATTERNS.
4. STEEL STAKES MAY BE RAILROAD RAILS WEIGHING NOT LESS THAN 30 LBS. PER YARD, 4" NOMINAL DIAMETER STANDARD STRENGTH GALVANIZED STEEL PIPE, OR L 4" X 4"X 3/8" STEEL ANGLES. STEEL STAKES SHALL PROJECT 6" ABOVE TOP OF RIPRAP. STEEL STAKES ARE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE WORK AND NO DIRECT MEASUREMENT OR PAYMENT WILL BE MADE THEREFORE.
5. CONTRACTOR MAY SUBSTITUTE CONCRETE CHEMICAL ANCHORS WITH HOOK GEOMETRY SHOWN, WHICH MEET REQUIREMENTS OF SECTION 522.
6. TOE-IN OR PLACE EROSION CONTROL GEOTEXTILE UNDER FOOTINGS OR CUT-OFF WALL.
7. L (MIN.) = 10'-0" OR 1.5 x DIAMETER OR RISE, WHICHEVER IS GREATER.





HOOK BOLT DETAILS

COST OF HOOK BOLT IN PLACE TO BE INCLUDED IN UNIT BID PRICE FOR RIPRAP.

NO.	DATE	BY/BY	DESCRIPTION
1	8/09/09	YML	GENERAL REVISIONS

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

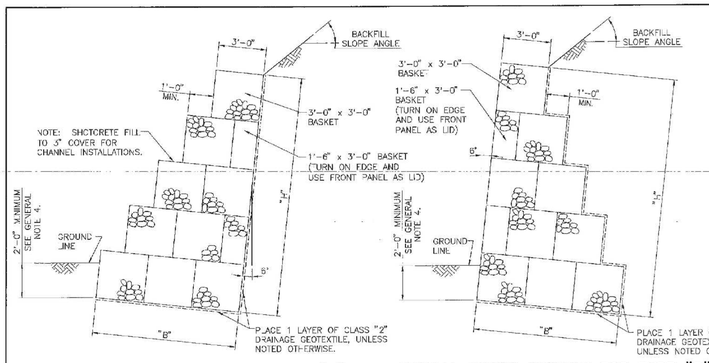
EROSION CONTROL
AT CULVERT OUTLETS

DESIGNED BY: TM DRAWN BY: SKL CHECKED BY: YML

602-02-1/1 1 of 1

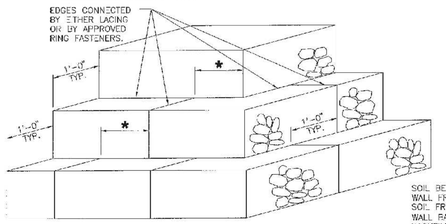
RAY M. TRUJILLO NEW MEXICO 10313 REGISTERED PROFESSIONAL ENGINEER 11/16/09

Sheet 602-02



TYPICAL CROSS SECTION FOR TYPE "A" STANDARD RETAINING WALL

TYPICAL CROSS SECTION FOR TYPE "B" STANDARD RETAINING WALL



TYPICAL VIEW OF GABION RETAINING WALL

★ NOTE: STAGGER JOINTS AT 3'-0" WHEN PRACTICAL.

BACKFILL TABLE

BACKFILL SLOPE ANGLE	FRICTION ANGLE OF BACKFILL
0°	35°
9.5°	35°
18.4°	33°
26.6°	33°
33.7°	34°

DESIGN DATA

SOIL BEARING PRESSURE	3000 PSF
WALL FRICTION ANGLE	0 DEGREES
SOIL FRICTION ANGLE	SEE BACKFILL TABLE ABOVE
WALL BATTER	NEGATIVE 6 DEGREES
BACKFILL SLOPE ANGLE	SEE BACKFILL TABLE ABOVE
SOIL DENSITY	120 LBS./ CU. FT.
GABION FILL DENSITY	80% OF SOIL DENSITY
SAFETY FACTOR AGAINST OVERTURNING	2.0
SAFETY FACTOR AGAINST SLIDING	1.5
SURCHARGE PRESSURE (LEVEL BACKFILL)	2 FT. x 120 LBS./CU. FT. x 1.25 = 300 LBS./SQ. FT.

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TYPE "A" GABION RETAINING WALL			
WALL HEIGHT "H"	BASE "B"	NO. OF COURSES	QTY. CU. YD. PER LIN. FT.
6'-0"	4'-6"	2	0.833
9'-0"	6'-0"	3	1.50
12'-0"	7'-6"	4	2.33
15'-0"	9'-0"	5	3.33

TYPE "B" GABION RETAINING WALL			
WALL HEIGHT "H"	BASE "B"	NO. OF COURSES	QTY. CU. YD. PER LIN. FT.
6'-0"	4'-0"	2	0.833
9'-0"	6'-0"	3	1.50
12'-0"	7'-6"	4	2.33
15'-0"	9'-0"	5	3.33

GENERAL NOTES

1. WORKMANSHIP AND MATERIALS SHALL CONFORM TO SECTION 602 OF THE NEW MEXICO STATE DEPARTMENT OF TRANSPORTATION (NMDOT) STANDARD SPECIFICATIONS.
2. QUANTITIES FOR GABION BASKETS SHALL BE SHOWN ON THE PLANS.
3. RETAINING WALL FOUNDATION SHALL BE INSTALLED A MINIMUM OF 2 FEET BELOW THE GROUND LINE. WHEN GABION WALLS ARE TO BE INSTALLED IN STREAMBED, MEASURES TO PROTECT THE WALL AGAINST UNDERMINING SHALL BE SHOWN ON THE PROJECT SPECIFIC DRAWINGS.
4. ALL FOUNDATION SOILS SHALL BE ANALYZED TO ENSURE ADEQUATE BEARING PRESSURE. SOILS THAT DO NOT MEET THE DESIGN BEARING PRESSURE SHALL BE STABILIZED ACCORDING TO THE RECOMMENDATIONS OF THE NEW MEXICO STATE DEPARTMENT OF TRANSPORTATION'S FOUNDATION ENGINEER PRIOR TO THE START OF CONSTRUCTION.
5. INTERNAL FRICTION ANGLE REQUIREMENT OF THE BACKFILL MATERIAL SHALL BE VERIFIED BY PROCEDURES OUTLINED IN SECTION 506- MECHANICALLY STABILIZED EARTH RETAINING STRUCTURES, OF THE NMDOT STANDARD SPECIFICATIONS EXCEPT THAT THE FRICTION ANGLE SHALL NOT BE LESS THAN THAT SHOWN IN THE TABLE ON THIS SHEET.

DATE	BY	DESCRIPTION

REVISIONS (OR CHANGE NOTICES)

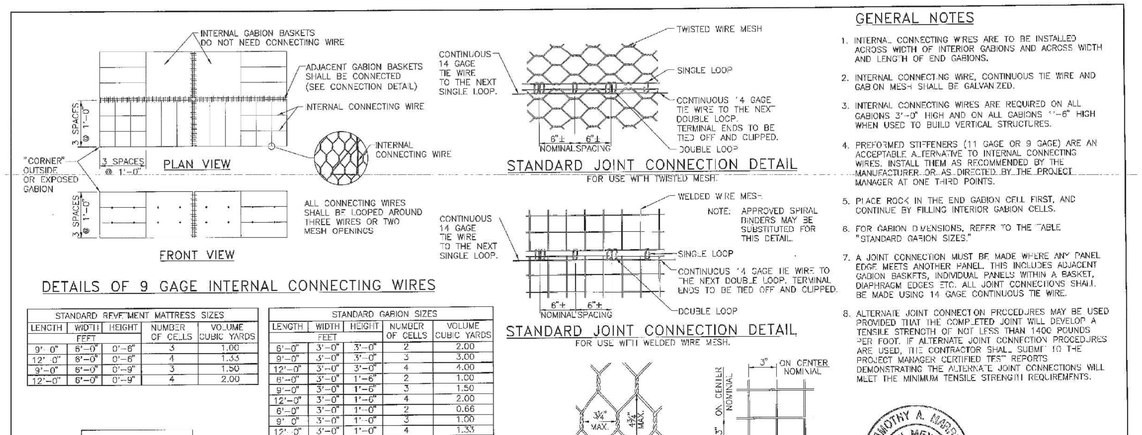
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

GABION
RETAINING WALL
DETAILS

DESIGNED BY: TM DRAWN BY: SKL CHECKED BY: YML/TM

602-05-2/2 2 of 2

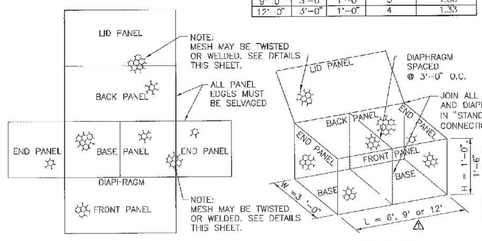
Sheet 602-04



DETAILS OF 9 GAGE INTERNAL CONNECTING WIRES

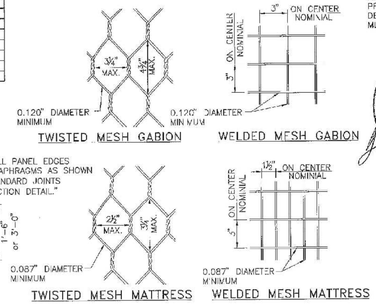
STANDARD REVETMENT MATTRESS SIZES				
LENGTH	WIDTH	HEIGHT	NUMBER OF CELLS	VOLUME CUBIC YARDS
FEET				
9'-0"	6'-0"	0'-6"	3	1.00
12'-0"	6'-0"	0'-6"	4	1.33
9'-0"	6'-0"	0'-9"	3	1.50
12'-0"	6'-0"	0'-9"	4	2.00

STANDARD GABION SIZES				
LENGTH	WIDTH	HEIGHT	NUMBER OF CELLS	VOLUME CUBIC YARDS
FEET				
6'-0"	3'-0"	3'-0"	2	2.00
9'-0"	3'-0"	3'-0"	3	3.00
12'-0"	3'-0"	3'-0"	4	4.00
6'-0"	3'-0"	1'-6"	2	1.00
9'-0"	3'-0"	1'-6"	3	1.50
12'-0"	3'-0"	1'-6"	4	2.00
6'-0"	3'-0"	1'-0"	2	0.66
9'-0"	3'-0"	1'-0"	3	1.00
12'-0"	3'-0"	1'-0"	4	1.33



TYPICAL FLAT LAYOUT OF GABION BASKET

TYPICAL ASSEMBLED GABION BASKET



TYPICAL ACCEPTABLE MESH STYLES

SEE AL 602-05-2/2 SHEET 2 OF 2 MUST ACCOMPANY THIS SHEET.

GENERAL NOTES

1. INTERNAL CONNECTING WIRES ARE TO BE INSTALLED ACROSS WIDTH OF INTERIOR GABIONS AND ACROSS WIDTH AND LENGTH OF END GABIONS.
2. INTERNAL CONNECTING WIRE, CONTINUOUS TIE WIRE AND GABION MESH SHALL BE GALVANIZED.
3. INTERNAL CONNECTING WIRES ARE REQUIRED ON ALL GABIONS 3'-0" HIGH AND ON ALL GABIONS 1'-6" HIGH WHEN USED TO BUILD VERTICAL STRUCTURES.
4. PREFORMED STIFFENERS (11 GAGE OR 9 GAGE) ARE AN ACCEPTABLE ALTERNATIVE TO INTERNAL CONNECTING WIRES. INSTALL THEM AS RECOMMENDED BY THE MANUFACTURER OR AS DIRECTED BY THE PROJECT MANAGER AT ONE THIRD POINTS.
5. PLACE ROCK IN THE END GABION CELL FIRST, AND CONTINUE BY FILLING INTERIOR GABION CELLS.
6. FOR GABION DIMENSIONS, REFER TO THE TABLE "STANDARD GABION SIZES."
7. A JOINT CONNECTION MUST BE MADE WHERE ANY PANEL EDGE MEETS ANOTHER PANEL. THIS INCLUDES ADJACENT GABION BASKETS, INDIVIDUAL PANELS WITHIN A BASKET, DIAPHRAGM EDGES ETC. ALL JOINT CONNECTIONS SHALL BE MADE USING 14 GAGE CONTINUOUS TIE WIRE.
8. ALTERNATE JOINT CONNECTION PROCEDURES MAY BE USED PROVIDED THAT THE COMPLETED JOINT WILL DEVELOP A TENSILE STRENGTH OF NOT LESS THAN 1400 POUNDS PER FOOT. IF ALTERNATE JOINT CONNECTION PROCEDURES ARE USED, THE CONTRACTOR SHALL SUBMIT TO THE PROJECT MANAGER CERTIFIED "TEST" REPORTS DEMONSTRATING THE ALTERNATE JOINT CONNECTIONS WILL MEET THE MINIMUM TENSILE STRENGTH REQUIREMENTS.

TIMOTHY A. MARRS NEW MEXICO 14072 REGISTERED PROFESSIONAL ENGINEER 1-9-13

DATE	BY	DESCRIPTION
1/16/09	YML	CORRECTED 1 = 6', 9' OR 12'

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

GABION
BASKET DETAILS

DESIGNED BY: TM DRAWN BY: SKL CHECKED BY: YML/TM

602-05-1/2 1 of 2

Sheet 602-03

_SUMMARY
FILENAME

GENERAL NOTES:

1. *NMDOT IS RECOGNIZED AS A TITLE II PUBLIC ENTITY UNDER THE AMERICANS WITH DISABILITIES ACT (ADA), OF 1990 (PUBLIC LAW 101-336). A TITLE II ENTITY IS DEFINED AS ANY STATE OR LOCAL GOVERNMENT ENTITY AND PROHIBITS DISCRIMINATION ON THE BASIS OF DISABILITY. THE ADA EXTENDS THE PRINCIPLES OF SECTION 504 OF THE REHABILITATION ACT, OF 1973, AS AMENDED, TO PROTECT PERSONS WITH DISABILITIES IN ALL PUBLIC FACILITIES AND PROGRAMS IRRESPECTIVE OF THE FUNDING SOURCE.*
2. *THESE DRAWINGS PROVIDE GUIDANCE FOR COMPLIANCE WITH THE PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY (PROWAG), JULY 26, 2011, OR LATEST EDITION. THESE GUIDELINES SHALL APPLY TO ALL NEW AND ALTERED PEDESTRIAN ACCESS ROUTES (PAR).*
3. *REFER TO CONSTRUCTION PLANS FOR THE DETAILED LAYOUTS AND DETAILS.*
4. *PEDESTRIAN ACCESS ROUTES (PAR) SHALL BE FIRM, STABLE, AND SLIP RESISTANT. PROVIDE SLIP RESISTANT TEXTURE ON SIDEWALKS AND CURB RAMPS BY BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP AND / OR PERPENDICULAR TO PEDESTRIAN TRAVEL. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING SIDE FLARES. DO NOT SCORE OR RAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATIONS ONLY.*
5. *VERTICAL SURFACE DISCONTINUITIES SHALL BE 0.5 INCHES MAXIMUM. VERTICAL DISCONTINUITIES BETWEEN 0.25 INCHES AND 0.5 INCHES SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 50 PERCENT. THE BEVEL SHALL BE APPLIED ACROSS THE ENTIRE VERTICAL SURFACE DISCONTINUITY.*
6. *HORIZONTAL OPENINGS IN GRATINGS AND JOINTS SHALL NOT PERMIT PASSAGE OF A SPHERE MORE THAN 0.5 INCHES IN DIAMETER. ELONGATED OPENINGS IN GRATES SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.*
7. *PROVIDE EXPANSION JOINT MATERIAL 0.5 INCHES THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.*
8. *SEAL ALL JOINTS WITH AN APPROVED SEALING MATERIAL.*
9. *INSTALL JOINTS WHERE CURB RAMPS, TURNING SPACES, FLARES, AND SIDEWALKS ABUT. ALL JOINTS AND TRANSITIONS SHALL BE FLUSH.*
10. *VERTICAL WALLS OR HEADER CURBS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY CURB RAMP FLARES OR GRADING. GRADE NON-WALK AREAS AT 3:1 OR FLATTER.*
11. *CONSTRUCTION TOP / BOTTOM OF CURB TO BE FLUSH WITH ADJACENT SURFACES (CURB RAMPS, SIDEWALKS, AND FLARES). VERTICAL LIPS NOT PERMITTED AT THE BOTTOM OF CURB RAMP WHERE THE RAMP MEETS STREET LEVEL.*

SIDEWALKS

12. *SIDEWALK, AND CURB AND GUTTER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SERIAL 605-01-01.*
13. *SIDEWALK CROSS SLOPE IS RECOMMENDED TO BE CONSTRUCTED FOR CROSS SLOPE OF 1.5% TYPICAL, BUT SHALL NOT EXCEED 2.0% CROSS SLOPE ON THE PEDESTRIAN ACCESS ROUTE (PAR).*
14. *SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 5.0 FT, EXCLUSIVE OF THE WIDTH OF THE CURB RETURN.*
    EXCEPTION: WHERE SIDEWALK WIDTH NEEDS TO BE REDUCED TO NO LESS 4.0 FT, PASSING SPACES SHALL BE PROVIDED AT INTERVALS OF 200 FT MAXIMUM. PASSING SPACES SHALL BE 5.0 FT MINIMUM BY 5.0 FT MINIMUM.
15. *ANY SIGNS POSTS, UTILITY POLES, FIRE HYDRANTS, TRAFFIC SIGNALS, STREET FURNITURE, AND OTHER OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH TO LESS THAN 4.0 FT.*
16. *THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES (PAR) WITHIN MEDIANS AND PEDESTRIAN REFUGE ISLANDS SHALL BE 5.0 FT MINIMUM.*

CURB RAMPS

17. *FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE FEASIBLE. THE MAXIMUM SLOPE ALLOWABLE IS INDICATED IN NOTE 18 OF THE CURB RAMP STANDARD DETAILS. SLOPES THAT EXCEED THOSE INDICATED IN THE CURB RAMP STANDARD DETAILS, OR CONSTRUCTION PLANS, WILL NOT BE ACCEPTED AND WILL BE REMOVED AND RECONSTRUCTED.*
18. *RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.*
19. *CONSTRUCT THE CLEAR WIDTH OF CURB RAMP RUNS (EXCLUDING ANY FLARED SIDES), BLENDED TRANSITIONS, AND TURNING SPACES AS TYPICAL 5.0 FT X 5.0 FT AND MINIMUM 4.0 FT X 4.0 FT CLEAR SPACE BEYOND THE CURB FACE, WITHIN THE WIDTH OF THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.*
20. *CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT, AND THE SIDEWALK SLOPE.*
21. *THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 13.3%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A CURB RAMP RUNS, TURNING SPACE OR BLENDED TRANSITION IS NOT TO EXCEED 5.0%.*
22. *CONSTRUCT CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL TURNING SPACES BEHIND CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE.*
23. *GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.*
24. *ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF CURB RAMP IS NOT SOLELY DEPENDENT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6.0 FT FOR AN 8.3% SLOPE).*

CROSSWALKS

25. *PROVIDE A SEPARATE CURB RAMP FOR EACH MARKED OR UNMARKED CROSSWALK. CURB RAMP LOCATIONS SHALL BE PLACED WITHIN THE WIDTH OF THE MARKED OR UNMARKED CROSSWALK AS SHOWN IN THE CONSTRUCTION PLANS.*

DETECTABLE WARNING

26. *DETECTABLE WARNING SURFACES (DWS) CONSISTING OF TRUNCATED DOMES SHALL BE UTILIZED WHERE CURB RAMPS, BLENDED TRANSITIONS, OR TURNING SPACE PROVIDE A FLUSH PEDESTRIAN CONNECTION TO THE STREET OR WHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CROSSES A STREET, ALLEY, TRAFFIC ISLAND, MEDIAN, OR RAILROAD. DETECTABLE WARNING SURFACES (DWS) WILL NOT BE INSTALLED AT RESIDENTIAL DRIVEWAYS. DETECTABLE WARNING SURFACE MUST BE PROVIDED AT THE JUNCTION BETWEEN THE PAR AND COMMERCIAL DRIVEWAYS THAT ARE STOP OR YIELD CONTROLLED OR ARE CONTROLLED BY A SIGNAL.*
27. *DETAILS OF DETECTABLE WARNING SURFACE ARE SHOWN IN CONTRACT PLANS AND SHEET 608-001-8/12 OF THE STANDARD DRAWINGS.*

ACCESSIBLE PEDESTRIAN SIGNALS (APS) AND PEDESTRIAN PUSHBUTTONS

28. *FOR ALTERATION PROJECTS, PROVIDE ACCESS TO EXISTING PEDESTRIAN PUSHBUTTONS TO THE MAXIMUM EXTENT PRACTICABLE. INSTALL PEDESTRIAN STUB POLES, WHERE APPLICABLE, SO AS NOT TO CREATE PEDESTRIAN OBSTRUCTIONS. REFER TO THE MUTCD FOR FURTHER GUIDANCE.*
29. *PEDESTRIAN SIGNAL PUSH BUTTONS SHALL COMPLY WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LOCATED WITHIN A HORIZONTAL REACH OF 0" TO 10" AND SHALL BE WITHIN 36" TO 48" ABOVE THE SIDEWALK SURFACE.*
30. *PEDESTRIAN SIGNAL SHALL HAVE 4FTx4FT MIN TURNING SPACE TO PROVIDE ACCESS TO PUSH BUTTONS.*

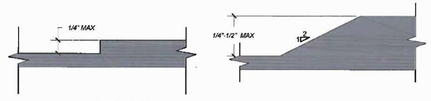
ALTERATIONS TO EXISTING FACILITIES - GENERAL NOTES:

ADDITIONS OR ALTERATIONS TO ANY FACILITY SHALL CONFORM TO THE REQUIREMENTS OF THE NEW CONSTRUCTION STANDARDS WITHIN THE NMDOT PEDESTRIAN ACCESS STANDARDS AND PROWAG 2011 OR LATEST EDITION. ANY DESIGN / CONSTRUCTION DEVIATION THAT IS DEEMED AN VARIANCE OR TECHNICALLY INFEASIBLE BY THE DEFINITION BELOW SHALL REQUIRE SUBMITTAL AND APPROVAL OF ADA DESIGN VARIANCE PROCEDURES.

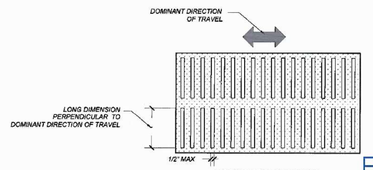
31. *EXCEPTION: IN ALTERATION WORK, IF COMPLIANCE IS TECHNICALLY INFEASIBLE, THE ALTERATION SHALL PROVIDE ACCESSIBILITY TO THE MAXIMUM EXTENT PRACTICABLE. ANY ELEMENTS OR FEATURES OF THE BUILDING OR FACILITY THAT IS BEING ALTERED AND CAN BE MADE ACCESSIBLE SHALL BE MADE ACCESSIBLE WITHIN THE SCOPE OF THE ALTERATION.*

32. *TECHNICAL INFEASIBILITY: MEANS, WITH RESPECT TO AN ALTERATION OF A BUILDING OR A FACILITY, THAT IT HAS LITTLE LIKELIHOOD OF BEING ACCOMPLISHED BECAUSE EXISTING STRUCTURAL CONDITIONS WOULD REQUIRE REMOVING OR ALTERING A LOAD-BEARING MEMBER WHICH IS AN ESSENTIAL PART OF THE STRUCTURAL FRAME; OR BECAUSE OTHER EXISTING PHYSICAL OR SITE CONSTRAINTS PROHIBIT.*

33. *IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSOUNTS.*



VERTICAL SURFACE DISCONTINUITIES
SCALE: NONE REFER TO NOTE 5



HORIZONTAL OPENINGS
SCALE: NONE REFER TO NOTE 6



NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

PEDESTRIAN ACCESS ROUTE
GENERAL NOTES

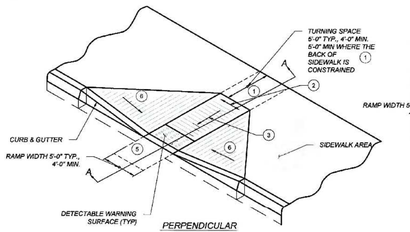
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608-001-1 608-1 of 12

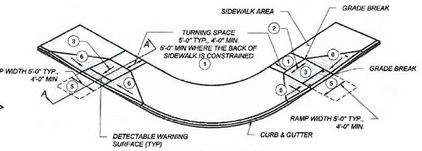
file path

DRAWING SCALE = NOT TO SCALE

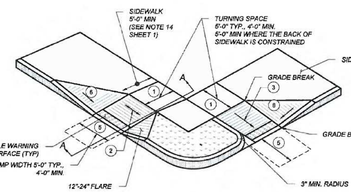
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FILENAME



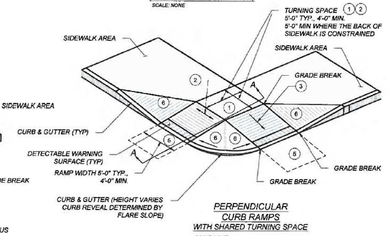
PERPENDICULAR CURB RAMP
SCALE: NONE



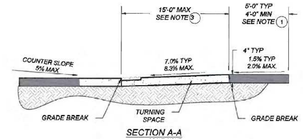
DUAL PERPENDICULAR CURB RAMP
(PREFERRED INSTALLATION)
SCALE: NONE



DUAL PERPENDICULAR CURB RAMP
(ALTERNATE INSTALLATION)
SCALE: NONE



PERPENDICULAR CURB RAMPS
WITH SHARED TURNING SPACE
SCALE: NONE



SECTION A-A
SCALE: NONE



KEYED NOTES

1. *TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMEND 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.*
2. *CROSS SLOPE SHALL BE 2.0% MAX (RECOMMENDED 1.5%). EXCEPTION: THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.*
3. *RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.*
4. *GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.*
5. *COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 5% MAX.*
6. *FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 9%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.*

NOTES:

- (A) *DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.*
- (B) *DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 608-001-8/12 OF THE STANDARD DRAWINGS.*
- (C) *IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.*
- (D) *CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 608004 AND NO SEPARATE PAYMENT WILL BE MADE.*

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

PERPENDICULAR
CURB RAMPS

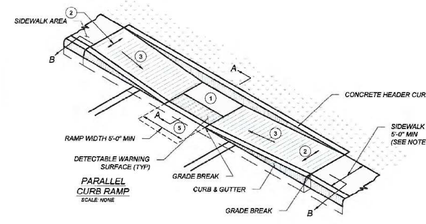
APPROVED: CHIEF ENGINEER — 1-13-15 DATE

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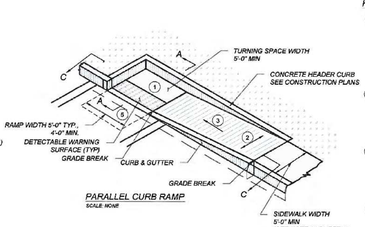
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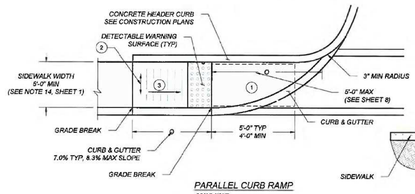
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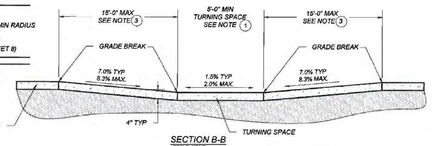
PARALLEL CURB RAMP
SCALE: NONE



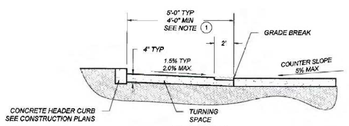
PARALLEL CURB RAMP
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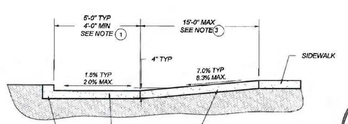
PARALLEL CURB RAMP
SCALE: NONE



SECTION B-B
SCALE: NONE



SECTION A-A
SCALE: NONE



SECTION C-C
SCALE: NONE



NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS (OR CHANGE NOTICES)

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

PARALLEL
CURB RAMPS

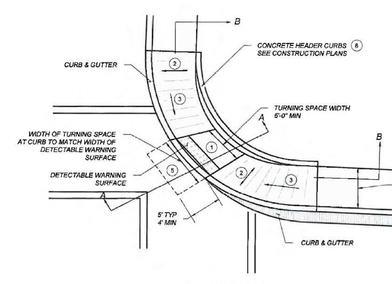
APPROVED: CHIEF ENGINEER — 1-13-15 DATE

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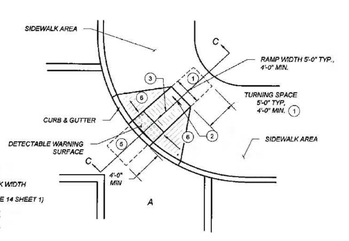
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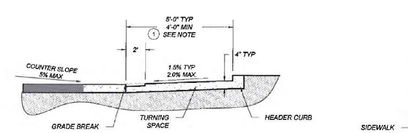
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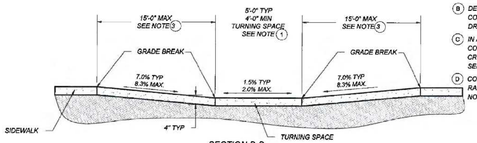
SINGLE DIAGONAL PARALLAL CURB RAMP
SCALE: NONE



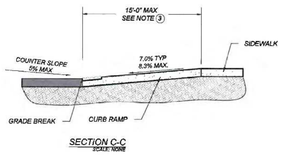
SINGLE DIAGONAL PERPENDICULAR CURB RAMP
SCALE: NONE



SECTION A-A
SCALE: NONE



SECTION B-B
SCALE: NONE



SECTION C-C
SCALE: NONE

KEYED NOTES

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NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

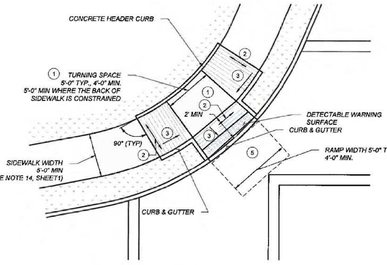
DIAGONAL
CURB RAMPS

APPROVED: CHIEF ENGINEER — 1-13-15 DATE

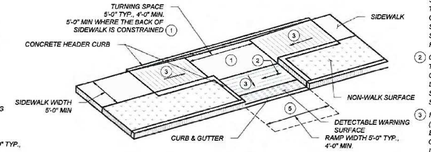
608-001-4 608- 4 of 12

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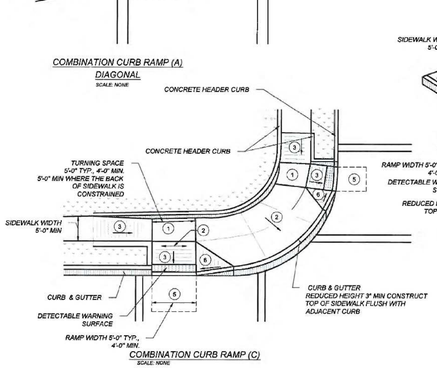
DRAWING SCALE = NOT TO SCALE



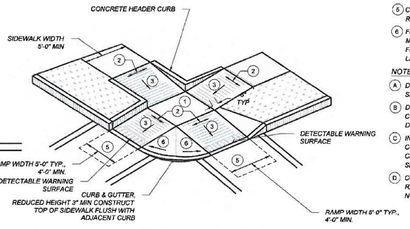
COMBINATION CURB RAMP (A)
DIAGONAL
SCALE: NONE



COMBINATION CURB RAMP (B)
SCALE: NONE



COMBINATION CURB RAMP (C)
SCALE: NONE



COMBINATION CURB RAMP (D)
WITH SHARED TURNING SPACE
SCALE: NONE

KEYED NOTES

1. TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMEND 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.
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6. FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 9%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.

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D. CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 609004 AND NO SEPARATE PAYMENT WILL BE MADE.



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NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

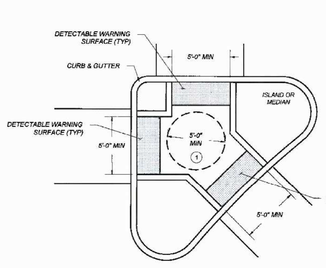
COMBINATION
CURB RAMPS

APPROVED: DESIGN ENGINEER — DATE: 1-13-15

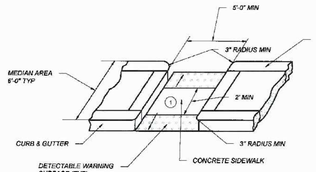
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DRAWING SCALE = NOT TO SCALE



PEDESTRIAN REFUGE ISLAND
CURB RAMP
SCALE: NONE



TYPICAL CUT-THROUGH
PEDESTRIAN REFUGE ISLAND
OPENING WITH CURB SIDES
SCALE: NONE

KEYED NOTES

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NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

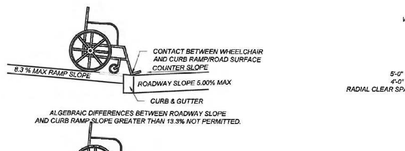
PEDESTRIAN REFUGE ISLAND

APPROVED: DESIGN ENGINEER — DATE: 1-13-15

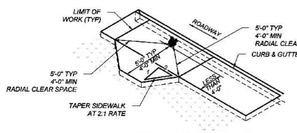
608-001-6 | 608- 6 of 12

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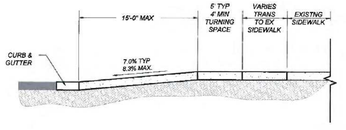
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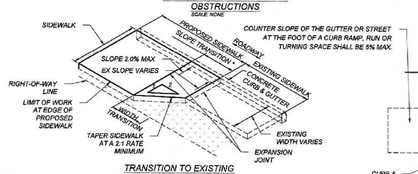


CHANGE OF GRADE
LIMITATIONS
SCALE: NONE

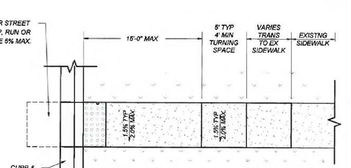


SIDEWALK ADDITION DUE TO
OBSTRUCTIONS
SCALE: NONE





TRANSITION TO EXISTING
SIDEWALK DETAIL
SCALE: NONE



CURB RAMP TRANSITION
TO EXISTING SIDEWALK
DETAIL

MINIMUM SLOPE TRANSITION LENGTH BASED ON THE DIFFERENCE OF PROPOSED SIDEWALK CROSS SLOPE AND EXISTING SIDEWALK CROSS SLOPE AT THE LOCATION OF TIE IN. THIS MINIMUM LENGTH TO BE DETERMINED BY THE FOLLOWING FORMULA: DELTA % SLOPE X 0.5' OR MIN WIDTH OF 1 FT.

THE MINIMUM WIDTH TRANSITION SHALL BE CALCULATED USING THE FOLLOWING FORMULA CHANGE IN WIDTH X 2.

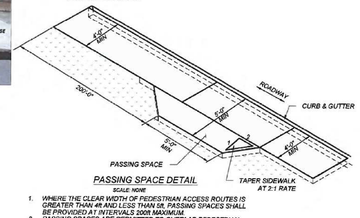
DEPENDING ON WHICH IS LONGEST, EITHER THE SLOPE TRANSITION OR WIDTH TRANSITION WILL CONTROL THE LENGTH OF SIDEWALK TRANSITION.

TRANSITION AREAS SERVE AS TEMPORARY CONNECTIONS OF THE PEDESTRIAN ACCESS ROUTE. FUTURE IMPROVEMENTS TO THE REMAINING PORTION OF EXISTING SIDEWALK SHALL INCLUDE REMOVING THE TRANSITION AREA AND CONSTRUCTING A FULLY COMPLIANT SIDEWALK.



RAMP CROSS SLOPE TRANSITION
TO MATCH ROADWAY PROFILE SLOPE
* SLOPES SHOWN ARE FOR ILLUSTRATION ONLY.

NOTE:
1) CROSS SLOPE OF CURB RAMP AT PEDESTRIAN STREET CROSSING WITHOUT YIELD ON STOP CONTROL, AND AT MID BLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE ARE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.
2) CROSS SLOPE IF CURB RAMP IS AT YIELD OR STOP CONTROL REQUIRES 2% MAX CROSS SLOPE AT CURB LINE



PASSING SPACE DETAIL
SCALE: NONE

1. WHERE THE CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES IS GREATER THAN 4ft AND LESS THAN 5ft, PASSING SPACES SHALL BE PROVIDED AT INTERVALS 200ft MAXIMUM.
2. PASSING SPACES ARE PERMITTED TO OVERLAP PEDESTRIAN ACCESS ROUTES.



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REVISIONS (OR CHANGE NOTICES)			

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

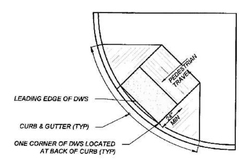
CURB RAMP AND
SIDEWALK
TRANSITION DETAILS

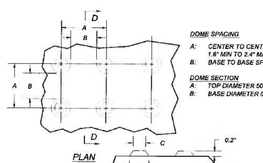
APPROVED: DESIGN ENGINEER — DATE: 1-13-15

608-001-7 | 608- 7 of 12

file path

DRAWING SCALE = NOT TO SCALE





PLAN

SECTION D-D

DOME SPACING
A: CENTER TO CENTER SPACING 1.6" MIN TO 2.4" MAX
B: BASE TO BASE SPACING 0.65" MIN

DOME SECTION
A: TOP DIAMETER 50%-65% OF D
B: BASE DIAMETER 0.9" TO 1.4" MAX

DETECTABLE WARNING SURFACE (DWS)
TRUNCATED DOME DETAILS
SCALE: NONE

DETECTABLE WARNING SURFACE (DWS):

A STANDARDIZED TRUNCATED DOME GRID SURFACE BUILT IN OR APPLIED TO THE PEDESTRIAN ACCESS ROUTE TO WARN VISUALLY IMPAIRED PEOPLE OF HAZARDS. THE SURFACE IS PLACED WHERE DETECTABLE WARNING SURFACE (DWS): A STANDARDIZED TRUNCATED DOME GRID SURFACE BUILT IN OR APPLIED TO THE PEDESTRIAN ACCESS ROUTE TO WARN VISUALLY IMPAIRED PEOPLE OF HAZARDS. THE SURFACE IS PLACED WHERE PEDESTRIANS WILL ENCOUNTER THE PRESENCE OF HAZARDS IN THE LINE OF TRAVEL, SUCH AS THE EDGE OF ROADWAY AND AT-GRADE RAIL CROSSINGS, INDICATING THEY SHOULD STOP AND DETERMINE THE NATURE OF THE HAZARD BEFORE PROCEEDING.

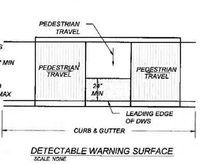
LOCATION:

1. THE DETECTABLE WARNING SURFACE (DWS) SHALL BE 2.0 FT MINIMUM WIDTH AND EXTENDED THE FULL WIDTH OF THE CURB RAMP RUN, TURNING SPACE, BLENDED TRANSITION, AN EXCLUDING ANY THE FLARED SIDES
2. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED TO BE PERPENDICULAR TO THE GRADE BREAK AT THE BACK OF THE CURB.
3. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED TO BE PARALLEL TO THE DIRECTION OF TRAVEL.
4. IF CURB AND GUTTER ARE NOT PRESENT, SUCH AS A SHARED-USE PATH CONNECTION, THE DETECTABLE WARNING SURFACE SHALL BE PLACED AT THE PAVEMENT EDGE.
5. PEDESTRIAN REFUGE ISLANDS SHALL HAVE DETECTABLE WARNINGS. DETECTABLE WARNINGS AT CUT THROUGH ISLANDS SHALL BE SEPARATED BY A 24 INCH MINIMUM LENGTH OF THE WALKWAY WITHOUT MARKINGS.

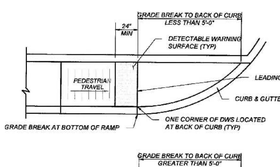
EXCEPTION: DETECTABLE WARNINGS SHALL NOT BE REQUIRED ON CUT THROUGH ISLANDS WHERE THE CROSSING IS LESS THAN 6 FT IN THE DIRECTION OF PEDESTRIAN TRAVEL.

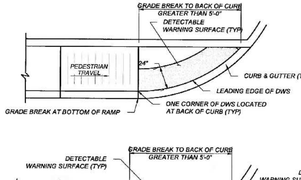
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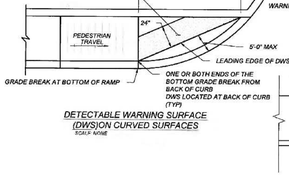
1. DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION OR RECONSTRUCTION OF STREETS, CURBS, OR SIDEWALKS BY ALL PUBLIC AGENCIES AND BY ALL PRIVATE ORGANIZATIONS CONSTRUCTING FACILITIES FOR PUBLIC USE.
2. DETECTABLE WARNING SURFACE SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.
3. ALL PRODUCTS USED FOR DETECTABLE WARNING SURFACES SHALL BE ON THE DEPARTMENT'S APPROVED PRODUCT LIST.



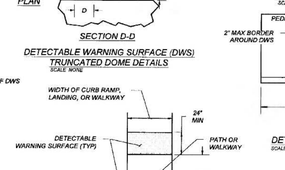
DETECTABLE WARNING SURFACE
SCALE: NONE



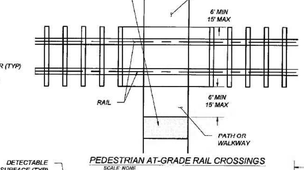




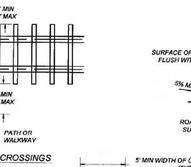
DETECTABLE WARNING SURFACE
(DWS)ON CURVED SURFACES
SCALE: NONE



PEDESTRIAN AT-GRADE RAIL CROSSINGS
SCALE: NONE

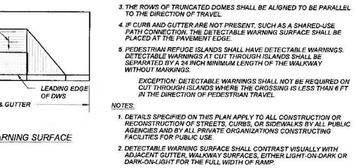


SHARED-USE PATH CONNECTION
SCALE: NONE



MEDIAN CUT-THROUGH
SCALE: NONE

EXCEPTION: IF THE LENGTH BETWEEN TWO DWS SURFACE IS LESS THAN 2' THEN DETECTABLE WARNING SURFACE WILL NOT BE INSTALLED



DETECTABLE WARNING SURFACE
SCALE: NONE



NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

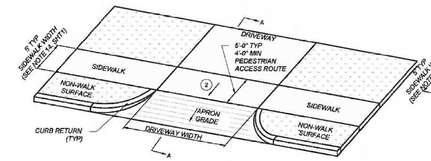
DETECTABLE WARNING
SURFACE

APPROVED: DESIGN ENGINEER — DATE: 1-13-15

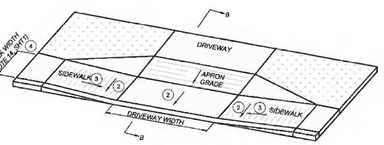
608-001-8 | 608- 8 of 12

file path

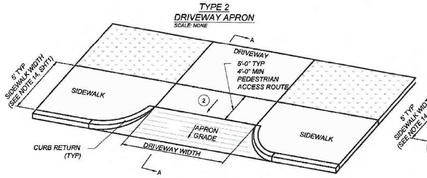
DRAWING SCALE = NOT TO SCALE



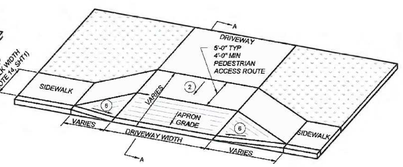
TYPE 2
DRIVEWAY APRON
SCALE: NONE



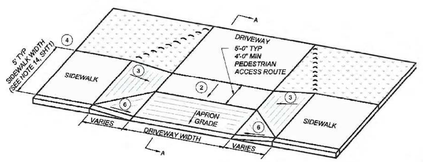
TYPE 3A
DRIVEWAY APRON
SCALE: NONE



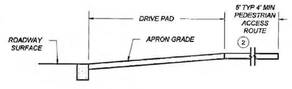
TYPE 2A
DRIVEWAY APRON
SCALE: NONE



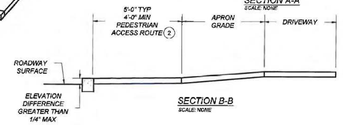
TYPE 2C
DRIVEWAY APRON
SCALE: NONE



TYPE 2B
DRIVEWAY APRON
SCALE: NONE



SECTION A-A
SCALE: NONE



SECTION B-B
SCALE: NONE

KEYED NOTES

1. *TURNING SPACE SHALL HAVE MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.0% (RECOMMEND 1.5%). TURNING SPACE SHALL BE 4.0 FT BY 4.0 FT MIN (RECOMMEND 5.0 FT BY 5.0 FT) AT THE TOP OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, THE TURNING SPACE SHALL BE 4.0 FT MIN BY 5.0 FT MIN. THE 5.0 FT SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.*
2. *CROSS SLOPE SHALL BE 2.0% MAX (RECOMMENDED 1.5%). EXCEPTION: THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.*
3. *RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX. (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.*
4. *GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP'S RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OR RAMP RUNS AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.*
5. *COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 5% MAX.*
6. *FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 9%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.*

NOTES:

A. *DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.*
B. *DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 608-001-9/12 OF THE STANDARD DRAWINGS.*
C. *IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.*
D. *CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 608004 AND NO SEPARATE PAYMENT WILL BE MADE.*

NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			

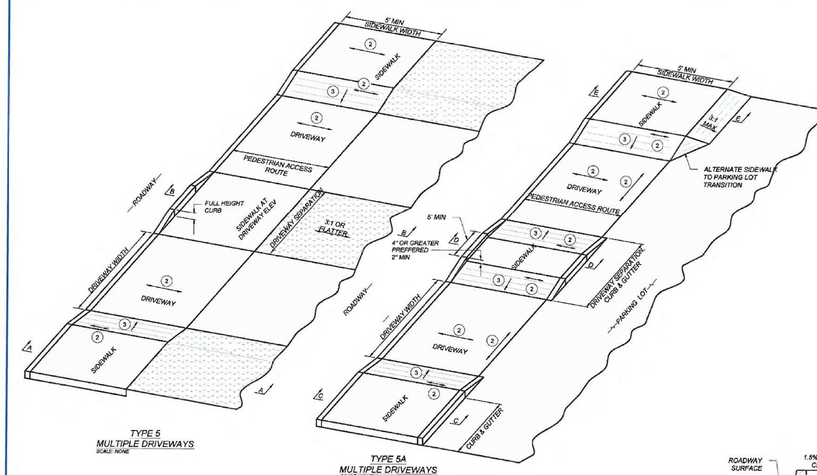
NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

DRIVEWAY APRONS

APPROVED _____ CHIEF ENGINEER 1-13-15 DATE

608-001-9

DRAWING SCALE = NOT TO SCALE



TYPE 5
MULTIPLE DRIVEWAYS
SCALE: NONE

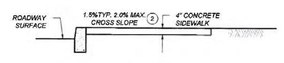
TYPE 5A
MULTIPLE DRIVEWAYS
SCALE: NONE

KEYED NOTES

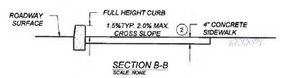
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2. *CROSS SLOPE SHALL BE 2.0% MAX (RECOMMENDED 1.5%). EXCEPTION: THE CROSS SLOPE OF CURB RAMPS AT PEDESTRIAN STREET CROSSING WITHOUT YIELD OR STOP CONTROL, TRAFFIC SIGNALS DESIGNED FOR THE GREEN PHASE, AND AT MIDBLOCK PEDESTRIAN STREET CROSSING, THE CROSS SLOPE IS PERMITTED TO MATCH STREET OR HIGHWAY GRADE.*
3. *RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 % MAX. (RECOMMENDED 7.0%) BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15.0 FT TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAX LENGTH, THE RUNNING SLOPE OF THE CURB RAMP SHALL BE EXTENDED AS FLAT AS MAXIMUM EXTENT PRACTICABLE.*
4. *GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP'S RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS AND TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.*
5. *COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, RUN OR TURNING SPACE SHALL BE 5% MAX.*
6. *FLARED SIDES ARE TO HAVE A SLOPE OF 10% MAX (RECOMMEND 9%), MEASURED PARALLEL TO THE BACK OF THE CURB, UNLESS THE FLARED SIDES ARE PROTECTED FROM CROSS TRAVEL BY LANDSCAPING, STREET FURNITURE, CHAINS, FENCING, OR RAILINGS.*

NOTES:

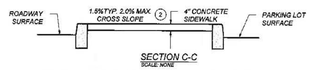
A. *DO NOT SCORE OR MAKE GROOVES IN SLOPED SURFACE. LINES SHOWN ON STANDARD DETAILS ARE FOR ILLUSTRATION ONLY.*
B. *DETAILS OF THE DETECTABLE WARNING SURFACE ARE SHOWN IN THE CONSTRUCTION PLANS AND SHEET 608-001-9/12 OF THE STANDARD DRAWINGS.*
C. *IN ALTERATIONS WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT COMPLIANCE TO PROVIDE A CURB RAMP FOR EACH PEDESTRIAN CROSSING A SINGLE DIAGONAL CURB RAMP SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS.*
D. *CONCRETE HEADER CURBS CONSTRUCTED AS PART OF THE CURB RAMP WILL BE CONSIDERED INCIDENTAL TO ITEM NUMBER 608004 AND NO SEPARATE PAYMENT WILL BE MADE.*



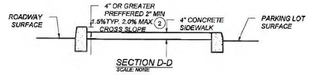
SECTION A-A
SCALE: NONE



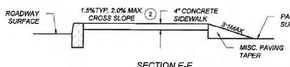
SECTION B-B
SCALE: NONE



SECTION C-C
SCALE: NONE



SECTION D-D
SCALE: NONE



SECTION E-E
SCALE: NONE

NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

DRIVEWAY APRONS

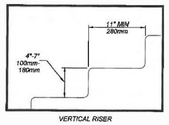
APPROVED _____ CHIEF ENGINEER 1-13-15 DATE

608-001-10

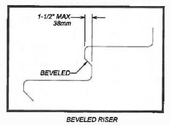
DRAWING SCALE = NOT TO SCALE

STAIRWAY REQUIREMENTS

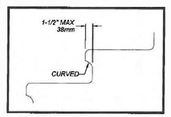
1. *STAIRWAYS SHALL BE 4 FT WIDE MINIMUM BETWEEN HANDRAILS.*
2. *ALL STEPS ON A FLIGHT OF STAIRS SHALL HAVE UNIFORM RISER HEIGHTS AND UNIFORM TREAD DEPTH. RISERS SHALL BE 4 INCHES (100mm) HIGH MINIMUM AND 7 INCHES (180mm) MAXIMUM. TREADS SHALL BE 11 INCHES (280mm) DEEP MINIMUM MEASURED FROM RISER TO RISER.*
3. *OPEN RISERS SHALL NOT BE PERMITTED.*
4. *STAIR TREADS SHALL BE STABLE, FIRM, AND SLIP RESISTANT.*
5. *THE RADIUS OF CURVATURE AT THE LENDING EDGE OF THE TREAD SHALL BE ½ INCH (13mm) MAXIMUM. NOSINGS THAT EXCEED BEYOND RISERS SHALL HAVE THE UNDERSIDE OF THE LANDING EDGE CURVED OR BEVELED. RISERS SHALL BE PERMITTED TO SLOPE UNDER THE TREAD AT AN ANGLE OF 30 DEGREES MAXIMUM FROM THE VERTICAL. THE PERMITTED PROJECTION OF THE NOSING SHALL BE 1 INCHES (38mm) MAXIMUM BEYOND THE TREAD BELOW.*
6. *HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS.*
7. *OUTDOOR STAIRS AND OUTDOOR APPROACHES TO STAIRS SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.*



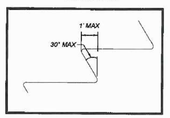
VERTICAL RISER



BEVELED RISER



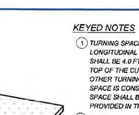
CURVED RISER



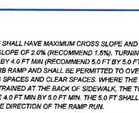
ANGLED RISER

HANDRAIL REQUIREMENTS

1. *HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS AND RAMPS.*
2. *HANDRAILS SHALL BE CONTINUOUS WITHIN THE FULL LENGTH OF EACH STAIR FLIGHT OR RAMP RUN. INSIDE HANDRAILS ON SWITCH BACK OR DOGLEG STAIRS OR RAMPS SHALL BE CONTINUOUS BETWEEN FLIGHTS OR RUNS.*
3. *TOP GRIPPING SURFACES OF HANDRAILS SHALL BE 34 INCHES (865mm) MINIMUM AND 38 INCHES (965mm) MAXIMUM VERTICALLY ABOVE STAIR NOSINGS AND RAMP SURFACES. HANDRAILS SHALL BE AT A CONSISTENT HEIGHT ABOVE STAIR NOSINGS AND RAMP SURFACES.*
4. *CLEAR SPACE BETWEEN HANDRAIL AND WALL SHALL BE 1 INCH (38mm) MINIMUM.*
5. *GRIPPING SURFACES SHALL BE CONTINUOUS WITHOUT INTERRUPTION BY NEW POSTS OTHER CONSTRUCTION ELEMENTS, OR OBSTRUCTIONS.*
   EXCEPTION:
   HANDRAIL BRACKETS OR BALUSTERS ATTACHED TO THE BOTTOM SURFACE OF THE HANDRAIL SHALL NOT BE CONSIDERED OBSTRUCTIONS PROVIDED THEY COMPLY WITH THE FOLLOWING CRITERIA:
   A. NOT MORE THAN 20 PERCENT OF THE HANDRAIL LENGTH IS OBSTRUCTED.
   B. HORIZONTAL PROJECTIONS BEYOND THE SIDES OF THE HANDRAIL OCCUR 2 INCHES (64mm) MINIMUM BELOW THE BOTTOM OF THE HANDRAIL AND
   C. EDGES HAVE 11 INCH (328MM) MINIMUM RADIUS.
6. *HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION WITH AN OUTSIDE DIAMETER OD 1-1/4" or 1.25 INCH (32mm) MINIMUM AND 2 INCH (51mm) MAXIMUM OR SHALL PROVIDE EQUIVALENT GRASPABILITY.*
   EXCEPTION: HANDRAILS WITH OTHER SHAPES SHALL BE PERMITTED PROVIDED THEY HAVE A PERIMETER DIMENSION OF 4 INCH (100mm) MINIMUM AND A 6.25 INCH (160mm) MAXIMUM AND PROVIDED THEIR LARGEST CROSS SECTION DIMENSION IS 2.25 INCH (57mm) MAXIMUM.
7. *HANDRAILS AND ANY WALL OR OTHER SURFACES ADJACENT TO THEM SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE 1 INCH (32mm) MINIMUM RADIUS.*
8. *HANDRAILS SHALL NOT ROTATE WITHIN THEIR FITTINGS.*
9. *HANDRAILS FOR STAIRS AND RAMPS SHALL HAVE EXTENSIONS.*
   EXCEPTIONS:
   A. EXTENSIONS ARE NOT REQUIRED WHERE CONTINUOUS HANDRAILS AT THE INSIDE TURN OF STAIRS AND RAMPS
   B. IN ALTERATIONS FULL EXTENSIONS OF HANDRAILS SHALL NOT BE REQUIRED WHERE SUCH EXTENSIONS WOULD BE HAZARDOUS OR IMPOSSIBLE DUE TO PLAN CONFIGURATION.
10. *RAMP HANDRAILS SHALL EXTEND HORIZONTALLY 12 INCHES (305mm) MINIMUM BEYOND OF RAMP RUNS SUCH EXTENSION SHALL RETURN TO WALL GUARD OR THE WALKING SURFACE OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT RAMP RUN.*
11. *AT THE TOP OF A STAIR FLIGHT HANDRAILS SHALL EXTEND HORIZONTALLY ABOVE THE LANDING FOR 12 INCHES (305mm) MINIMUM BEGINNING DIRECTLY ABOVE THE FIRST RISER NOSING. SUCH EXTENSIONS SHALL RETURN TO A WALL, OR THE WALKING SURFACE OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.*
12. *AT THE BOTTOM OF THE STAIR FLIGHT HANDRAILS SHALL EXTEND AT THE SLOPE OF THE STAIR FLIGHT FOR A HORIZONTAL DISTANCE AT LEAST EQUAL TO ONTREAD DEPTH BEYOND THE LAST RISER NOSING. EXTENSIONS SHALL RETURN TO A WELL GUARD, OR THE LANDING SURFACE, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT.*



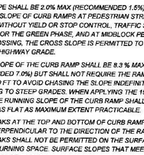
STAIR HANDRAIL HEIGHT



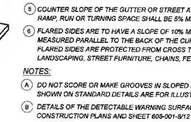
RAMP HANDRAIL HEIGHT



TOP HANDRAIL EXTENSION AT STAIRS



BOTTOM HANDRAIL EXTENSION AT STAIRS



HANDRAIL CLEARANCE

NO.	DATE	REV. BY	DESCRIPTION
REVISIONS (OR CHANGE NOTICES)			

NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

PEDESTRIAN ACCESS DETAILS
STAIRWAY AND HANDRAILS

APPROVED _____ CHIEF ENGINEER 1-13-15 DATE

608-001-11

DRAWING SCALE = NOT TO SCALE

ACCESSIBLE ROUTES:

ACCESSIBLE EXTERIOR ROUTES SHALL BE PROVIDED FROM TRANSPORTATION STOPS, ACCESSIBLE PARKING AND ACCESSIBLE PASSENGER LOADING ZONES AND PUBLIC SIDEWALKS TO THE ACCESSIBLE BUILDING ENTRANCE THEY SERVE. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE BUILDING ENTRANCE OR FACILITY

ACCESSIBLE PARKING REQUIREMENTS:

1. *EACH FACILITY SHALL PROVIDE ACCESSIBLE PARKING SPACES IN COMPLIANCE WITH THE FOLLOWING TABLE:*

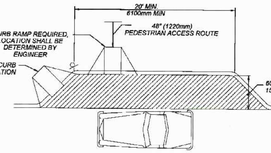
NUMBER OF ACCESSIBLE PARKING SPACES

TOTAL PARKING SPACES	TOTAL REQUIRED ACCESSIBLE PARKING SPACES	NUMBER REQUIRED TO BE VAN ACCESSIBLE
1-25	1	1
26-35	2	1
36-50	3	1
51-100	4	1
101-300	6	2
301-500	12	2
501-900	16	3
901-1000	20	4
OVER 1,000	20 SPACES PLUS 1 SPACE FOR EVERY 100 SPACES, OR FRACTION THEREOF, OVER 1,000	1 OF EVERY 6 ACCESSIBLE PARKING SPACES, OR FRACTION THEREOF

2. *CAR SPACES SHALL BE 96 INCHES (2440 mm) WIDE MINIMUM AND VAN PARKING SPACES SHALL BE 132 INCHES AND SHALL HAVE AN ADJACENT ACCESS AISLE.*
3. *ACCESS AISLES SERVING PARKING SPACES SHALL CONNECT TO THE BUILDING OR FACILITY ENTRANCE BY AN ACCESSIBLE SIDEWALK. TWO PARKING SPACES SHALL BE PERMITTED TO SHARE A COMMON ACCESS AISLE. THE VAN ACCESS AISLE IS PREFERRED TO BE AT THE RIGHT SIDE (PASSENGER SIDE) OF THE PARKING SPACE. (AN ACCESSIBLE SIDEWALK IS 60 INCHES (1525mm) MINIMUM CLEAR WIDTH, 5:0:1 MAXIMUM CROSS SLOPE WITH A RUNNING SLOPE OF 20:1 MAXIMUM OR THE RUNNING SLOPE MAY FOLLOW THE ADJACENT ROAD PROFILE GRADE.) PARKED VEHICLE OVERHANGS SHALL NOT REDUCE THE MINIMUM 48 INCH CLEAR WIDTH OF AN ACCESSIBLE ROUTE.*
4. *ACCESS AISLES SERVING CAR PARKING SPACES SHALL BE 60 INCHES (1525mm) WIDE MINIMUM. ACCESS AISLES SERVING VAN PARKING SPACES SHALL BE 96 INCHES (2440mm) WIDE MINIMUM.*
5. *ACCESS AISLES SHALL EXTEND THE FULL LENGTH OF THE PARKING SPACES THEY SERVE.*
6. *PARKING SPACES AND ACCESS AISLES SHALL HAVE SURFACE SLOPES NOT STEEPER THAN 50:1. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE PARKING SPACES THEY SERVE.*
7. *PARKING SPACES FOR VANS SHALL HAVE A VERTICAL CLEARANCE OF 98 INCHES (2490mm) MINIMUM AT THE SPACE AND ALONG THE VEHICULAR ROUTE THERETO.*
8. *EACH ACCESSIBLE PARKING SPACE SHALL BE IDENTIFIED BY A SIGN ON A POST. SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. THE CLEARANCE TO THE BOTTOM OF THE SIGN (R7-8) SHALL BE AT LEAST 7 FEET (2100mm). LOCATED AT THE HEAD OF THE PARKING SPACE VAN ACCESSIBLE PARKING SPACES SHALL HAVE AN ADDITIONAL SIGN (R7-8A) MOUNTED BELOW THE INTERNATIONAL SYMBOL OF ACCESS IDENTIFYING THE SPACE AS "VAN ACCESSIBLE." SIGNS MUST INCLUDE THE LANGUAGE "VIOLATORS ARE SUBJECT TO A FINE AND/OR TOWING .*
9. *PARKING SPACE AND ACCESS AISLES SHALL HAVE OSHA SAFETY BLUE STRIPING. STRIPING SHALL BE 4 INCHES (100mm) WIDE ACCESS AISLES STRIPING SHALL BE 30 INCHES (760mm) ON CENTER ACCESS AISLE SHALL HAVE THE WORD "NO PARKING" IN CAPITAL LETTER OF WHICH SHALL BE AT LEAST ONE FOOT HIGH AND AT LEAST TWO INCHES WIDE PLACED AT THE REAR OF THE PARKING SPACE SO AS TO BE CLOSE TO WHERE AN ADJACENT VEHICLES REAR TIRES WOULD BE PLACED.*
10. *EACH ACCESSIBLE PARKING SPACE SHALL INCLUDE, CENTERED AT THE FOOT, A PAVEMENT MARKING OF THE INTERNATIONAL SYMBOL OF ACCESSIBILITY TO BE CLEARLY VISIBLE WHEN THE SPACE IS OCCUPIED.*

ACCESSIBLE PASSENGER LOADING ZONE REQUIREMENTS:

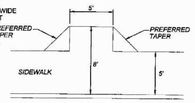
1. *PASSENGER LOADING ZONES SHALL PROVIDE A 60 INCH (1525mm) WIDE ACCESS AISLE ADJACENT AND PARALLEL TO A VEHICLE PULL-UP SPACE. ACCESS AISLES SHALL BE 20 FEET (6100mm) LONG MINIMUM.*
2. *ACCESS AISLES SHALL BE PART OF THE ACCESSIBLE ROUTE TO THE BUILDING OR FACILITY ENTRANCE, AND MARKED TO DISCOURAGE PARKING.*
3. *VEHICLE PULL-UP SPACES IN PASSENGER LOADING ZONES AND ACCESS AISLES SHALL HAVE SURFACE SLOPES NOT STEEPER THAN 50:1. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE VEHICLE PULL-UP SPACE THEY SERVE.*
4. *VERTICAL CLEARANCE OF 114 INCHES (2895mm) MINIMUM SHALL BE PROVIDED AT PASSENGER LOADING ZONES AND ALONG VEHICLE ACCESS ROUTES TO SUCH AREAS FROM SITE ENTRANCES*
5. *EACH ACCESSIBLE PASSENGER LOADING ZONE SHALL BE IDENTIFIED BY A SIGN ON A POST. SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.*



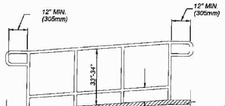
ACCESSIBLE PASSENGER LOADING ZONE
PLAN VIEW

TRANSIT STOP REQUIREMENTS

1. *TRANSIT STOPS SHOULD BE LOCATED SO THAT THERE IS A LEVEL AND STABLE SURFACE FOR BOARDING VEHICLES.*
2. *LOCATING TRANSIT STOPS AT SIGNALIZED INTERSECTIONS INCREASE THE USABILITY FOR PEDESTRIANS WITH DISABILITIES.*
3. *WHERE SECURITY BOLLARDS ARE INSTALLED AT TRANSIT STOPS, THEY MUST NOT OBSTRUCT THE CLEAR SPACE AT BOARDING AND ALIGHTING AREAS OR REDUCE THE REQUIRED CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTES.*
4. *TRANSIT STOPS SHALL COMPLY WITH PROWAG SECTION R 308 TRANSIT STOPS AND TRANSIT SNELTERS.*



TRANSIT STOP
PLAN VIEW



RAMP

RAMP REQUIREMENTS:

1. *RAMP RUNS SHALL HAVE A RUNNING SLOPE GREATER THAN 1:20 AND NOT STEEPER THAN 1:12. THE EXCEPTION SHALL REMAIN AS SHOWN, INCLUDING THE TABLE FOR EXISTING BUILDINGS AND FACILITIES.*
2. *RAMP RUNS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 12:1 EXCEPTION: RAMPS IN OR ON EXISTING BUILDINGS OR FACILITIES SHALL BE PERMITTED TO HAVE SLOPES STEEPER THAN 12:1 AND SHALL COMPLY WITH THE FOLLOWING TABLE WHERE SUCH SLOPES STEEPER THAN 8:1 SHALL NOT BE PERMITTED.*

TABLE FOR EXISTING SITES, BUILDINGS AND FACILITIES

SLOPE	MAXIMUM RISE
STEEPER THAN 10:1 BUT NOT STEEPER THAN 8:1	3 INCHES (76mm)
STEEPER THAN 12:1 BUT NOT STEEPER THAN 10:1	6 INCHES (150mm)

3. *CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 50:1.*
4. *PLOOR OR GROUND SURFACES OF RAMP RUN SHALL BE STABLE, FIRM, AND SLIP RESISTANT.*
5. *THE CLEAR WIDTH OF A RAMP RUN SHALL BE 48 INCHES (915mm) MINIMUM MEASURED BETWEEN HANDRAILS.*
6. *THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES (760mm) MAXIMUM.*
7. *RAMPS SHALL HAVE LANDINGS AT THE BOTTOM AND TOP OF EACH RUN. LANDINGS SHALL COMPLY WITH THE FOLLOWING:*
   A. LANDINGS SHALL HAVE A SOPE NOT STEEPER THAN 50:1.
   B. CLEAR WIDTH OF LANDINGS SHALL BE AT LEAST AS WIDE AS THE WIDEST RAMP RUN LEADING TO THE LANDING.
   C. LANDING LENGTH SHALL BE 60 INCHES (1525mm) MINIMUM CLEAR.
   D. RAMPS THAT CHANGE DIRECTION AT LANDINGS SHALL HAVE A 60 INCH BY 60 INCH (1525mm) MINIMUM LANDING.
   E. WHERE DOORWAYS ARE ADJACENT TO A RAMP LANDING, MANEUVERING CLEARANCES SHALL COMPLY WITH 2010 ANNDRD/ADS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN (2010 ADA) SECTION 404.
8. *RAMPS WITH A RISE GREATER THAN 6 INCHES (150mm) SHALL HAVE HANDRAILS. HANDRAILS SHALL NOT REDUCE THE REQUIRED CLEARANCES OF A RAMP RUN OR LANDINGS.*
9. *EDGE PROTECTION SHALL BE PROVIDED ON EACH SIDE OF RAMP RUNS AND AT EACH SIDE OF RAMP LANDINGS.*

   EXCEPTIONS:
   A. RAMPS NOT REQUIRED TO HAVE HANDRAILS WHERE SIDE FLARES ARE PROVIDED.
   B. SIDES OF RAMP LANDINGS SERVING AN ADJOINING RAMP RUN OR STAIRWAY.
   C. SIDES OF RAMP TURN SPACE HAVING A VERTICAL DROP-OFF OF 1/2 INCH (13mm) MAXIMUM WITHIN 10 INCHES (255mm) HORIZONTALLY OF THE MINIMUM LANDING AREA.
10. *EDGE PROTECTION MAY BE PROVIDED BY EXTENDING A PLOOR OR GROUND SURFACE, OF THE RAMP RUN OR LANDING, 12 INCHES (305mm) MINIMUM BEYOND THE INSIDE FACE OF A HANDRAIL OR AN EDGE PROTECTION CURB OR BARRIER SHALL BE PROVIDED THAT PREVENTS THE PASSAGE OF A 4-INCH (100mm) DIAMETER SPHERE BELOW A HEIGHT OF 4 INCHES (100mm).*
11. *OUTDOOR RAMPS AND APPROACHES TO RAMPS SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.*

NO.	DATE	REV. BY	DESCRIPTION
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NEW MEXICO
DEPARTMENT OF TRANSPORTATION
STANDARD DRAWING

PEDESTRIAN ACCESS DETAILS PARKING
AND PASSENGER LOADING ZONES

APPROVED _____ CHIEF ENGINEER 1-13-15 DATE

608-001-12

DRAWING SCALE = NOT TO SCALE