WARE MALCOMB

ARCHITECTURE
PLANNING
INTERIORS
CIVIL ENGINEERING
BRANDING
BUILDING MEASUREMENT

The Craftsman on Elliot
RE: CASE # **ZON23-00343** | **DRB23-00342**

Project Narrative:

This narrative is intended to supplement and highlight the design documents that are being submitted as part of the Application package for the project currently known as "**The Craftsman on Elliot**." The project is located at the northwest corner of Elliot and Hawes Roads and is more specifically identified as Maricopa County Assessor Parcel (APN 304-04-031).

In response to Planning Department and Council comments, The Craftsman on Elliot is resubmitted with enthusiasm. The site layout and design highlights a vertical mixed-use development built on a unified neighborhood concept.

Site Overview:

The ±22.46 gross acres (±19.26 net acres) property is currently vacant land with MX zoning. While there are a small number of multi-family and retail / commercial developments under construction within the immediate area, much of the existing development is in the warehousing & manufacturing sectors. The proposed development strives to help balance the demand for the much-needed housing supply and to provide consumer level retail options for all developments within this area of Mesa.

The Development:

The proposed development is a mixed-use project with 65 percent of the site area allocated to multi-family use and 35 percent for a mixed and dedicated retail/commercial use. The site has been designed to engage the connecting roadways, commercial activity and the residential tenant in a dynamic manner that culminates with a thriving and exciting user experience. Site entries and circulation are inviting and intuitive for visitors, residents, solid-waste porter and collection services, and emergency personnel alike.

A full access entry is proposed along the Elliot Corridor to promote success of the mixed-use development requirements. Additionally, the site has been designed to consider programmatic clarity, site security, pedestrian accessibility, service vehicles, refuse and fire service accessibility. Visually contrasting hardscaped pedestrian crossings, 26' minimum fire lanes that front buildings, an enhanced "main street" streetscape, and refuse container placement that minimizes project disruption are integral design components.

Site enhancements include Landscaped plazas, outdoor patio spaces for all users, an inviting vegetation palette, generous shading, vertical mixed-use retail neighborhood, and tenant amenities.

The multi-family, commercial, and mixed-use buildings are envisioned to utilize a consistent modern agrarian style design vocabulary. This style was selected as it provides materiality compliance per the City of Mesa's design

guidelines and pays homage to the local agricultural and ranching history with an updated clean aesthetic.

Open Space: Project supports Hawes Crossing PAD requirement of 2% site area dedicated to open space. Please refer to Project Drawings, DR050 – Overall Site Plan, for site area detail.

Residential:

The proposed net residential density of (386) Dwelling Units (DU) at (17.2) du/ac within the entire parcel area supports a pedestrian oriented development along the Elliot Corridor intermixed with key amenities, retail/restaurant, and an open space plan with urban parks.

Based on market studies and demand studio; one and two-bedroom; and live/work units are provided. The spacious patio design provided to each unit, coupled with extensive use of overhangs, shading and glazing further enhances residential quality of life and the visual interest.

Resident amenities feature a fitness center, clubhouse, active and passive recreation outdoor opportunities, pet parks, and private garage/storage buildings. All buildings will be access controlled for residents only. (663) dedicated spaces are provided at a (1.72) ratio to unit count in a mix of surface, covered, and detached (private) garage. The planned parking ratio is in consideration of the project's unit mix and intent of the pedestrian-oriented MX-U district.

The residential development consists of:

- (3) Apartment buildings of the same plan/configuration
  - 4-Story, (22,000) GSF residential with (88) DU each.
- (1) Mixed-use Apartment building with a two-tenant retail shell at ground floor
  - 4-Story, (19,200) GSF residential with (84) DU
- (4) Carriage House buildings of the same plan/configuration
  - 2-Story, (1,600) GSF residential over garage with (2) DU each
- (1) Mixed-use building with a six-tenant retail shell at ground floor
  - 2-Story, (11,000) GSF residential with (12) DU over retail
- (1) Live/Work building with (4) dedicated Live/Work units at ground floor
  - 2-Story, (22,000) GSF residential with (18) DU
- (5) Detached Residential Garages
  - 1-Story, (10) bay with (1) ADA bay each

Please refer to Project Drawings, DR010 and DR050 for comprehensive DU and residential project data.

Retail / Commercial:

Five retail / commercial buildings are proposed along Elliot Road. Urban Plazas and patio are set amongst the buildings to enhance the patron and pedestrian experience to and through the site. Elliot Road currently experiences a steady flow of traffic which is expected to increase as the vacant and underutilized land in this area develops making this relationship ideal for commercial activity.

The Commercial development consists of:

- (2) Office buildings of the same plan/configuration
  - 1-Story Office Buildings (A and B): (7,500) GSF each / (15,000) GSF total
- (1) Restaurant building pad along the Elliot Corridor frontage with patio
  - 1-Story (6,000) GSF restaurant with an additional (2,250) SF of outdoor patio.
- (1) Mixed-Use Building with a six-tenant retail shell at ground floor
  - 2-Story (11,000) GSF retail
- (1) Retail/Limited Restaurant
  - 1-Story (5,000) GSF split between a proposed retail and limited-use restaurant (drive-thru) tenant

Please refer to Project Drawings, DR050 for comprehensive commercial project data.

Council Use Permit

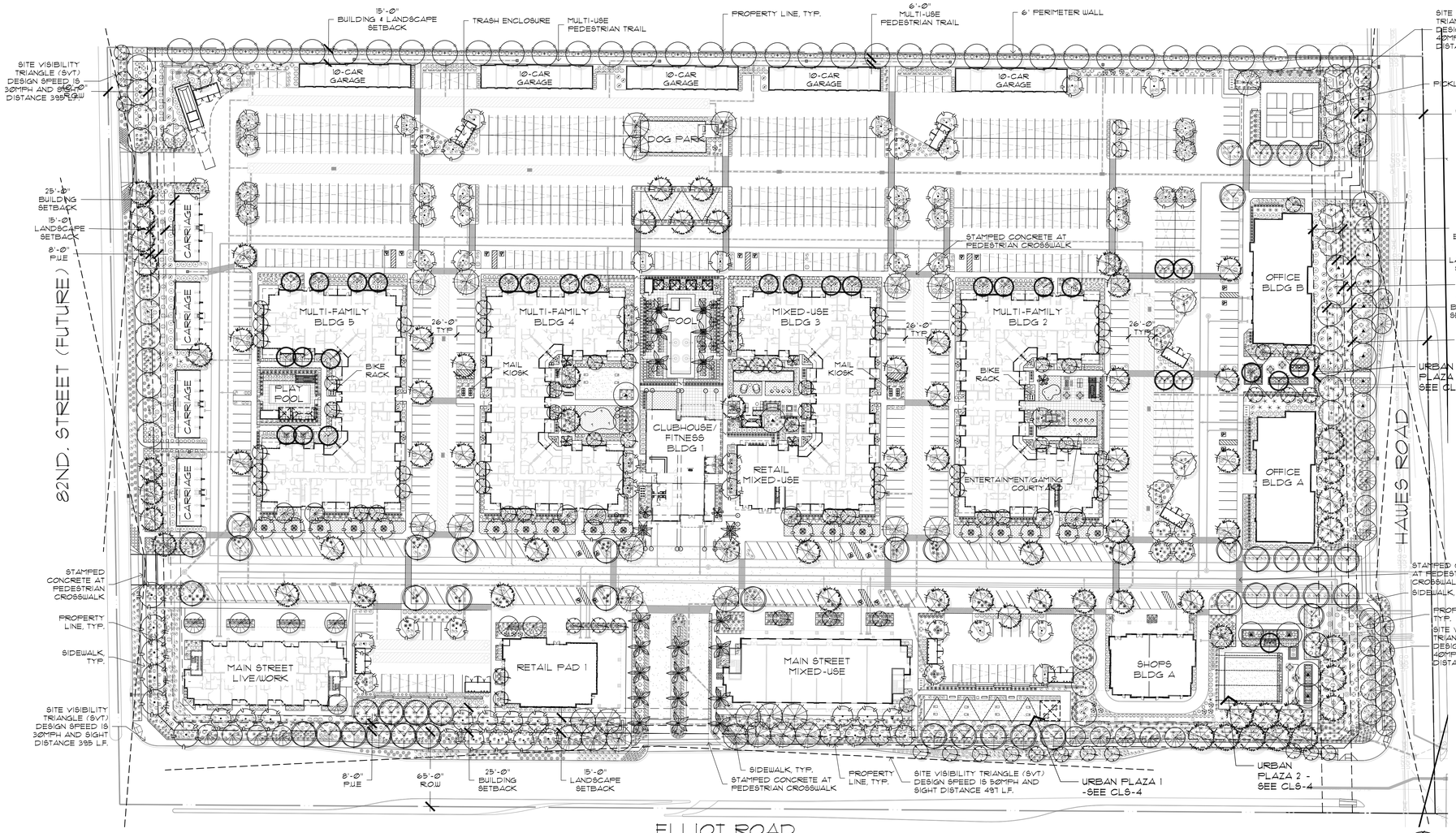
Large Commercial Developments: In accordance with MZO §11-31-16, a Council Use Permit is requested. This narrative, the provided Good Neighbor policy, and Project Drawings provide verification of criteria for review in accordance with the criteria for review of council use permit.

In Closing:

Ware Malcomb is looking forward to work with the City of Mesa on this high-end and exciting development. On behalf of the Client, Ware Malcomb has gone above and beyond the City's minimum application requirements so that the development's quality is conveyed early, thereby reducing overall time spent on Staff reviews. We look forward to moving ahead with the next steps in the design and entitlements process.

Sincerely,

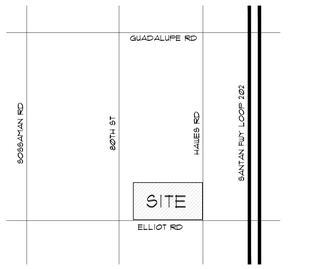
Cory Bruce
Senior Project Manager
D 602.641.7078 P 480.767.1001 x1976
2777 E. Camelback Rd, Suite 325, Phoenix, AZ 85016
cbruce@waremalcomb.com



CONCEPTUAL LANDSCAPE PLAN

SCALE: 1"=50'-Ø"

0 25' 50' 100' NORTH



VICINITY MAP

N.T.S NORTH

PLANT SCHEDULE

BOTANICAL NAME	COMMON NAME	SIZE	QTY	COMMENTS
TREES				
Acacia aneura	Mulga Acacia	24" Box	40	Standard Trunk Dense Canopy
Caesalpinia cacalaco	Cascalote	24" Box	30	Standard Trunk Dense Canopy
Chilopsis linearis	Desert Willow	24" Box 36" Box	73 12	Multi - Trunk Size Per Plan
Chamaerops humilis	Mediterranean Fan Palm	24" Box	7	ET Multi - Trunk, Dense Canopy
Chitalpa tashkentensis	Chitalpa	24" Box	28	OT Multi - Trunk, Dense Canopy
Dalbergia sissoo	Indian Rosewood	24" Box	56	Standard Trunk Dense Canopy
Parkinsonia praecox	Palo Brea	24" Box	22	Standard Trunk Dense Canopy
Phoenix dactilifera	Date Palm	18' C.T.H.	19	ET Matching Form Diamond Cut
Pistacia X 'Red Push'	Red Push Pistache	24" Box	71	Standard Trunk Dense Canopy
Prosopis velutina	Velvet Mesquite	24" Box	12	ST Multi - Trunk Dense Canopy
Quercus virginiana	Southern Live Oak	24" Box	100	Standard Trunk Dense Canopy
Ulmus parvifolia	Evergreen Elm	24" Box	45	ST Standard Trunk Dense Canopy
Washingtonia 'filibusta'	Hybrid Fan Palm	22' C.T.H.	2	Matching Form Skirted
ACCENTS/VINES				
Aloe barbadensis	Medicinal Aloe	5 Gal.	400	SS As Per Plan
Agave 'Blue Glow'	Blue Glow Agave	5 Gal.	141	MS As Per Plan
Asclepias subulata	Desert Milkweed	5 Gal.	78	MS As Per Plan
Asparagus densiflorus 'Foxtail'	Asparagus Fern	5 Gal.	93	SS As Per Plan
Bougainvillea hybrid 'Torch Glow	Bougainvillea Torch Glow	5 Gal.	339	MS As Per Plan
Dasylirion quadrangulatum	Toothless Spoon	5 Gal.	272	MS As Per Plan
Dasylirion wheeleri	Desert Spoon	5 Gal.	213	LS As Per Plan
Hesperaloe funifera	Giant Hesperaloe	5 Gal.	106	MS As Per Plan
Hesperaloe parviflora 'Perpa'	Brakelights Red Yucca	5 Gal.	484	SS As Per Plan
Trachelospermum jasmicides	Star Jasmine	15 Gal.	4	Train to Structure
SHRUBS				
Caesalpinia mexicana	Mexican Bird of Paradise	5 Gal.	38	LS As Per Plan
Dodonaea viscosa 'Purpurea'	Purple Hopseed Bush	5 Gal.	338	LS As Per Plan
Eremophila hygrophana	Blue Bells	5 Gal.	782	MS As Per Plan
Myrtus communis 'Compacta'	Dwarf Myrtle	5 Gal.	443	SS As Per Plan
Ruellia peninsularis	Baja Ruellia	5 Gal.	684	MS As Per Plan
Russelia equisetiformis	Coral Fountain	5 Gal.	412	MS As Per Plan
Tecoma stans	Yellow Bells	5 Gal.	118	MS As Per Plan
Tecoma stans 'Orange Jubilee'	Orange Jubilee	5 Gal.	192	LS As Per Plan
GROUND COVERS				
Acacia redolens 'Desert Carpet'	Prostrate Acacia	1 Gal.	299	SS As Per Plan
Callistemon 'Little John'	Dwarf Bottlebrush	1 Gal.	549	SS As Per Plan
Convovulus cneorum	Bush Morning Glory	1 Gal.	94	EG As Per Plan
Lantana hybrid 'New Gold'	New Gold Lantana	1 Gal.	413	EG As Per Plan
Lantana montevidensis	Purple Trailing Lantana	1 Gal.	1,093	EG As Per Plan
Eremophila glabra 'Mingenew Gold'	Outback Sunrise	1 Gal.	1,436	SS As Per Plan
MISCELLANEOUS				
DG	Decomposed Granite - 1/2" Screened 'Caramel' or equal 2" Depth in All Planting Areas (Typ.) - +/- 220,264 S.F.			
✦	Dictates plants not on the Hawes Crossing PAD Plant List			

CITY OF MESA NOTES

1. LANDSCAPE CONTRACTOR SHALL CONFIRM LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION AND SHALL BE RESPONSIBLE FOR THE FOLLOWING:
   A. DAMAGES TO SUCH UTILITIES CAUSED AS A RESULT OF THE CONTRACTOR'S ACTIVITIES
   B. DAMAGES TO EXISTING WALKS, WALLS, DRIVES, CURBS, ETC.
   C. INSPECTING THE SITE IN ORDER TO BE FULLY AWARE OF EXISTING CONDITIONS PRIOR TO SUBMITTING A BID.
2. INSTALLATION OF ALL LANDSCAPE AND IRRIGATION MATERIALS SHALL COMPLY WITH SECTIONS 424, 425, 757, AND 795 OF THE MAG STANDARD SPECIFICATIONS AS AMENDED BY THE CITY OF MESA.
3. CONTRACTOR SHALL REPAIR ANY DAMAGE MADE TO THE EXISTING SPRINKLER SYSTEM TO THE SATISFACTION OF THE CITY AT NO ADDITIONAL COST TO THE CITY.
4. LANDSCAPE REMOVAL IS A NON-PAY ITEM UNLESS OTHERWISE NOTED.
5. ALL EXISTING VEGETATION, WEEDS, DEBRIS, ETC. SHALL BE REMOVED FROM PROJECT AREA AND DISPOSED OF PROPERLY OFF THE SITE AT THE CONTRACTOR'S EXPENSE (SCARIFY EXISTING SUBGRADE, MINIMUM 6" DEPTH.)
6. DAMAGE TO TURF SHALL BE REPAIRED BY CONTRACTOR, I.E., RUTS FILLED WITH CLEAN SOIL, COMPACTED TO MATCH SURROUNDING GRADES. EXCESS SOIL, ROCK, ETC. SHALL BE REMOVED TO LEAVE THE SITE CLEAN.
7. ALL PLANT MATERIAL, OTHER THAN TREES, SHALL CONFORM TO GRADING, TYPE, ETC. AS SET FORTH IN THE AMERICAN STANDARD FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN. ALL TREES SHALL CONFORM TO THE CURRENT ARIZONA NURSERY ASSOCIATION TREE SPECIFICATIONS AND MAG SPEC 795.1, SHOULD ANY CONFLICTS IN THE SPECIFICATIONS OCCUR, THE ARIZONA NURSERY ASSOCIATION'S SPECIFICATIONS SHALL PREVAIL.
8. CITY RESERVES THE RIGHT TO INSPECT SHRUBS AND CONTAINERED TREES FOR CONDITION OF ROOT BALLS, FOR ANY SUCH INSPECTIONS WHICH MAY DESTROY ROOT BALL, CONTRACTOR SHALL SUPPLY ADDITIONAL PLANT AT NO COST TO CITY.
9. PLANT PITS SHALL BE INSPECTED BY CITY PRIOR TO PLANTING BY THE CONTRACTOR BY REQUESTING AN INSPECTION 48 HOURS IN ADVANCE.
10. ROUGH AND FINE GRADING TO ESTABLISH UNIFORM SMOOTH GRADE IS INCLUDED IN THIS PROJECT.
11. SOIL TEST FOR FERTILITY AND ADDITIVE RECOMMENDATIONS (FOR TURF AND ORNAMENTALS) SHALL BE COMPLETED BY CONTRACTOR TO DETERMINE IF ADDITIVES ARE REQUIRED. CONTRACTOR SHALL PROVIDE COPY OF SOIL TEST RESULTS FOR REVIEW AND APPROVAL TO ENGINEERING INSPECTOR AT LEAST SEVEN DAYS PRIOR TO ANTICIPATED PLANTING. AFTER APPROVAL BY THE CITY, THE CONTRACTOR SHALL PROVIDE AND INCORPORATE CITY ADDITIVES REQUIRED PRIOR TO OR AT TIME OF PLANTING.
12. PLANT PIT SOIL MIXTURE SHALL CONSIST OF FOUR AND ONE HALF PARTS NATURAL FERTILE, FRIABLE SOIL AND ONE PART HUMUS BY VOLUME, THOROUGHLY MIXED PRIOR TO BACKFILLING IN PITS. BACKFILLING SHALL BE IN 6" LIFTS WITH EACH LIFT WATER SETTLED WITHOUT PUDDLING.
13. CONTRACTOR SHALL STAKE TREE AND SHRUB LOCATIONS FOR 5-GALLON PLANTS AND LARGER. STAKES SHALL BE MARKED WITH PLANT NAME OR PLANT LEGEND ITEM NUMBER FROM PLANS.
14. ALL EXISTING (GAS, ELECTRIC, WATER, ETC.) COVERS AND BOXES SHALL REMAIN UNCOVERED. CONTRACTOR TO ADJUST TO FINAL GRADE AS NECESSARY, NPI UNLESS OTHERWISE NOTED.
15. THE CONTRACTOR SHALL INSTALL WATER METER PROVIDED BY THE CITY OF MESA. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR NECESSARY TO INSTALL THE COMPLETE AUTOMATIC SPRINKLER SYSTEM FROM THE METER (WATER USAGE CHARGES SHALL BE PAID BY CONTRACTOR UNTIL PROJECT FINAL ACCEPTANCE BY CITY OF MESA). CONTRACTOR SHALL ORDER METER FROM DEVELOPMENT SERVICES.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING THE UNDERGROUND SPRINKLER SYSTEMS IN ADVANCE OF CONSTRUCTION. THE SPRINKLER SYSTEM LOCATIONS NOTED ON PLANS ARE FOR REFERENCE ONLY.
17. CONTRACTOR TO VERIFY DEPTH OF ALL INLET STRUCTURES AND SPRINKLER SYSTEMS PRIOR TO TRENCHING FOR LOW-FLOW CHANNEL.
18. CONTRACTOR TO PROVIDE PUMPING WITHIN FIVE (5) DAYS AFTER THE NOTICE TO PROCEED IS GIVEN AS REQUIRED TO DRY THE AREA SUFFICIENTLY TO BEGIN CONSTRUCTION.
19. CONTRACTOR SHALL ARRANGE FOR SPRINKLER SYSTEM SHUTDOWN DURING CONSTRUCTION BY CONTACTING THE ENGINEERING INSPECTOR.
20. NO ROCKS LARGER THAN 1" IN DIAMETER SHALL BE ALLOWED IN THE TOP 6" OF TOPSOIL WHERE TURF ESTABLISHMENT IS SPECIFIED. ROCK REMOVAL AS NECESSARY IS INCLUDED IN THIS PROJECT (NPI).
21. WHERE CALICHE IS ENCOUNTERED IN PLANT PITS, DEPTH AND WIDTH OF PIT SHALL BE INCREASED BY ONE-THIRD (1/3) OVER SPECIFICATION, AND A LIQUID PENETRATOR, "AL-KALICHE" OR EQUAL SHALL BE INCORPORATED FOR EACH PIT PER MANUFACTURER'S RECOMMENDATIONS.
22. PROJECT RECORD (AS-BUILT) DRAWINGS FOR IRRIGATION SYSTEM:
   A. MAINTAIN ON SITE AND SEPARATE FROM DOCUMENTS USED FOR CONSTRUCTION, ONE COMPLETE SET OF CONTRACT DOCUMENTS AS PROJECT RECORD DOCUMENTS. KEEP DOCUMENTS CURRENT. DO NOT PERMANENTLY COVER WORK UNTIL AS-BUILT INFORMATION IS RECORDED.
   B. RECORD PIPE AND WIRING NETWORK ALTERATIONS. RECORD WORK WHICH IS INSTALLED DIFFERENTLY THAN SHOWN ON THE CONSTRUCTION DRAWINGS. RECORD ACCURATE REFERENCE DIMENSIONS, MEASURED FROM AT LEAST TWO PERMANENT REFERENCE POINTS, OF EACH IRRIGATION SYSTEM VALVE, EACH BACKFLOW PREVENTION DEVICE, EACH CONTROLLER OR CONTROLLER UNIT, EACH SLEEVE END, EACH STUB-OUT FOR FUTURE PIPE OR WIRING CONNECTIONS, AND OTHER IRRIGATION COMPONENTS ENCLOSED WITHIN A VALVE BOX.

CONCEPTUAL GENERAL NOTES

1. CONCEPTUAL LANDSCAPE PLAN IS SCHEMATIC IN NATURE. AT THE TIME OF LANDSCAPE CONSTRUCTION DRAWINGS ACTUAL LOCATIONS, QUANTITIES, SIZES, AND SPECIES SHALL BE DETERMINED AND WILL BE PER CITY CODES.
2. ALL TREES USED WITHIN THIS PROJECT SHALL BE NURSERY GROWN. EXACT LOCATIONS AND QUANTITIES SHALL BE DETERMINED ON LANDSCAPE CONSTRUCTION DRAWINGS. ALL EXISTING TREES SHALL BE PROTECTED DURING CONSTRUCTION.
3. ALL LANDSCAPE AREAS SHALL RECEIVE AN AUTOMATIC IRRIGATION SYSTEM.
4. ALL PLANT MATERIAL SHALL BE INSTALLED PER CITY REQUIREMENTS. PLANT MATERIAL INSTALLED WITHIN SIGHT DISTANCE TRIANGLES SHALL BE OF A SPECIES THAT DOES NOT GROW TO A HEIGHT OF MORE THAN 30" AND SHALL BE MAINTAINED PER CITY REQUIREMENTS.
5. ALL NON-TURF AREAS SHALL RECEIVE A 2" DEPTH OF DECOMPOSED GRANITE.
6. THE RETENTION SHOWN ON THE PLANS IS CONCEPTUAL IN NATURE. REFER TO THE ENGINEERING PLANS FOR ACTUAL GRADING AND DRAINAGE CONFIGURATIONS.
7. ALL EARTHWORK WILL BE DONE TO DRAIN AWAY FROM SIDEWALKS AND STRUCTURES.
8. FINAL SITE PLAN CONFIGURATION MAY VARY AT THE TIME OF FINAL PLAT APPROVAL.
9. ADDITIONAL PLANT MATERIAL MAY BE INTRODUCED AS DIFFERENT VARIETIES BECOME AVAILABLE THROUGH LOCAL NURSERIES AND IF THEY ARE CONSISTENT WITH THE OVERALL THEME OF THIS PROJECT.
10. SVT LOCATIONS WILL BE ADDRESSED ON THE FINAL PLAT. ALL LANDSCAPE ELEMENTS WILL COMPLY WITH MESA CITY CODE FOR SVTs.

CITY OF MESA LANDSCAPE REQUIREMENTS

	REQUIRED	PROVIDED
RIGHT OF WAY (HAWES RD.) 2,235 LF	1 Tree/6 Shrub per 25 LF (And 50% Coverage)	
TREES	25	30
SHRUBS	138	583
RIGHT OF WAY (ELLIOT RD.) 1,147 LF	1 Tree/6 Shrub per 25 LF (And 50% Coverage)	
TREES	46	53
SHRUBS	276	495
RIGHT OF WAY (82ND ST.) 610 LF	1 Tree/6 Shrub per 25 LF (And 50% Coverage)	
TREES	24	26
SHRUBS	141	234
PERIMETER LANDSCAPE 1,182 LF	3 Non-Deciduous Trees/ 20 Shrub per 100 LF	
TREES	35	36
SHRUBS	257	268
BUILDING FOUNDATION	1 Tree per 50 Ln. Ft.	
TREES	123	126
	10% of Trees to be 36" Box	
36" TREES	12	12
OPEN SPACE	50% of all required open space to have live plant material	
LIVE PLANT MATERIAL	50% (133,057 s.f.)	50% (133,057 s.f.)

NOTES

1. 25% OF TREES REQUIRED IN ROW SHOULD BE 36" BOX OR LARGER, WITH A MINIMUM OF 50% OF REQUIRED TREES BEING 24" BOX. NO TREES SMALLER THAN 15 GALLON.
2. 10% OF TREES REQUIRED IN PARKING ISLANDS & FOUNDATION PLANTING AREAS NEED TO BE 36" BOX WITH THE BALANCE BEING AT LEAST 24" BOX.
3. 50% OF ALL REQUIRED SHRUBS TO BE 5 GALLON WITH NO SHRUBS LESS THAN 1 GALLON.
4. 50% OF ALL REQUIRED OPEN SPACE MUST CONTAIN LIVE PLANT MATERIAL

COLLABORATIVE DESIGN STUDIO

Collaborative V Design Studio Inc.
7116 East 1st Ave., Suite 103
Scottsdale, Arizona 85251
office: 480-347-0590
fax: 480-656-6012

Registered Landscape Architect — 54917 — MATTHEW PAUL DRAGER — 01/25/2024 — ARIZONA, U.S.A. — EXPIRES 06 / 30 / 2025

Landscape Improvements to The Craftsman on Elliot

8264 East Elliot Road Mesa, Arizona 85212

CONCEPTUAL LANDSCAPE PLAN

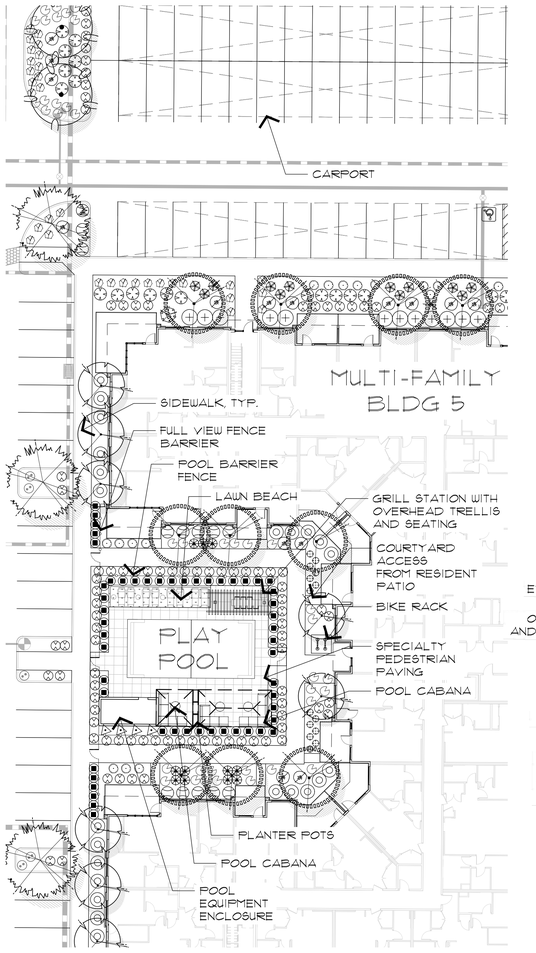
Call at least two full working days before you dig, it's the law! ARIZONA 811 — Arizona Blue Stake, Inc. — Dial 8-1-1 or 1-800-STAKE-IT (782-5348) — In Maricopa County: (602)263-1100

DESIGNED BY: HR
DRAWN BY: HR/MD
CHECKED BY: PV/MD
DATE: 06/02/2023

REVISIONS:
02/27/2023 PRE-APPLICATION SUBMITTAL
05/01/2023 SP/DRB SUBMITTAL
06/02/2023 SP/DRB 2ND SUBMITTAL
10/06/2023 SP/DRB 3RD SUBMITTAL
01/25/2024 SP/DRB 4TH SUBMITTAL

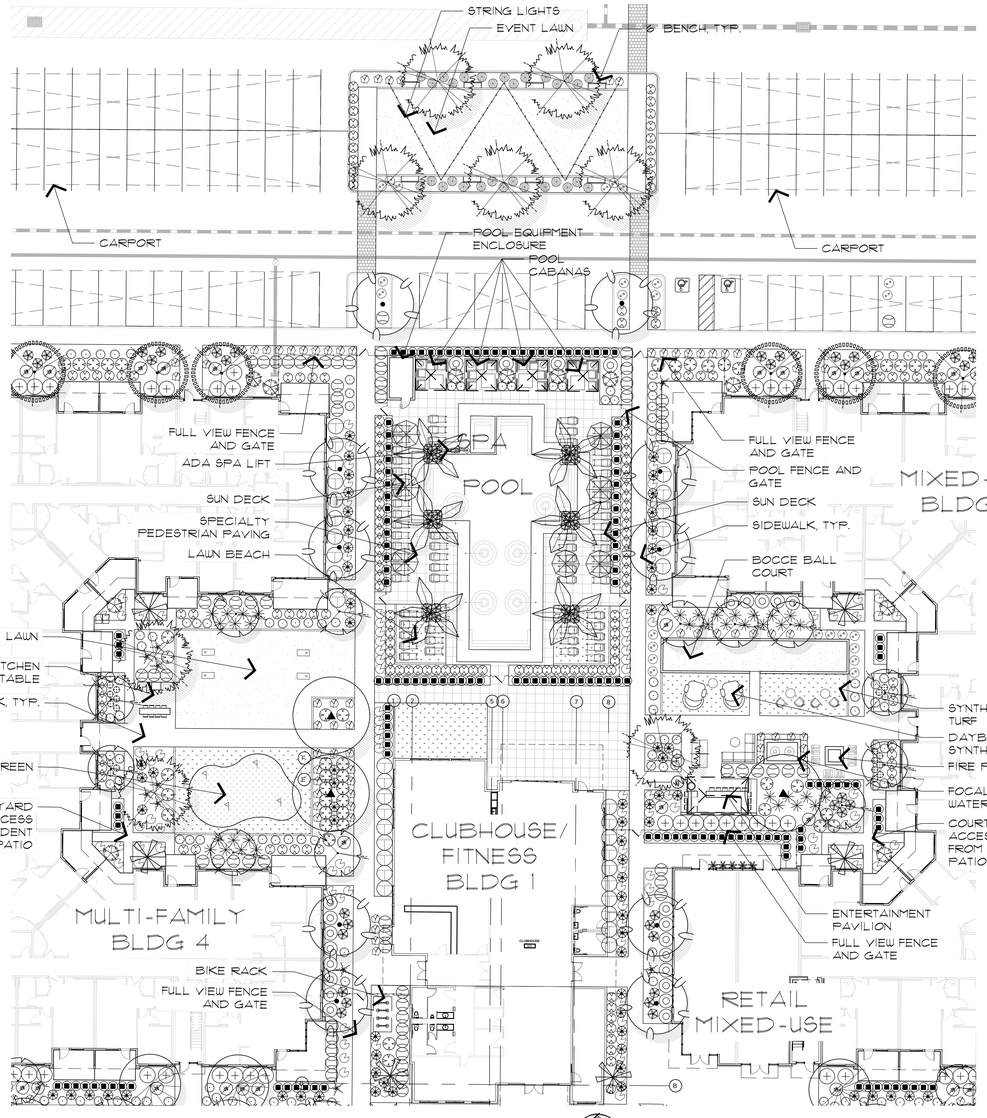
The Craftsman on Elliot SP/DRB Submittal

CLS-1



WEST POOL COURTYARD

SCALE: 1"=20'-0"



CENTRAL POOL COURTYARD

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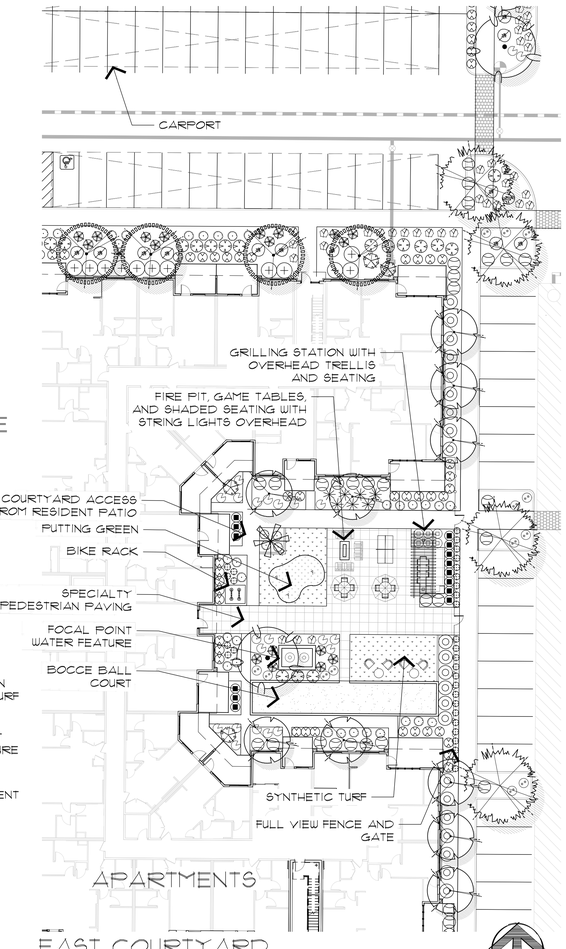
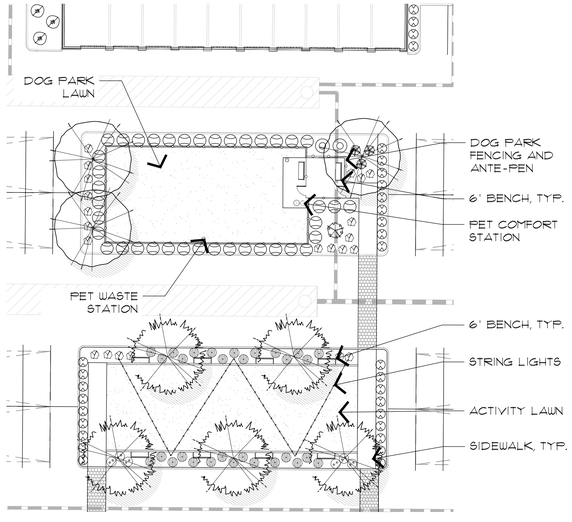


EAST COURTYARD

SCALE: 1"=20'-0"



DOG PARK

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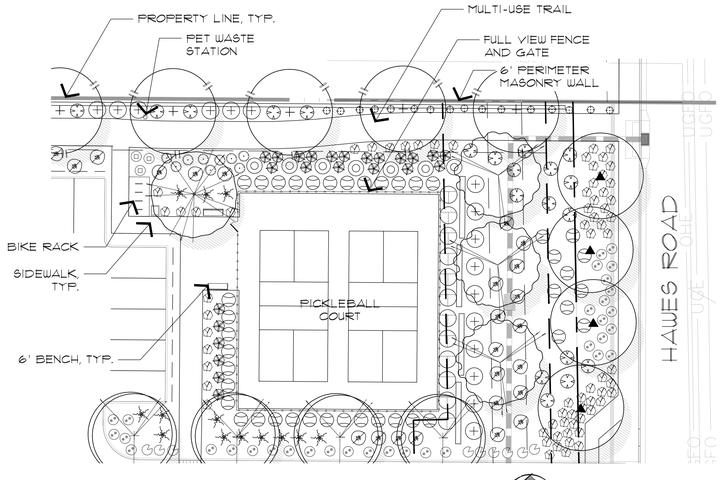

PICKLEBALL COURTS

SCALE: 1"=20'-0"

PLANT SCHEDULE

	BOTANICAL NAME	COMMON NAME	SIZE	QTY	COMMENTS
	TREES				
	Acacia aneura	Mulga Acacia	24" Box	40	Standard Trunk Dense Canopy
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	Lantana hybrid 'New Gold'	New Gold Lantana	1 Gal.	413	EG As Per Plan
	Lantana montevidensis	Purple Trailing Lantana	1 Gal.	1093	EG As Per Plan
	* Eremophila glabra 'Mingenew Gold'	Outback Sunrise	1 Gal.	1496	SS As Per Plan
	MISCELLANEOUS				

DG — Decomposed Granite - 1/2" Screened 'Caramel' or equal 2" Depth in All Planting Areas (Typ) - +/- 2202.04 SF

* Dictates plants not on the Hawes Crossing PAD Plant List

COLLABORATIVE DESIGN STUDIO

Collaborative V Design Studio Inc.
7116 East 1st Ave., Suite 103
Scottsdale, Arizona 85251
office: 480-347-0590
fax: 480-656-6012

Registered Landscape Architect — 25497 — MATTHEW PAUL DRACER — 01/25/2024 — Arizona, U.S.A.

EXPIRES 06 / 30 / 2025

Landscape Improvements

The Craftsman on Elliot

8264 East Elliot Road — Mesa, Arizona 85212

Call at least two full working days before you dig. ARIZONA811 (Dial 8-1-1 or 1-800-STAKE-IT (782-5348)) Arizona Blue Stake, Inc.

DESIGNED BY: HR
DRAWN BY: HR/MD
CHECKED BY: PV/MD
DATE: 06/02/2023

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10/06/2023	SP/DRB 3RD SUBMITTAL
01/25/2024	SP/DRB 4TH SUBMITTAL

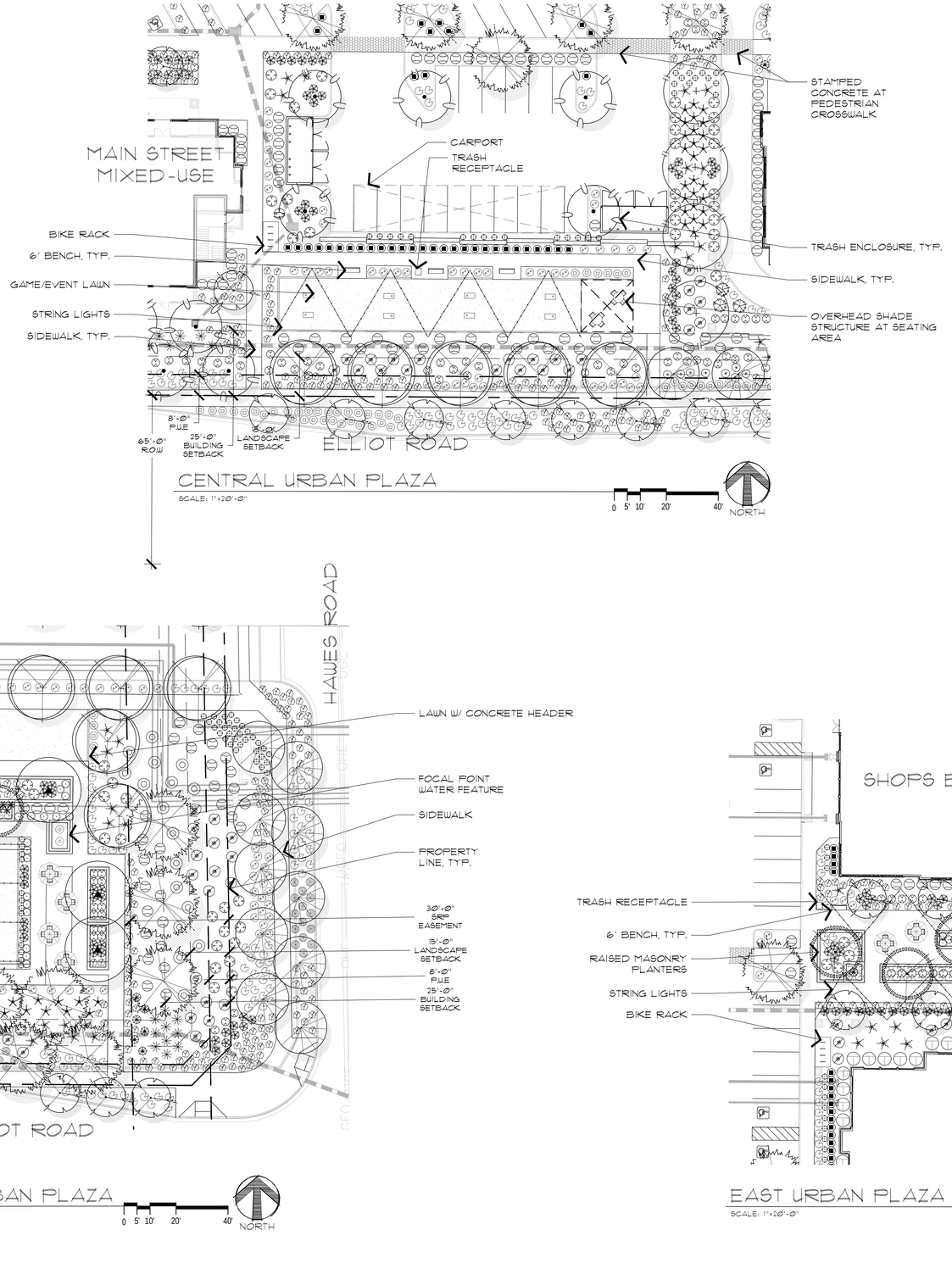
AMENITY ENLARGEMENTS

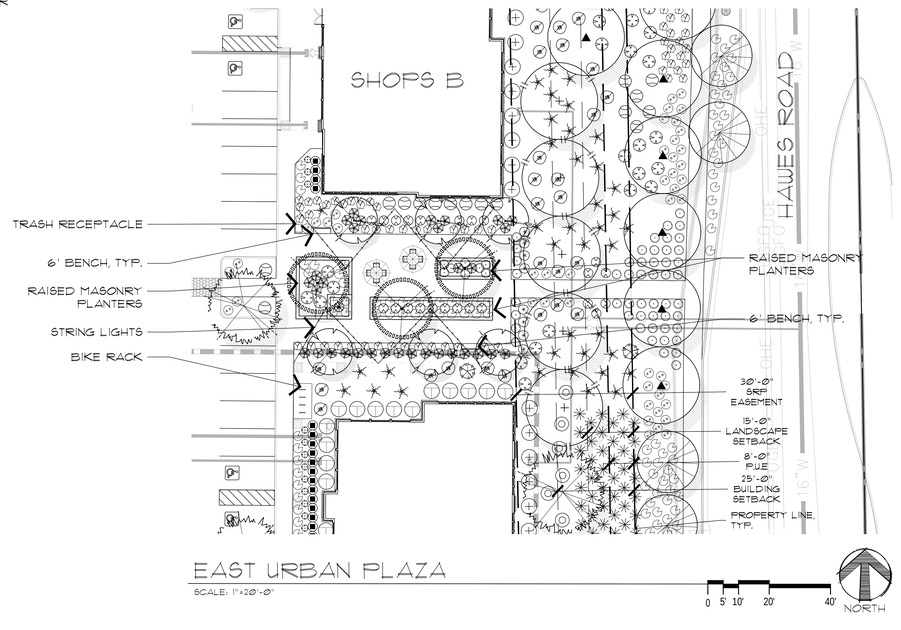
The Craftsman on Elliot SP/DRB Submittal

CLS-3

PLANT SCHEDULE

	BOTANICAL NAME	COMMON NAME	SIZE	QTY	COMMENTS
	TREES				
	Acacia aneura	Mulga Acacia	24" Box	40	Standard Trunk, Dense Canopy
	Caesalpinia cacalaco	Cascalote	24" Box	30	Standard Trunk, Dense Canopy
	Chilopsis linearis	Desert Willow	24" Box 36" Box	73 12	Multi - Trunk, Size Per Plan
	Chamaerops humilis	Mediterranean Fan Palm	24" Box	7	ET Multi - Trunk, Dense Canopy
	Chitalpa tashkentensis	Chitalpa	24" Box	28	OT Multi - Trunk, Dense Canopy
	Dalbergia sissoo	Indian Rosewood	24" Box	56	Standard Trunk, Dense Canopy
	Parkinsonia praecox	Palo Brea	24" Box	22	Standard Trunk, Dense Canopy
	Phoenix dactilifera	Date Palm	18' C.T.H.	19	ET Matching Form Diamond Cut
	Pistacia X 'Red Push'	Red Push Pistache	24" Box	71	Standard Trunk, Dense Canopy
	Prosopis velutina	Velvet Mesquite	24" Box	12	ST Multi - Trunk, Dense Canopy
	Quercus virginiana	Southern Live Oak	24" Box	100	Standard Trunk, Dense Canopy
	Ulmus parvifolia	Evergreen Elm	24" Box	45	ST Standard Trunk, Dense Canopy
	Washingtonia 'filibusta'	Hybrid Fan Palm	22' C.T.H.	2	Matching Form Skinned
	ACCENTS/VINES				
	Aloe barbadensis	Medicinal Aloe	5 Gal.	420	SS As Per Plan
	Agave 'Blue Glow'	Blue Glow Agave	5 Gal.	141	MS As Per Plan
	Asclepias subulata	Desert Milkweed	5 Gal.	78	MS As Per Plan
	Asparagus densiflorus 'Foxtail'	Asparagus Fern	5 Gal.	93	SS As Per Plan
	✱ Bougainvillea hybrid 'Torch Glow'	Bougainvillea Torch Glow	5 Gal.	339	MS As Per Plan
	✱ Dasylirion quadrangulatum	Toothless Spoon	5 Gal.	272	MS As Per Plan
	✱ Dasylirion wheeleri	Desert Spoon	5 Gal.	213	LS As Per Plan
	✱ Hesperaloe funifera	Giant Hesperaloe	5 Gal.	106	MS As Per Plan
	✱ Hesperaloe parviflora 'Perpa'	Brakelights Red Yucca	5 Gal.	484	SS As Per Plan
	Trachelospermum jasminoides	Star Jasmine	15 Gal.	4	Train to Structure
	SHRUBS				
	✱ Caesalpinia mexicana	Mexican Bird of Paradise	5 Gal.	38	LS As Per Plan
	Dodonaea viscosa 'Purpurea'	Purple Hopseed Bush	5 Gal.	339	LS As Per Plan
	✱ Eremophila hygrophana	Blue Bells	5 Gal.	792	MS As Per Plan
	Myrtus communis 'Compacta'	Dwarf Myrtle	5 Gal.	443	SS As Per Plan
	Ruellia peninsularis	Baja Ruellia	5 Gal.	684	MS As Per Plan
	Russelia equisetiformis	Coral Fountain	5 Gal.	412	MS As Per Plan
	Tecoma stans	Yellow Bells	5 Gal.	118	MS As Per Plan
	Tecoma stans 'Orange Jubilee'	Orange Jubilee	5 Gal.	192	LS As Per Plan
	GROUND COVERS				
	Acacia redolens 'Desert Carpet'	Prostrate Acacia	1 Gal.	299	SS As Per Plan
	Callistemon 'Little John'	Dwarf Bottlebrush	1 Gal.	549	SS As Per Plan
	Convolvulus cneorum	Bush Morning Glory	1 Gal.	94	EG As Per Plan
	Lantana hybrid 'New Gold'	New Gold Lantana	1 Gal.	413	EG As Per Plan
	Lantana montevidensis	Purple Trailing Lantana	1 Gal.	1,098	TEG As Per Plan
	✱ Eremophila glabra 'Mingenew Gold'	Outback Sunrise	1 Gal.	1,498	SS As Per Plan
	MISCELLANEOUS				
DG	Decomposed Granite - 1/2" Screened 'Caramel' or equal 2" Depth in All Planting Areas (Typ.) - +/- 22,024 SF ✱ Dictates plants not on the Hawes Crossing PAD Plant List				





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Registered Landscape Architect
OFFICIAL SEAL
26497
MATTHEW PAUL DRAGER
Registered
ARIZONA, U.S.A.
01/25/2024

EXPIRES 06 / 30 / 2025

Landscape Improvements

The Craftsman on Elliot

8264 East Elliot Road Mesa, Arizona 85212

Call at least two full working days before you begin excavation. ARIZONA811 Arizona Blue Stake, Inc. Dial 8-1-1 or 1-800-STAKE-IT (1-800-782-5348) In Maricopa County: (602)263-1100

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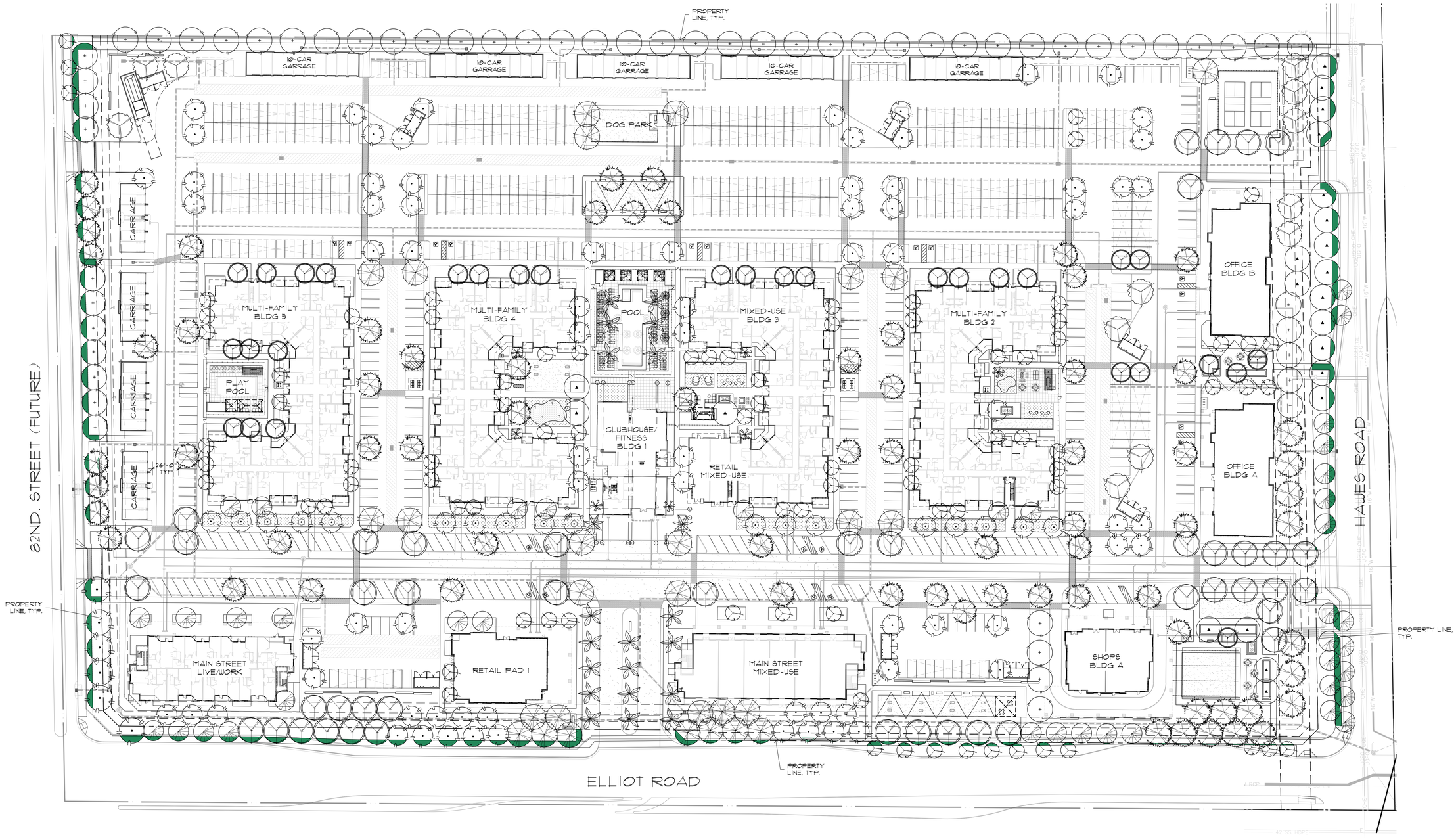
AMENITY ENLARGEMENTS

The Craftsman on Elliot SP/DRB Submittal

CLS-4



SHADE LEGEND

SHADE ON STREET FRONTAGE WALKS

SHADE CALCULATIONS

STREET FRONTAGE WALK AREA= 13,519 SQ. FT.
REQUIRE SHADE (50%) = 6,760 SQ. FT.
PROVIDED SHADE = 6,766 SQ. FT. (50%)

SHADE STUDY

SCALE: 1"=40'-0"

0 10' 20' 40' 80' NORTH

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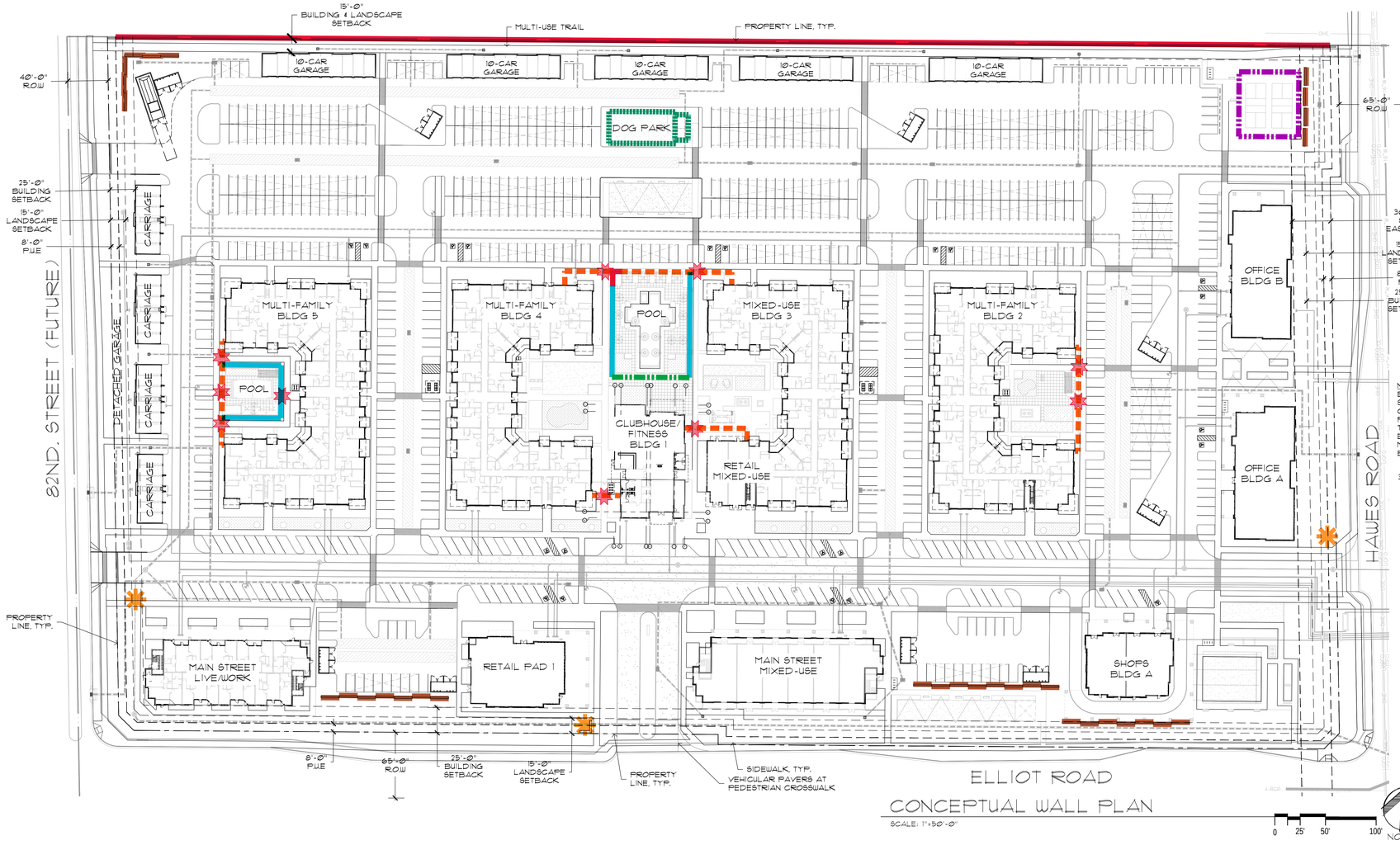
The Craftsman on Elliot
SP/DRB Submittal

SHADE STUDY

CLS-5

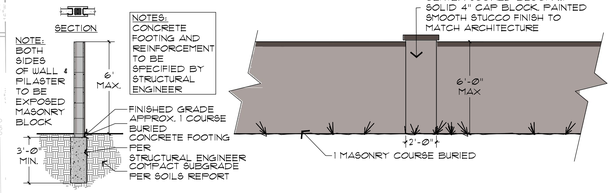


CONCEPTUAL WALL PLAN

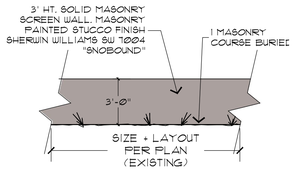
SCALE: 1"=50'-0"

WALL/FENCE LEGEND

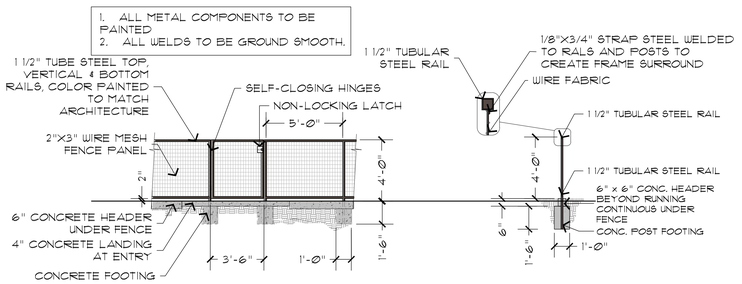
- 6' SOLID PERIMETER WALL (SEE ELEVATION 1 BELOW)
- 3' SCREEN WALL (SEE ELEVATION 2 BELOW)
- 6' FULL VIEW FENCE (SEE ELEVATION 3 BELOW)
- DOG PARK FENCE AND GATE (SEE ELEVATION 4 BELOW)
- 5' POOL BARRIER (SEE ELEVATION 5 BELOW)
- 5' POOL GLASS BARRIER (SEE ELEVATION 6 BELOW)
- 5' PICKLEBALL FENCE (SEE ELEVATION 7 BELOW)
- PEDESTRIAN GATE (SEE ELEVATION 3 BELOW)
- PROJECT ENTRY MONUMENT (SEE SHEET SIGN-1)



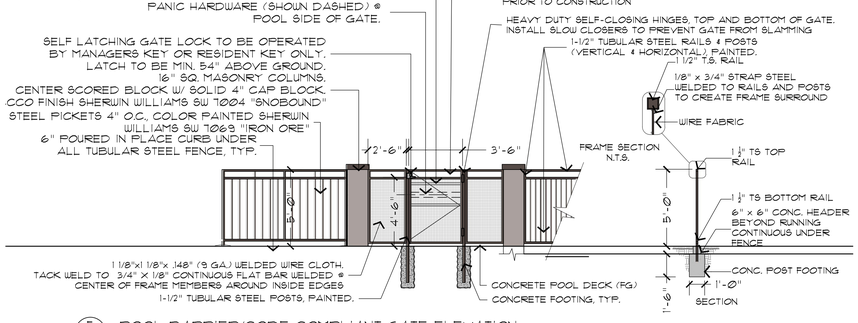
1 PERIMETER WALL/PARTIAL VIEW FENCE ELEVATION
SCALE: 1/4"=1'-Ø"



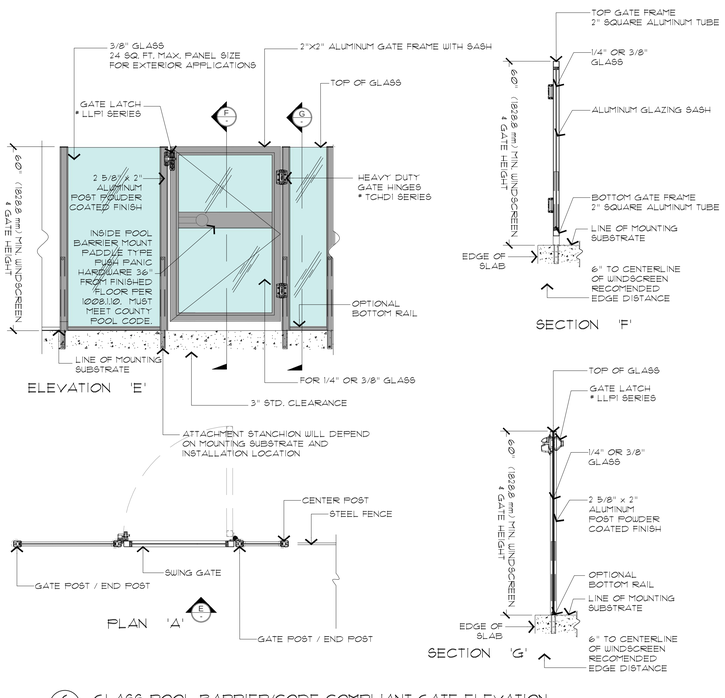
2 3' SCREEN WALL
SCALE: 1/4"=1'-Ø"



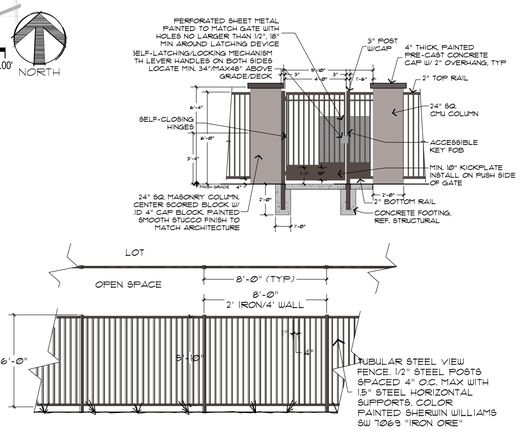
4 DOG PARK FENCE AND GATE
SCALE: 1/4"=1'-Ø"



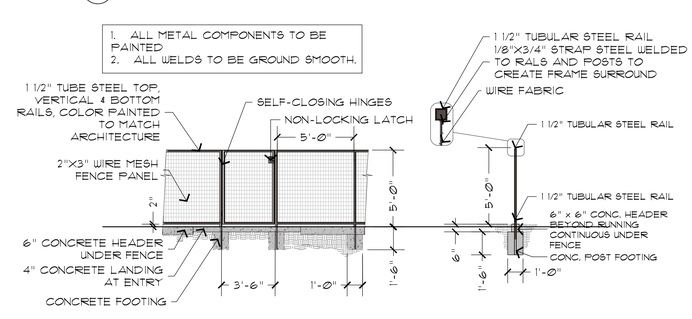
5 POOL BARRIER/CODE COMPLIANT GATE ELEVATION
SCALE: 1/4"=1'-Ø"



6 GLASS POOL BARRIER/CODE COMPLIANT GATE ELEVATION
SCALE: 1/4"=1'-Ø"



3 FULL VIEW FENCE / PEDESTRIAN GATE ELEVATION
SCALE: 1/4"=1'-Ø"



7 5' PICKLEBALL FENCE AND GATE
SCALE: 1/4"=1'-Ø"

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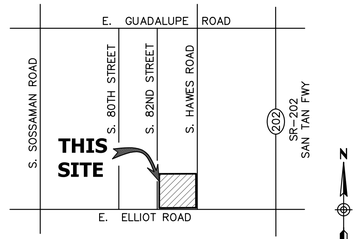
The Craftsman on Elliot SP/DRB Submittal

CONCEPTUAL WALL PLAN

CLS-6

CONCEPTUAL GRADING, DRAINAGE & UTILITY PLANS
FOR
THE CRAFTSMAN
8264 E. ELLIOT ROAD
MESA, ARIZONA 85212

A PORTION OF LAND LOCATED WITHIN THE SOUTHEAST QUARTER OF SECTION 8, TOWNSHIP 1 SOUTH, RANGE 7 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.



VICINITY MAP

LEGAL DESCRIPTION
THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF MARICOPA, STATE OF ARIZONA, AND IS DESCRIBED AS FOLLOWS:

THE EAST 1,320 FEET OF THE SOUTH 760 FEET OF THE SOUTHEAST QUARTER OF SECTION 8, TOWNSHIP 1 SOUTH, RANGE 7 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA. EXCEPT THE EAST 33 FEET THREOF.

FEMA INFORMATION
THE CURRENT FEMA FLOOD INSURANCE RATE MAP (FIRM) FOR THIS AREA, MAP NUMBER 04013C 2760L (EFFECTIVE REVISED DATE OCTOBER 16, 2013), DESIGNATES THE PROPERTY WITHIN FLOOD HAZARD ZONE X

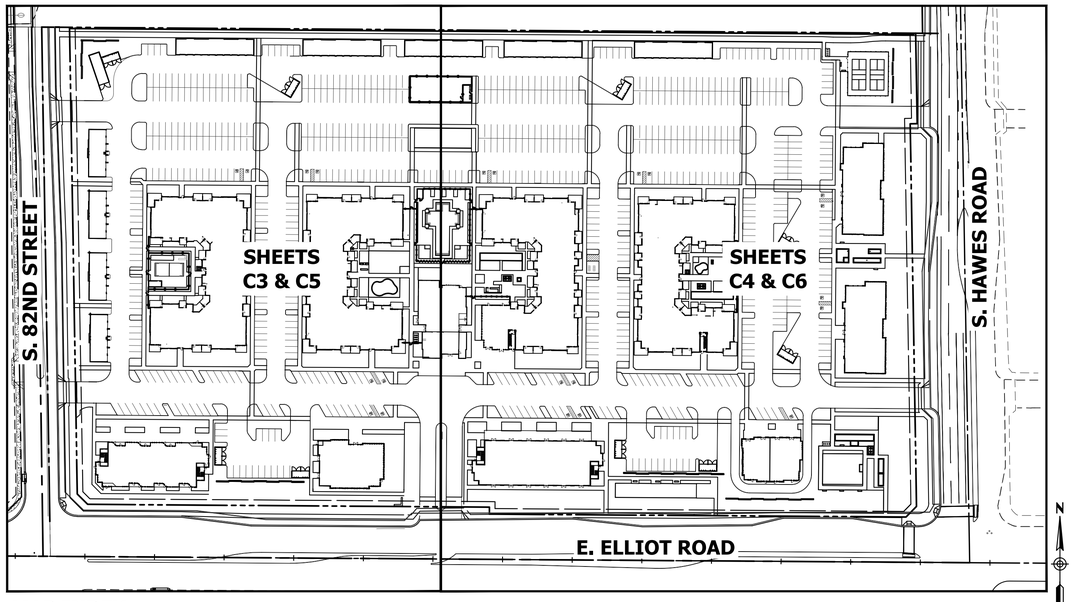
ZONE: X IS DEFINED AS AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT, OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

ABBREVIATIONS

APN	ASSESSOR PARCEL NUMBER	P	PAVEMENT
B/C	BACK OF CURB	PAE	PUBLIC ACCESS EASEMENT
BOT	BOTTOM	PDE	PUBLIC DRAINAGE EASEMENT
BRW	BOTTOM OF RETAINING WALL	PL	PROPERTY LINE
BVC	BEGINNING OF VERTICAL CURVE	POB	POINT OF BEGINNING
C	CONCRETE	POC	POINT OF COMMENCEMENT
℄	CENTERLINE	PUE	PUBLIC UTILITY EASEMENT
CF	CUBIC FEET	PUFE	PUBLIC UTILITY FACILITIES EASEMENT
C&G	CURB & GUTTER	PVI	POINT OF VERTICAL INTERSECTION
CY	CUBIC YARD	PVMT	PAVEMENT
DE	DRAINAGE EASEMENT	P\C	PAVEMENT/CONCRETE
DW	DRYWELL	RCW	RECLAIMED WATER
EA	EACH	R/W	RIGHT OF WAY
EL	ELEVATION	SD	STORM DRAIN
EP	EDGE OF PAVEMENT	SF	SQUARE FEET
ESMT	EASEMENT	SS	SANITARY SEWER
EVC	END OF VERTICAL CURVE	S/W	SIDEWALK
EX	EXISTING	STA	STATION
EXG	EXISTING GRADE	SY	SQUARE YARDS
F/C	FACE OF CURB	TD	TRENCH DRAIN
FF	FINISH FLOOR	TC	TOP OF CURB
FG	FINISH GRADE	TEL	TELEPHONE
FL	FLOWLINE	TF	TOP OF FOOTING
FT/FT	FOOT PER FOOT	THR	TOP OF HANDRAIL
FM	FORCE MAIN	TPOB	TRUE POINT OF BEGINNING
G	GUTTER	TRW	TOP OF RETAINING WALL
GB	GRADE BREAK	TS	TRAFFIC SIGNAL
GR	GRATE	TW	TOP OF WALL
HP	HIGH POINT	UGFO	UNDERGROUND FIBER OPTIC
HW	HIGH WATER	UGE	UNDERGROUND ELECTRIC
IE	INVERT ELEVATION	UGT	UNDERGROUND TELEPHONE
IRR	IRRIGATION	UTS	UNDERGROUND TRAFFIC SIGNAL
LF	LINEAR FEET	VCP	VITRIFIED CLAY PIPE
LIE	LANDSCAPE IRRIGATION EASEMENT	VG	VALLEY GUTTER
LP	LOW POINT	VNAE	VEHICULAR NON-ACCESS EASEMENT
MCR	MARICOPA COUNTY RECORDER	VOL	VOLUME
ML	MATCH LINE	VP	VOLUME PROVIDED
ℳ	MONUMENT LINE	VR	VOLUME REQUIRED
MUTE	MULTI USE TRAIL EASEMENT	W	WATER
NTS	NOT TO SCALE	WLE	WATER LINE EASEMENT
OHE	OVERHEAD ELECTRIC	WTP	WATER TREATMENT PLANT
		WWTP	WASTEWATER TREATMENT PLANT
		YD	YARD DRAIN

EXISTING LEGEND
RIGHT OF WAY
PROPERTY LINE
CENTERLINE
EASEMENT LINE
WATER LINE — 8" ACP W —
WATER LINE — 16" ACP W —
SANITARY SEWER LINE — 6" VCP SS —
SPOT ELEVATION +1349.16 P
FIRE HYDRANT
WATER VALVE
IRRIGATION CONTROL VALVE
SANITARY SEWER MANHOLE
SANITARY SEWER CLEANOUT
SIGN
LIGHT POLE
ELECTRICAL RISER
ELECTRICAL CABINET (CAB)

PROPOSED LEGEND
DIRECTION OF SLOPE
SEWER LINE — SS —
WATER LINE — W —
FIRE LINE — FIRE —
EASEMENT
SAWCUT
GRADE BREAK
CATCH BASIN
DRYWELL
SPOT ELEVATION 90.50P
SECTION CALLOUT (1 / C3)
FLOW LINE
BACKFLOW PREVENTOR
TAPPING SLEEVE & VALVE
SANITARY SEWER CLEANOUT
STORM DRAIN PIPE



MAP INDEX

SHEET INDEX

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CONCEPTUAL CROSS SECTIONS.	.C2
CONCEPTUAL GRADING AND DRAINAGE PLANS.	.C3-C4
CONCEPTUAL UTILITY PLANS.	.C5-C6
CONCEPTUAL FIRE HYDRANT PLAN.	.C7

APN
304-04-031

SITE ACREAGE
TOTAL NET AREA = 19.12 ACRES
TOTAL GROSS AREA = 23.04 ACRES

OWNER
MARTENS DEVELOPMENT COMPANY
6710 N. SCOTTSDALE RD. SUITE 140
SCOTTSDALE, ARIZONA 85253
CONTACT: DAVID MARTENS, JD/MBA
PHONE: (602) 390-5403

ARCHITECT
WARE MALCOMB
2777 E. CAMELBACK RD. SUITE #325
PHOENIX, ARIZONA 85016
PHONE: (480) 800-5291
PHONE: (480) 767-1001
CONTACT: BRADEN BLAKE
EMAIL: BBLAKE@WAREMALCOMB.COM

CIVIL ENGINEER
HUNTER ENGINEERING, INC.
10446 N. 74TH STREET, SUITE #140
SCOTTSDALE, ARIZONA 85258
PHONE: (480) 991-3985
CONTACT: JOHN HAKO, PE
EMAIL: JHAKO@HUNTERENGINEERINGPC.COM

BENCHMARK
CITY OF MESA BENCHMARK. BRASS TAG LOCATED AT THE NORTHWEST CORNER INTERSECTION OF ELLSWORTH & ELLIOT ON CONCRETE PAD. ELEV.=1405.28 (NAVD 88)

BASIS OF BEARING
BASIS OF BEARING FOR THIS SURVEY IS A BEARING OF SOUTH 00 DEGREES 57 MINUTES 01 SECONDS EAST ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 9, TOWNSHIP 1 SOUTH, RANGE 7 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.

RETENTION CALCULATIONS
TOTAL ONSITE AREA: 19.12 AC
TOTAL OFFSITE AREA: 3.92 AC

RETENTION REQUIRED:
VR=(C)*(P/12)*(A) P=2.2 (100-YR., 2-HR. EVENT)
VR=(0.90)*(2.2/12)*(19.12)*(43,560) = 137,423 CF ONSITE

VR=(C)*(P/12)*(A) P=2.2 (100-YR., 2-HR. EVENT)
VR=(0.95)*(2.2/12)*(3.92)*(43,560) = 29,715 CF OFFSITE

TOTAL REQUIRED = 167,138 CU.FT.

RETENTION PROVIDED:
UGT 1-6 (2,129 LF 10' DIA CMP) . . . . . 167,211 CF

TOTAL PROVIDED = 167,211 CU.FT.

RETENTION TOTALS:
TOTAL REQUIRED. . . . . 167,138 CF
TOTAL PROVIDED. . . . . 167,211 CF
TOTAL EXCESS . . . . . .73 CF

NO.	DATE	REVISION	BY

PURPOSE: 4TH CONCEPT SUBMITTAL

DESIGN BY: RSL
DRAWN BY: LW
CHECKED BY: JH

HUNTER ENGINEERING
CIVIL AND SURVEY
10446 NORTH 74TH STREET, SUITE 140
SCOTTSDALE, AZ 85258
T 480 991 3985
F 480 991 3986

Registered Professional Engineer
CERTIFICATE NO. 71091
JOHN HAKO
Date Signed 1/25/2024
ARIZONA U.S.A.

CONCEPTUAL COVER SHEET
FOR
THE CRAFTSMAN
8264 E. ELLIOT RD.
MESA, ARIZONA 85212

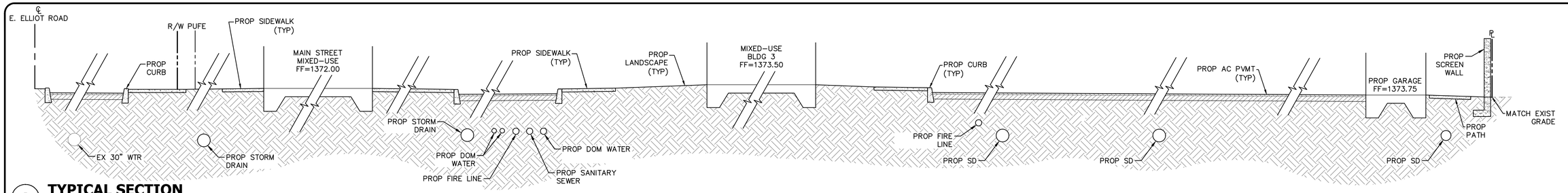
CONTACT ARIZONA 811 AT LEAST 2 FULL WORKING DAYS BEFORE YOU BEGIN EXCAVATION
ARIZONA811 BLUE STAKE, INC.
CALL 811 OR CLICK ARIZONA811.COM

THESE PLANS ARE NOT APPROVED FOR CONSTRUCTION WITHOUT AN APPROVED SIGNATURE FROM THE GOVERNING MUNICIPALITY.

PROJECT NAME: THE CRAFTSMAN

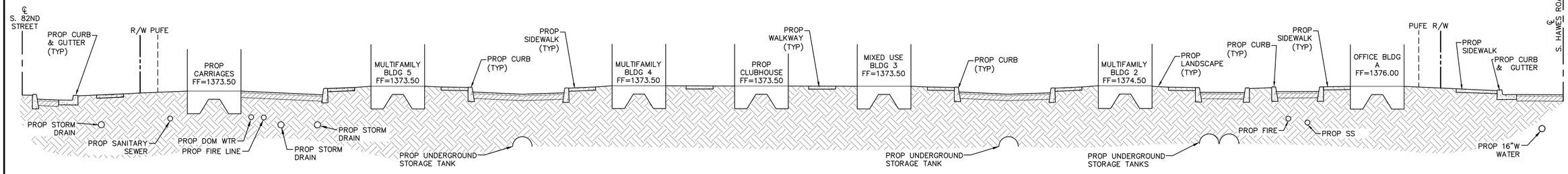
HE NO.: MARW014
SCALE: N.T.S.

SHEET: C1



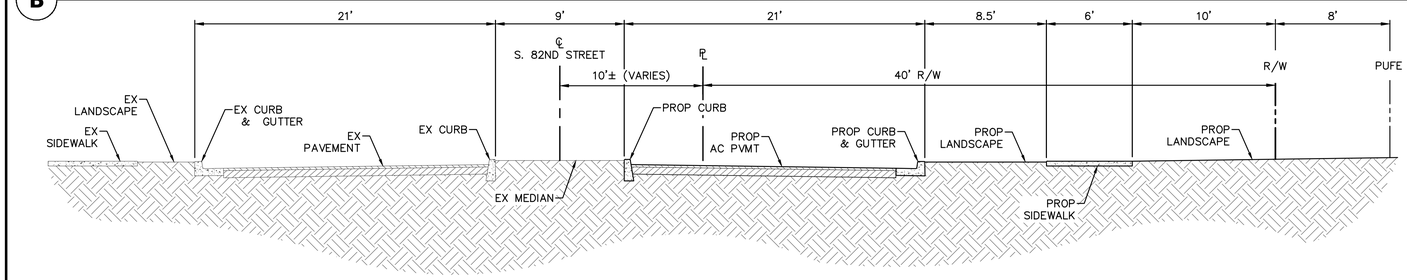
A TYPICAL SECTION

N.T.S



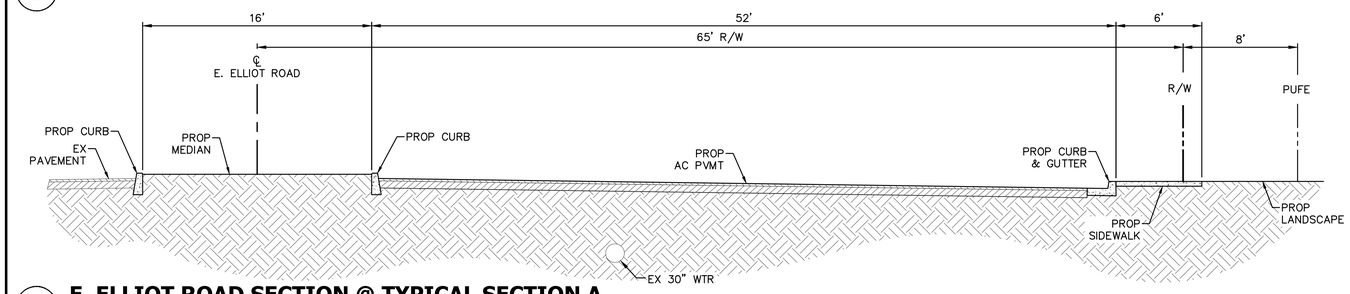
B TYPICAL SECTION

N.T.S



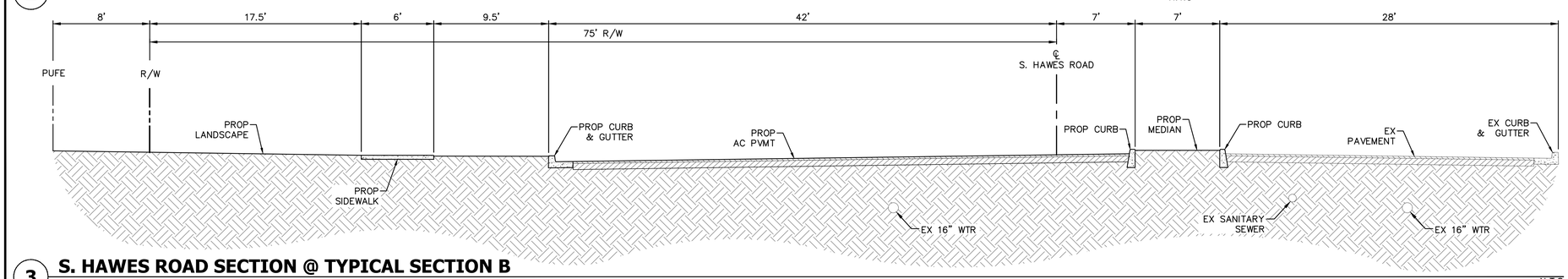
1 S. 82ND STREET SECTION @ TYPICAL SECTION B

N.T.S



2 E. ELLIOT ROAD SECTION @ TYPICAL SECTION A

N.T.S



3 S. HAWES ROAD SECTION @ TYPICAL SECTION B

N.T.S

NO.	DATE	REVISION	BY

PURPOSE: **4TH CONCEPT SUBMITTAL**

DESIGN BY: **RSL**
DRAWN BY: **LW**
CHECKED BY: **JH**

HUNTER ENGINEERING
CIVIL AND SURVEY
10446 NORTH 74TH STREET, SUITE 140
SCOTTSDALE, AZ 85258
T 480 991 3985
F 480 991 3986

Registered Professional Engineer (Civil)
CERTIFICATE NO.
71091
JOHN
HAKO
Date Signed 1/30/2026
ARIZONA U.S.A.

CONCEPTUAL CROSS SECTIONS FOR THE CRAFTSMAN 8264 E. ELLIOT RD. MESA, ARIZONA 85212

CONTACT ARIZONA 811 AT LEAST 2 FULL WORKING DAYS BEFORE YOU BEGIN EXCAVATION
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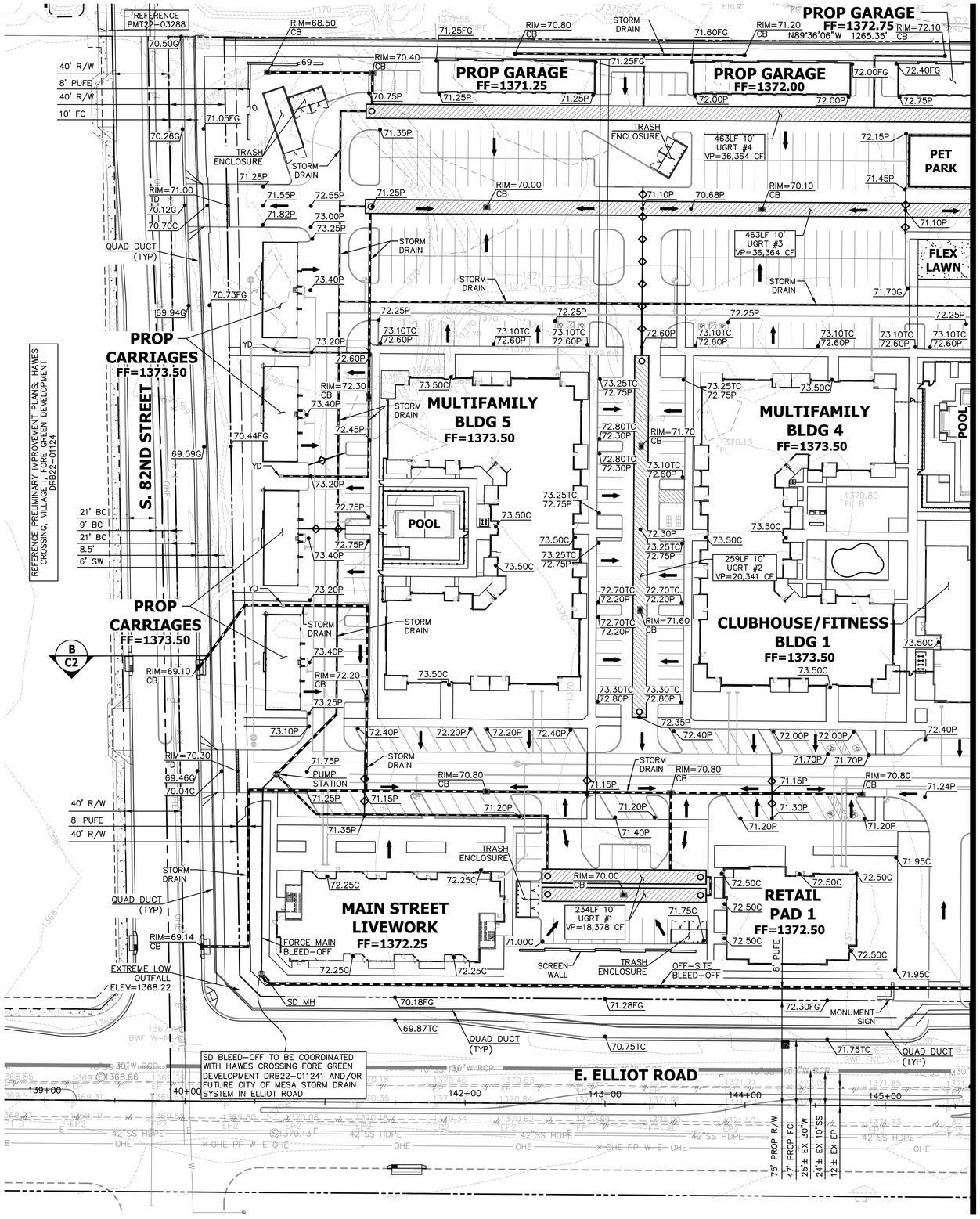
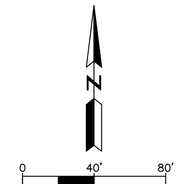
PROJECT NAME: THE CRAFTSMAN

HE NO.: MARW014
SCALE: N.T.S.

SHEET: **C2**





NO.	DATE	REVISION	BY

PURPOSE:
4TH CONCEPT SUBMITTAL

DESIGN BY: RSL
DRAWN BY: LW
CHECKED BY: JH

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CIVIL AND SURVEY
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Registered Professional Engineer
CERTIFICATE NO.
71091
JOHN
HAKO
Signed 1/25/2024
(Civil)
ARIZONA U.S.A.

CONCEPTUAL GRADING & DRAINAGE PLAN FOR THE CRAFTSMAN
8264 E. ELLIOT RD. MESA, ARIZONA 85212

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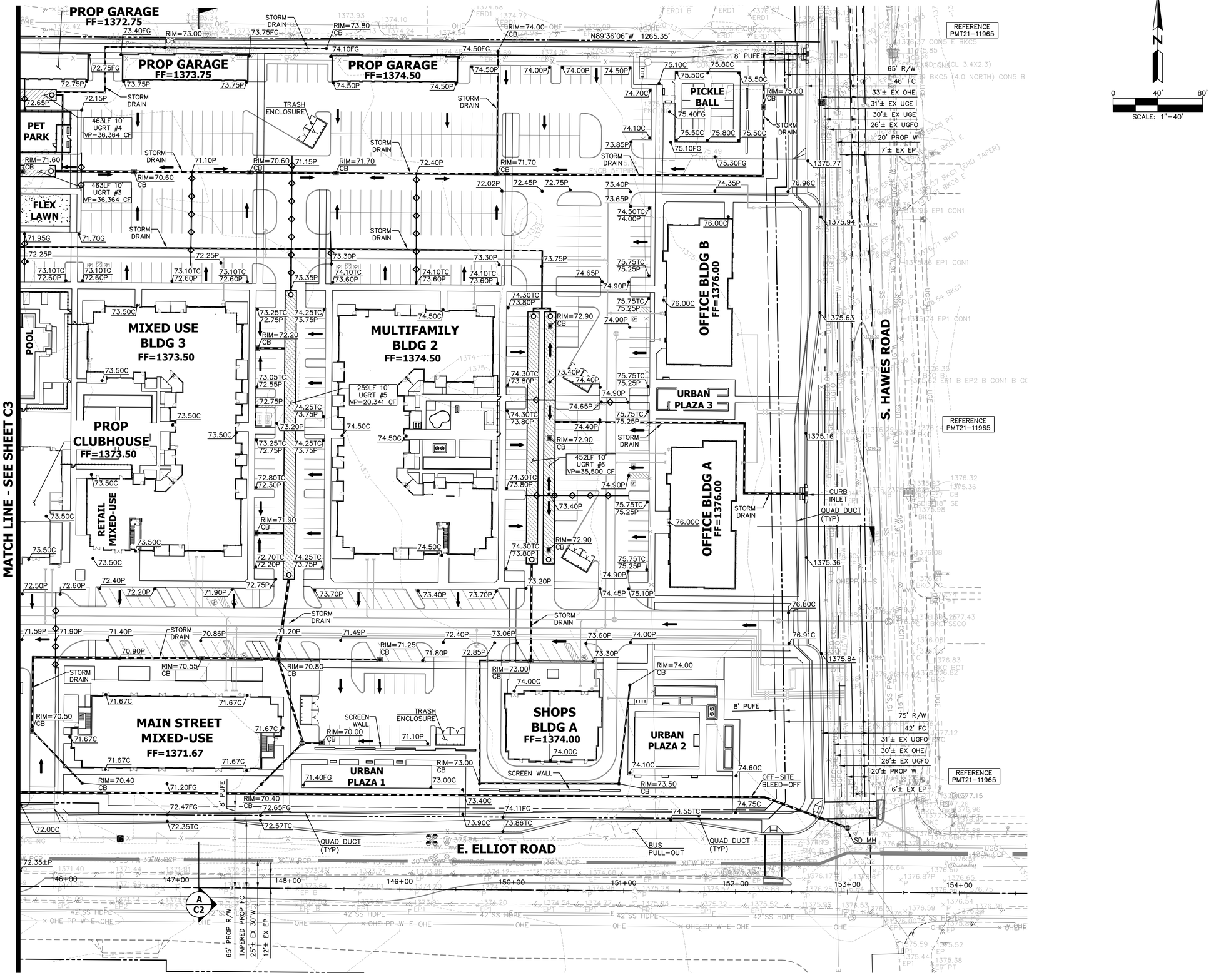
PROJECT NAME:
THE CRAFTSMAN

HE NO.: MARW014
SCALE: 1"=40'

SHEET:
C3



NO.	DATE	REVISION	BY

PURPOSE:
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DESIGN BY: RSL
DRAWN BY: LW
CHECKED BY: JH

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SCOTTSDALE, AZ 85258
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F 480 991 3986

Registered Professional Engineer
CERTIFICATE NO.
71091
JOHN
HAKO
Date Signed 1/25/2024
ARIZONA U.S.A.

CONCEPTUAL GRADING & DRAINAGE PLAN FOR THE CRAFTSMAN
8264 E. ELLIOT RD. MESA, ARIZONA 85212

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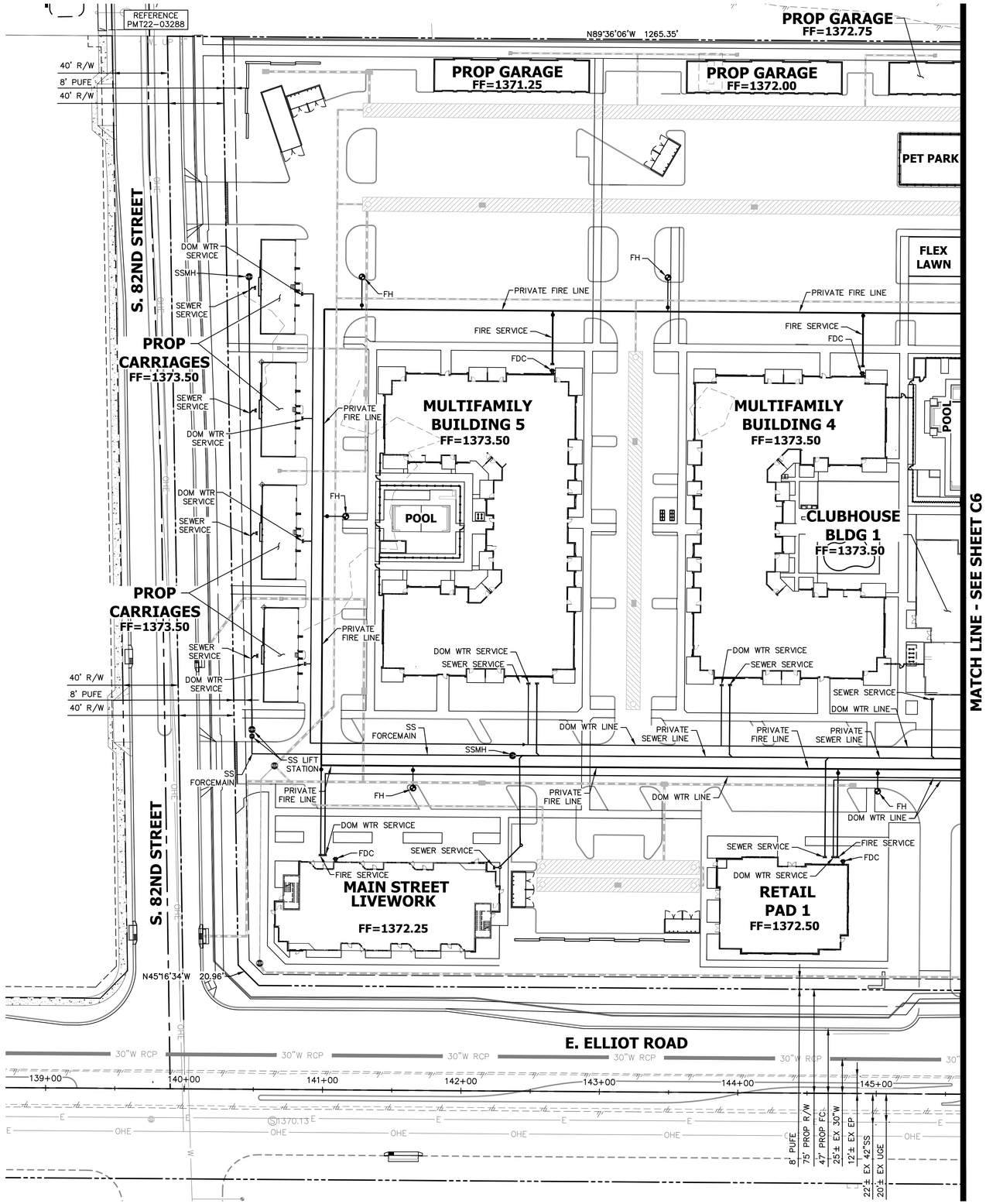
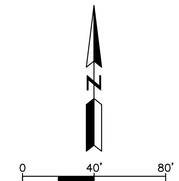
PROJECT NAME:
THE CRAFTSMAN

HE NO.: MARW014
SCALE: 1"=40'

SHEET:
C4





NO.	DATE	REVISION	BY

PURPOSE:
4TH CONCEPT SUBMITTAL

DESIGN BY: RSL
DRAWN BY: LW
CHECKED BY: JH

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F 480 991 3986

Registered Professional Engineer
CERTIFICATE NO.
71091
JOHN
HAKO
Date Signed 1/25/2024
ARIZONA U.S.A.
(Civil)

CONCEPTUAL UTILITY PLAN FOR THE CRAFTSMAN 8264 E. ELLIOT RD. MESA, ARIZONA 85212

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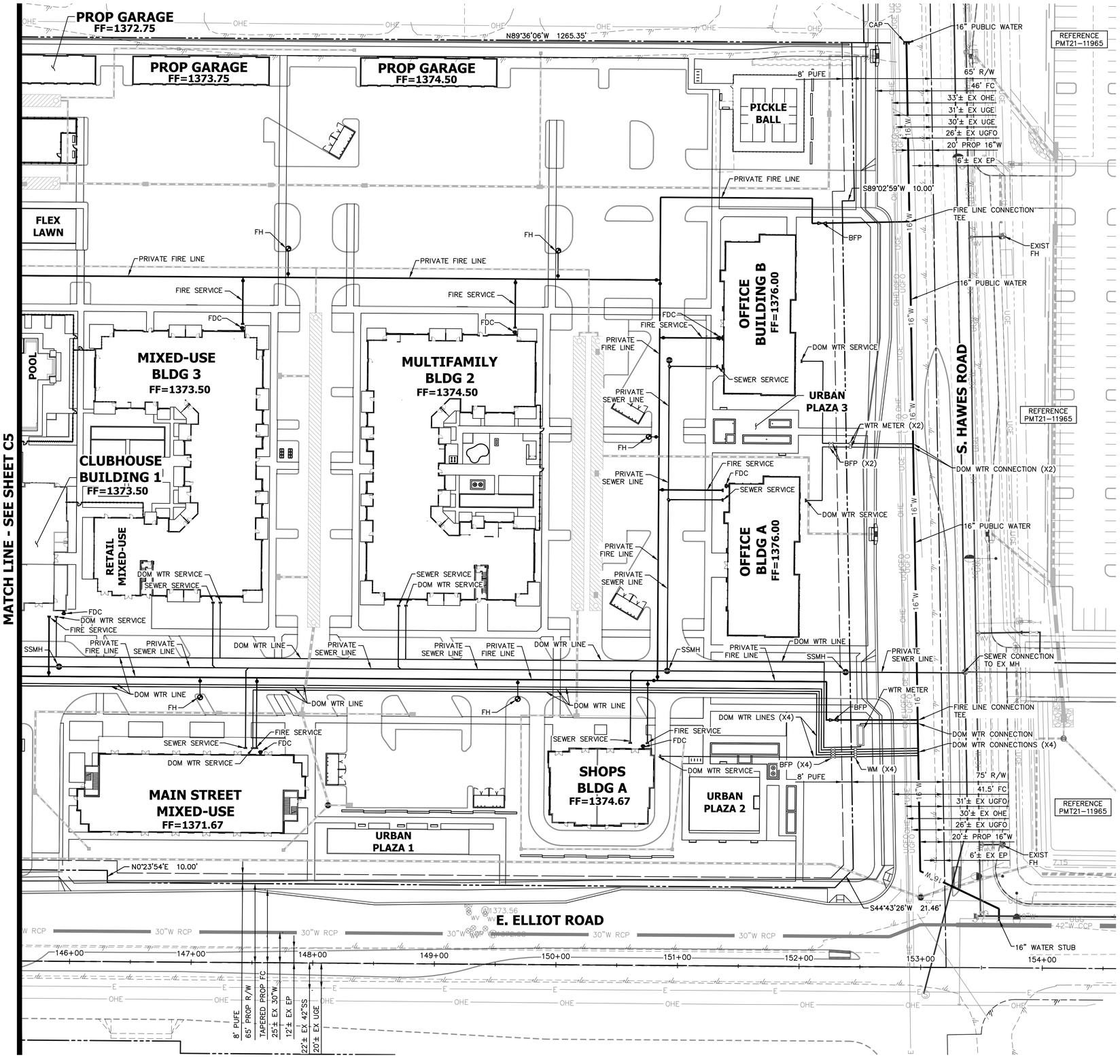
PROJECT NAME:
THE CRAFTSMAN

HE NO.: MARW014
SCALE: 1"=40'

SHEET:
C5



NO.	DATE	REVISION	BY

PURPOSE: 4TH CONCEPT SUBMITTAL

DESIGN BY: RSL
DRAWN BY: LW
CHECKED BY: JH

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Registered Professional Engineer
CERTIFICATE NO.
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JOHN
HAKO
Date Signed 1/25/2024
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CONCEPTUAL UTILITY PLAN FOR THE CRAFTSMAN 8264 E. ELLIOT RD. MESA, ARIZONA 85212

CONTACT ARIZONA 811 AT LEAST 2 FULL WORKING DAYS BEFORE YOU BEGIN EXCAVATION
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CALL 811 OR CLICK ARIZONA811.COM

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PROJECT NAME: THE CRAFTSMAN

HE NO.: MARW014
SCALE: 1"=40'

SHEET: C6

0 40' 80'
SCALE: 1"=40'

N

PROP GARAGE
PROP GARAGE
PROP GARAGE
PROP GARAGE
PROP GARAGE
PET PARK
PICKLE BALL
FLEX LAWN
FIRE HYDRANT
FIRE HYDRANT
FIRE HYDRANT
FIRE HYDRANT
PROP CARRIAGES
MULTIFAMILY BLDG 5
MULTIFAMILY BLDG 4
POOL
MIXED-USE BLDG 3
MULTIFAMILY BLDG 2
OFFICE B
FIRE HYDRANT
FIRE HYDRANT
PROP CARRIAGES
PROP CLUBHOUSE
RETAIL MIXED-USE
OFFICE A
URBAN PLAZA 3
S. 82ND STREET
S. HAWES ROAD
FIRE HYDRANT
FIRE HYDRANT
FIRE HYDRANT
FIRE HYDRANT
FIRE HYDRANT
MAIN STREET LIVE/WORK
RETAIL PAD 1
MAIN STREET MIXED-USE
SHOPS A
URBAN PLAZA 2
URBAN PLAZA 1
E. ELLIOT ROAD

NO.	DATE	REVISION	BY

PURPOSE:
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Registered Professional Engineer
CERTIFICATE NO.
71091
JOHN
HAKO
Date Signed 1/25/2024
ARIZONA U.S.A.

CONCEPTUAL FIRE HYDRANT PLAN
FOR
THE CRAFTSMAN
8264 E. ELLIOT RD.
MESA, ARIZONA 85212

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PROJECT NAME:
THE CRAFTSMAN

HE NO.: MARW014
SCALE: 1"=40'

SHEET:
C7

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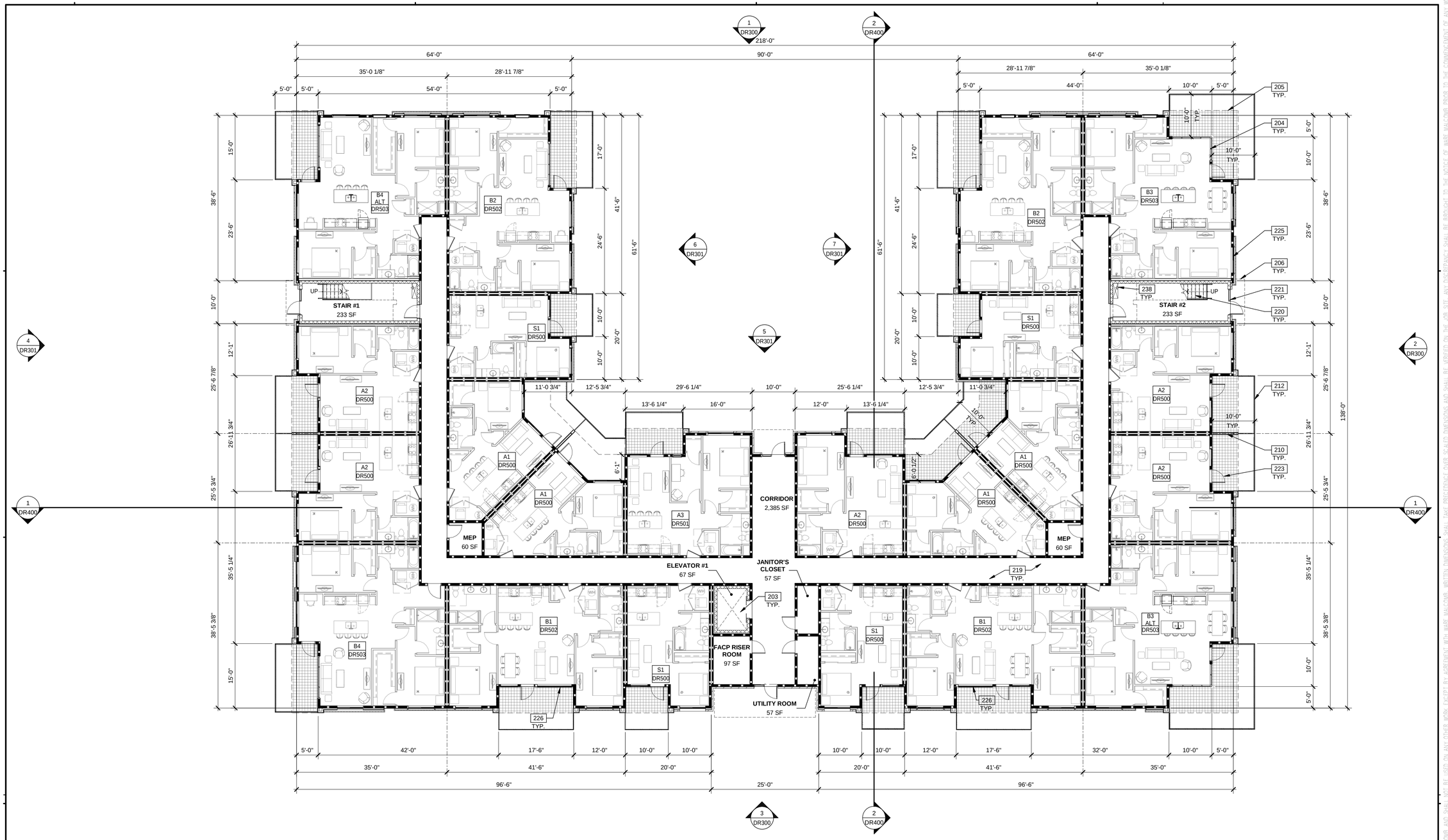


MULTIFAMILY - LEVEL 1 - FLOOR PLAN

SCALE: 3/32" = 1'-0"

3/32"=1'-0"
0 4' 8' 16' 24' 48'

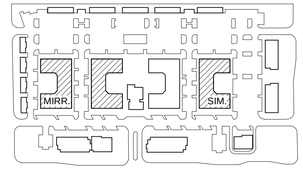
LEGENDS

WALL	BASIC DESCRIPTION
	2 HR FIRE-RESISTANCE RATED CONCRETE MASONRY WALL
	1 HR EXTERIOR PANEL OVER WOOD STUD WALL
	1 HR EXTERIOR WALL WITH BRICK WALL FURRING
	NON-RATED INTERIOR PARTITION
	1HR FIRE-RESISTANCE RATED WOOD DOUBLE STUD DEMISING WALL
	AREA OF PATIO OVERHEAD COVERAGE

KEYNOTES:

203	ELEVATOR SHAFT AND PIT.
204	ALUMINUM STOREFRONT SYSTEM.
205	LINE OF BALCONY ABOVE.
206	OUTLINE OF CANOPY ABOVE.
210	EXTERIOR UNIT SEPARATION PRIVACY WALL.
212	42" HIGH PREFABRICATED GUARDRAIL.
219	CONCRETE SLAB, PROVIDE VAPOR BARRIER PER SOILS REPORT.
220	CONCRETE-FILLED STEEL PAN TREADS AND LANDINGS WITH FABRICATED STEEL SUPPORT STRINGERS.
221	EXTERIOR STOREFRONT DOOR WITH SIDELIGHT.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
225	VINYL SLIDING OPERABLE WINDOW.
226	3 PANEL VINYL SLIDING OPERABLE WINDOW.
238	STAND PIPE.

KEY PLAN



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PLANNING BRANDING
INTERIORS BUILDING MEASUREMENT
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Phoenix, AZ, 85016
P:480.767.1001

REGISTERED ARCHITECT
63180
BRADEN P. BLAKE
DATE SIGNED
ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

MULTIFAMILY - LEVEL 1 - FLOOR PLAN

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

SHEET
DR100

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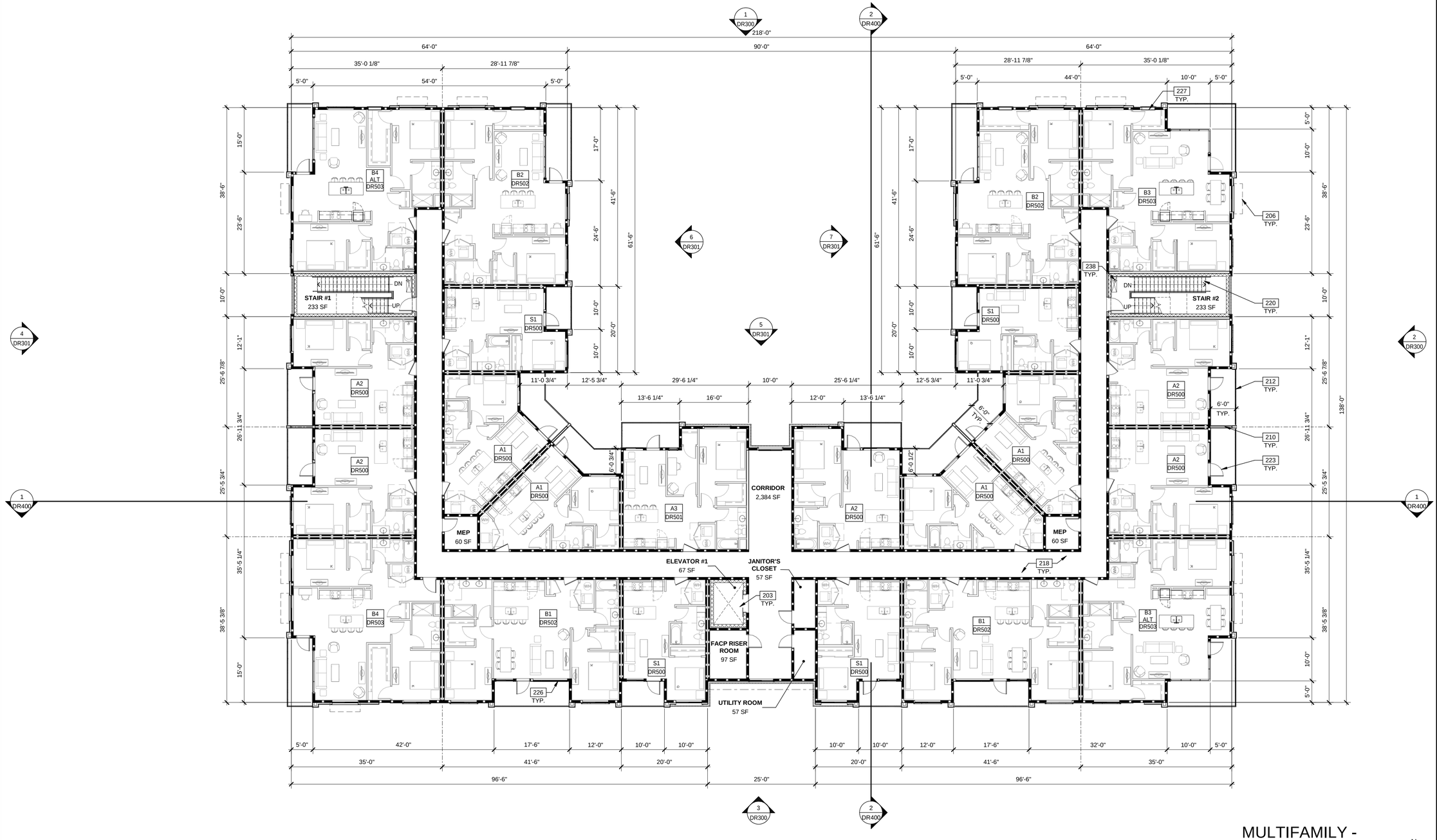


3/32"=1'-0"

0 4' 8' 16' 24' 48'

MULTIFAMILY - LEVEL 2, 3 AND 4 - TYPICAL FLOOR PLAN

SCALE: 3/32" = 1'-0"

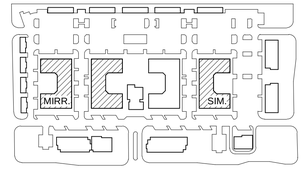
LEGENDS

WALL	BASIC DESCRIPTION
	2 HR FIRE-RESISTANCE RATED CONCRETE MASONRY WALL
	1 HR EXTERIOR PANEL OVER WOOD STUD WALL
	1 HR EXTERIOR WALL WITH BRICK WALL FURRING
	NON-RATED INTERIOR PARTITION
	1HR FIRE-RESISTANCE RATED WOOD DOUBLE STUD DEMISING WALL

KEYNOTES:

203	ELEVATOR SHAFT AND PIT.
206	OUTLINE OF CANOPY ABOVE.
210	EXTERIOR UNIT SEPARATION PRIVACY WALL.
212	42" HIGH PREFABRICATED GUARDRAIL.
218	WOOD FLOOR ASSEMBLY.
220	CONCRETE-FILLED STEEL PAN TREADS AND LANDINGS WITH FABRICATED STEEL SUPPORT STRINGERS.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
226	3 PANEL VINYL SLIDING OPERABLE WINDOW.
227	18" X 36" FIXED WINDOW.
238	STAND PIPE.

KEY PLAN



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BRADEN P. BLAKE
DATE SIGNED
ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD, MESA, ARIZONA 85212

MULTIFAMILY - LEVEL 2, 3 AND 4 - TYPICAL FLOOR PLAN

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

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DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

SHEET

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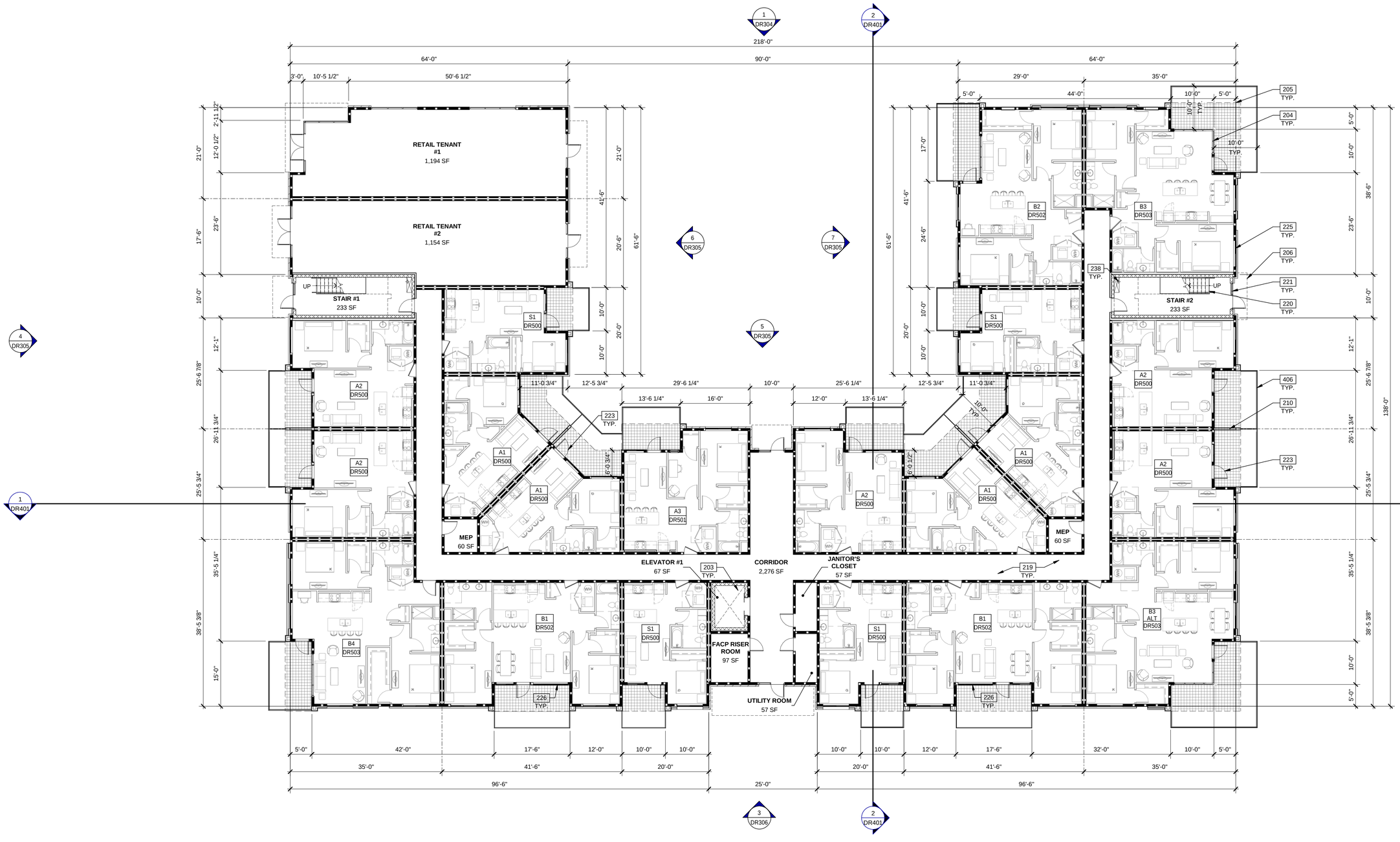


3/32"=1'-0"

0 4' 8' 16' 24' 48'

MIXED USE APARTMENTS - LEVEL 1 - FLOOR PLAN

SCALE: 3/32" = 1'-0"

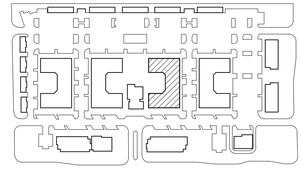
LEGENDS

WALL	BASIC DESCRIPTION
	2 HR FIRE-RESISTANCE RATED CONCRETE MASONRY WALL
	1 HR EXTERIOR PANEL OVER WOOD STUD WALL
	1 HR EXTERIOR WALL WITH BRICK WALL FURRING
	NON-RATED INTERIOR PARTITION
	1HR FIRE-RESISTANCE RATED WOOD DOUBLE STUD DEMISING WALL
	AREA OF PATIO OVERHEAD COVERAGE

KEYNOTES:

203	ELEVATOR SHAFT AND PIT.
204	ALUMINUM STOREFRONT SYSTEM.
205	LINE OF BALCONY ABOVE.
206	OUTLINE OF CANOPY ABOVE.
210	EXTERIOR UNIT SEPARATION PRIVACY WALL.
212	42" HIGH PREFABRICATED GUARDRAIL.
219	CONCRETE SLAB, PROVIDE VAPOR BARRIER PER SOILS REPORT.
220	CONCRETE-FILLED STEEL PAN TREADS AND LANDINGS WITH FABRICATED STEEL SUPPORT STRINGERS.
221	EXTERIOR STOREFRONT DOOR WITH SIDELIGHT.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
225	VINYL SLIDING OPERABLE WINDOW.
226	3 PANEL VINYL SLIDING OPERABLE WINDOW.
238	STAND PIPE.

KEY PLAN



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PLANNING BRANDING
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REGISTERED ARCHITECT 63180 BRADEN P. BLAKE DATE SIGNED ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD, MESA, ARIZONA 85212

MIXED USE APARTMENTS - LEVEL 1 - FLOOR PLAN

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
02/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A. / E.M.
JOB NO.:	PHX22-0196-00

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3/32"=1'-0"

0 4' 8' 16' 24' 48'

MIXED USE APARTMENTS - LEVEL 2 - FLOOR PLAN

SCALE: 3/32" = 1'-0"

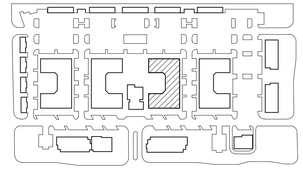
LEGENDS

WALL	BASIC DESCRIPTION
	2 HR FIRE-RESISTANCE RATED CONCRETE MASONRY WALL
	1 HR EXTERIOR PANEL OVER WOOD STUD WALL
	1 HR EXTERIOR WALL WITH BRICK WALL FURRING
	NON-RATED INTERIOR PARTITION
	1HR FIRE-RESISTANCE RATED WOOD DOUBLE STUD DEMISING WALL

KEYNOTES:

203	ELEVATOR SHAFT AND PIT.
204	ALUMINUM STOREFRONT SYSTEM.
210	EXTERIOR UNIT SEPARATION PRIVACY WALL.
220	CONCRETE-FILLED STEEL PAN TREADS AND LANDINGS WITH FABRICATED STEEL SUPPORT STRINGERS.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
225	VINYL SLIDING OPERABLE WINDOW.
226	3 PANEL VINYL SLIDING OPERABLE WINDOW.
238	STAND PIPE.
406	BALCONY WITH 42" METAL GUARDRAIL.

KEY PLAN



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THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

MIXED USE APARTMENTS - LEVEL 2 - FLOOR PLAN

DATE	REMARKS
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06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A. / E.M.
JOB NO.:	PHX22-0196-00

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DR103

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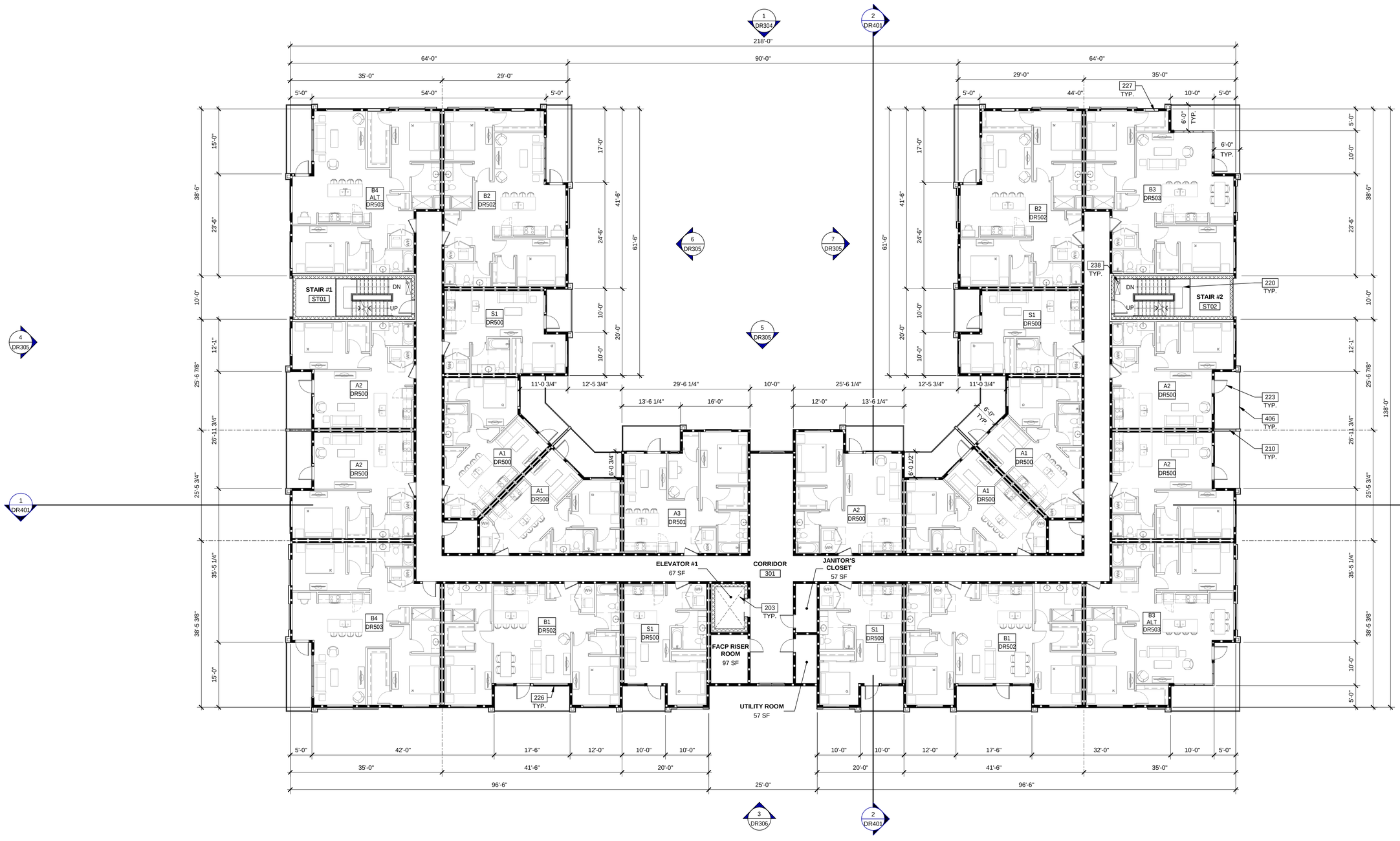


3/32"=1'-0"

0 4' 8' 16' 24' 48'

MIXED USE APARTMENTS - LEVEL 3 AND 4 - TYPICAL FLOOR PLAN

SCALE: 3/32" = 1'-0"

1 N

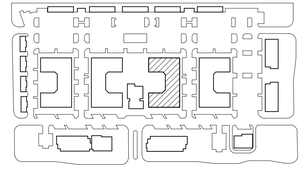
LEGENDS

WALL	BASIC DESCRIPTION
	2 HR FIRE-RESISTANCE RATED CONCRETE MASONRY WALL
	1 HR EXTERIOR PANEL OVER WOOD STUD WALL
	1 HR EXTERIOR WALL WITH BRICK WALL FURRING
	NON-RATED INTERIOR PARTITION
	1HR FIRE-RESISTANCE RATED WOOD DOUBLE STUD DEMISING WALL

KEYNOTES:

203	ELEVATOR SHAFT AND PIT.
210	EXTERIOR UNIT SEPARATION PRIVACY WALL.
220	CONCRETE-FILLED STEEL PAN TREADS AND LANDINGS WITH FABRICATED STEEL SUPPORT STRINGERS.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
226	3 PANEL VINYL SLIDING OPERABLE WINDOW.
227	18" X 36" FIXED WINDOW.
238	STAND PIPE.
406	BALCONY WITH 42" METAL GUARDRAIL.

KEY PLAN



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Phoenix, AZ, 85016
P 480.767.1001

REGISTERED ARCHITECT 63180 BRADEN P. BLAKE DATE SIGNED ARIZONA U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD, MESA, ARIZONA 85212

MIXED USE APARTMENTS - LEVEL 3 & LEVEL 4 - TYPICAL FLOOR PLANS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

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DRAWN BY.:	H.A. / E.M.
JOB NO.:	PHX22-0196-00

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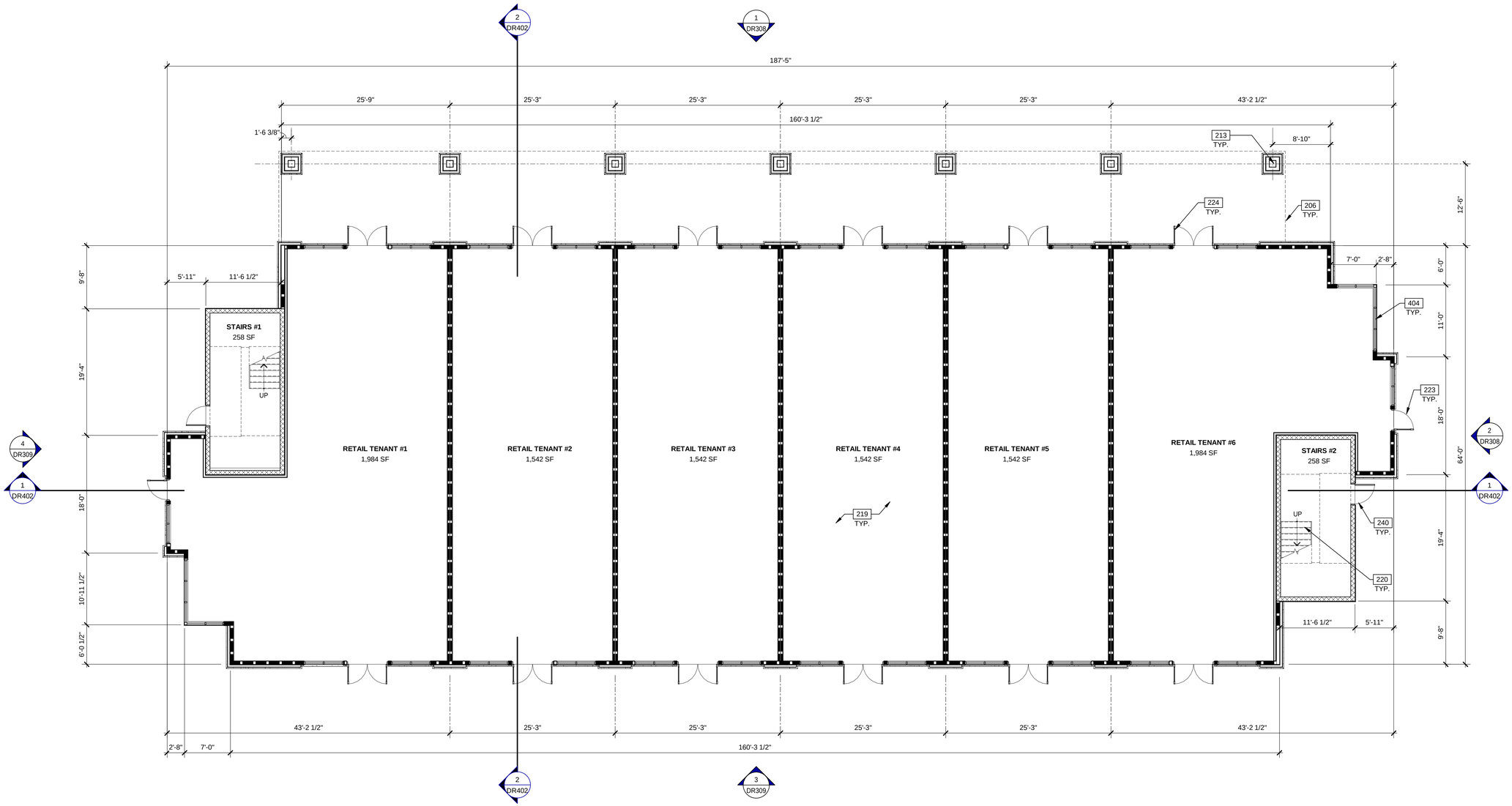


1/8"=1'-0"

0 4' 8' 16' 32'

MIXED USE BUILDING - LEVEL 1 - FLOOR PLAN

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

N

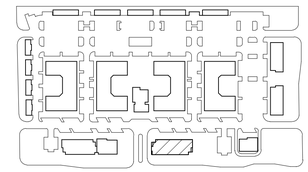
LEGEND

WALL	BASIC DESCRIPTION
	1HR RATED FULL HEIGHT PARTITION
	CMU WALL, FULLY GROUTED
	EXTERIOR WALL, 1 HR RATED

KEYNOTES: -

206	OUTLINE OF CANOPY ABOVE.
213	WRAPPED WOOD COLUMN.
219	CONCRETE SLAB, PROVIDE VAPOR BARRIER PER SOILS REPORT.
220	CONCRETE-FILLED STEEL PAN TREADS AND LANDINGS WITH FABRICATED STEEL SUPPORT STRINGERS.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
224	EXTERIOR (PAIR) ALUMINUM DOUBLE DOOR.
240	EXTERIOR HOLLOW METAL DOOR.
404	ALUMINUM STOREFRONT SYSTEM.

KEY PLAN



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REGISTERED ARCHITECT
63180
BRADEN P. BLAKE
DATE SIGNED
ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

MIXED USE BUILDING - LEVEL 1 - FLOOR PLAN

	DATE	REMARKS
	02/27/2023	PRE-APPLICATION SUBMITTAL
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	06/05/2023	SP / DRB SUBMITTAL #2
	10/09/2023	SP / DRB SUBMITTAL #3
	01/29/2024	SP / DRB SUBMITTAL #4
	03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	E.M. / H.A.
JOB NO.:	PHX22-0196-00

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DR105

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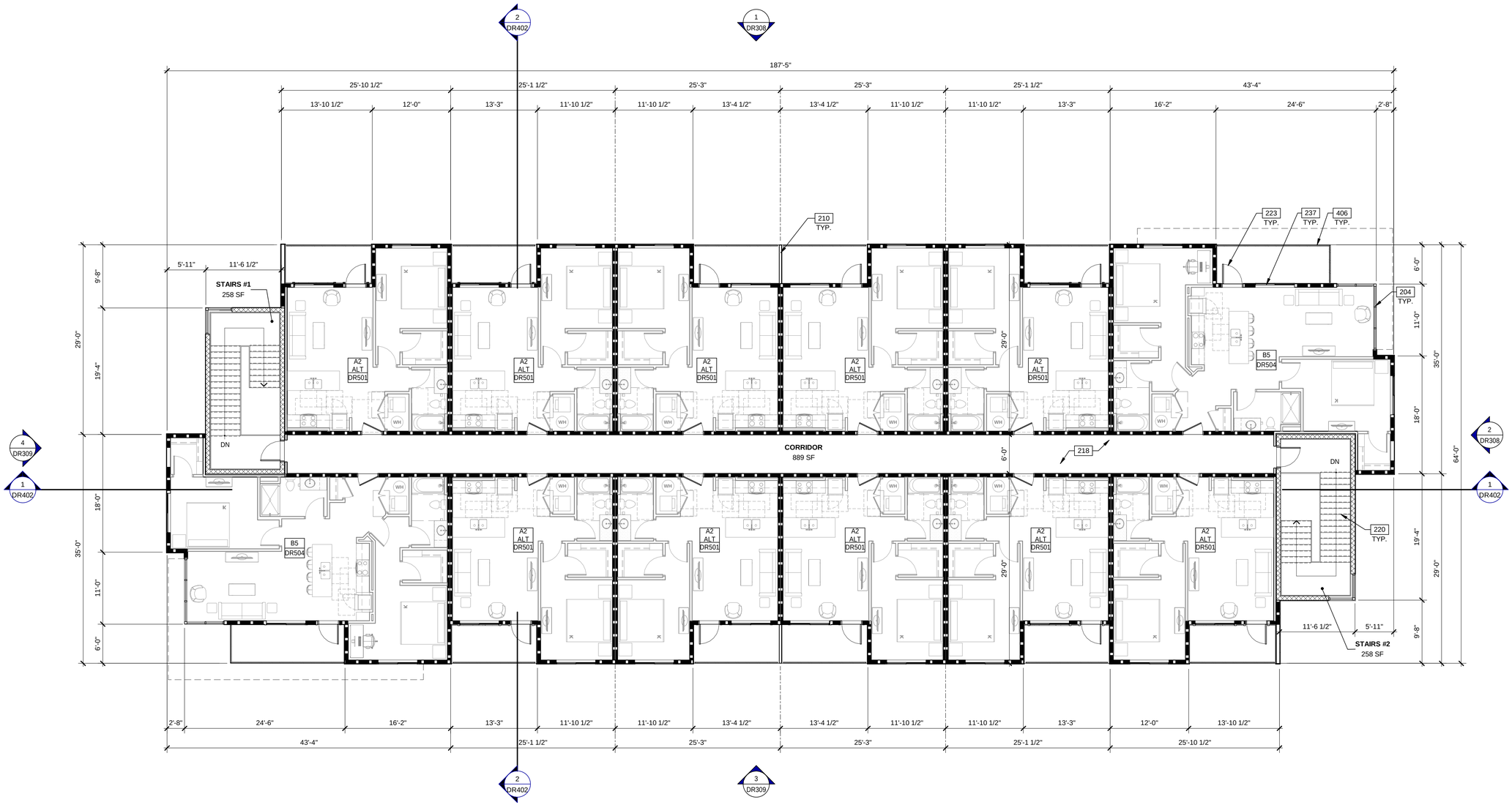


1/8"=1'-0"

0 4' 8' 16' 32'

MIXED USE BUILDING - LEVEL 2 - FLOOR PLAN

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

1

N

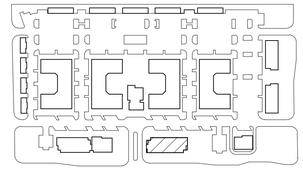
LEGEND

WALL	BASIC DESCRIPTION
	FULL HEIGHT NON-RATED PARTITION TO STURCTURE
	1HR RATED FULL HEIGHT PARTITION
	CMU WALL, FULLY GROUTED
	EXTERIOR WALL, 1 HR RATED

KEYNOTES:

204	ALUMINUM STOREFRONT SYSTEM.
210	EXTERIOR UNIT SEPARATION PRIVACY WALL.
218	WOOD FLOOR ASSEMBLY.
220	CONCRETE-FILLED STEEL PAN TREADS AND LANDINGS WITH FABRICATED STEEL SUPPORT STRINGERS.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
237	72" X 60" VINYL SLIDING OPERABLE WINDOW.
406	BALCONY WITH 42" METAL GUARDRAIL.

KEY PLAN



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THE CRAFTSMAN ON ELLIOT

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MIXED USE BUILDING - LEVEL 2 - FLOOR PLAN

DATE	REMARKS
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PA/PM:	C. BRUCE
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JOB NO.:	PHX22-0196-00

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DR106

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LIVE/WORK BUILDING - LEVEL 1 - FLOOR PLAN

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

N

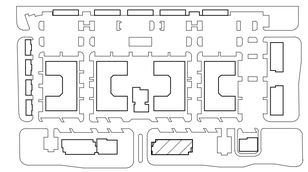
LEGEND

WALL	BASIC DESCRIPTION
	FULL HEIGHT NON-RATED PARTITION TO STRUCTURE
	1HR RATED FULL HEIGHT DEMISING WALL TO STRUCTURE
	2HR FIRE-RESISTANCE RATED CMU WALL, FULLY GROUTED.
	1HR RATED EXTERIOR WALL

KEYNOTES:

204	ALUMINUM STOREFRONT SYSTEM.
219	CONCRETE SLAB, PROVIDE VAPOR BARRIER PER SOILS REPORT.
220	CONCRETE-FILLED STEEL PAN TREADS AND LANDINGS WITH FABRICATED STEEL SUPPORT STRINGERS.
221	EXTERIOR STOREFRONT DOOR WITH SIDELIGHT.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
225	VINYL SLIDING OPERABLE WINDOW.
226	3 PANEL VINYL SLIDING OPERABLE WINDOW.
240	EXTERIOR HOLLOW METAL DOOR.

KEY PLAN



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BRADEN P. BLAKE
DATE SIGNED
ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

LIVE/WORK BUILDING - LEVEL 1 - FLOOR PLAN

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	E.M. / H.A.
JOB NO.:	PHX22-0196-00

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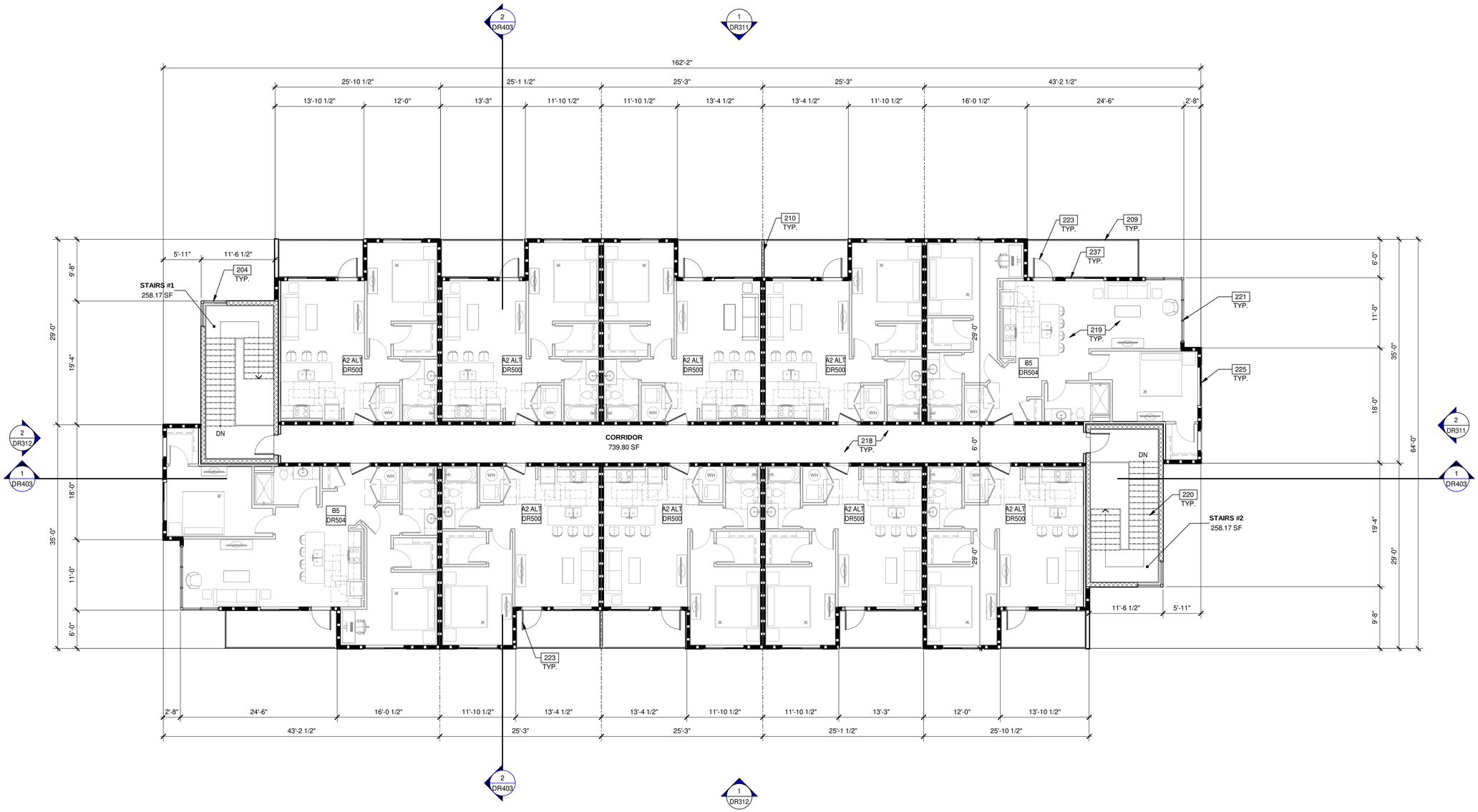


LIVE/WORK BUILDING - LEVEL 2 - FLOOR PLAN

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

N

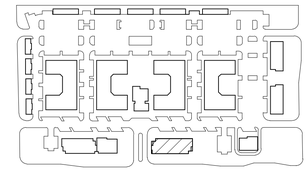
LEGEND

WALL	BASIC DESCRIPTION
	FULL HEIGHT NON-RATED PARTITION TO STRUCTURE
	1HR RATED FULL HEIGHT DEMISING WALL TO STRUCTURE
	2HR FIRE-RESISTANCE RATED CMU WALL, FULLY GROUTED.
	1HR RATED EXTERIOR WALL

KEYNOTES: -

204	ALUMINUM STOREFRONT SYSTEM.
209	DECORATIVE STAINLESS STEEL GUARD, UP TO 42" ABOVE FINISH FLOOR.
210	EXTERIOR UNIT SEPARATION PRIVACY WALL.
218	WOOD FLOOR ASSEMBLY.
219	CONCRETE SLAB, PROVIDE VAPOR BARRIER PER SOILS REPORT.
220	CONCRETE-FILLED STEEL PAN TREADS AND LANDINGS WITH FABRICATED STEEL SUPPORT STRINGERS.
221	EXTERIOR STOREFRONT DOOR WITH SIDELIGHT.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
225	VINYL SLIDING OPERABLE WINDOW.
237	72" X 60" VINYL SLIDING OPERABLE WINDOW.

KEY PLAN



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ARIZONA U.S.A.

THE CRAFTSMAN ON ELLIOT

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LIVE/WORK BUILDING - LEVEL 2 - FLOOR PLAN

DATE	REMARKS
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10/09/2023	SP / DRB SUBMITTAL #3
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JOB NO.:	PHX22-0196-00

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DR108

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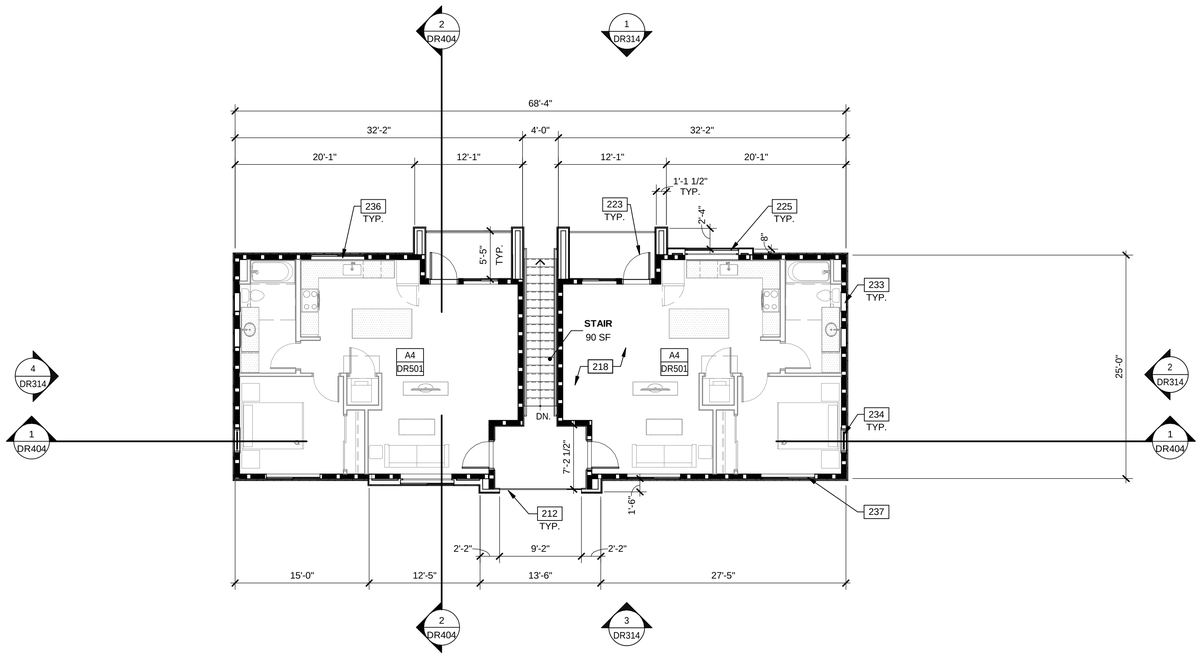
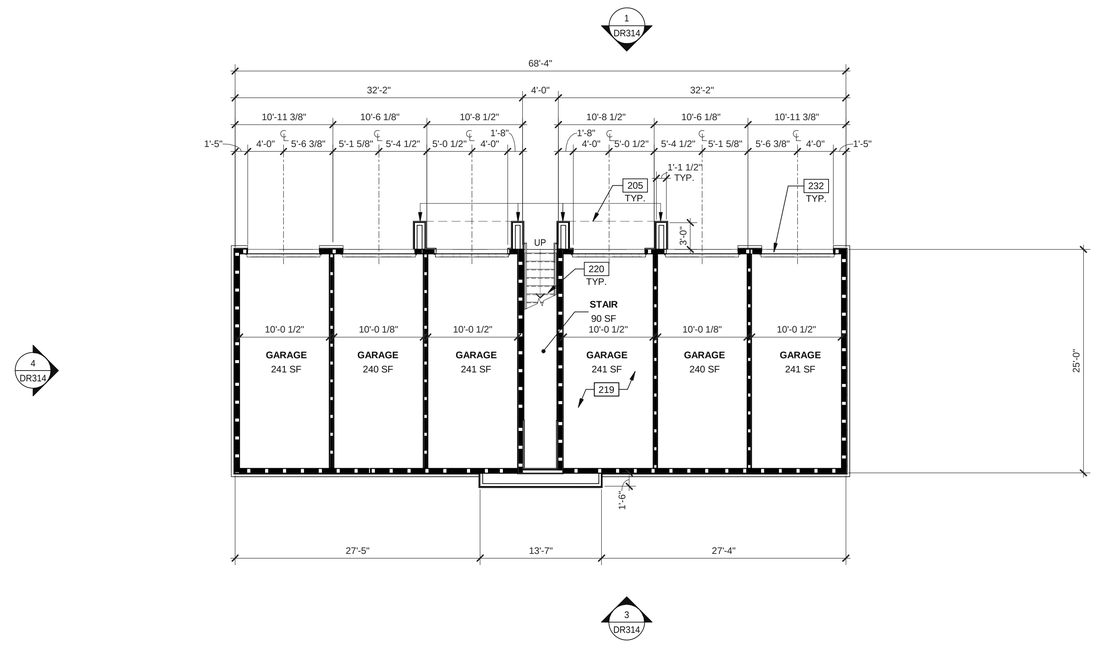


CARRIAGE HOUSE - SECOND FLOOR PLAN

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

2



CARRIAGE HOUSE - FIRST FLOOR PLAN

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

1

1/8"=1'-0"

0 4' 8' 16' 32'

N

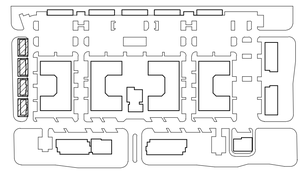
KEYNOTES:

205	OUTLINE OF FLOOR ABOVE.
212	42" HIGH PREFABRICATED GUARDRAIL.
218	WOOD FLOOR ASSEMBLY.
219	CONCRETE SLAB, PROVIDE VAPOR BARRIER PER SOILS REPORT.
220	CONCRETE-FILLED STEEL PAN TREADS AND LANDINGS WITH FABRICATED STEEL SUPPORT STRINGERS.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
225	VINYL SLIDING OPERABLE WINDOW.
232	96" X 96" SECTIONAL ALUMINUM GARAGE DOOR, SINGLE CAR.
233	24" X 24" FIXED WINDOW.
234	32" X 66" FIXED WINDOW.
236	66" X 48" VINYL SLIDING OPERABLE WINDOW.
237	72" X 60" VINYL SLIDING OPERABLE WINDOW.

LEGEND

WALL	BASIC DESCRIPTION
	EXTERIOR WALL
	1HR FIRE-RESISTANCE RATED

KEY PLAN



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BRADEN P. BLAKE
DATE SIGNED
ARIZONA U.S.A.

THE CRAFTSMAN ON ELLIOT

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MESA, ARIZONA 85212

CARRIAGE HOUSE - FLOOR PLANS

DATE	REMARKS
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PA/PM:	C. BRUCE
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DR109

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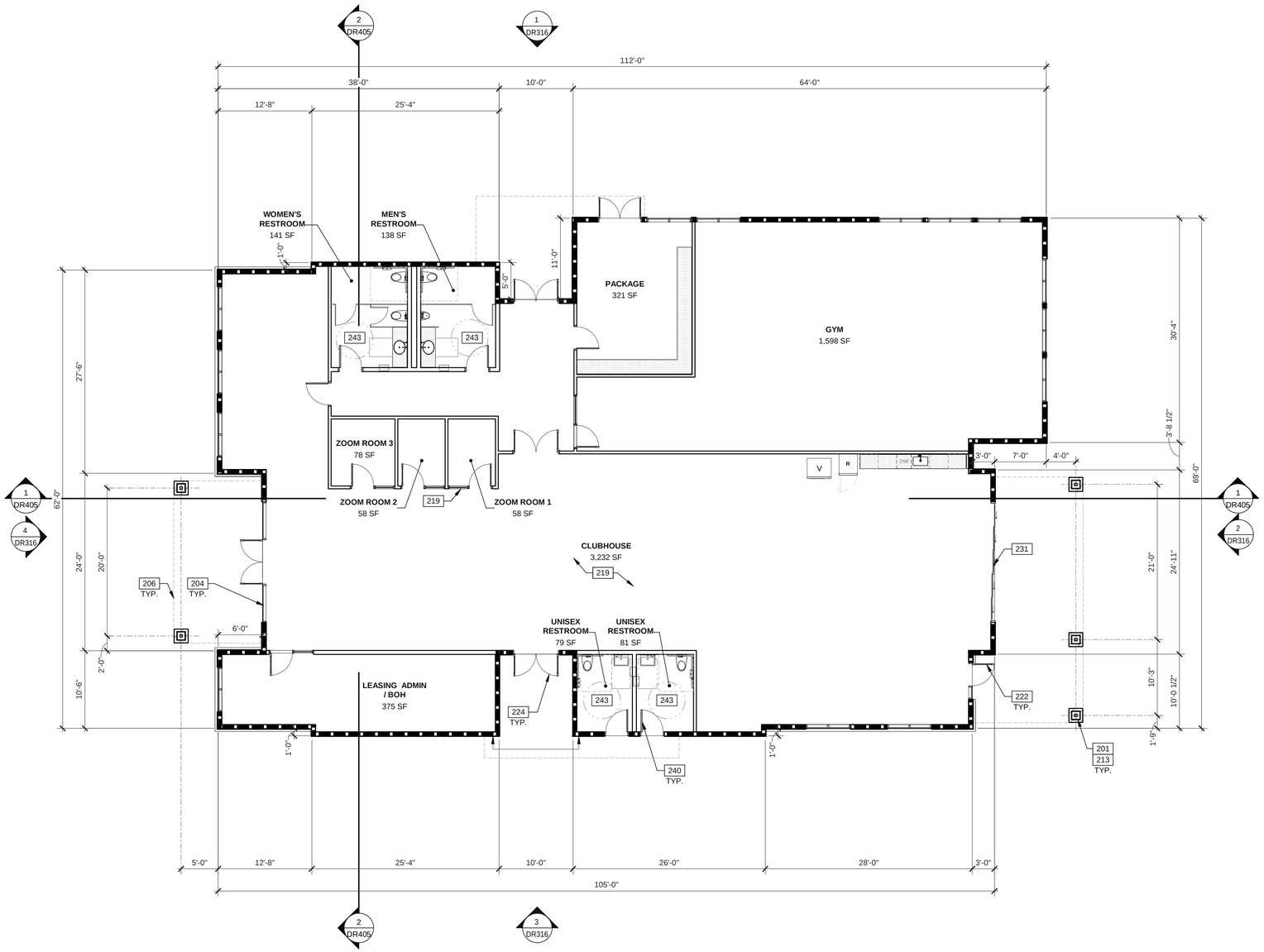


1/8"=1'-0"

0 4' 8' 16' 32'

CLUBHOUSE & FITNESS - FLOOR PLAN

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

1 N

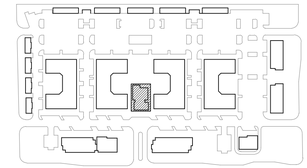
KEYNOTES:

201	STRUCTURAL COLUMN.
204	ALUMINUM STOREFRONT SYSTEM.
206	OUTLINE OF CANOPY ABOVE.
213	WRAPPED WOOD COLUMN.
219	CONCRETE SLAB, PROVIDE VAPOR BARRIER PER SOILS REPORT.
222	EXTERIOR ALUMINUM DOOR WITH SIDELIGHT.
224	EXTERIOR (PAIR) ALUMINUM DOUBLE DOOR.
231	ALUMINUM AND GLASS FOLDING WALL.
240	EXTERIOR HOLLOW METAL DOOR.
243	FULLY ACCESSIBLE RESTROOM FACILITY.

LEGEND

WALL	BASIC DESCRIPTION
	EXTERIOR 1HR RATED WOOD STUD WALL
	INTERIOR NON RATED PARTITION

KEY PLAN



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BRADEN P. BLAKE
DATE SIGNED
ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

CLUBHOUSE & FITNESS - FLOOR PLAN

DATE	REMARKS
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06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

SHEET
DR110

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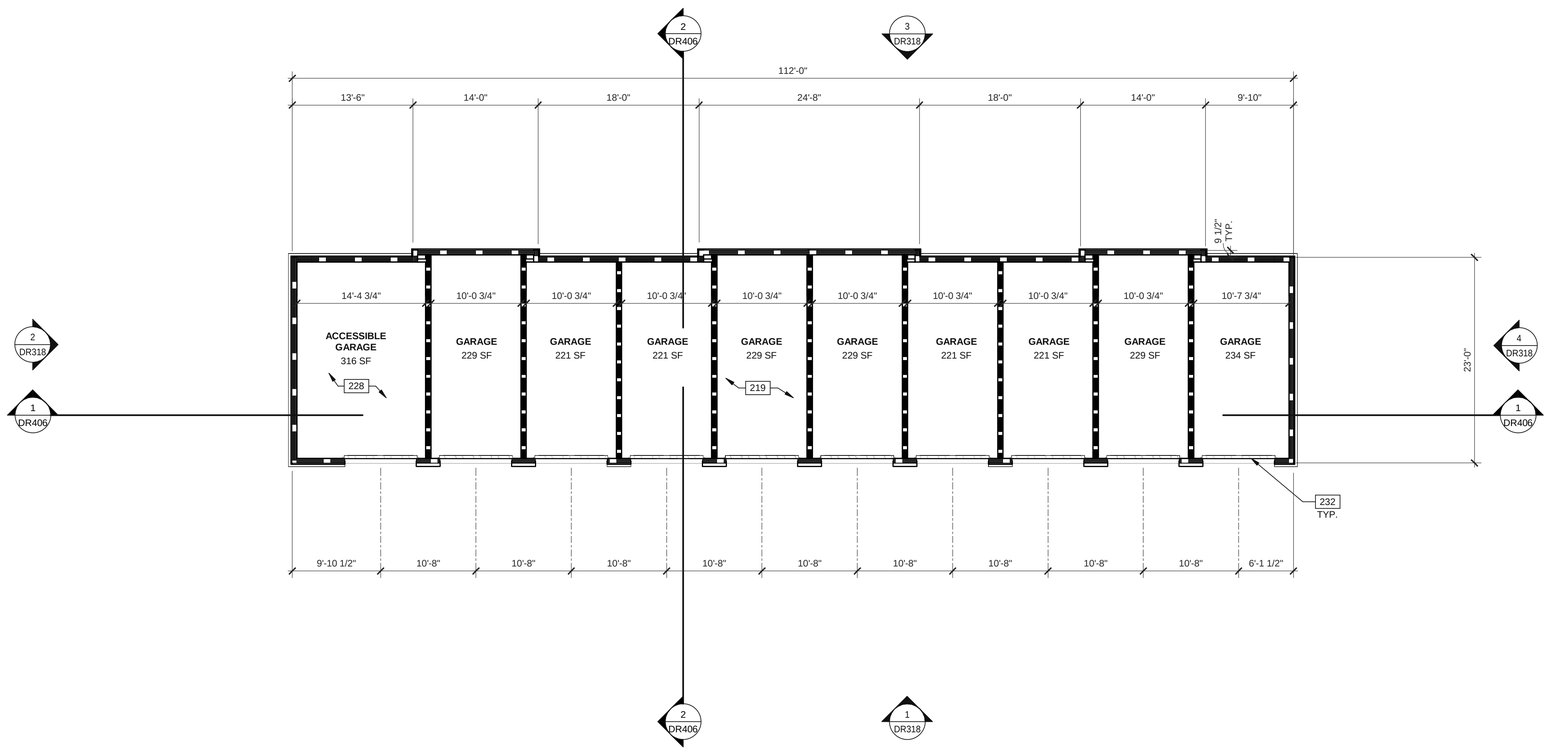


1/8"=1'-0"

0 4' 8' 16' 32'

DETACHED GARAGE - FLOOR PLAN

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

1

N

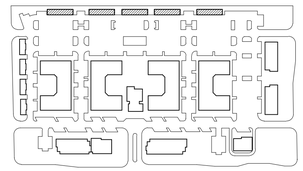
KEYNOTES:

219	CONCRETE SLAB, PROVIDE VAPOR BARRIER PER SOILS REPORT.
228	ACCESSIBLE GARAGE.
232	96" X 96" SECTIONAL ALUMINUM GARAGE DOOR, SINGLE CAR.

LEGEND

WALL	BASIC DESCRIPTION
	EXTERIOR 1 HR RATED WOOD STUD WALL
	INTERIOR 1 HR RATED PARTITION

KEY PLAN



N

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P 480.767.1001

REGISTERED ARCHITECT
63180
BRADEN P. BLAKE
DATE SIGNED
ARIZONA U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

DETACHED GARAGE - FLOOR PLAN

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	E.M. / H.A.
JOB NO.:	PHX22-0196-00

SHEET

DR111

10/6/2023 8:41:25 PM

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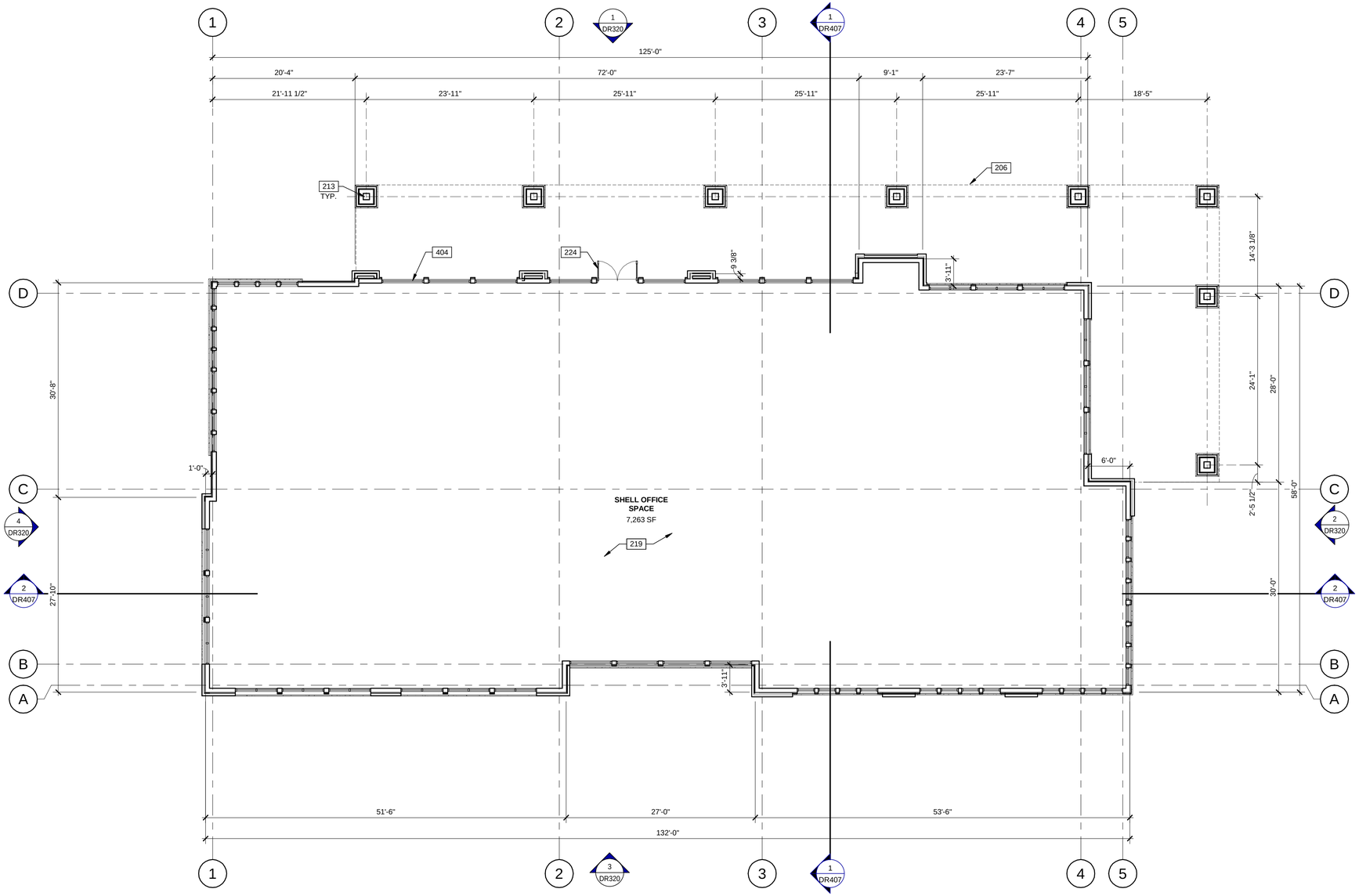


1/8"=1'-0"

0 4' 8' 16' 32'

OFFICE BUILDING "A" - FLOOR PLAN

OFFICE BUILDING "B" SIM. MIRRORED HORIZONTALLY SCALE: 1/8" = 1'-0"

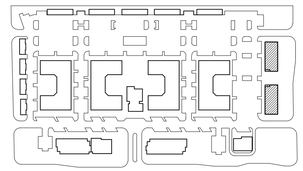
KEYNOTES:

206	OUTLINE OF CANOPY ABOVE.
213	WRAPPED WOOD COLUMN.
219	CONCRETE SLAB, PROVIDE VAPOR BARRIER PER SOILS REPORT.
224	EXTERIOR (PAIR) ALUMINUM DOUBLE DOOR.
404	ALUMINUM STOREFRONT SYSTEM.

LEGEND

WALL	BASIC DESCRIPTION
	EXTERIOR METAL STUD WALL

KEY PLAN



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BRADEN P. BLAKE
DATE SIGNED
ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

OFFICE BUILDING "A" - FLOOR PLAN

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

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DR112

10/6/2023 8:49:30 PM

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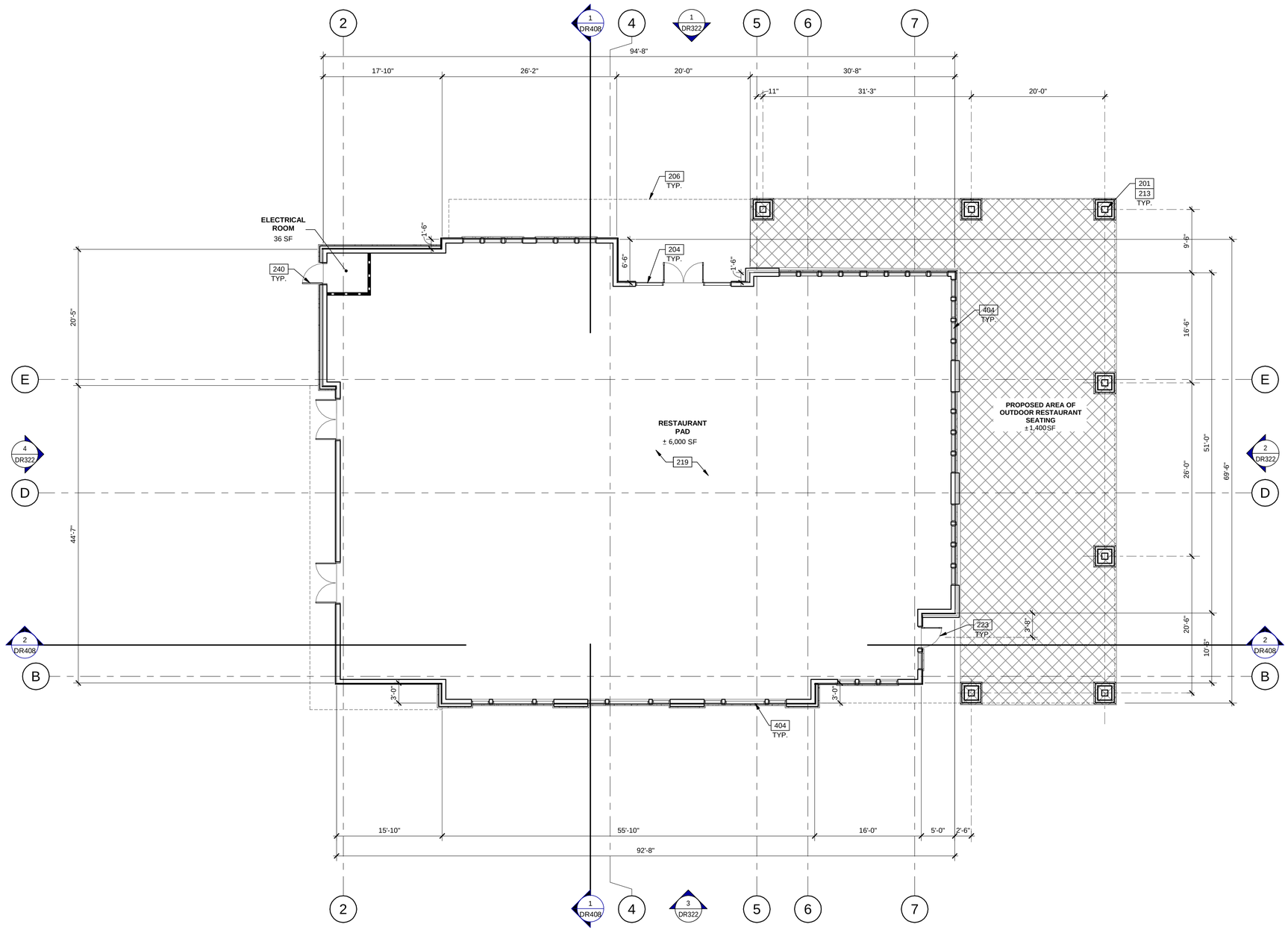


1/8"=1'-0"

0 4' 8' 16' 32'

RESTAURANT BUILDING - FLOOR PLAN

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

1

N

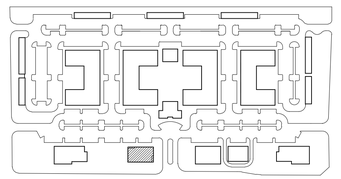
KEYNOTES:

201	STRUCTURAL COLUMN.
204	ALUMINUM STOREFRONT SYSTEM.
206	OUTLINE OF CANOPY ABOVE.
213	WRAPPED WOOD COLUMN.
219	CONCRETE SLAB, PROVIDE VAPOR BARRIER PER SOILS REPORT.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
240	EXTERIOR HOLLOW METAL DOOR.
404	ALUMINUM STOREFRONT SYSTEM.

LEGEND

WALL	BASIC DESCRIPTION
	EXTERIOR METAL STUD WALL
	INTERIOR 1HR RATED PARTITION

KEY PLAN



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Phoenix, AZ. 85016
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REGISTERED ARCHITECT
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BRADEN P. BLAKE
DATE SIGNED
ARIZONA U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

RESTAURANT BUILDING - FLOOR PLAN

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

SHEET

DR113

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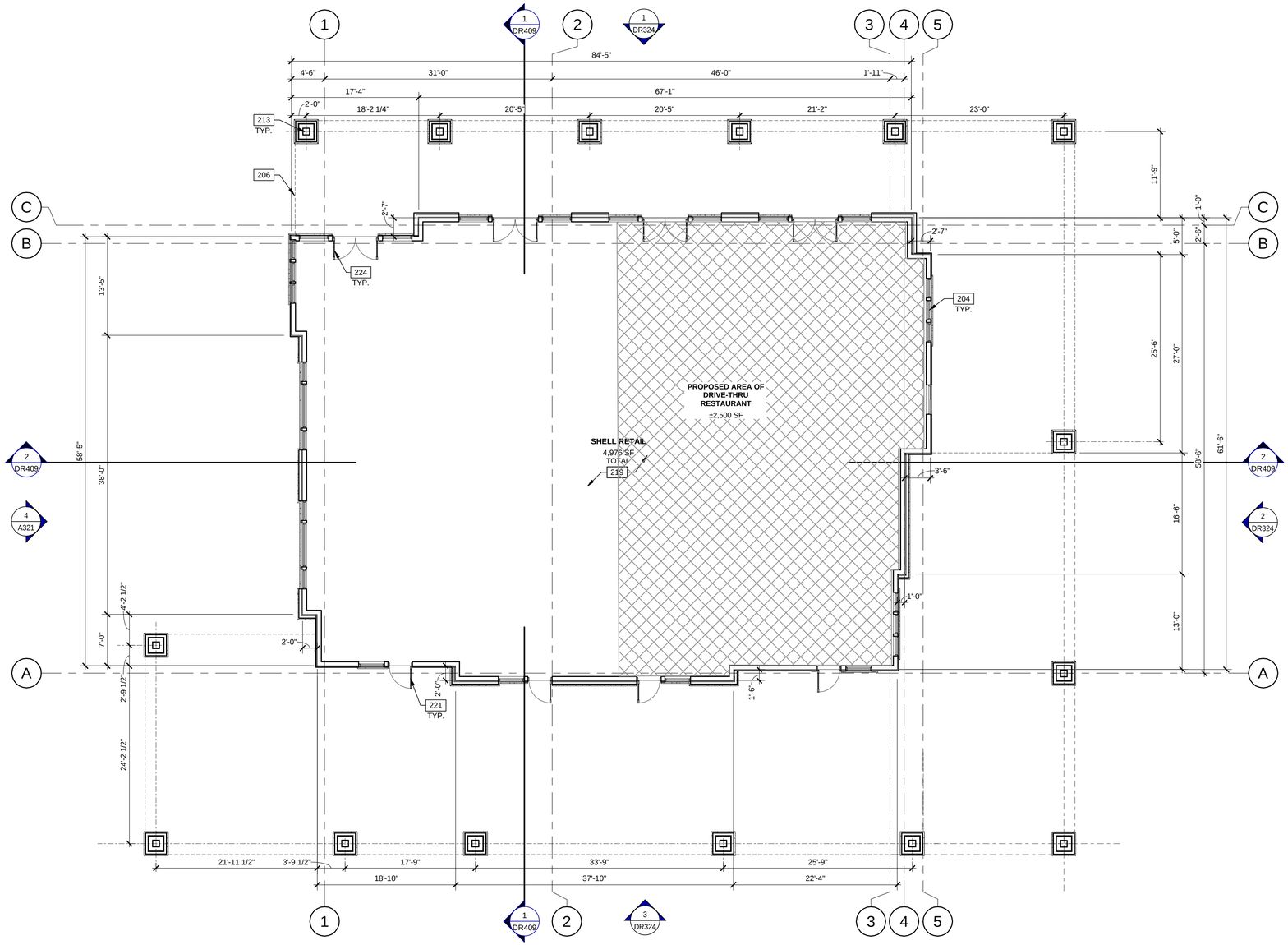


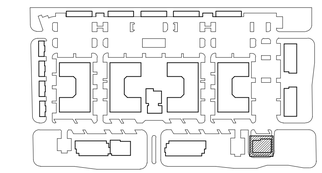
KEYNOTES:

204	ALUMINUM STOREFRONT SYSTEM.
206	OUTLINE OF CANOPY ABOVE.
213	WRAPPED WOOD COLUMN.
219	CONCRETE SLAB, PROVIDE VAPOR BARRIER PER SOILS REPORT.
221	EXTERIOR STOREFRONT DOOR WITH SIDELIGHT.
224	EXTERIOR (PAIR) ALUMINUM DOUBLE DOOR.

LEGEND

WALL	BASIC DESCRIPTION
	EXTERIOR METAL STUD WALL
	NON RATED INTERIOR PARTITION

KEY PLAN



N

NOT TO SCALE

1/8"=1'-0"

0 4' 8' 16' 32'

RETAIL BUILDING - FLOOR PLAN

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

1 N

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REGISTERED ARCHITECT
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DATE SIGNED
ARIZONA U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

RETAIL BUILDING - FLOOR PLAN

DATE	REMARKS
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02/07/2023	SP / DRB SUBMITTAL #1
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10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

SHEET

DR114

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MULTIFAMILY - EAST EXTERIOR ELEVATION

SCALE: 3/32" = 1'-0" 1



MULTIFAMILY - SOUTH EXTERIOR ELEVATION

SCALE: 3/32" = 1'-0" 2



MULTIFAMILY - WEST EXTERIOR ELEVATION

SCALE: 3/32" = 1'-0" 3

KEYNOTES: -

210	EXTERIOR UNIT SEPARATION PRIVACY WALL.
221	EXTERIOR STOREFRONT DOOR WITH SIDELIGHT.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
225	VINYL SLIDING OPERABLE WINDOW.
226	3 PANEL VINYL SLIDING OPERABLE WINDOW.
227	18" X 36" FIXED WINDOW.
310	16" STUCCO CORNICE.
401	FINISH GRADE VARIES.
404	ALUMINUM STOREFRONT SYSTEM.
405	LINE OF ROOF BEYOND.
406	BALCONY WITH 42" METAL GUARDRAIL.
408	PAINTED METAL CANOPY.
409	LOUVERED PAINTED METAL CANOPY.

LEGEND

GLASS:

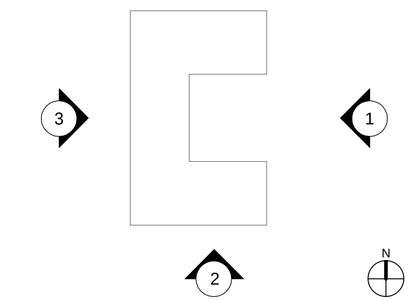
VISION GLASS

TEMPERED GLASS

MATERIALS:

METAL CANOPY

KEY PLAN



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REGISTERED ARCHITECT 63180 BRADEN P. BLAKE DATE SIGNED ARIZONA U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD, MESA, ARIZONA 85212

MULTIFAMILY - EXTERIOR ELEVATIONS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

SHEET

DR300

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1/16"=1'-0"

0 8' 16' 32' 64'

MULTIFAMILY - NORTH EXTERIOR ELEVATION 4

SCALE: 3/32" = 1'-0"



MULTIFAMILY - EAST EXTERIOR ELEVATION 5

SCALE: 3/32" = 1'-0"



MULTIFAMILY - NORTH EXTERIOR ELEVATION 7

SCALE: 3/32" = 1'-0"



MULTIFAMILY - SOUTH EXTERIOR ELEVATION 6

SCALE: 3/32" = 1'-0"

KEYNOTES: -

210	EXTERIOR UNIT SEPARATION PRIVACY WALL.
221	EXTERIOR STOREFRONT DOOR WITH SIDELIGHT.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
225	VINYL SLIDING OPERABLE WINDOW.
310	16" STUCCO CORNICE.
401	FINISH GRADE VARIES.
404	ALUMINUM STOREFRONT SYSTEM.
405	LINE OF ROOF BEYOND.
406	BALCONY WITH 42" METAL GUARDRAIL.
408	PAINTED METAL CANOPY.
409	LOUVERED PAINTED METAL CANOPY.

LEGEND

GLASS:

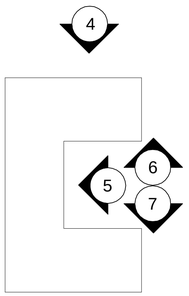
VISION GLASS

TEMPERED GLASS

MATERIALS:

METAL CANOPY

KEY PLAN



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P 480.767.1001

REGISTERED ARCHITECT
63180
BRADEN P. BLAKE
DATE SIGNED
ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

MULTIFAMILY - EXTERIOR ELEVATIONS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
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10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

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DR301

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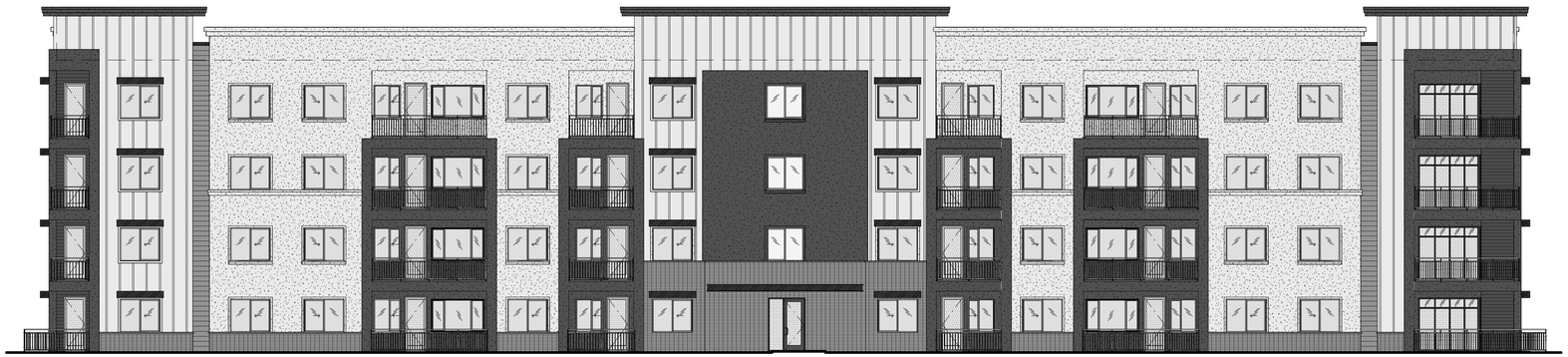
MULTIFAMILY - EAST EXTERIOR ELEVATION 1

SCALE: 3/32" = 1'-0"



MULTIFAMILY - SOUTH EXTERIOR ELEVATION 2

SCALE: 3/32" = 1'-0"



MULTIFAMILY - WEST EXTERIOR ELEVATION 3

SCALE: 3/32" = 1'-0"

LEGEND

GLASS:

- VISION GLASS
- TEMPERED GLASS

MATERIALS:

- BRICK VENEER - MEDIUM GRAY (STACKED BOND)
- FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 7069 IRON ORE)
- FIBER CEMENT - PLANK (WOOD LOOK)
- FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)
- STUCCO (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 9163 TIN LIZZIE) (PAINTED - SW 7069 IRON ORE)
- STEEL (PAINTED - SW 6258 TRICORN BLACK)

EXTERIOR MATERIAL ANALYSIS

EAST ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	5%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	26%
FIBER CEMENT - PLANK (WOOD LOOK)	4%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	2%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	36%
STUCCO (PAINTED - SW 7069 IRON ORE)	27%

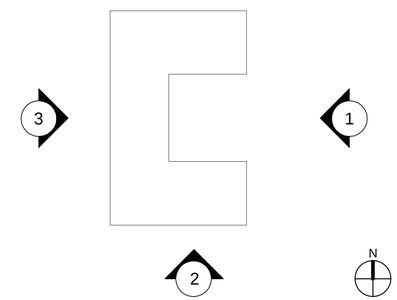
SOUTH ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	4%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	23%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	5%
FIBER CEMENT - PLANK (WOOD LOOK)	10%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	4%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	26%
STUCCO (PAINTED - SW 7069 IRON ORE)	28%

WEST ELEVATION

	0%
BRICK VENEER - MEDIUM GRAY (STACKED BOND)	8%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	19%
FIBER CEMENT - PLANK (WOOD LOOK)	12%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	2%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	30%
STUCCO (PAINTED - SW 7069 IRON ORE)	28%

KEY PLAN



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REGISTERED ARCHITECT
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BRADEN P. BLAKE
DATE SIGNED
ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

MULTIFAMILY - COLOR EXTERIOR ELEVATIONS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
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01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

SHEET
DR302

10/6/2023 8:17:10 PM

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3/32"=1'-0"
0 4' 8' 16' 24' 48'

MULTIFAMILY - NORTH EXTERIOR ELEVATION (4)

SCALE: 3/32" = 1'-0"



NOTE: EXTERIOR MATERIAL PERCENTAGES ARE INCLUDED IN THE OVERALL EAST ELEVATION CALCULATIONS ON SHEET DR302

MULTIFAMILY - EAST COURTYARD EXTERIOR ELEVATION (5)

SCALE: 3/32" = 1'-0"



MULTIFAMILY - NORTH COURTYARD EXTERIOR ELEVATION (7)

SCALE: 3/32" = 1'-0"



MULTIFAMILY - SOUTH COURTYARD EXTERIOR ELEVATION (6)

SCALE: 3/32" = 1'-0"

LEGEND

GLASS:

- VISION GLASS
- TEMPERED GLASS

MATERIALS:

- BRICK VENEER - MEDIUM GRAY (STACKED BOND)
- FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 7069 IRON ORE)
- FIBER CEMENT - PLANK (WOOD LOOK)
- FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)
- STUCCO (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 9163 TIN LIZZIE) (PAINTED - SW 7069 IRON ORE)
- STEEL (PAINTED - SW 6258 TRICORN BLACK)

EXTERIOR MATERIAL ANALYSIS

NORTH ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	4%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	22%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	5%
FIBER CEMENT - PLANK (WOOD LOOK)	4%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	4%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	27%
STUCCO (PAINTED - SW 7069 IRON ORE)	34%

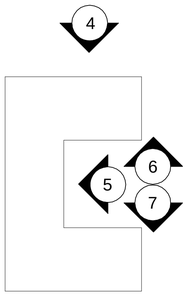
NORTH COURTYARD ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	3%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	14%
FIBER CEMENT - PLANK (WOOD LOOK)	8%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	3%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	44%
STUCCO (PAINTED - SW 7069 IRON ORE)	28%

SOUTH COURTYARD ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	4%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	15%
FIBER CEMENT - PLANK (WOOD LOOK)	9%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	4%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	50%
STUCCO (PAINTED - SW 7069 IRON ORE)	19%

KEY PLAN



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Phoenix, AZ. 85016
P 480.767.1001

REGISTERED ARCHITECT
63180
BRADEN P. BLAKE
DATE SIGNED
ARIZONA U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

MULTIFAMILY - COLOR EXTERIOR ELEVATIONS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

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DR303

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MIXED USE APARTMENTS - WEST EXTERIOR ELEVATION 1

SCALE: 3/32" = 1'-0"



MIXED USE APARTMENTS - NORTH EXTERIOR ELEVATION 2

SCALE: 3/32" = 1'-0"



MIXED USE APARTMENTS - EAST EXTERIOR ELEVATION 3

SCALE: 3/32" = 1'-0"

KEYNOTES:

210	EXTERIOR UNIT SEPARATION PRIVACY WALL.
221	EXTERIOR STOREFRONT DOOR WITH SIDELIGHT.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
225	VINYL SLIDING OPERABLE WINDOW.
226	3 PANEL VINYL SLIDING OPERABLE WINDOW.
227	18" X 36" FIXED WINDOW.
310	16" STUCCO CORNICE.
401	FINISH GRADE VARIES.
405	LINE OF ROOF BEYOND.
406	BALCONY WITH 42" METAL GUARDRAIL.
408	PAINTED METAL CANOPY.
409	LOUVERED PAINTED METAL CANOPY.

LEGEND

GLASS:

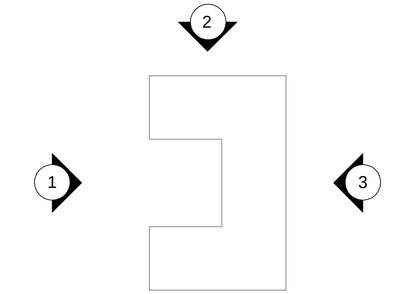
VISION GLASS

TEMPERED GLASS

MATERIALS:

METAL CANOPY

KEY PLAN



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REGISTERED ARCHITECT 63180 BRADEN P. BLAKE DATE SIGNED ARIZONA U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD, MESA, ARIZONA 85212

MIXED USE APARTMENTS - EXTERIOR ELEVATIONS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A. / E.M.
JOB NO.:	PHX22-0196-00

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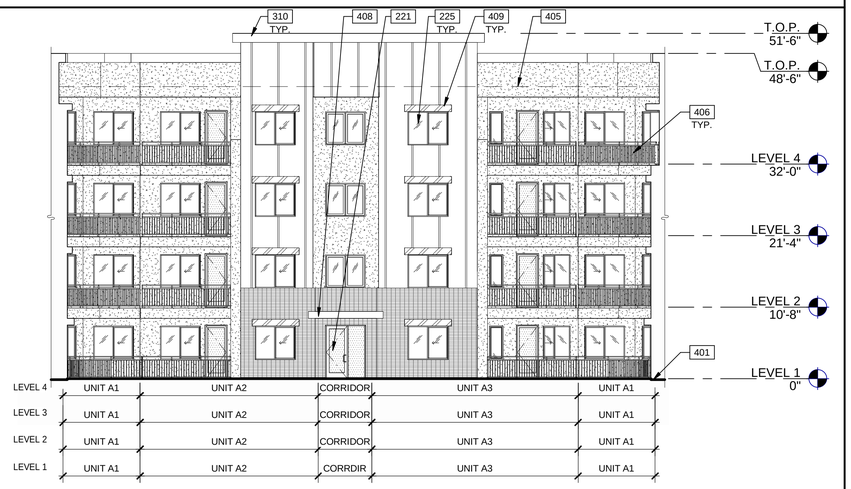
MIXED USE APARTMENTS - SOUTH EXTERIOR ELEVATION

SCALE: 3/32" = 1'-0"

4



MIXED USE APARTMENTS - WEST EXTERIOR ELEVATION

SCALE: 3/32" = 1'-0"

5



MIXED USE APARTMENTS - SOUTH EXTERIOR ELEVATION

SCALE: 3/32" = 1'-0"

7



MIXED USE APARTMENTS - NORTH EXTERIOR ELEVATION

SCALE: 3/32" = 1'-0"

6

KEYNOTES:

204	ALUMINUM STOREFRONT SYSTEM.
210	EXTERIOR UNIT SEPARATION PRIVACY WALL.
221	EXTERIOR STOREFRONT DOOR WITH SIDELIGHT.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
224	EXTERIOR (PAIR) ALUMINUM DOUBLE DOOR.
225	VINYL SLIDING OPERABLE WINDOW.
310	16" STUCCO CORNICE.
401	FINISH GRADE VARIES.
404	ALUMINUM STOREFRONT SYSTEM.
405	LINE OF ROOF BEYOND.
406	BALCONY WITH 42" METAL GUARDRAIL.
408	PAINTED METAL CANOPY.
409	LOUVERED PAINTED METAL CANOPY.

LEGEND

GLASS:

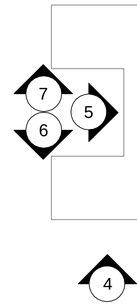
VISION GLASS

TEMPERED GLASS

MATERIALS:

METAL CANOPY

KEY PLAN



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BRADEN P. BLAKE
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MIXED USE APARTMENTS - EXTERIOR ELEVATIONS

DATE	REMARKS
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06/05/2023	SP. / DRB SUBMITTAL #2
10/09/2023	SP. / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A. / E.M.
JOB NO.:	PHX22-0196-00

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THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
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1/16"=1'-0"

0 8' 16' 32' 64'

MIXED USE APARTMENTS - EAST EXTERIOR ELEVATION 1

SCALE: 3/32" = 1'-0"



MIXED USE APARTMENTS - SOUTH EXTERIOR ELEVATION 2

SCALE: 3/32" = 1'-0"



MIXED USE APARTMENTS - EAST EXTERIOR ELEVATION 3

SCALE: 3/32" = 1'-0"

LEGEND

GLASS:

- VISION GLASS
- TEMPERED GLASS

FINISH MATERIALS:

- BRICK VENEER - MEDIUM GRAY (STACKED BOND)
- FIBER CEMENT - BOARD & BATTEN
- FIBER CEMENT - SHIPLAP
- FIBER CEMENT - WOOD LOOK
- STUCCO BOARD PANEL - IRON ORE (PAINTED)
- STUCCO BOARD PANEL - SNOWBOUND (PAINTED)
- METAL CANOPY

COLORS:

- BASE COLOR: SHERWIN WILLIAMS SW 7004 SNOWBOUND
- ACCENT COLOR: SHERWIN WILLIAMS SW 7069 IRON ORE

EXTERIOR MATERIAL ANALYSIS

EAST ELEVATION

	7%
FIBER CEMENT - BOARD & BATTEN	25%
FIBER CEMENT - SHIPLAP	2%
FIBER CEMENT - WOOD LOOK	5%
STUCCO - IRON ORE (PAINTED)	25%
STUCCO - SNOWBOUND (PAINTED)	37%

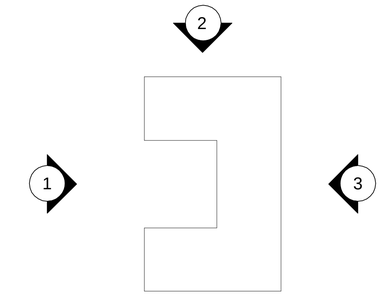
SOUTH ELEVATION

	5%
FIBER CEMENT - BOARD & BATTEN	27%
FIBER CEMENT - SHIPLAP	4%
FIBER CEMENT - WOOD LOOK	9%
STUCCO - IRON ORE (PAINTED)	29%
STUCCO - SNOWBOUND (PAINTED)	26%

WEST ELEVATION

	8%
FIBER CEMENT - BOARD & BATTEN	19%
FIBER CEMENT - SHIPLAP	2%
FIBER CEMENT - WOOD LOOK	12%
STUCCO - IRON ORE (PAINTED)	23%
STUCCO - SNOWBOUND (PAINTED)	36%

KEY PLAN



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REGISTERED ARCHITECT
63180
BRADEN P. BLAKE
DATE SIGNED
ARIZONA, U.S.A.

MIXED USE APARTMENTS - COLOR EXTERIOR ELEVATIONS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
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10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A. / E.M.
JOB NO.:	PHX22-0196-00

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THE CRAFTSMAN ON ELLIOT
8264 EAST ELLIOT ROAD,
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MIXED USE APARTMENTS - SOUTH EXTERIOR ELEVATION 4

3/32"=1'-0"

0 4' 8' 16' 24' 48'

SCALE: 3/32" = 1'-0"

NOTE: EXTERIOR MATERIAL PERCENTAGES ARE INCLUDED IN THE OVERALL EAST ELEVATION CALCULATIONS ON SHEET DR302



MIXED USE APARTMENTS - WEST COURTYARD EXTERIOR ELEVATION 5

SCALE: 3/32" = 1'-0"



MIXED USE APARTMENTS - SOUTH COURTYARD EXTERIOR ELEVATION 7

SCALE: 3/32" = 1'-0"



MIXED USE APARTMENTS - NORTH COURTYARD EXTERIOR ELEVATION 6

SCALE: 3/32" = 1'-0"

LEGEND

GLASS:

- VISION GLASS
- TEMPERED GLASS

FINISH MATERIALS:

- BRICK VENEER - MEDIUM GRAY (STACKED BOND)
- FIBER CEMENT - BOARD & BATTEN
- FIBER CEMENT - SHIPLAP
- FIBER CEMENT - WOOD LOOK
- STUCCO BOARD PANEL - IRON ORE (PAINTED)
- STUCCO BOARD PANEL - SNOWBOUND (PAINTED)
- METAL CANOPY

COLORS:

- BASE COLOR: SHERWIN WILLIAMS SW 7004 SNOWBOUND
- ACCENT COLOR: SHERWIN WILLIAMS SW 7069 IRON ORE

EXTERIOR MATERIAL ANALYSIS

NORTH ELEVATION

	17%
FIBER CEMENT - BOARD & BATTEN	22%
FIBER CEMENT - SHIPLAP	3%
FIBER CEMENT - WOOD LOOK	7%
STUCCO - IRON ORE (PAINTED)	29%
STUCCO - SNOWBOUND (PAINTED)	21%

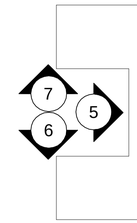
NORTH COURTYARD ELEVATION

	6%
FIBER CEMENT - BOARD & BATTEN	11%
FIBER CEMENT - SHIPLAP	2%
FIBER CEMENT - WOOD LOOK	7%
STUCCO - IRON ORE (PAINTED)	36%
STUCCO - SNOWBOUND (PAINTED)	38%

SOUTH COURTYARD ELEVATION

	4%
FIBER CEMENT - BOARD & BATTEN	15%
FIBER CEMENT - SHIPLAP	4%
FIBER CEMENT - WOOD LOOK	9%
STUCCO - IRON ORE (PAINTED)	20%
STUCCO - SNOWBOUND (PAINTED)	49%

KEY PLAN



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ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD, MESA, ARIZONA 85212

MIXED USE APARTMENTS - COLOR EXTERIOR ELEVATIONS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A. / E.M.
JOB NO.:	PHX22-0196-00

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1/8"=1'-0"

0 4' 8' 16' 32'

MIXED USE BUILDING - NORTH EXTERIOR ELEVATION

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



MIXED USE BUILDING - WEST EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (4)



MIXED USE BUILDING - EAST EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (2)

KEYNOTES:

204	ALUMINUM STOREFRONT SYSTEM.
210	EXTERIOR UNIT SEPARATION PRIVACY WALL.
213	WRAPPED WOOD COLUMN.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
224	EXTERIOR (PAIR) ALUMINUM DOUBLE DOOR.
237	72" X 60" VINYL SLIDING OPERABLE WINDOW.
239	EXTERIOR ALUMINUM STOREFRONT DOOR.
240	EXTERIOR HOLLOW METAL DOOR.
241	20" X 36" FIXED WINDOW.
310	16" STUCCO CORNICE.
401	FINISH GRADE VARIES.
402	CLEARSTORY WINDOWS.
404	ALUMINUM STOREFRONT SYSTEM.
405	LINE OF ROOF BEYOND.
406	BALCONY WITH 42" METAL GUARDRAIL.
408	PAINTED METAL CANOPY.
409	LOUVERED PAINTED METAL CANOPY.
417	STUCCO PARAPET CORNICE.



MIXED USE BUILDING - SOUTH EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (3)

EXTERIOR MATERIAL ANALYSIS

SOUTH ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	11%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	31%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	13%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	14%
STUCCO (PAINTED - SW 7069 IRON ORE)	8%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	17%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	6%

EAST ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	21%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	23%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	39%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	7%
STUCCO (PAINTED - SW 7069 IRON ORE)	2%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	5%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	3%

NORTH ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	15%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	29%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	12%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	13%
STUCCO (PAINTED - SW 7069 IRON ORE)	8%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	18%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	5%

WEST ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	20%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	24%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	39%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	7%
STUCCO (PAINTED - SW 7069 IRON ORE)	2%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	5%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	3%

LEGEND

GLASS:

VISION GLASS

TEMPERED GLASS

MATERIALS:

BRICK VENEER - WHITE WASH (RUNNING BOND)

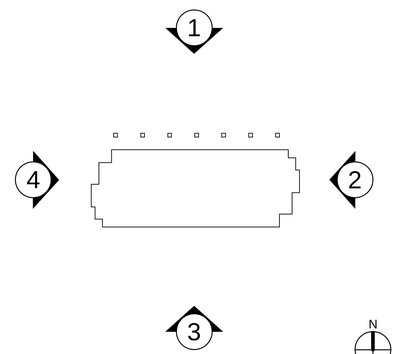
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 7069 IRON ORE)

FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)

STUCCO (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 9163 TIN LIZZIE) (PAINTED - SW 7069 IRON ORE)

STEEL (PAINTED - SW 6258 TRICORN BLACK)

KEY PLAN



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BRADEN P. BLAKE
DATE SIGNED
ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

MIXED USE BUILDING - COLOR EXTERIOR ELEVATIONS

DATE	REMARKS
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01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	E.M. / H.A.
JOB NO.:	PHX22-0196-00

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DR310

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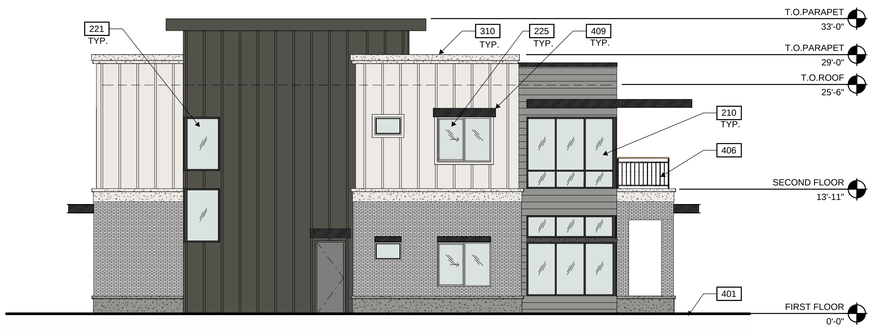
LIVE/WORK BUILDING - NORTH EXTERIOR ELEVATION (1)

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



LIVE/WORK BUILDING - WEST EXTERIOR ELEVATION (4)

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



LIVE/WORK BUILDING - EAST EXTERIOR ELEVATION (2)

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

KEYNOTES:

210	EXTERIOR UNIT SEPARATION PRIVACY WALL.
221	EXTERIOR STOREFRONT DOOR WITH SIDELIGHT.
225	VINYL SLIDING OPERABLE WINDOW.
310	16" STUCCO CORNICE.
401	FINISH GRADE VARIES.
406	BALCONY WITH 42" METAL GUARDRAIL.
408	PAINTED METAL CANOPY.
409	LOUVERED PAINTED METAL CANOPY.



LIVE/WORK BUILDING - SOUTH EXTERIOR ELEVATION (3)

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

EXTERIOR MATERIAL ANALYSIS

SOUTH ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	18%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	27%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	13%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	15%
FIBER CEMENT - WOOD LOOK	4%
STUCCO (PAINTED - SW 7069 IRON ORE)	8%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	10%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	5%

EAST ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	17%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	25%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	42%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	8%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	4%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	3%

NORTH ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	18%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	26%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	12%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	13%
FIBER CEMENT - WOOD LOOK	4%
STUCCO (PAINTED - SW 7069 IRON ORE)	9%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	13%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	5%

WEST ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	17%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	26%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	42%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	8%
STUCCO (PAINTED - SW 7069 IRON ORE)	0%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	4%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	3%

LEGEND

GLASS:

VISION GLASS

TEMPERED GLASS

MATERIALS:

BRICK VENEER - WHITE WASH
(RUNNING BOND)

FIBER CEMENT - BOARD & BATTEN
(PAINTED - SW 7004 SNOWBOUND)
(PAINTED - SW 7069 IRON ORE)

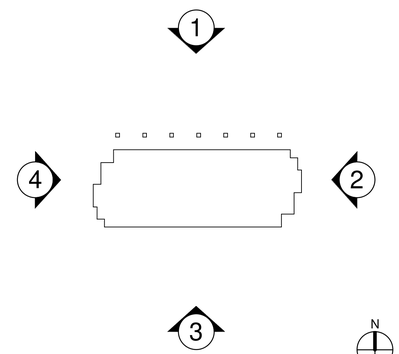
FIBER CEMENT - PLANK
(WOOD LOOK)

FIBER CEMENT - SHIPLAP
(PAINTED - SW 9163 TIN LIZZIE)

STUCCO
(PAINTED - SW 7004 SNOWBOUND)
(PAINTED - SW 9163 TIN LIZZIE)
(PAINTED - SW 7069 IRON ORE)

STEEL
(PAINTED - SW 6258 TRICORN BLACK)

KEY PLAN



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ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

LIVE/WORK BUILDING - COLOR EXTERIOR ELEVATIONS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
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10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	E.M. / H.A.
JOB NO.:	PHX22-0196-00

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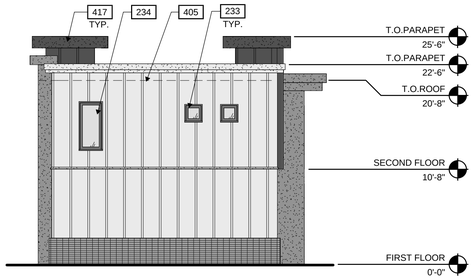


CARRIAGE HOUSE - SOUTH COLOR EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (2)

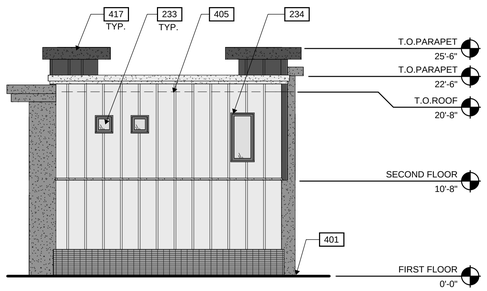


1/8"=1'-0"

0 4' 8' 16' 32'

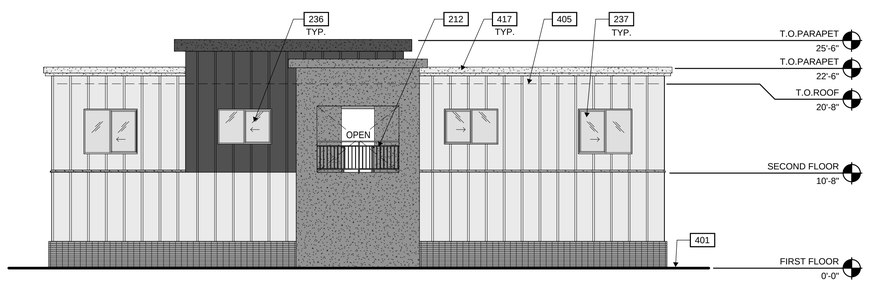
CARRIAGE HOUSE - EAST COLOR EXTERIOR ELEVATION

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



CARRIAGE HOUSE - NORTH COLOR EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (4)



CARRIAGE HOUSE - WEST COLOR EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (3)

LEGENDS

GLASS:

VISION GLASS

TEMPERED GLASS

MATERIALS:

BRICK VENEER - MEDIUM GRAY
(STACKED BOND)

FIBER CEMENT - BOARD & BATTEN
(PAINTED - SW 7004 SNOWBOUND)
(PAINTED - SW 7069 IRON ORE)

STUCCO
(PAINTED - SW 7004 SNOWBOUND)
(PAINTED - SW 9163 TIN LIZZIE)
(PAINTED - SW 7069 IRON ORE)

METAL - WOOD LOOK
(PAINTED - SW 7004 SNOWBOUND)
(PAINTED - SW 9163 TIN LIZZIE)

EXTERIOR MATERIAL ANALYSIS

EAST ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	1%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	22%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	8%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	69%

SOUTH ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	11%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	68%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	7%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	14%

WEST ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	11%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	53%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	13%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	23%

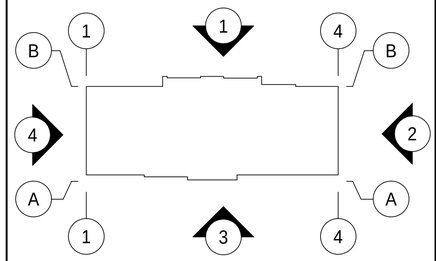
NORTH ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	12%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	68%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	7%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	13%

KEYNOTES: -

212 42" HIGH PREFABRICATED GUARDRAIL.
223 EXTERIOR ALUMINUM FULL LITE DOOR.
225 VINYL SLIDING OPERABLE WINDOW.
233 24" X 24" FIXED WINDOW.
234 32" X 66" FIXED WINDOW.
236 66" X 48" VINYL SLIDING OPERABLE WINDOW.
237 72" X 60" VINYL SLIDING OPERABLE WINDOW.
401 FINISH GRADE VARIES.
405 LINE OF ROOF BEYOND.
417 STUCCO PARAPET CORNICE.

KEY PLAN



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CARRIAGE HOUSE - COLOR EXTERIOR ELEVATIONS

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01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A. / E.M.
JOB NO.:	PHX22-0196-00

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1/8"=1'-0"

0 4' 8' 16' 32'

CLUBHOUSE & FITNESS - WEST COLOR EXTERIOR ELEVATION

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

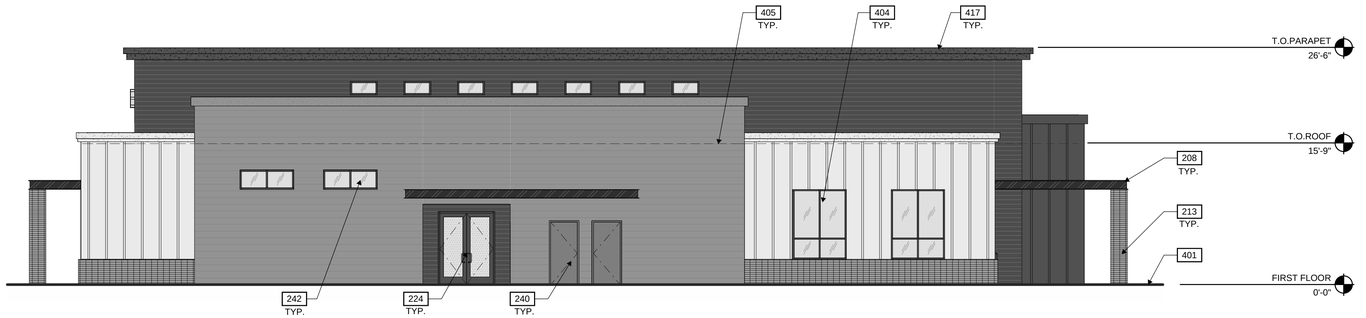
KEYNOTES:

204	ALUMINUM STOREFRONT SYSTEM.
208	PAINTED METAL CANOPY.
213	WRAPPED WOOD COLUMN.
222	EXTERIOR ALUMINUM DOOR WITH SIDELIGHT.
224	EXTERIOR (PAIR) ALUMINUM DOUBLE DOOR.
231	ALUMINUM AND GLASS FOLDING WALL.
240	EXTERIOR HOLLOW METAL DOOR.
242	26" X 72" FIXED WINDOW.
401	FINISH GRADE VARIES.
402	CLEARSTORY WINDOWS.
404	ALUMINUM STOREFRONT SYSTEM.
405	LINE OF ROOF BEYOND.
410	FUTURE TENANT SIGNAGE, UNDER SEPARATE PERMIT.
417	STUCCO PARAPET CORNICE.



CLUBHOUSE & FITNESS - NORTH COLOR EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (2)



CLUBHOUSE & FITNESS - EAST COLOR EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (3)



CLUBHOUSE & FITNESS - SOUTH COLOR EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (4)

LEGEND

MATERIALS:

- BRICK VENEER - MEDIUM GRAY (STACKED BOND)
- FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 7069 IRON ORE)
- FIBER CEMENT - PLANK (WOOD LOOK)
- FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)
- STUCCO (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 9163 TIN LIZZIE) (PAINTED - SW 7069 IRON ORE)
- STEEL (PAINTED - SW 6258 TRICORN BLACK)

GLASS:

- VISION GLASS
- TEMPERED GLASS

EXTERIOR MATERIAL ANALYSIS

NORTH ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	12%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	27%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	13%
FIBER CEMENT - PLANK (WOOD LOOK)	32%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	16%

EAST ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	7%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	17%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	6%
FIBER CEMENT - PLANK (WOOD LOOK)	29%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	41%

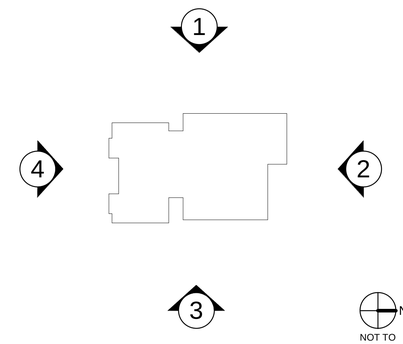
WEST ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	5.0%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	8.6%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	29.4%
FIBER CEMENT - PLANK (WOOD LOOK)	32.1%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	23.7%
STUCCO (PAINTED - SW 7069 IRON ORE)	0.8%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	0.5%

SOUTH ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	5%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	10%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	36%
FIBER CEMENT - PLANK (WOOD LOOK)	36%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	5%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	8%

KEY PLAN



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CLUBHOUSE & FITNESS - COLOR EXTERIOR ELEVATIONS

DATE	REMARKS
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01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

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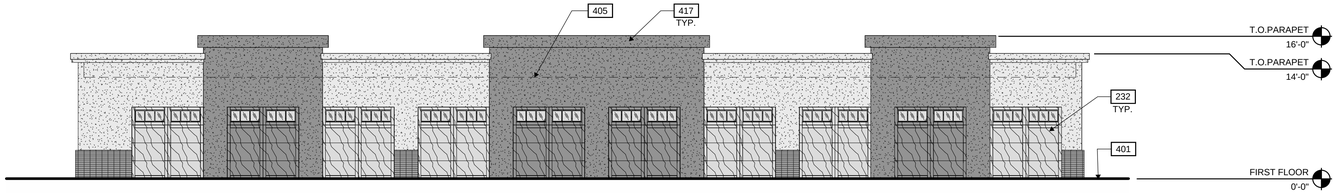
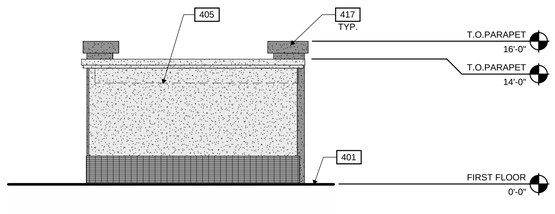


1/8"=1'-0"

0 4' 8' 16' 32'

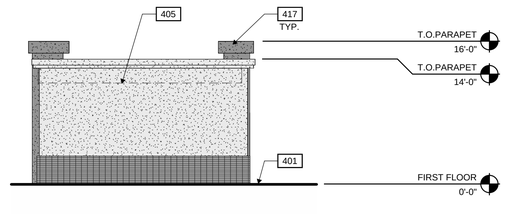
DETACHED GARAGE - SOUTH COLOR EXTERIOR ELEVATION 1

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



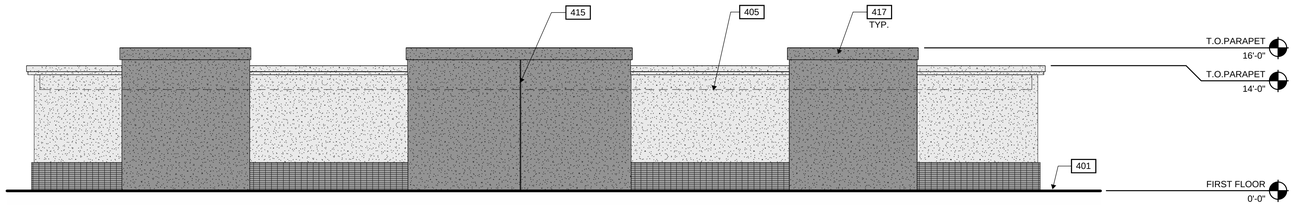
DETACHED GARAGE - EAST COLOR EXTERIOR ELEVATION 4

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



DETACHED GARAGE - WEST COLOR EXTERIOR ELEVATION 2

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



DETACHED GARAGE - NORTH COLOR EXTERIOR ELEVATION 3

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

EXTERIOR MATERIAL ANALYSIS

SOUTH ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	5%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	54%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	41%

WEST ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	19%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	22%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	59%

EAST ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	19%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	22%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	59%

NORTH ELEVATION

BRICK VENEER - MEDIUM GRAY (STACKED BOND)	12%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	51%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	37%

LEGEND

MATERIALS:

- BRICK VENEER - MEDIUM GRAY (STACKED BOND)
- STUCCO (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 9163 TIN LIZZIE)
- METAL - WOOD LOOK (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 9163 TIN LIZZIE)

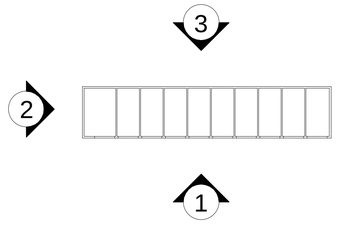
GLASS:

- VISION GLASS

KEYNOTES: [-]

232	96" X 96" SECTIONAL ALUMINUM GARAGE DOOR, SINGLE CAR.
401	FINISH GRADE VARIES.
405	LINE OF ROOF BEYOND.
415	1/2" PLASTER JOINT.
417	STUCCO PARAPET CORNICE.

KEY PLAN



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DETACHED GARAGE - COLOR EXTERIOR ELEVATIONS

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03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
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JOB NO.:	PHX22-0196-00

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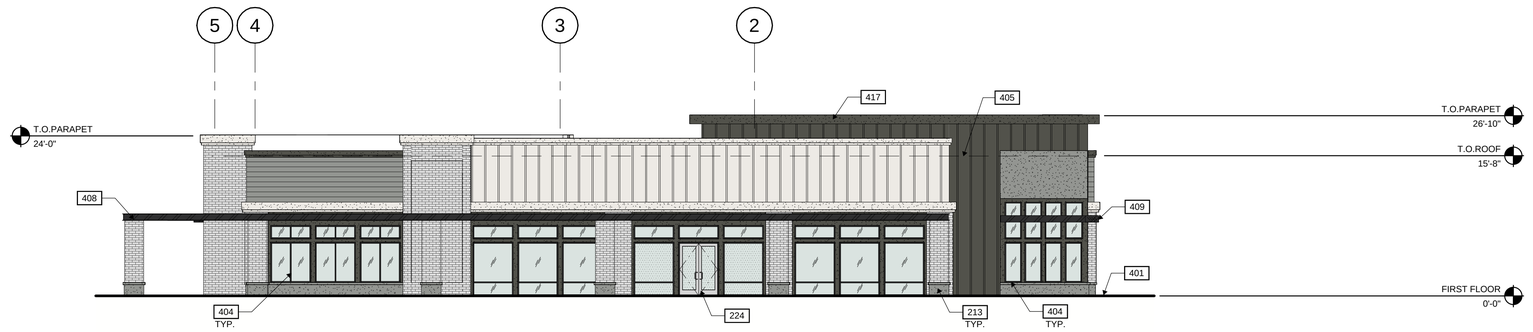
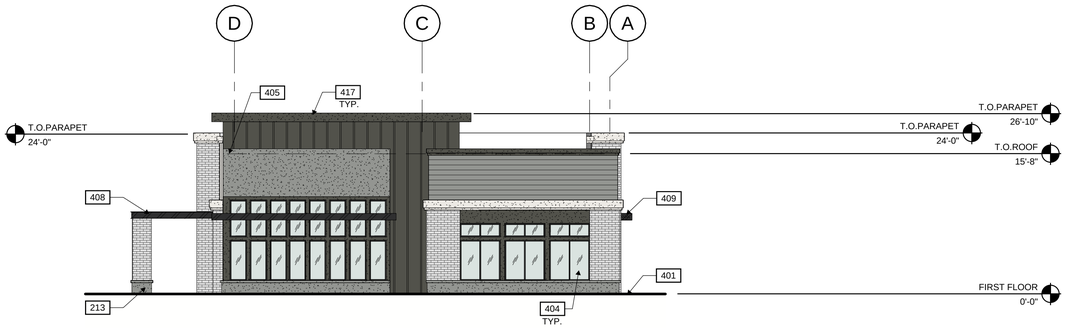


OFFICE BUILDING "A" - NORTH COLOR EXTERIOR ELEVATION

OFFICE BUILDING "B" SIM. - MIRRORED HORIZONTALLY

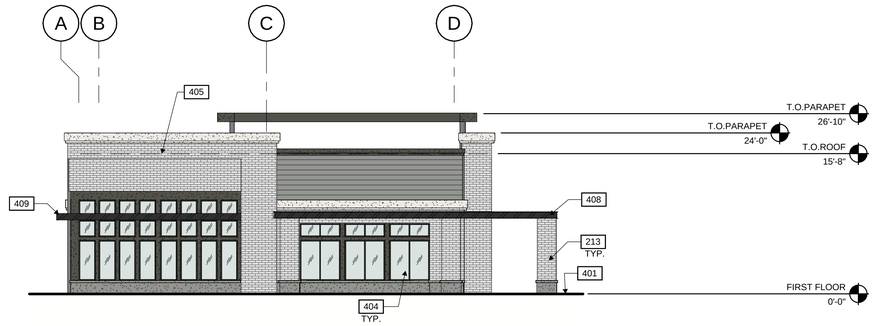
SCALE: 3/32" = 1'-0" (1)



OFFICE BUILDING "A" - WEST COLOR EXTERIOR ELEVATION

OFFICE BUILDING "B" SIM, MIRRORED HORIZONTALLY - WEST EXTERIOR ELEVATION

SCALE: 3/32" = 1'-0" (4)



OFFICE BUILDING "A" - EAST COLOR EXTERIOR ELEVATION

OFFICE BUILDING "B" SIM, MIRRORED HORIZONTALLY - EAST EXTERIOR ELEVATION

SCALE: 3/32" = 1'-0" (2)



OFFICE BUILDING "A" - SOUTH COLOR EXTERIOR ELEVATION

OFFICE BUILDING "B" SIM. - MIRRORED HORIZONTALLY

SCALE: 3/32" = 1'-0" (3)

KEYNOTES:

213	WRAPPED WOOD COLUMN.
224	EXTERIOR (PAIR) ALUMINUM DOUBLE DOOR.
401	FINISH GRADE VARIES.
404	ALUMINUM STOREFRONT SYSTEM.
405	LINE OF ROOF BEYOND.
408	PAINTED METAL CANOPY.
409	LOUVERED PAINTED METAL CANOPY.
417	STUCCO PARAPET CORNICE.

EXTERIOR MATERIAL ANALYSIS

NORTH ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	61%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	18%
STUCCO (PAINTED - SW 7069 IRON ORE)	10%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	11%

EAST ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	38%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	14%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	1%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	16%
STUCCO (PAINTED - SW 7069 IRON ORE)	21%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	10%

WEST ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	36%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	26%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	17%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	7%
STUCCO (PAINTED - SW 7069 IRON ORE)	6%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	8%

SOUTH ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	34%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	19%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	15%
STUCCO (PAINTED - SW 7069 IRON ORE)	10%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	22%

LEGEND

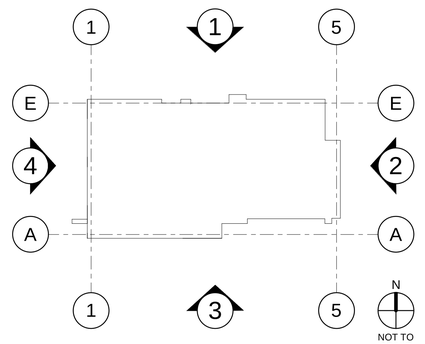
MATERIALS:

- BRICK VENEER - WHITE WASH (RUNNING BOND)
- FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 7069 IRON ORE)
- FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)
- STUCCO (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 9163 TIN LIZZIE) (PAINTED - SW 7069 IRON ORE)
- STEEL (PAINTED - SW 6258 TRICORN BLACK)

GLASS:

- VISION GLASS
- SPANDREL GLASS
- TEMPERED GLASS

KEY PLAN



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REGISTERED ARCHITECT
63180
BRADEN P. BLAKE
DATE SIGNED
ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

OFFICE BUILDING "A" - COLOR EXTERIOR ELEVATIONS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

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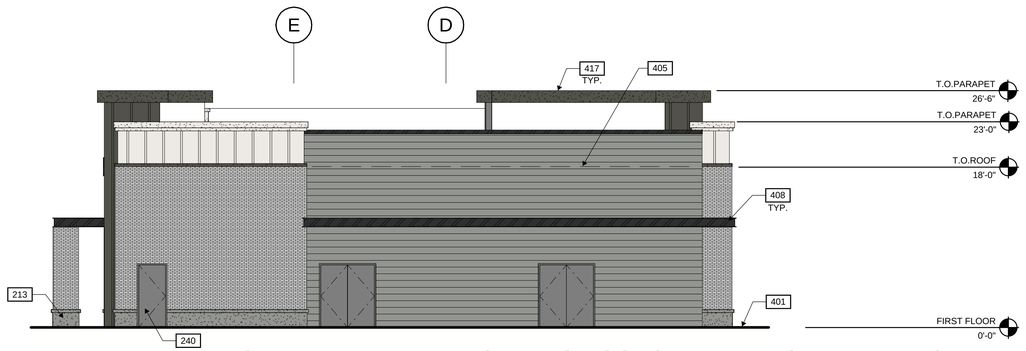
1/8"=1'-0"

0 4' 8' 16' 32'

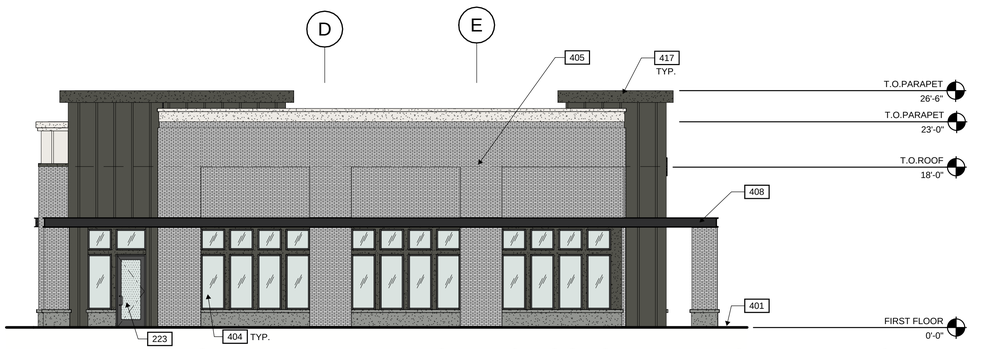
RESTAURANT BUILDING - NORTH COLOR EXTERIOR ELEVATION

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



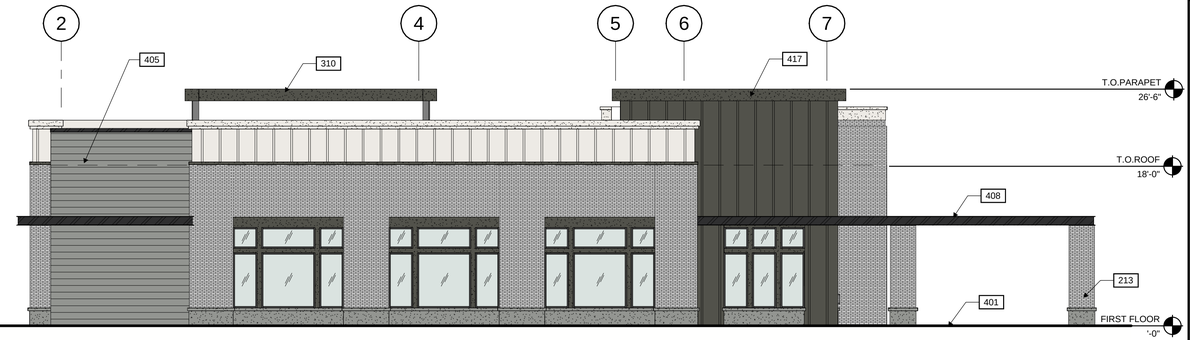
RESTAURANT BUILDING - WEST COLOR EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (4)



RESTAURANT BUILDING - EAST COLOR EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (2)



RESTAURANT BUILDING - SOUTH COLOR EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (3)

KEYNOTES:

213	WRAPPED WOOD COLUMN.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
240	EXTERIOR HOLLOW METAL DOOR.
310	16" STUCCO CORNICE.
401	FINISH GRADE VARIES.
404	ALUMINUM STOREFRONT SYSTEM.
405	LINE OF ROOF BEYOND.
408	PAINTED METAL CANOPY.
410	FUTURE TENANT SIGNAGE, UNDER SEPARATE PERMIT.
417	STUCCO PARAPET CORNICE.

EXTERIOR MATERIAL ANALYSIS

NORTH ELEVATION

BRICK VEENER - WHITE WASHED	9%
BRICK VENEER - WHITE WASHED (RUNNING BOND)	36%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	4%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	23%
FIBER CEMENT - WOOD LOOK	12%
STUCCO (PAINTED - SW 7069 IRON ORE)	5%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	8%
STUCCO - SNOWBOUND (PAINTED)	2%

WEST ELEVATION

BRICK VEENER - WHITE WASHED	8%
BRICK VENEER - WHITE WASHED (RUNNING BOND)	24%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	6%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	5%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	52%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	4%
STUCCO - SNOWBOUND (PAINTED)	1%

EAST ELEVATION

BRICK VEENER - WHITE WASHED	9%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	26%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	1%
BRICK VENEER - WHITE WASHED (RUNNING BOND)	20%
BRICK VENEER - WHITE WASHED (RUNNING BOND)	28%
STUCCO (PAINTED - SW 7069 IRON ORE)	5%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	5%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	2%
STUCCO - SNOWBOUND (PAINTED)	4%

SOUTH ELEVATION

BRICK VEENER - WHITE WASHED	6%
BRICK VENEER - WHITE WASHED (RUNNING BOND)	34%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	12%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	17%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	18%
STUCCO (PAINTED - SW 7069 IRON ORE)	6%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	8%
STUCCO - SNOWBOUND (PAINTED)	0%

LEGEND

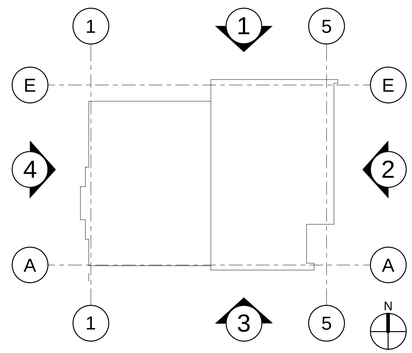
MATERIALS:

- BRICK VENEER - WHITE WASH (RUNNING BOND)
- FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 7069 IRON ORE)
- FIBER CEMENT - PLANK (WOOD LOOK)
- FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)
- STUCCO (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 9163 TIN LIZZIE) (PAINTED - SW 7069 IRON ORE)
- STEEL (PAINTED - SW 6258 TRICORN BLACK)

GLASS:

- VISION GLASS
- TEMPERED GLASS
- SPANDRAL GLASS

KEY PLAN



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MESA, ARIZONA 85212

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03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

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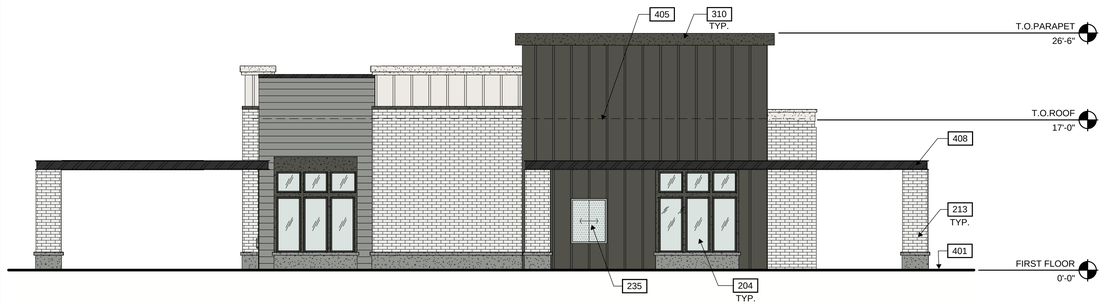
RETAIL BUILDING - NORTH COLOR EXTERIOR ELEVATION

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



RETAIL BUILDING - WEST COLOR EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (4)



RETAIL BUILDING - EAST COLOR EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (2)

KEYNOTES:

204	ALUMINUM STOREFRONT SYSTEM.
213	WRAPPED WOOD COLUMN.
221	EXTERIOR STOREFRONT DOOR WITH SIDELIGHT.
224	EXTERIOR (PAIR) ALUMINUM DOUBLE DOOR.
235	48" X 56" VINYL SLIDING OPERABLE WINDOW.
310	16" STUCCO CORNICE.
401	FINISH GRADE VARIES.
405	LINE OF ROOF BEYOND.
408	PAINTED METAL CANOPY.



RETAIL BUILDING - SOUTH COLOR EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0" (3)

OPENINGS

SHOP A NORTH ELEVATION

OPENINGS BETWEEN 2' - 6" AND 7' - 0" = 68.01%

SHOP A SOUTH ELEVATION

OPENINGS BETWEEN 2' - 6" AND 7' - 0" = 45.34%

SHOP A WEST ELEVATION

OPENINGS BETWEEN 2' - 6" AND 7' - 0" = 39.78%

EXTERIOR MATERIAL ANALYSIS

NORTH ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	46%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	23%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	15%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	5%
STUCCO (PAINTED - SW 7069 IRON ORE)	4%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	7%

WEST ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	42.5%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	9.6%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	20.9%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	12.3%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	0.2%
STUCCO (PAINTED - SW 7069 IRON ORE)	5.1%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	9.4%

EAST ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	37.7%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	4.1%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	34.2%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	13.0%
STUCCO (PAINTED - SW 7004 SNOWBOUND)	0.4%
STUCCO (PAINTED - SW 7069 IRON ORE)	2.9%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	7.8%

SOUTH ELEVATION

BRICK VENEER - WHITE WASHED (RUNNING BOND)	34%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND)	8%
FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7069 IRON ORE)	29%
FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)	20%
STUCCO (PAINTED - SW 7069 IRON ORE)	4%
STUCCO (PAINTED - SW 9163 TIN LIZZIE)	6%

LEGEND

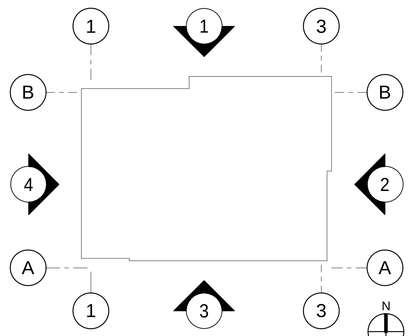
MATERIALS:

- BRICK VENEER - WHITE WASH (RUNNING BOND)
- FIBER CEMENT - BOARD & BATTEN (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 7069 IRON ORE)
- FIBER CEMENT - SHIPLAP (PAINTED - SW 9163 TIN LIZZIE)
- STUCCO (PAINTED - SW 7004 SNOWBOUND) (PAINTED - SW 9163 TIN LIZZIE) (PAINTED - SW 7069 IRON ORE)
- STEEL (PAINTED - SW 6258 TRICORN BLACK)

GLASS:

- VISION GLASS
- TEMPERED GLASS

KEY PLAN



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RETAIL BUILDING - COLOR EXTERIOR ELEVATIONS

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01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

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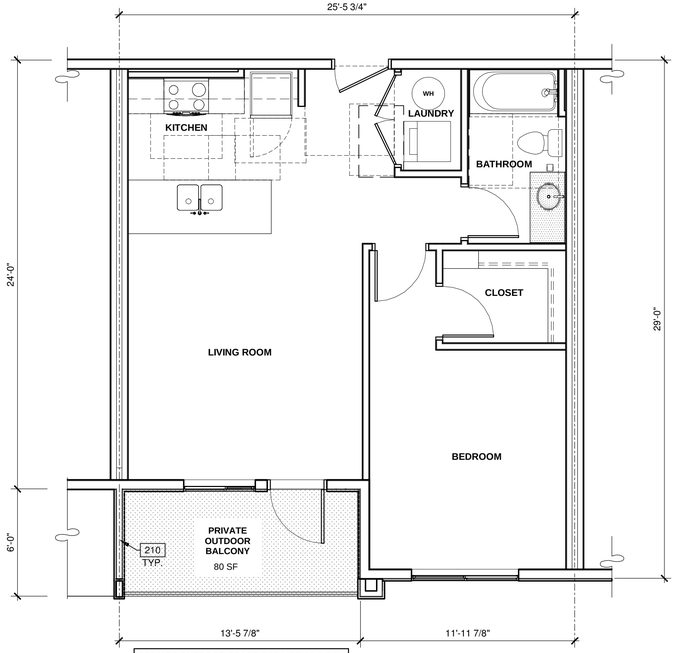
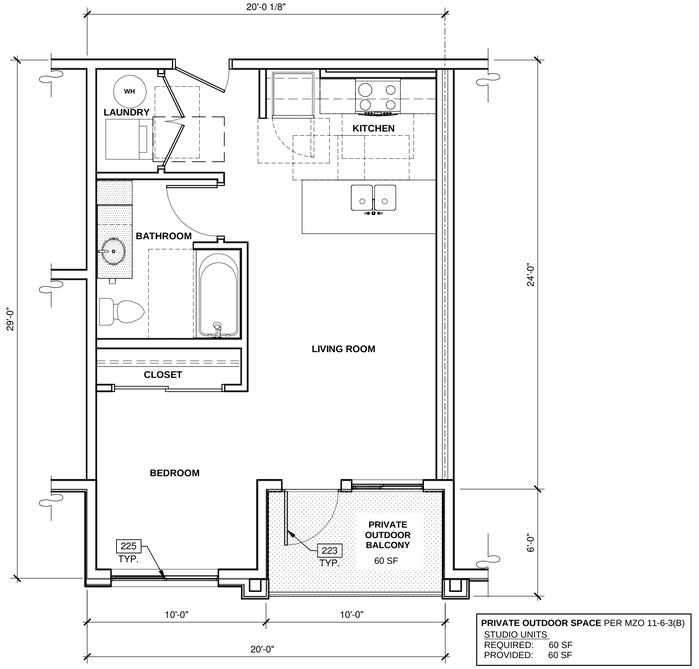


PRIVATE OUTDOOR SPACE PER MZO 11-6-3(B)
1BD UNITS
REQUIRED: 60 SF
PROVIDED: 80 SF

UNIT PLAN - A2

SCALE: 1/4" = 1'-0" (3)

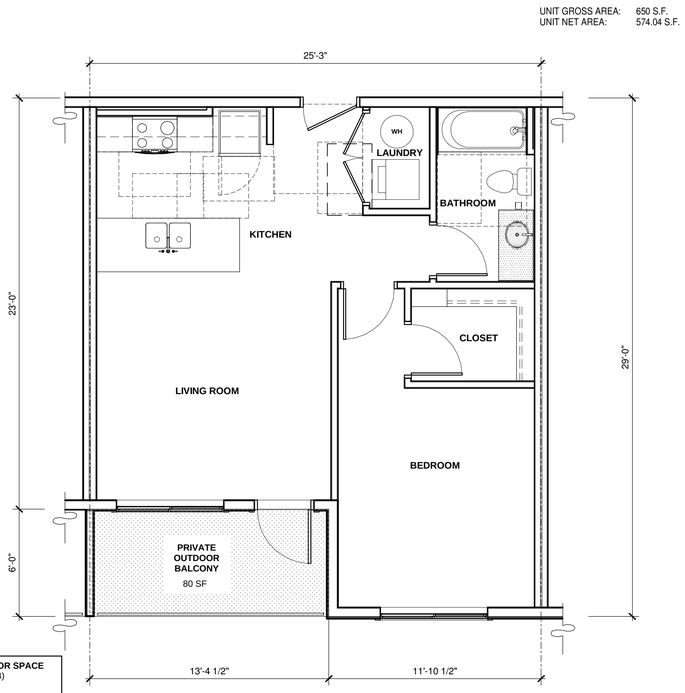


PRIVATE OUTDOOR SPACE PER MZO 11-6-3(B)
STUDIO UNITS
REQUIRED: 60 SF
PROVIDED: 60 SF

1/4"=1'-0"
0 2' 4' 8' 16'

UNIT PLAN - S1

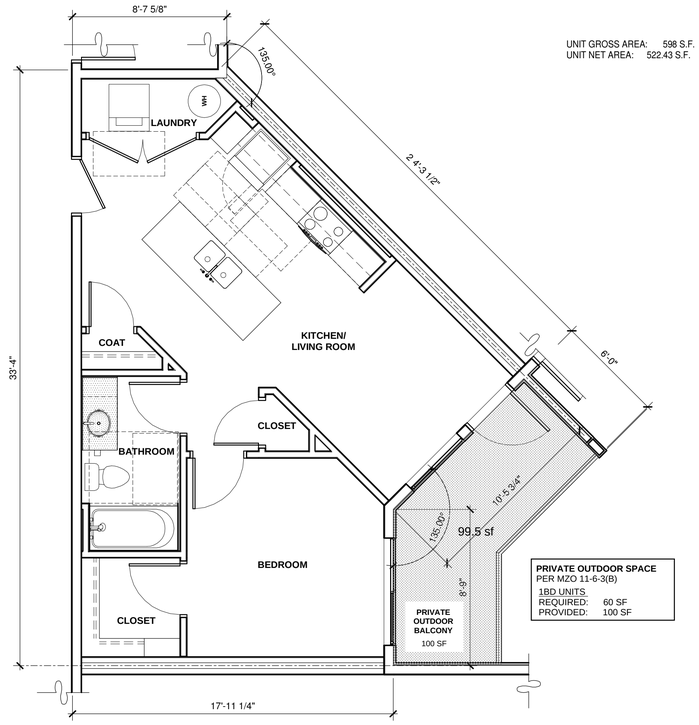
SCALE: 1/4" = 1'-0" (1)



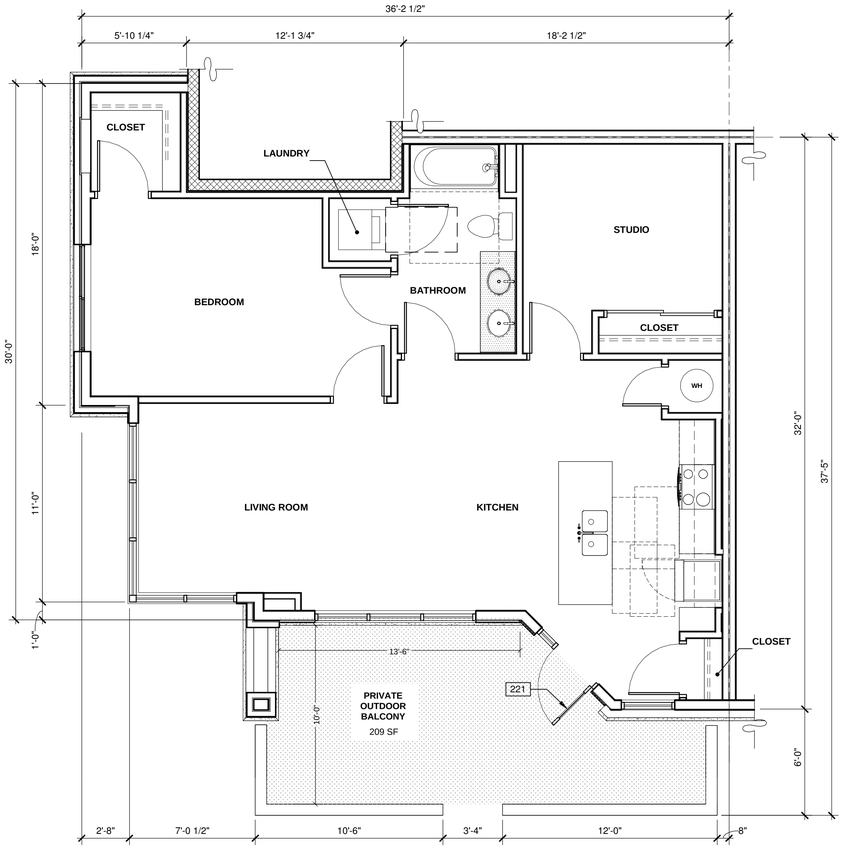
PRIVATE OUTDOOR SPACE
PER MZO 11-6-3(B)
1BD UNITS
REQUIRED: 60 SF
PROVIDED: 80 SF

UNIT PLAN - A2 ALT

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


UNIT GROSS AREA: 598 S.F.
UNIT NET AREA: 522.43 S.F.
8'-7 5/8"
135.00°
WH
LAUNDRY
2'-4"
2'-4"
2'-4"

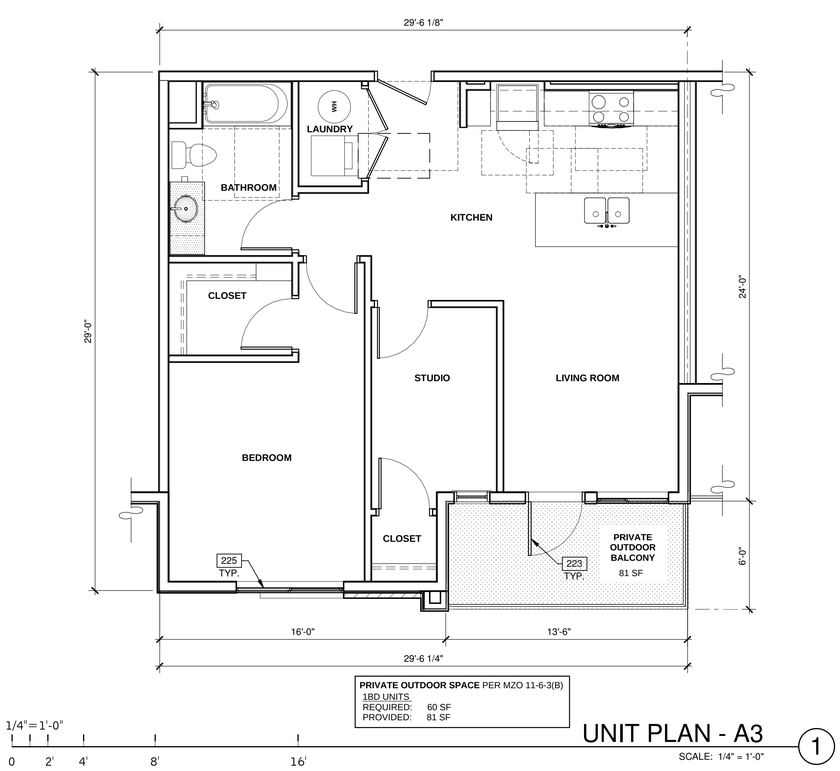
CAUTION: IF THIS SHEET IS NOT 24"x36" IT IS A REDUCED PRINT



PRIVATE OUTDOOR SPACE PER MZO 11-6-3(B)
1BD UNITS
REQUIRED: 60 SF
PROVIDED: 209 SF

UNIT PLAN - A5

SCALE: 1/4" = 1'-0" (3)

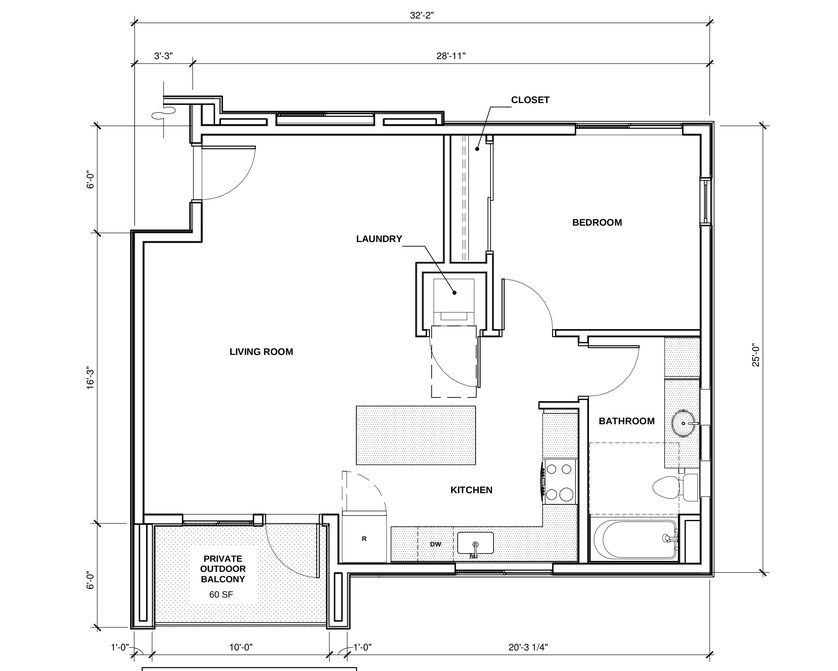


PRIVATE OUTDOOR SPACE PER MZO 11-6-3(B)
1BD UNITS
REQUIRED: 60 SF
PROVIDED: 81 SF

1/4"=1'-0"
0 2' 4' 8' 16'

UNIT PLAN - A3

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



PRIVATE OUTDOOR SPACE PER MZO 11-6-3(B)
1BD UNITS
REQUIRED: 60 SF
PROVIDED: 60 SF

UNIT PLAN - A4

SCALE: 1/4" = 1'-0" (2)

GENERAL NOTES

1. ALL UNITS ARE DIMENSIONED TO THE CENTERLINE OF THE DOUBLE WALL, OR THE EXTERIOR SIDE OF FRAMING, IF THESE ARE NOT ADJACENT TO ANOTHER UNIT.

KEYNOTES: -

221 EXTERIOR STOREFRONT DOOR WITH SIDELIGHT.
223 EXTERIOR ALUMINUM FULL LITE DOOR.
225 VINYL SLIDING OPERABLE WINDOW.

KEY PLAN



TYPICAL LEVEL

N

WARE MALCOMB
ARCHITECTURE CIVIL ENGINEERING
PLANNING BRANDING
INTERIORS BUILDING MEASUREMENT
2777 E. Camelback Rd, Suite #325
Phoenix, AZ 85016
P 480.767.1001

REGISTERED ARCHITECT
63180
BRADEN P. BLAKE
DATE SIGNED
ARIZONA U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

MULTIFAMILY - UNITS PLANS - ENLARGED FLOOR PLANS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
02/07/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2
10/09/2023	SP / DRB SUBMITTAL #3
01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

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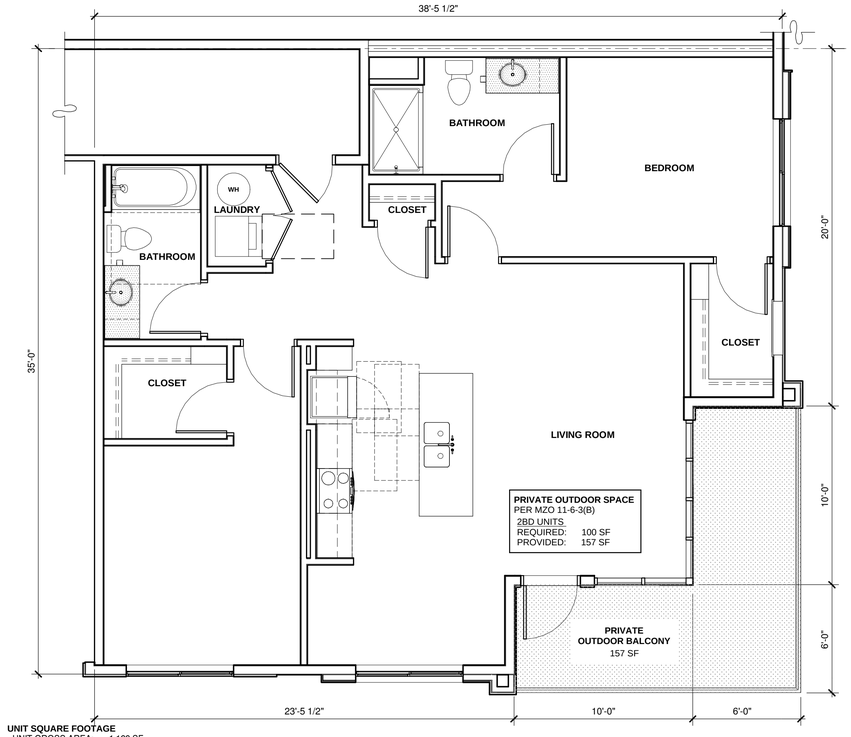
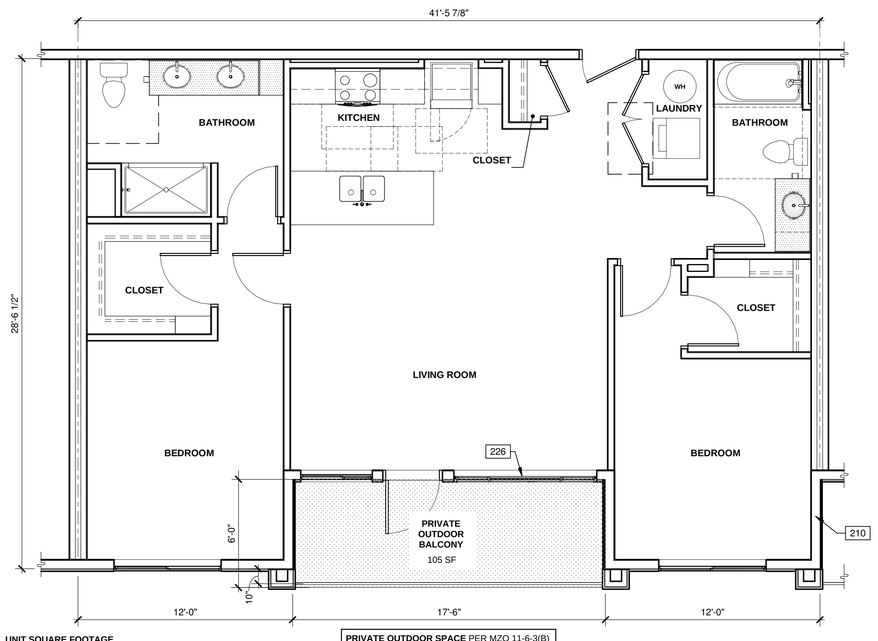


UNIT SQUARE FOOTAGE
UNIT GROSS AREA: 1,123 SF.
UNIT NET AREA: 990 SF.

UNIT PLAN - B3

SCALE: 1/4" = 1'-0" (3)



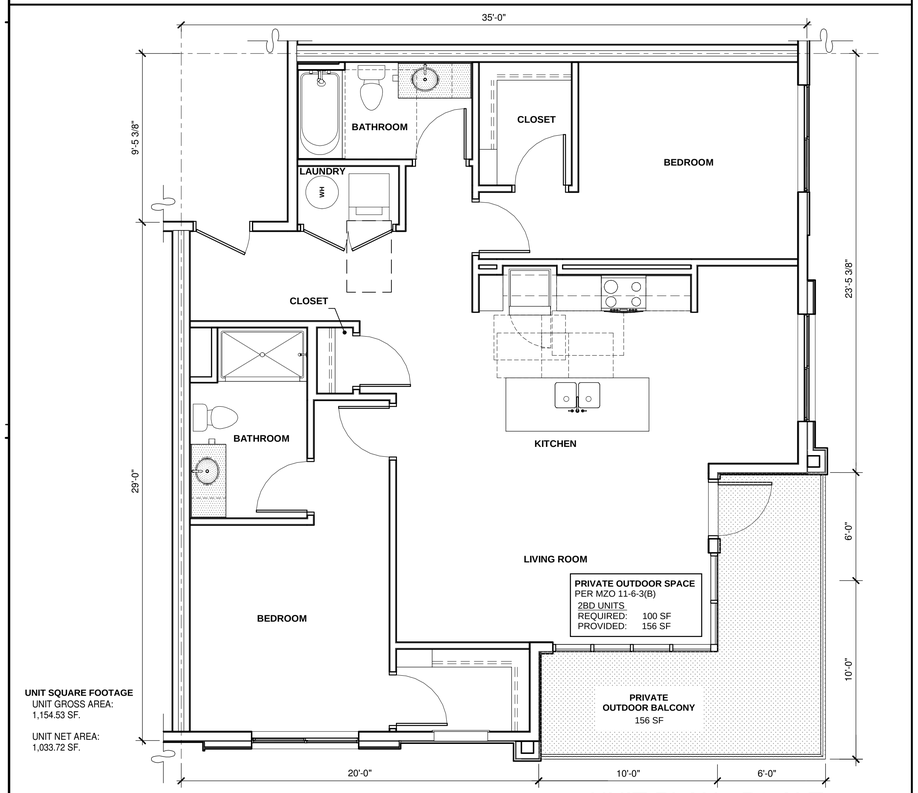
UNIT SQUARE FOOTAGE
UNIT GROSS AREA: 1,108 SF.
UNIT NET AREA: 1,079.54 SF.

PRIVATE OUTDOOR SPACE PER MZO 11-6-3(B)
2BD UNITS
REQUIRED: 100 SF
PROVIDED: 105 SF

1/4"=1'-0"
0 2' 4' 8' 16'

UNIT PLAN - B1

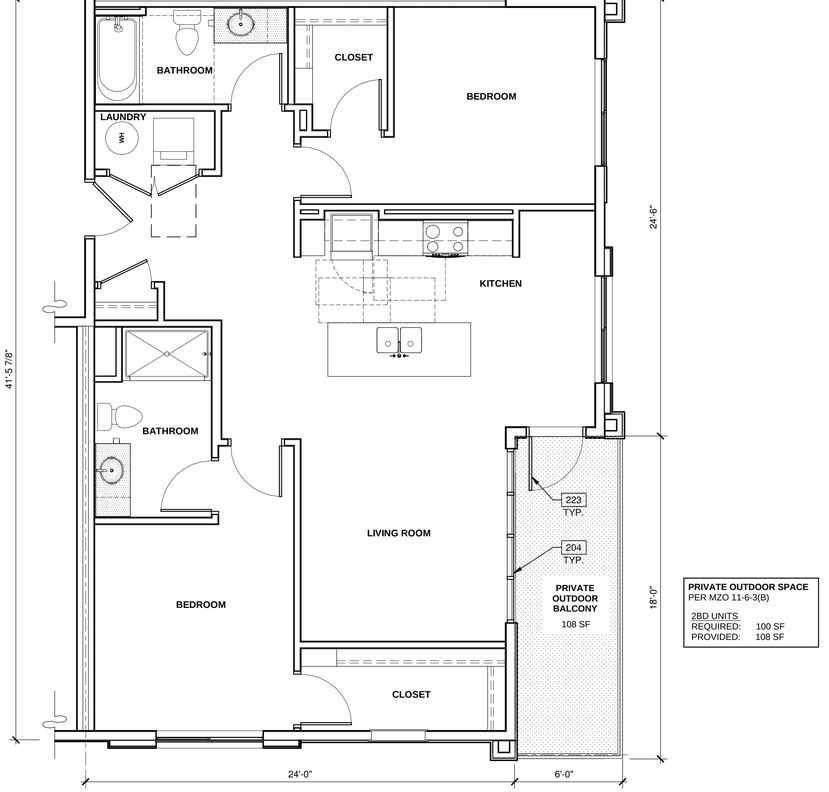
SCALE: 1/4" = 1'-0" (1)



UNIT SQUARE FOOTAGE
UNIT GROSS AREA: 1,154.53 SF.
UNIT NET AREA: 1,033.72 SF.

UNIT PLAN - B3 ALT

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



UNIT SQUARE FOOTAGE
UNIT GROSS AREA: 1,111 SF.
UNIT NET AREA: 984.28 SF.

PRIVATE OUTDOOR SPACE
PER MZO 11-6-3(B)
2BD UNITS
REQUIRED: 100 SF
PROVIDED: 108 SF

UNIT PLAN - B2

SCALE: 1/4" = 1'-0" (2)

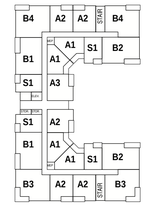
GENERAL NOTES

1. ALL UNITS ARE DIMENSIONED TO THE CENTERLINE OF THE DOUBLE WALL, OR THE EXTERIOR SIDE OF FRAMING, IF THESE ARE NOT ADJACENT TO ANOTHER UNIT.

KEYNOTES: -

204 ALUMINUM STOREFRONT SYSTEM.
210 EXTERIOR UNIT SEPARATION PRIVACY WALL.
223 EXTERIOR ALUMINUM FULL LITE DOOR.
226 3 PANEL VINYL SLIDING OPERABLE WINDOW.

KEY PLAN



TYPICAL LEVEL

N

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ARIZONA, U.S.A.

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MULTIFAMILY - UNITS PLANS - ENLARGED FLOOR PLANS

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01/29/2024	SP / DRB SUBMITTAL #4
03/13/2024	SP / DRB SUBMITTAL #4 REV 1

PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

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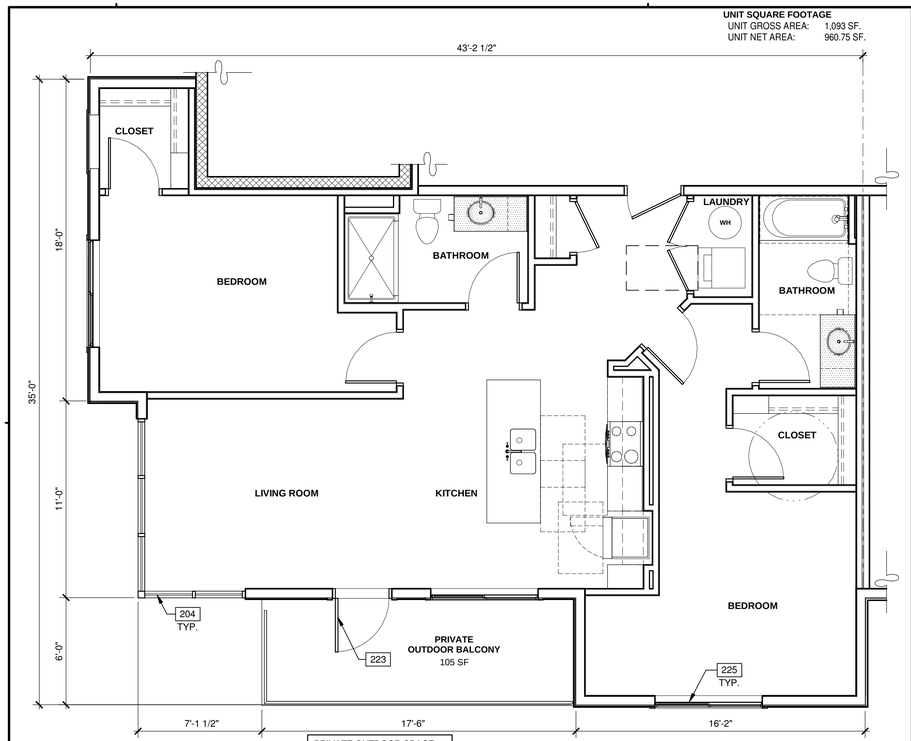
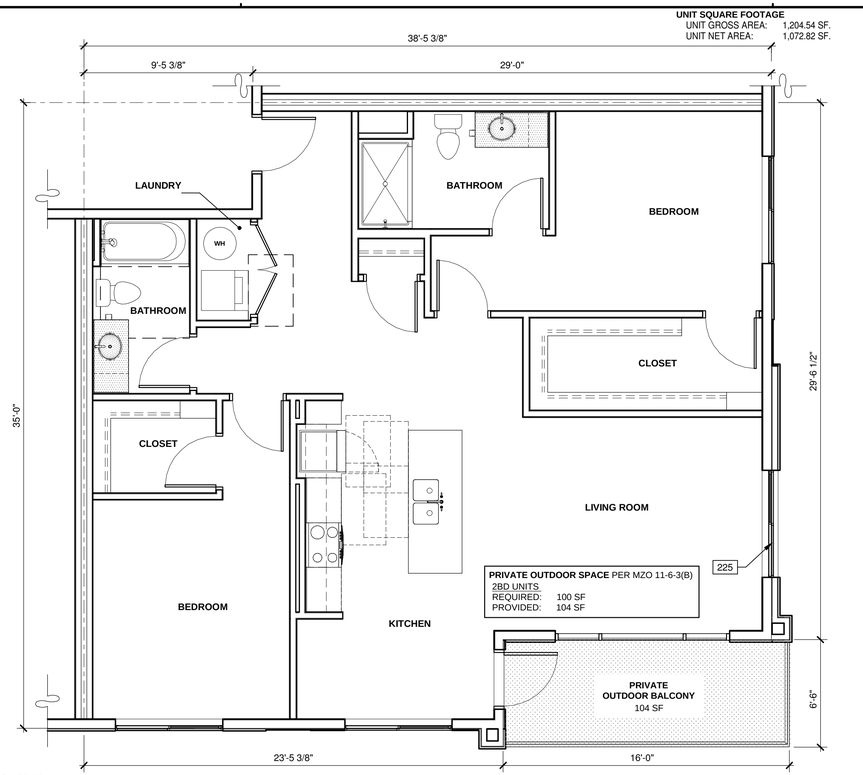


UNIT PLAN - B5

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

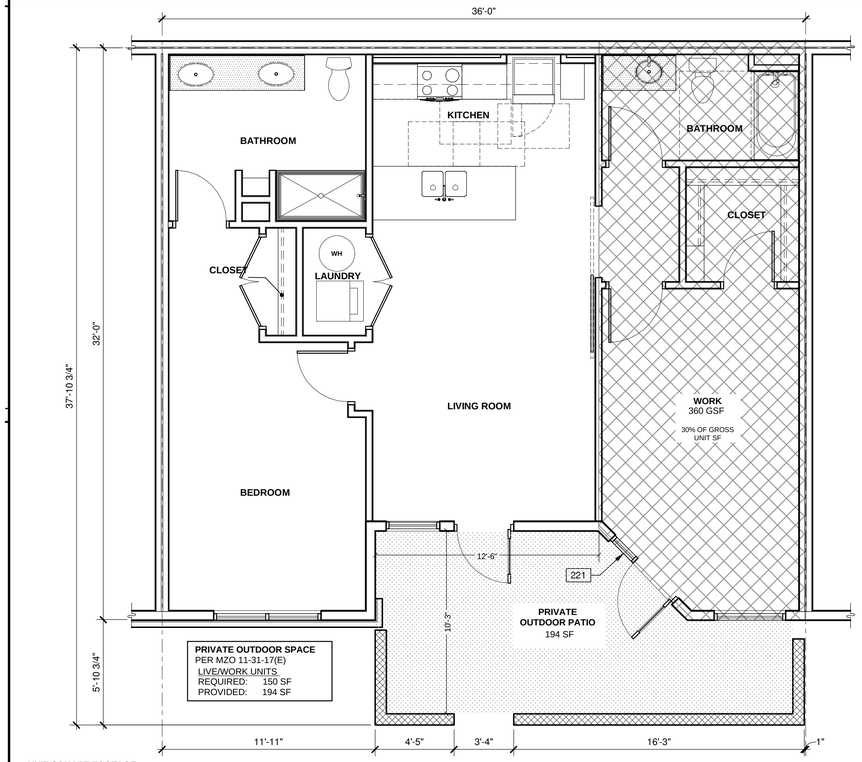
3



UNIT PLAN - B4

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

1

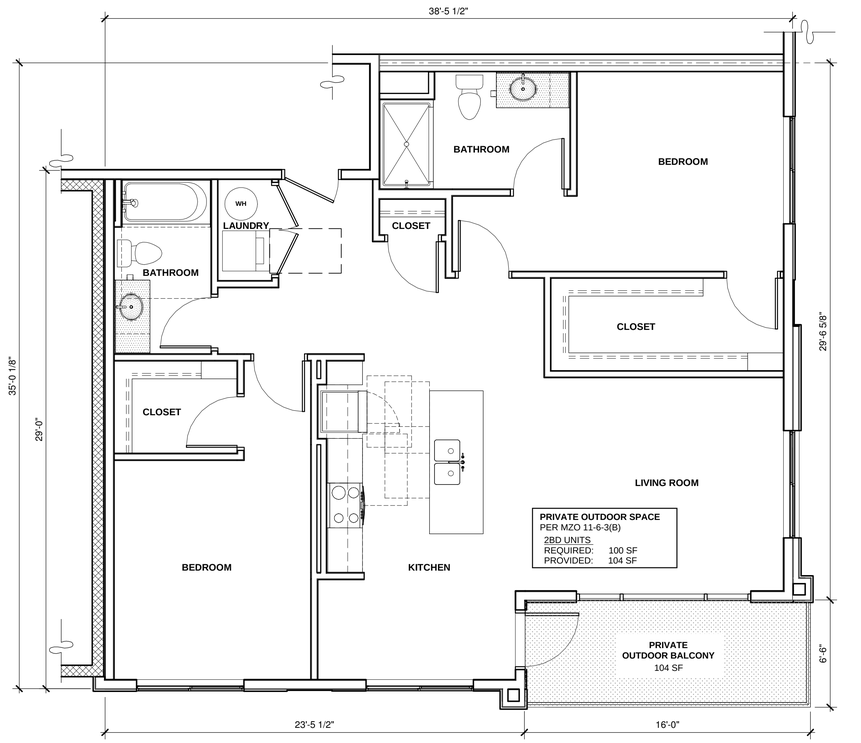


UNIT SQUARE FOOTAGE
UNIT GROSS AREA: 1,073 SF.
UNIT NET AREA: 961.72 SF.

UNIT PLAN - B6 (LIVE/WORK)

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

4



UNIT SQUARE FOOTAGE
UNIT GROSS AREA: 1,174.55 SF.
UNIT NET AREA: 1,045.92 SF.

UNIT PLAN - B4 ALT

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

2

GENERAL NOTES

1. ALL UNITS ARE DIMENSIONED TO THE CENTERLINE OF THE DOUBLE WALL, OR THE EXTERIOR SIDE OF FRAMING, IF THESE ARE NOT ADJACENT TO ANOTHER UNIT.

KEYNOTES:

204	ALUMINUM STOREFRONT SYSTEM.
221	EXTERIOR STOREFRONT DOOR WITH SIDELIGHT.
223	EXTERIOR ALUMINUM FULL LITE DOOR.
225	VINYL SLIDING OPERABLE WINDOW.

KEY PLAN



TYPICAL LEVEL

N

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REGISTERED ARCHITECT
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DATE SIGNED
ARIZONA, U.S.A.

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MULTIFAMILY - UNITS PLANS - ENLARGED FLOOR PLANS

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PA/PM:	C. BRUCE
DRAWN BY.:	H.A./E.M.
JOB NO.:	PHX22-0196-00

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WARE MALCOMB

ARCHITECTURE
PLANNING
INTERIORS
CIVIL ENGINEERING
BRANDING
BUILDING MEASUREMENT

The Craftsman on Elliot
RE: CASE # **ZON23-00343** | **DRB23-00342**

Good Neighbor Policy

Purpose:

The purpose of this Policy is to establish the Good Neighbor guidelines for a new mixed use development proposed at the northwest corner of Elliot and Hawes Road.

The project is located at the northwest corner of Elliot and Hawes Roads and is more specifically identified as Maricopa County Assessor Parcel (APN 304-04-031). This ±22.46 gross acres (±19.26 net acres) property is currently vacant land with MX zoning.

The Development:

The proposed development is a mixed-use project with 65 percent of the use for this site area allocated to multi-family use and 35 percent for a retail, commercial, and live/work use. The site has been designed to engage the connecting roadways, commercial activity and the residential tenant in a dynamic manner that culminates with a thriving and exciting user experience. Site entries and circulation throughout the site is inviting and intuitive.

A main access entry is proposed along the Elliot Corridor to promote success of the mixed-use development requirements. Additionally, the site has been designed to consider programmatic clarity, site security, pedestrian accessibility, service vehicles, refuse and fire service accessibility. Visually contrasting hardscaped pedestrian crossings, 26’ minimum driveways that front buildings, and refuse container placement that minimizes project disruption are integral design components.

Site enhancements include Landscaped plazas, outdoor patio spaces for all users, an inviting vegetation palette, generous shading, and tenant amenities. All design elements contribute to a development that is designed to retain tenants and attract its users today, and for many years to come.

Residential:

The proposed multi-family development consists of (3) four-story apartment buildings to provide twenty-two (22) dwelling units per floor to provide create 264 dwelling units. (1) four-story mixed-use apartment building to provide eighteen (18) units in the first 2 level and twenty-two (22) in the top 2 levels to provide 60 units. Along Elliot Rd. there will be (2) two-story buildings with more dwelling units. One with twelve (12) units in the 2nd level, above retail shops, and the other building with eight (8) Live/work units in the 1st level and ten (10) units in the 2nd level, to create eighteen (18) more units, for a grand total of 382 dwelling units in this development. The proposed net residential density of (20.04) du/ac within the entire parcel area supports a pedestrian oriented development along the Elliot Corridor intermixed with key amenities, retail, restaurant, office, and open space plan with urban parks.

Resident amenities feature a fitness center, clubhouse, pickleball courts, active and passive recreation outdoor opportunities, pet parks, and private garage buildings. All buildings will be access controlled for residents only.

Operations: The residential portions of this development will have normal office business hours, 7 days a week from 9:00 am to 5:00 pm. We expect that during these times there will be anywhere from 2-6 employees on site at any given time. This complex will provide trash collection service to all residents; the collected trash will be taken to a trash compactor in the Northeast corner of this site. Trash collection truck is expected to service the site 2 times a week and recycle at least once a week. Given the number of employees on site at all times, the site will be maintained per the City of Mesa code.

Retail / Commercial:

This development consists of 2 Office building along Haws Rd.; one (1) restaurant building with drive-thru service, fully screened from the main street; one (1) free standing restaurant that will include an outdoor dining patio; and one (1) mixed use building with up to six (6) retail spaces in the first level and dwelling units in the second level.

These building will be surrounded with Urban Plazas, Landscaping, and shaded sidewalks to enhance the patron and pedestrian experience to and through the site. Elliot Road currently experiences a steady flow of traffic which is expected to increase as the vacant and underutilized land in this area develops making this relationship ideal for commercial activity.

Operations: The Office portion of this development will have normal office operations hours, 7:00 am to 6:00 pm, Monday thru Friday and will employ dozens of individuals. The retail portion of this development be open 7 days a week and a manager will be present during those hours. These stores will employ dozens of individuals, and the number of employees present varies depending on demand. However, we expect that during the day there will be anywhere from 2-6 employees on site at any given time. Given the number of employees on site at all times, the site will be maintained per the City of Mesa code.

Contact:

David Martens, Marwest Enterprises, LLC.
davidmartens@marwest.net
(602) 390-5403

Complaint Response Procedures:

Our top priority is providing the best customer service in the retail industry. A team of Training Managers are used to collect responses from both customers and City Inspectors to remedy any situation. The Division Office can be reached at 602-728-8000 where someone can quickly route any call to the appropriate agent for quick and professional resolution.

Litter Control Measures:

Maintaining a clean outside appearance not only provides a higher level of customer service, it also is an effective tool for employees to continuously monitor onsite activities. Per policy, Managers are to perform a shift walk upon arrival prior to relieving the previous Manager. This shift walk includes patrolling the property to pick up any trash or debris on site. Additionally, every hour, an Employee is to perform outside upkeeps to sweep the site and check landscape areas for debris.

In Closing:

Ware Malcomb is looking forward to work with the City of Mesa on this high-end and exciting development. On behalf of the Client, Ware Malcomb has gone above and beyond the City's minimum application requirements so that the development's quality is conveyed early, thereby reducing overall time spent on Staff reviews. We look forward to moving ahead with the next steps in the design and entitlements process.

Sincerely,



Cory Bruce
Senior Project Manager
D 602.641.7078 P 480.767.1001 x1976
2777 E. Camelback Rd, Suite 325, Phoenix, AZ 85016
cbruce@waremalcomb.com

The Craftsman on Elliot

Mesa, Arizona

Parking Demand Study

Lee Engineering Project No. 1313.02

March 12, 2024

Prepared for:

Martens Development Company
6710 N. Scottsdale Road, #140
Scottsdale, AZ 85253

Prepared by:

Lee Engineering, LLC
3610 N. 44th Street
Suite 100
Phoenix, AZ 85018
(602) 955-7206

LEE ENGINEERING

The Craftsman on Elliot
Mesa, Arizona

PARKING DEMAND STUDY

Prepared for:
Martens Development Company
6710 N. Scottsdale Road, #140
Scottsdale, Arizona 85253



Prepared by:
Lee Engineering, LLC
3610 North 44th Street, Suite 100
Phoenix, Arizona 85018
(602) 955-7206

March 2024

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1. INTRODUCTION

A parking demand study was requested for The Craftsman on Elliot, a proposed mixed-use development on the northwest corner of Elliot and Hawes Roads in Mesa, Arizona. The developer is seeking a parking reduction from the City's general parking space requirement to better align the site's proposed parking supply with anticipated demand while eliminating areas of unused bulk parking. This report follows the latest guidance (August 2023) identified in the City of Mesa's Code of Ordinances, Title 11, Article 4, Chapter 32 as well as other state of the practice materials.

2. PROPOSED DEVELOPMENT

2.1. VICINITY AND SURROUNDING AREA

The proposed development is planned on parcel APN 304-04-031, an undeveloped parcel containing 22.46 acres (gross) with a designated City zoning of Mixed-Use Urban (MX-U), a zoning district that permits credit for on-street parking spaces located immediately adjacent to the frontage of the property, which may be counted toward required off-street parking for non-residential uses; however, no on-street parking is proposed or anticipated.

This site is in a developing area of Mesa, adjacent to a recently constructed distribution warehouse to its east and future residential units to its south, southwest and northeast. The future residential developments and undeveloped properties in the immediate area of the subject site are mostly comprised of the larger Hawes Crossing master plan, of which the subject property is part. A vicinity map of the project area is provided in **Figure 1**.

2.2. SITE DESCRIPTION AND LAND USE DETAILS

A copy of the proposed site layout plan is provided in **Figure 2**. The site is shown to consist of multiple land use types that will generate traffic to and from the site, including the following uses:

- Mixed-Use Residential (Apartments): 84 Dwelling Units (DU's)
- Apartments: 264 DU's
- Carriage Homes: 8 DU's
- Live/Work Units: 18 DU's
- Mixed Use Units: 12 DU's
- General Office Space: 15,000 SF GFA
- Sit-Down Restaurant: 6,000 SF indoor area plus 1,480 SF patio
- Restaurant with Drive-Through Window: 2,500 SF
- Retail Space: 16,300 SF
- Fitness/Clubhouse: 2,630 SF (half of bldg. area)

In addition to the above land uses, a number of ancillary uses are not expected to generate trips or require additional parking since they are for use by property tenants:

- Urban Plaza Open Space: 24,550 SF
- Flex Lawn (Open Space)
- Pet Park
- Pickleball Courts: 2 Courts
- Fitness/Clubhouse: 2,630 SF (half of bldg. area)

Following is the magnitude of proposed development aggregated by land use. It is noted that the number of residential bedrooms may change slightly from the information below. In addition, half of the site's fitness/clubhouse area (2,630 SF) was included as office space assuming there will be some outside activity associated with rental/leasing operations and property maintenance.

- Residential: 386 DU's (252 1-bedroom and 134 2-bedroom units, 520 total bedrooms)
- Office: 17,630 SF
- Retail: 16,300 SF
- Services: 8,500 SF (excluding 1,480 SF outdoor seating)

2.3. PARKING SUPPLY

To accommodate vehicle demand, a total of 797 parking spaces (21 ADA spaces) are proposed, located in areas throughout the property to best serve the individual land uses. The parking layout consists of 447 covered spaces (405 of which are covered residential parking), 74 garage spaces, and 276 uncovered spaces. In general, residential parking is proposed toward the back (north) two-thirds of the property, retail/office parking toward the south and adjacent to the office buildings on the east side of the property, and shared parking spaces grouped in strategic areas throughout the site.

Designating the parking spaces to specific land use groups, 573 spaces can be associated with the residential areas, 146 spaces associated with the retail, office, mixed use, and work-live combinations, and 78 that are considered shared spaces, spots near the pickleball area, retail, and clubhouse areas that can serve all uses depending upon the time of day. The 78 shared spaces are highlighted in Figure 2 with an "M" designation.

3. REQUIRED PARKING

3.1. CITY OF MESA PARKING CODE REQUIREMENT, INDIVIDUAL USES

The City of Mesa's requirements for the base number of off-street parking spaces for specific land uses is in its most recent Code of Ordinances, Title 11, Article 4, Chapter 32, On-Site Parking, Loading and Circulation. From Table 11-32-3(A), the following minimum standards are indicated for the individual land uses associated with the Craftsman on Elliot:

Table 1 – City of Mesa Parking Requirement

Component	Units	Parking Code	Code Required Parking
Residential (Units, Not located within 1/4 mile of BRT or LRT station)			**810.6**
Mixed-Use Apartments	84	2.1 spaces per Unit	176.4
Apartments	264	2.1 spaces per Unit	554.4
Carriage House	8	2.1 spaces per Unit	16.8
Main St Live/Work	18	2.1 spaces per Unit	37.8
Main St Mixed-Use	12	2.1 spaces per Unit	25.2
Office Area (1,000 SF GFA)			**47.0**
General Office	17.63	1.0 space per 375 SF	47.0
Retail / Services (1,000 SF GFA)			**171.7**
Restaurant - Indoor	6.0	1.0 space per 75 SF	80.0
Restaurant - Outdoor	1.48	1.0 space per 200 SF	7.4
Restaurant - Drive Thru Indoor	2.5	1.0 space per 100 SF	25.0
Retail / Shops	2.5	1.0 space per 275 SF	9.1
Retail (Mixed-Use Areas)	13.8	1.0 space per 275 SF	50.2
Total Required Parking Parking per Code (Individual Uses) =			**1,029**

Assuming the site consists of individual land uses, the City of Mesa parking code would require 1,029 off-street parking spaces. In this instance, parking supply would be 232 spaces (1,029 required minus 797 provided) or 22.6% below the City's requirement. However, the City acknowledges two conditions:

1. City code may over-estimate individual parking need and permits alternative information using state-of-the-practice materials for City consideration.

2. Parking demand for each land use may peak at different times throughout the day and permits a shared parking analysis within mixed-use developments, helping reduce the number of unused spaces to allow better use of the subject property.

3.2. State of the Practice Parking Ratio Estimates

To determine if the City of Mesa parking requirements over- or under-estimate parking need compared to average US rates, a review of current state-of-the-practice materials was conducted, analyzing the Institute of Transportation Engineers (ITE) *Parking Generation Manual* (6th Edition, 2023) and the Urban Land Institute (ULI) *Shared Parking* (3rd Edition, 2020).

From review of both publications that use results based on national research, definitions for each land use and parking conditions are not exact, but the most comparative data is presented. The ITE data presents parking demand using the 85th percentile rate of the peak period while the ULI data presents a base ratio, which is the expected peak accumulation of vehicles in the peak hour for each use. The ULI data breaks down parking demand into more granular subcategories (residential units/visitors or employees/visitors). Also, the City Zoning Ordinance parking ratios in effect prior to 2023 for multi-family residential developments are also presented for comparison purposes. All data is presented in **Table 2**.

Table 2 – Previous City of Mesa, ITE and ULI Peak Parking Ratios

	City of Mesa Parking Code	ITE Trip Generation [2] (6th Edition) 85th %-ile	ULI Shared Parking (3rd Edition)
	Previous Code 685 Spaces [1] *Current Code 811 Spaces*	*533 spaces*	*487 Spaces*
All Types Combined	2.1 spaces per Unit		
Studio Apartments	1.5 spaces per Unit [1]		0.85 spaces per Unit
1-Bedroom Apartments	1.5 spaces per Unit [1]	1.27 spaces per Unit	0.90 spaces per Unit
2-Bedroom Apartments	2.0 spaces per Unit [1]	1.59 spaces per Unit [3]	1.65 spaces per Unit
3+ Bedroom Apartments	2.0 spaces per Unit [1]		2.50 spaces per Unit
Guest	0.1 spaces per Unit [1]		0.1 spaces per Unit
Office (17,630 SF)	*47 Spaces*	*53 Spaces*	*67 Spaces*
General Office	2.7 per KSF	2.98 per KSF	
Employees			3.5 per KSF
Visitors			0.3 per KSF
Retail / Services (27,050 SF)	*157 Spaces*	*210 Spaces*	*233 Spaces*
Restaurant - Indoor	13.3 per KSF		
Restaurant - Outdoor	5.0 per KSF		
Sit-Down Restaurant (Family)		13.61 per KSF	
Employees			2.15 per KSF
Visitors			15.25 per KSF
Restaurant - Drive Thru Indoor	10.0 per KSF		
Restaurant - Drive Thru Outdoor	5.0 per KSF		
Fast-Food Restaurant		10.17 per KSF	
Employees			2.0 per KSF
Visitors			12.4 per KSF
Retail General / Shops	2.7 per KSF	4.44 per KSF	
Employees			0.7 per KSF
Visitors			2.9 per KSF
Total Parking Req'd. (Prev. Code)	**889 Total Spaces**		
Total Parking Req'd. (Current Code)	**1014 Total Spaces**	**796 Total Spaces**	**787 Total Spaces**

Notes:

1 Previous City of Mesa Parking Code

2 ITE data reflects 85th Percentile Peak Period Parking Demand

3. ITE - 2 or more bedrooms

4. Restaurant, ITE - High-Turnover (Sit-Down), ULI - Family

5. Fast-Food Restaurant, ITE w/Drive-Thru Window

When applying the indicated parking ratios to the land uses within the Craftsman on Elliot, the following is noted:

- The existing and previous City of Mesa residential parking ratios are similar except for studio and 1-bedroom apartments. Previously only 1.6 spaces per unit (apartment plus guest) was required compared to the current 2.1 spaces per unit. Applying the site's estimated apartment composition (252 1-bedroom and 134 2-bedroom units), 685 parking spaces would have been required under the previous City code compared to the current 811 spaces. This results in 126 more parking spaces required under the current code than before.

- The ITE 85th percentile parking ratios for the residential land use are lower than the City's requirement while for general office and restaurant land uses they are approximately the same (assuming no outdoor seating). The only ITE rate higher than the City's current parking requirement is for general retail shops at 4.44 spaces per 1,000 SF compared to the City's rate of 2.7 spaces per KSF. In all, the calculated number of parking spaces needed to accommodate the peak parking demand for all uses simultaneously using the ITE values would result in 796 parking spaces being required. Noting 797 spaces are proposed for the site, this would result in 1 vacant surplus parking space. *It is noted that use of the ITE average peak parking rates would result in a total of 579 spaces being required, 218 spaces below the parking supply being provided.*
- The ULI parking ratios are lower than the City's requirement for the residential component and slightly higher for the other land uses. Using the ULI data, a parking requirement of 787 spaces would result, which means the site would be over-parked by 10 parking stalls (1.3%) without considering the impacts of shared parking.

4. SHARED PARKING

The City permits a shared parking analysis to be performed when two or more nonresidential uses or a mixed-use development, with different peak parking characteristics, use the same off-street parking spaces to determine if the parking supply will meet their off-street parking requirements. The City does not provide a specific methodology but indicates use of state-of-the-practice materials to estimate parking need.

To analyze, *Shared Parking* (3rd Edition) by Urban Land Institute was referenced. This publication was used to help determine the parking supply required to accommodate parking demand throughout the day under the combination of different on-site land uses. This publication provides a more detailed for analysis purposes by separating parking demand based on resident and visitor (for multi-family residential dwelling units), employee and visitor (for office, retail, and restaurant uses) and a reserved condition if specific designated spaces are to be defined within the site compared to other local jurisdictions that do not include this refinement (City of Tempe and City of Phoenix). It is assumed the subject site will have reserved parking spaces for the residential units (74 garage spaces) and the office buildings (assumed to include the 29 retail spaces fronting the two buildings). A total of 34 spaces, located in the cut-out locations associated with the Main Street live/work and mixed-use areas appear to be dedicated to its residential tenants.

Table 3 shows the ULI weekday parking adjustment percentages, by hour, for each land use and parking component within the site while **Table 4** shows the weekend percentages.

Table 5 shows the calculated number of parking spaces for each land use component using the ULI parking ratios under typical weekday conditions. The unit rate for the residential dwellings was calculated on a blended average of the 1- and 2-bedroom units with the 74 reserved spaces (garage spaces) subtracted from its calculated number of spaces. Similarly, the calculated number of employee parking spaces for the assumed office spaces has been subtracted to estimate the number of reserved spaces dedicated to the office area (29 spaces assumed). The results show an approximate hourly parking demand for the site based on the individual land use.

It is noted that the results do not consider internal site interaction or alternative travel modes, which would reduce the parking demand further. As indicated from the traffic impact analysis conducted for this site, the NCHRP Internal Trip Capture Estimation Tool indicates a 18% AM and 43% PM peak period internal capture rate for the site (i.e., people from the office, residential, or other retail components could simply walk to the restaurants, reducing the number of parking spaces required). The NCHRP sheets have been attached.

Table 6 shows the calculated number of parking spaces for each land use component using the ULI parking ratios under typical weekend conditions.

Table 3 – ULI Weekday Time of Day Adjustment Factors (Percentages)

		ULI - WEEKDAY TIME OF DAY ADJUSTMENT FACTORS (Percent)															
Land Use Component	Type	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM
Residential	Units	95	80	67	55	50	45	40	40	40	40	45	50	60	70	80	85
Residential	Reserved (Garage)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Residential	Guests	0	10	20	20	20	20	20	20	20	20	20	40	60	100	100	100
Office	Visitors	0	1	20	60	100	45	15	45	95	45	15	10	5	2	1	0
Office	Employees	3	15	50	90	100	100	85	85	95	95	85	60	25	15	5	3
Office	Reserved (Bldg. Front)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Retail <400K SF	Visitors	1	5	15	35	60	75	100	100	95	85	85	85	90	80	65	45
Retail <400K SF	Employees	10	15	25	45	75	95	100	100	100	100	100	100	100	100	90	60
Family Restaurant	Visitors	25	50	60	75	85	90	100	90	50	45	45	75	80	80	80	60
Family Restaurant	Employees	50	45	90	0	100	100	100	100	100	75	75	95	95	95	95	80
Fast Casual/Fast Food	Visitors	5	10	20	30	55	85	100	100	90	60	55	60	85	80	50	30
Fast Casual/Fast Food	Employees	20	20	30	40	75	100	100	100	95	70	60	70	90	90	60	40

Table 4 – ULI Weekend Time of Day Adjustment Factors (Percentages)

		ULI - WEEKEND TIME OF DAY ADJUSTMENT FACTORS (Percent)															
Land Use Component	Type	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM
Residential	Units	100	95	88	80	75	70	68	65	65	68	71	74	77	80	83	86
Residential	Reserved (Garage)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Residential	Guests	0	20	20	20	20	20	20	20	20	20	20	40	60	100	100	100
Office	Visitors	0	20	60	80	90	100	90	80	60	40	20	10	5	0	0	0
Office	Employees	0	20	60	80	90	100	90	80	60	40	20	10	5	0	0	0
Office	Reserved (Bldg. Front)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Retail <400K SF	Visitors	1	5	30	50	70	90	95	100	100	95	90	80	75	70	65	50
Retail <400K SF	Employees	10	15	40	75	85	95	100	100	100	100	100	95	85	80	75	65
Family Restaurant	Visitors	10	25	45	70	90	90	100	85	65	40	45	60	70	70	65	30
Family Restaurant	Employees	50	75	90	90	100	100	100	100	100	75	75	95	95	95	95	80
Fast Casual/Fast Food	Visitors	5	10	20	30	55	85	100	100	90	60	55	60	85	80	50	30
Fast Casual/Fast Food	Employees	15	20	30	40	75	100	100	100	95	70	60	70	90	90	60	40

Table 5 – ULI Weekday Time of Day Parking Demand

Land Use Component	Type	ULI Spaces per Unit		Units	Calculated Spaces	ULI - WEEKDAY TIME OF DAY ADJUSTMENT FACTORS (Parking spaces) 6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM
Residential (Note 1)	Units	1.16	DU	386	374	355	299	251	206	187	168	150	150	150	150	168	187	224	262	299	318
Residential	Reserved	1	X	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74
Residential	Guests	0.1	DU	386	39	0	4	8	8	8	8	8	8	8	8	8	16	23	39	39	39
Office	Visitors	0.3	KSF	17.6	5	0	0	1	3	5	2	1	2	5	2	1	1	0	0	0	0
Office (Note 1)	Employees	3.5	KSF	17.6	33	1	5	17	30	33	33	28	28	31	31	28	20	8	5	2	1
Office	Reserved	1	X	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Retail <400K SF	Visitors	2.9	KSF	16.3	47	0	2	7	16	28	35	47	47	45	40	40	40	42	38	31	21
Retail <400K SF	Employees	0.7	KSF	16.3	11	1	2	3	5	8	10	11	11	11	11	11	11	11	11	10	7
Family Restaurant (Note 2)	Visitors	15.25	KSF	7.48	114	29	57	68	86	97	103	114	103	57	51	51	86	91	91	91	68
Family Restaurant	Employees	2.15	KSF	6	13	7	6	12	0	13	13	13	13	13	10	10	12	12	12	12	10
Fast Casual/Fast Food	Visitors	12.4	KSF	2.5	31	2	3	6	9	17	26	31	31	28	19	17	19	26	25	16	9
Fast Casual/Fast Food	Employees	2	KSF	2.5	5	1	1	2	2	4	5	5	5	5	4	3	4	5	5	3	2
		Parking Spaces Req per ULI =			**775**	**499**	**482**	**478**	**468**	**503**	**506**	**511**	**501**	**456**	**429**	**440**	**499**	**545**	**591**	**606**	**578**
		Unused Spaces =			**22**	**298**	**315**	**319**	**329**	**294**	**291**	**286**	**296**	**341**	**368**	**357**	**298**	**252**	**206**	**191**	**219**

Notes:

1. *Calc. blended average and/or minus reserved spaces.*
2. *Includes outdoor seating for visitors.*
3. *Yellow highlight is peak demand*
4. *Number of unused parking supply based on 797 on-site parking spaces*

Land Use Component	Est. # of Dedicated Spaces	Subtotals Per Land Group 6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM
Residential =	573	429	377	333	288	269	250	232	232	232	232	250	277	321	375	412	431
Office =	29	30	34	47	62	67	64	58	59	65	62	58	50	37	34	31	30
Retail =	117	40	71	98	118	167	192	221	210	159	135	132	172	187	182	163	117

Note: There are 78 shared spaces that can be used by the office, retail, or residential land uses during peak times.

Table 6 – ULI Weekend Time of Day Parking Demand

Land Use Component	Type	ULI Spaces per Unit		Units	Calculated Spaces	ULI - WEEKEND TIME OF DAY ADJUSTMENT FACTORS - Parking spaces) 6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM
Residential (Note 1)	Units	1.16	DU	386	374	374	355	329	299	281	262	254	243	243	254	266	277	288	299	310	322
Residential	Reserved	1	X	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74
Residential	Guests	0.1	DU	386	39	0	8	8	8	8	8	8	8	8	8	8	16	23	39	39	39
Office	Visitors	0.3	KSF	17.6	5	0	1	3	4	5	5	5	4	3	2	1	1	0	0	0	0
Office (Note 1)	Employees	3.5	KSF	17.6	33	0	7	20	26	30	33	30	26	20	13	7	3	2	0	0	0
Office	Reserved	1	X	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Retail <400K SF	Visitors	2.9	KSF	16.3	47	0	2	14	24	33	42	45	47	47	45	42	38	35	33	31	24
Retail <400K SF	Employees	0.7	KSF	16.3	11	1	2	4	8	9	10	11	11	11	11	11	10	9	9	8	7
Family Restaurant (Note 2)	Visitors	15.25	KSF	7.48	114	11	29	51	80	103	103	114	97	74	46	51	68	80	80	74	34
Family Restaurant	Employees	2.15	KSF	6	13	7	10	12	12	13	13	13	13	13	10	10	12	12	12	12	10
Fast Casual/Fast Food	Visitors	12.4	KSF	2.5	31	2	3	6	9	17	26	31	31	28	19	17	19	26	25	16	9
Fast Casual/Fast Food	Employees	2	KSF	2.5	5	1	1	2	2	4	5	5	5	5	4	3	4	5	5	3	2
	Parking Spaces Req per ULI =				**775**	**499**	**521**	**552**	**575**	**606**	**610**	**619**	**588**	**555**	**515**	**519**	**551**	**583**	**605**	**596**	**550**
	Unused Spaces =				**22**	**298**	**276**	**245**	**222**	**191**	**187**	**178**	**209**	**242**	**282**	**278**	**246**	**214**	**192**	**201**	**247**

Notes:

1. *Calc. blended average and/or minus reserved spaces.*
2. *Includes outdoor seating for visitors.*
3. *Yellow highlight is peak demand*
4. *Number of unused parking supply based on 797 on-site parking spaces*

Land Use Component	Est. # of Dedicated Spaces	Subtotals Per Land Group 6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM
Residential =	574	448	437	411	381	363	344	336	325	325	336	348	367	385	412	423	435
Office =	29	29	37	52	59	64	67	64	59	52	44	37	33	31	29	29	29
Retail =	117	22	47	89	135	179	199	219	204	178	135	134	151	167	164	144	86

Note: There are 78 shared spaces that can be used by the office, retail, or residential land uses during peak times.

The results in Table 5 for the shared parking weekday conditions are summarized as follows:

- Assuming no shared parking, the ULI data (weekday or weekend) indicates a total of 775 parking spaces would be needed to accommodate the on-site parking demand assuming all land uses peak at the same time. This would result in a 22-space parking over-supply (2.8%) compared to the 797 spaces being proposed.
- The ULI shared parking analysis indicates peak weekday parking demand at the Craftsman on Elliot is to occur during the 8 PM hour with 606 parking spaces being occupied. Noting a 797-space supply, 76.0% of the parking spaces will be occupied at peak site demand, resulting in a 191-parking space surplus (24.0%).
- Parking for each individual land use peaks at different times throughout the day. With 78 parking spaces dedicated as shared spaces, a total of 224 parking spaces are available to the office and retail components. Under the indicated assumptions, these spaces are estimated to be over-parked between the hours of 10 AM to 3 PM (maximum over-parked condition at Noon, 55 spaces). Although the retail and office-related spaces may be full, there will be 286 unused parking spaces throughout the site. Additionally, if applying the average AM/PM NCHRP site interaction percentage of 30% (AM = 18%, PM = 43%) to the 279 peak parking space demand associated with the office/retail spaces, only 196 spaces (279 x 0.70) would be occupied, resulting in the retail, office, and shared space areas being under-parked by 28 vehicles.

The results in Table 6 for the shared parking weekend conditions are summarized as follows:

- The shared parking demand for the Craftsman on Elliot is higher during the weekend than the weekday, although this assumed the office areas are open during the weekend. IF the office uses operate on the weekends, peak parking demand occurs during the 60-minute period beginning at Noon with 619 occupied spaces (178 vacant spaces) resulting in a parking surplus of 22.3% (178 vacant spaces / 797 provided spaces).
- Noting 78 on-site parking spaces are dedicated to shared space, the 224 total spaces available to the retail and office uses will be fully occupied from 10 AM to 3 PM, peaking during the Noon hour at 283 spaces (59 space under-supply). However, at this time, 178 spaces will be available throughout the site. Additionally, if the average NCHRP site interaction percentage of 30% is applied, only 198 parking spaces would be needed, resulting in 26 spaces provided to the office/retail/shared uses being vacant.
- The above results are only applicable if all the site's 17,630 SF of office space is open during the weekend. If any portion of the office use is closed, parking demand will be reduced and more parking spaces will be unoccupied.

5. CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis conducted, the following conclusions are presented:

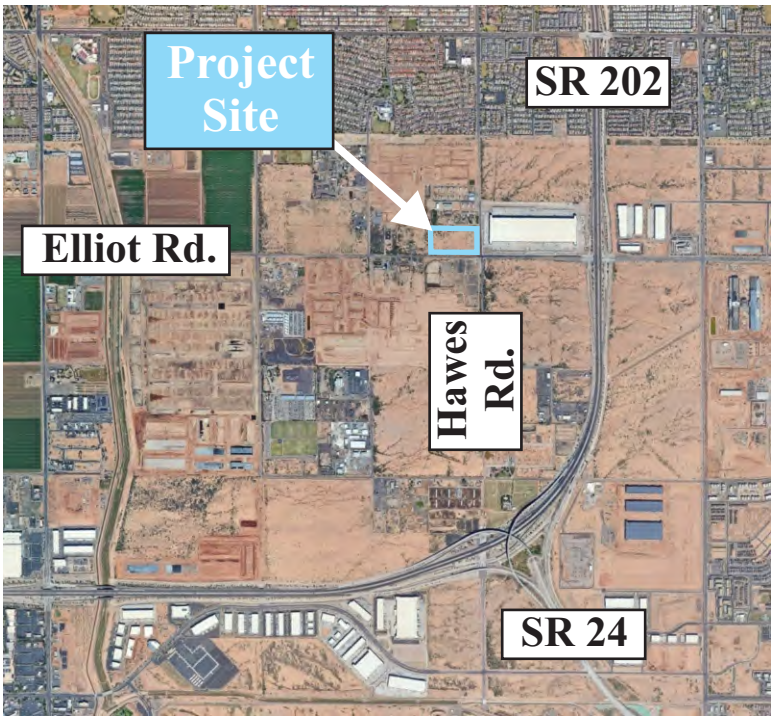
- The Craftsman on Elliot is planned to provide a total of 797 parking spaces to accommodate peak parking demand.
- For the multi-use development, adding the City of Mesa's parking space requirement for each individual land use is not appropriate. If the individual parking requirements for each land use were applied, a total of 1,029 spaces would be required under the current parking code.
- The City will consider a potential parking reduction to City requirements if state-of-the-practice material indicates such a reduction is reasonable. The ITE *Parking Generation* (6th Edition) and the ULI *Shared Parking* (3rd edition) result in less on-site parking being required as compared to the current City parking code. In total, using the ITE *Parking Generation*, 796 total spaces would be required, while the ULI results indicate 787 total parking spaces would meet parking demand, if the site were to accommodate peak demand for each individual land use. The 797 parking spaces being proposed for the site would accommodate the individual peak parking demand estimated using the ITE or ULI peak parking rates.
- The City permits a shared parking analysis to reduce parking supply noting multi-use sites have different parking characteristics, permitting a parking space to be used by different land uses throughout the day as needed. In following the methodology outlined in the ULI *Shared Parking* (3rd Edition) and using its identified rates per land use, peak parking demand is expected to occur at 8 PM during weekday conditions and at Noon during weekend conditions. During the higher weekend period, peak parking demand is estimated at 619 spaces, 77.7% of the 797 total parking spaces being occupied. This results in a 178 parking spaces surplus. During peak weekday periods, a 191-parking space surplus is expected.

Based on the analysis conducted, the following recommendations are presented:

- The 797 parking spaces proposed at the Craftsman on Elliot site will result in a parking surplus of 178 spaces during peak demand. This result does not include additional parking reduction factors such as site-interaction or alternative travel modes. Assuming trip generation and parking generation are similar, the NCHRP spreadsheet tool indicates the proposed mix of site land uses will result in an internal site interaction of 18% during the AM and 43% during peak afternoon conditions. When applying the average of these factors to the shared parking results to estimate midday conditions, parking demand is expected to be less than the 619-space demand that has been estimated and result in a surplus of more than 178 spaces.

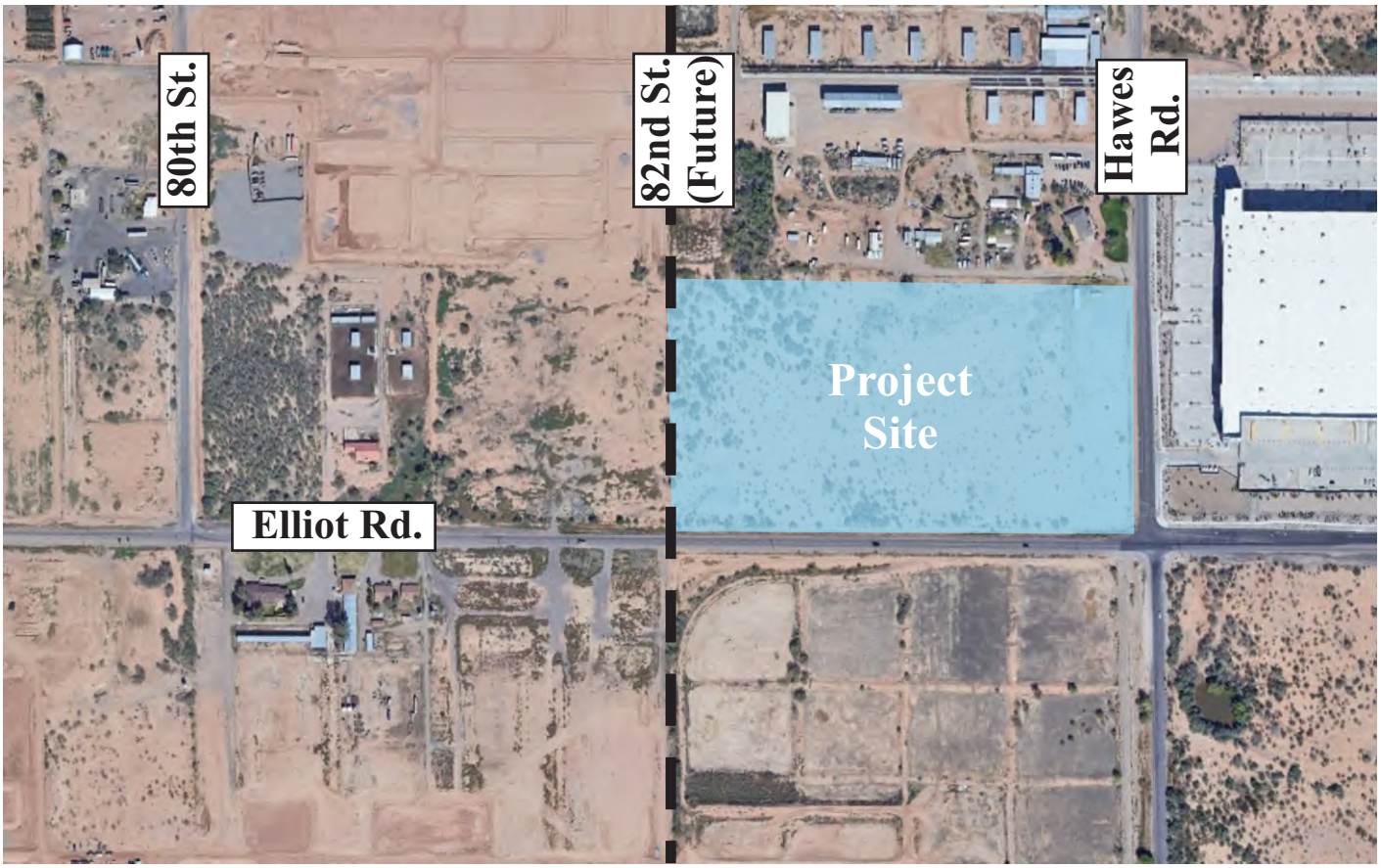
- It is recommended the City consider the 797 parking spaces proposed for the Craftsman on Elliot as adequate to accommodate estimated parking demand.

ATTACHMENTS



Project Area

Enlargement Area



North

Not to scale

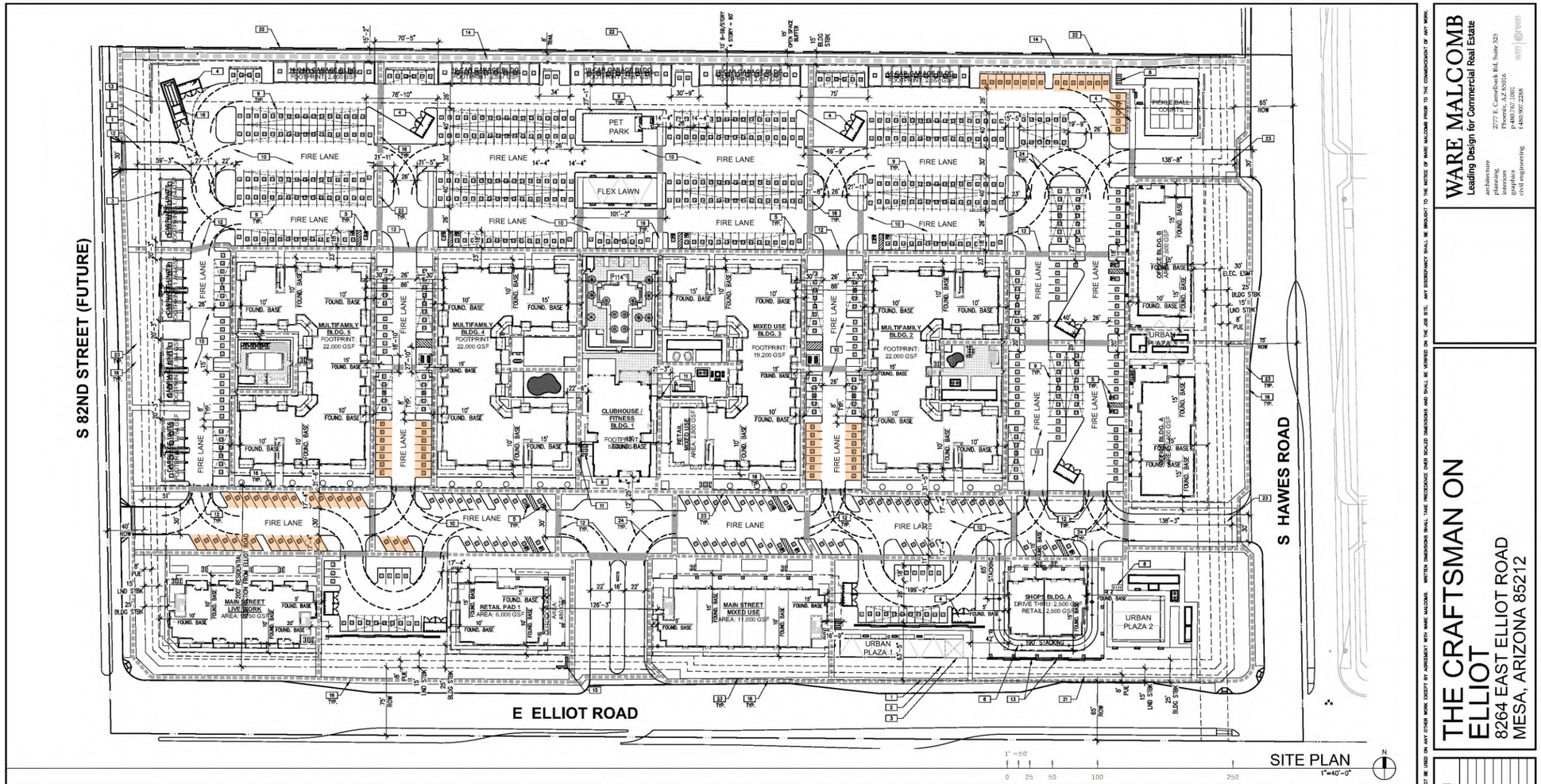
Craftsman on Elliot - Parking Study

Vicinity Map

Figure 1

LEE ENGINEERING

CAUTION: IF THIS SHEET IS NOT 24"x36" IT IS A REDUCED PRINT



SITE PLAN KEYNOTES

1. PROPERTY LINE (————)
2. LANDSCAPE SETBACK LINE
3. 25' MAX. BUILDING SETBACK LINE
4. C.O.M. STANDARD DOUBLE BIN ENCLOSURE. SEE SITE DETAILS SHEET.
5. C.O.M. STANDARD ACCESSIBLE PARKING STALL. SEE SITE DETAILS SHEET.
6. DRIVE-THRU STACKING PER MZO SECTION 11.31.18(E)
7. RETENTION BASIN; SEE CIVIL PLANS.
8. BIKE RACKS (8 BIKE STALLS PER RACK), TYPICAL.
9. PRE-ENGINEERED PARKING SHADE STRUCTURE; TYPICAL. SEE SITE DETAILS SHEET.
10. FIRE LANE, PAINT CURB PER CITY STANDARDS.
11. SECURED-ACCESS PEDESTRIAN GATE. SEE LANDSCAPE PLANS.
12. 6" WIDE PAVERS FINISH PEDESTRIAN CROSSWALKS AT PAVEMENT, RAISE 3" ABOVE VEHICLE LANE PER MZO SECTION 11-32-4(C)
13. DECORATIVE SCREEN WALL. SEE LANDSCAPE PLANS.
14. 8'-0" STABILIZED D.G. PEDESTRIAN TRAIL PER HAWES CROSSING PAD (▒▒▒ ▒▒▒)
15. PROPOSED FUTURE MONUMENT SIGN LOCATION.
16. 6' CONCRETE SIDEWALK, TYPICAL.
17. CITY OF MESA TYPICAL PARKING STALL LAYOUT. SEE SITE DETAILS SHEET.
18. C.O.M. STANDARD CMU TRASH COMPACTOR ENCLOSURE. SEE SITE DETAILS SHEET.
19. DECORATIVE SECURITY METAL FENCE. SEE LANDSCAPE PLANS FOR FENCE DESIGN
20. SITE ACCESS DRIVEWAY TO ALIGN WITH ADJACENT PROPERTY.
21. PROPOSED FUTURE BUS PAD, OFF-SITE STREET DESIGN SHOWN FOR REFERENCE ONLY.
22. 6' H SCREENING WALL ALONG NORTH PROPERTY LINE; SEE LANDSCAPE PLANS.
23. PEDESTRIAN CIRCULATION PATH (═══), ON 6'-0" WIDE ADA COMPLIANT SIDEWALK.
24. FIRE TRUCK MANEUVERING CLEARANCE; 35' INSIDE RADIUS, 55' OUTSIDE RADIUS

- A — RESIDENTIAL PARKING
- PA — COVERED RESIDENTIAL PARKING
- G — PRIVATE RESIDENTIAL GARAGE
- R — RETAIL PARKING
- PR — COVERED RETAIL PARKING
- M — SHARED PARKING

TRASH VOLUME CALCULATION

REFERENCE CITY OF MESA STANDARD DETAIL M-42.02.2(2), M-42.02.2(3), AND M-42.02.2(4)

MULTI-FAMILY TRASH CALCULATION:

	D.U.	CY TRASH PER WEEK PER UNIT	TOTAL TRASH PER WEEK	COMPACTOR RATIO	TOTAL TRASH (CY)
	380	0.3	333	4:1	68.25
TRASH	CONTAINER TYPE	NUMBER	CAPACITY (CY)	PICKUPS PER WEEK	CAPACITY PER WEEK PER CONTAINTER
	COMPACTOR	3	25	1	25
	STANDARD BIN	5	6	1	30
		TOTAL CAPACITY PER WEEK			55
RECYCLING	D.U.	CY TRASH PER WEEK PER UNIT	TOTAL TRASH PER WEEK		TOTAL RECYCLING (CY)
	380	0.13	48.25		48.25
	CONTAINER TYPE	NUMBER	CAPACITY (CY)	PICKUPS PER WEEK	CAPACITY PER WEEK PER CONTAINTER
	STANDARD BIN	5	6	2	60

NOTE:
TRASH FROM UNITS WILL BE COLLECTED BY A PERMANENT CONCIERGE SERVICE, PROVIDED BY THE APARTMENT COMPLEX

COMMERCIAL TRASH CALCULATION:

REFERENCE TO CITY OF MESA STANDARD DETAIL M-42.02.2 (3)
EACH COMMERCIAL BUILDING REQUIRES (1) DOUBLE ENCLOSURE — DOUBLE ENCLOSURE PROVIDED: 4

DEVELOPMENT DATA

PROJECT DESCRIPTION:
THE SCOPE OF THIS PROJECT IS THE MASTER PLANNING OF A MIXED-USE DEVELOPMENT THAT INCLUDES 4 NEW MULTI STORY MULTIFAMILY APARTMENT BUILDINGS AND 5 COMMERCIAL USE SINGLE STORY BUILDINGS, BUILT OVER ONE PHASE.

A.P.N.: 304-04-031

LOCATION: NWC ELLIOT RD. AND S. HAWES RD., MESA, AZ

GROSS SITE AREA: 978,357 SF (22.48 ACRES)
NET SITE AREA: 838,780 SF (19.29 ACRES)
CURRENT ZONING: MX4U (MIXED USE URBAN)
PROPOSED USE: COMMERCIAL AND MULTIFAMILY DEVELOPMENT

EXISTING USE: VACANT LOT / AGRICULTURE
GENERAL PLAN: MIXED USE / EMPLOYMENT

LOT USE PERCENTAGES (NET AREAS):

RESIDENTIAL	553,280 SF (12.71 AC) =	65%
COMMERCIAL	285,500 SF (6.55 AC) =	35%

MAXIMUM SETBACKS PROVIDED:

	SIDE(E)	REAR(N)	SIDE(W)	FRONT(S)
BUILDING	25'	25'	25'	25'
LANDSCAPE	15'	15'	15'	15'

URBAN PLAZA AREA:

URBAN PLAZA #1	8,300 SF
URBAN PLAZA #2	13,750 SF
URBAN PLAZA #3	2,500 SF
TOTAL URBAN PLAZA AREA:	24,550 SF

TOTAL SITE AREA: 838,780 SF
REQUIRED COVERAGE: 2.0% *(PER HAWES CROSSING PAD)*
AREA REQUIRED (2.0%) = 16,776 SF
AREA PROVIDED (2.9%) = 24,550 SF

RESIDENTIAL PROJECT DATA

VALUES ARE APPROXIMATE FOR INITIAL SITE PLANNING PURPOSES

RESIDENTIAL SITE AREA: 553,280 SF (12.71 AC)

RESIDENTIAL BUILDING

MIXED-USE APARTMENTS	(1) x 19,200 SF = 19,200 SF
APARTMENTS	(3) x 22,000 SF = 66,000 SF
CARRIAGE HOUSE	(4) x 1,800 SF = 8,400 SF
MAIN ST LIVE/WORK	(1) x 11,000 SF
MAIN ST MIXED-USE	(1) x 11,000 SF
TOTAL BUILDING AREA	113,600 SF

RESIDENTIAL UNITS

MIXED-USE APARTMENTS	(1) x (84) DU ea = 84 DU
APARTMENTS	(3) x (98) DU ea = 294 DU
CARRIAGE HOUSE	(4) x (2) DU ea = 8 DU
MAIN ST LIVE/WORK	(1) x 18 DU
MAIN ST MIXED-USE	(1) x 12 DU
TOTAL UNITS	380 DU
+ 10% MRU CAP: 193	

DENSITY

DENSITY ALLOWED	25 D.U. / AC
DENSITY PROVIDED	
GROSS = 380 / 22.48 =	17.19 DU/AC
NET = 380 / 19.29 =	20.04 DU/AC

BUILDINGS COVERAGE:

TOTAL BUILDINGS AREA	113,600 SF
BUILDING COVERAGE	21%

PARKING

380 UNITS (1.0 SP/DU) =	868 SP
RESIDENTIAL (SURFACE):	94 SP
RESIDENTIAL (GARAGE):	74 SP
RESIDENTIAL (COVERED):	405 SP
SHARED (SURFACE):	78 SP
TOTAL PARKING	851 SP

PARKING RATIO
851 SP / 380 DU = 1.08 SP/DU

COMMERCIAL PROJECT DATA

VALUES ARE APPROXIMATE FOR INITIAL SITE PLANNING PURPOSES

COMMERCIAL SITE AREA: 285,500 SF (6.55 AC)

BUILDINGS COVERAGE

TOTAL BUILDINGS AREA	42,050 SF
BUILDING COVERAGE	14.71%

OPEN SPACE (5%)

REQUIRED (42,000*.05) =	2,100 SF
PROVIDED =	24,550 SF

BUILDING TYPE

OFFICE	15,000 SF
REST. + SIT DOWN	8,000 SF
REST. + PATIO	1,480 SF
REST. + DRIVE THRU	2,520 SF
RETAIL	16,300 SF
TOTAL COMMERCIAL	41,280 SF

PARKING

REQUIRED

OFFICE:	1/375 SF	40
REST. + SIT DOWN:	1/75 SF	80
REST. + PATIO	1/200 SF	8
REST. + DRIVE THRU	1/100 SF	25
RETAIL	1/275 SF	60
		213

DEDICATED RETAIL: 104
COVERED: 42
SHARED: 78
PROVIDED: 224

PARKING RATIO: 5.3 SP / 1,000 SF

THE CRAFTSMAN ON ELLIOT
8264 EAST ELLIOT ROAD
MESA, ARIZONA 85212

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OVERALL SITE PLAN

DATE	REMARKS
20240311	SP/DRB SUBMITTAL #4

PA / PM: C.BRUCE
DRAWN BY: W.M.
JOB NO.: PHX22-0196-00

SHEET
DR050

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Shared Parking Spaces

North
Not to scale

Site Layout Plan

Figure 2

Land Use: 217 Multifamily Housing—1 BR (Low-Rise)

Description

Low-rise multifamily housing with one bedroom is a residential building with two or three floors (levels) of residence that consist entirely of 1-bedroom dwelling units. A studio or micro-apartment or condominium is treated as a 1-bedroom dwelling unit for this land use.

For this land use, a studio apartment is defined as a self-contained dwelling unit in which the living room, bedroom, and kitchen are combined into a single room. A micro-apartment is defined as a single-occupant studio apartment with a compact design that typically ranges between approximately 200 and 400 gross square feet.

Various configurations can fit this description, including the following:

- Walkup apartment or multiplex-access to the individual dwelling units is typically internal to the structure and provided through a shared entry, stairway, and hallway
- Mansion apartment-several dwelling units within what appears from the outside to be a single-family dwelling unit
- Stacked townhouse-designed to match the external appearance of a townhouse, but which have dwelling units that share both floors and walls and with access through a central entry and stairway

Land Use Subcategory

Data are separated into two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Time-of-Day Distribution for Parking Demand

The current database for this land use does not have sufficient data to produce a detailed, hour-by-hour distribution of parking demand from which the analyst can determine a peak period of parking demand. Based on the time periods for which data were collected for this land use and on a review of comparable land uses with hour-by-hour parking demand data, the presumed peak period for parking demand for this land use is between late-evening and early-morning.

Additional Data

The average parking supply ratios for the study sites with parking supply information are shown in the table below.

Setting	Proximity to Rail Transit	Parking Supply Per Dwelling Unit
Dense Multi-Use Urban	Within ½ mile of rail transit	0.47 (3 sites)
	Not within ½ mile of rail transit	0.59 (4 sites)
General Urban/Suburban	Within ½ mile of rail transit	1.08 (5 sites)
	Not within ½ mile of rail transit	1.35 (13 sites)

The average peak parking occupancy at the seven sites in a dense multi-use urban setting is 97 percent. The average peak parking occupancy at the 18 sites in a general urban/suburban setting is 70 percent.

The sites were surveyed in the 2000s, the 2010s, and the 2020s in California, Colorado, District of Columbia, Massachusetts, Oregon, and Wisconsin.

Source Numbers

419, 535, 536, 537, 544, 545, 579, 584, 585, 608, 610, 617

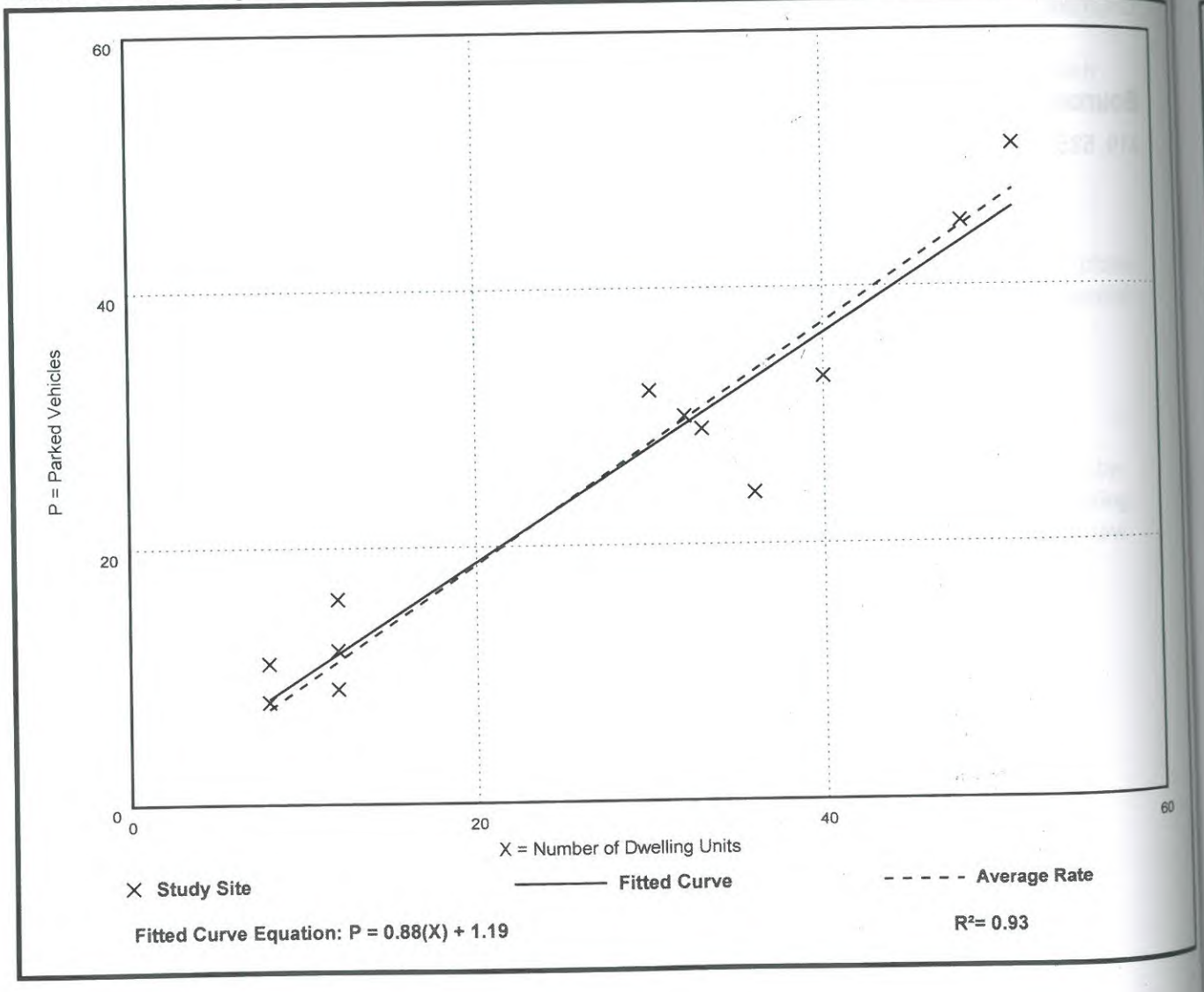
Multifamily Housing - 1 BR (Low-Rise) Not Close to Rail Transit (217)

Peak Period Parking Demand vs: Dwelling Units
On a: Weekday (Monday - Friday)
Setting/Location: General Urban/Suburban
Number of Studies: 14
Avg. Num. of Dwelling Units: 25

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.93	0.67 - 1.38	0.88 / 1.27	***	0.16 (17%)

Data Plot and Equation



Land Use: 220 Multifamily Housing—2+ BR (Low-Rise)

Description

Low-rise multifamily housing with two-or-more bedrooms is a residential building with two or three floors (levels) of residence that contain at least one dwelling unit with two or more bedrooms.

Various configurations can fit this description, including the following:

- Walkup apartment or multiplex-access to the individual dwelling units is typically internal to the structure and provided through a shared entry, stairway, and hallway
- Mansion apartment-several dwelling units within what appears from the outside to be a single-family dwelling unit
- Stacked townhouse-designed to match the external appearance of a townhouse, but which have dwelling units that share both floors and walls and with access through a central entry and stairway

Land Use Subcategory

Data are separated into two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Time-of-Day Distribution for Parking Demand

The following table presents a Time-of-Day distribution of parking demand (1) on a weekday (13 study sites) and a Saturday (eight study sites) in a general urban/suburban setting and (2) on a weekday (three study sites) and a Saturday (three study sites) in a dense multi-use urban setting.

	Percent of Peak Parking Demand			
	General Urban/Suburban		Dense Multi-Use Urban	
Hour Beginning	Weekday	Saturday	Weekday	Saturday
12:00-4:00 a.m.	97	92	89	100
5:00 a.m.	100	100	100	92
6:00 a.m.	96	99	97	92
7:00 a.m.	85	97	84	84
8:00 a.m.	67	92	58	76
9:00 a.m.	54	83	55	81
10:00 a.m.	48	79	47	78
11:00 a.m.	45	71	55	86
12:00 p.m.	45	68	55	81
1:00 p.m.	42	65	55	73
2:00 p.m.	42	62	42	70
3:00 p.m.	47	66	45	49
4:00 p.m.	49	66	47	51
5:00 p.m.	56	67	50	46
6:00 p.m.	64	70	68	43
7:00 p.m.	72	78	58	49
8:00 p.m.	77	77	58	59
9:00 p.m.	85	80	61	62
10:00 p.m.	92	82	74	76
11:00 p.m.	95	88	84	86

Additional Data

The average parking supply ratios and average peak parking occupancy for the study sites with parking supply information are shown in the table below.

Setting	Proximity to Rail Transit	Parking Supply Per Dwelling Unit	Average Peak Parking Occupancy
Dense Multi-Use Urban	Within ½ mile of rail transit	1.2 (21 sites)	73%
	Not within ½ mile of rail transit	1.3 (18 sites)	70%
General Urban/ Suburban	Within ½ mile of rail transit	1.6 (31 sites)	72%
	Not within ½ mile of rail transit	1.7 (114 sites)	72%

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), Arizona, California, Colorado, District of Columbia, Maine, Maryland, Massachusetts, New Jersey, Ontario (CAN), Oregon, Pennsylvania, Tennessee, Virginia, Washington, and Wisconsin.

Source Numbers

209, 218, 219, 247, 255, 277, 314, 402, 414, 419, 432, 437, 505, 512, 533, 535, 536, 537, 538, 544, 545, 577, 578, 579, 580, 584, 585, 587, 603, 604, 610, 611, 617, 620, 631

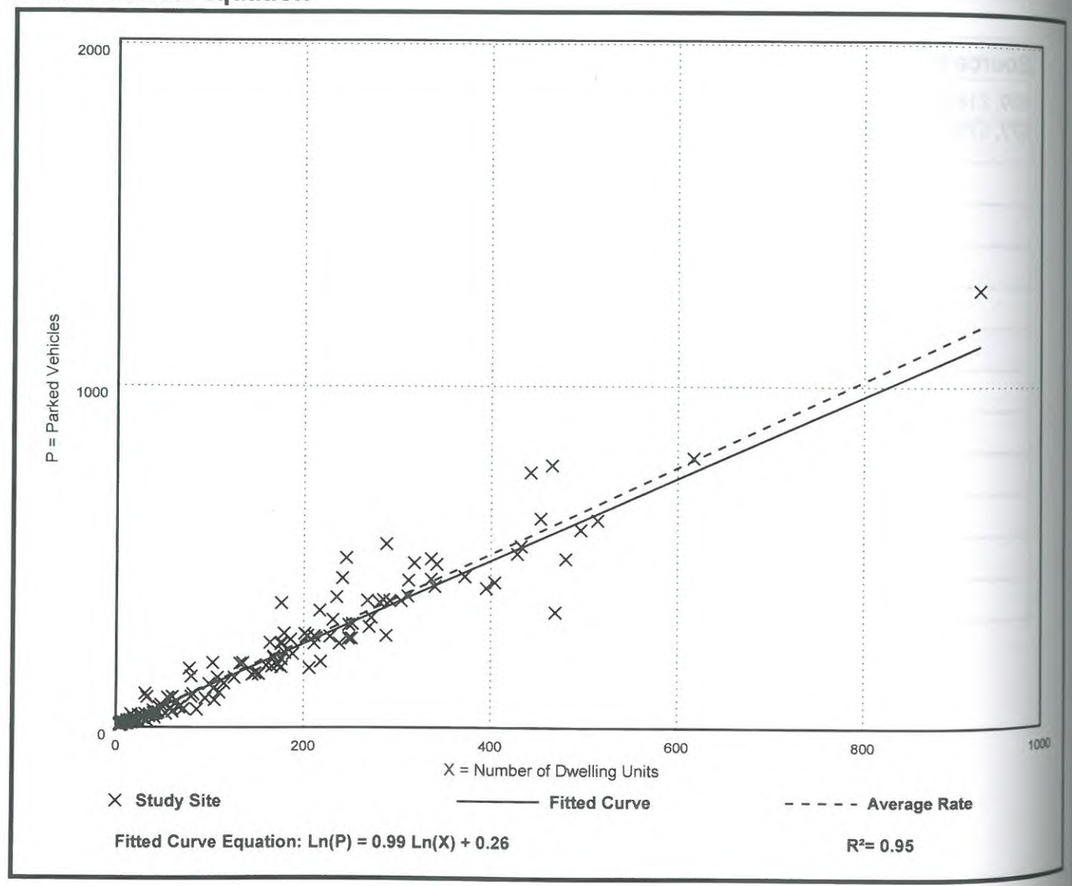
Multifamily Housing - 2+ BR (Low-Rise)
Not Close to Rail Transit (220)

Peak Period Parking Demand vs: Dwelling Units
On a: Weekday (Monday - Friday)
Setting/Location: General Urban/Suburban
Number of Studies: 143
Avg. Num. of Dwelling Units: 154

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.27	0.58 - 3.16	1.07 / 1.59	1.22 - 1.32	0.29 (23%)

Data Plot and Equation



Fitted Curve Equation: Ln(P) = 0.99 Ln(X) + 0.26

R^2= 0.95

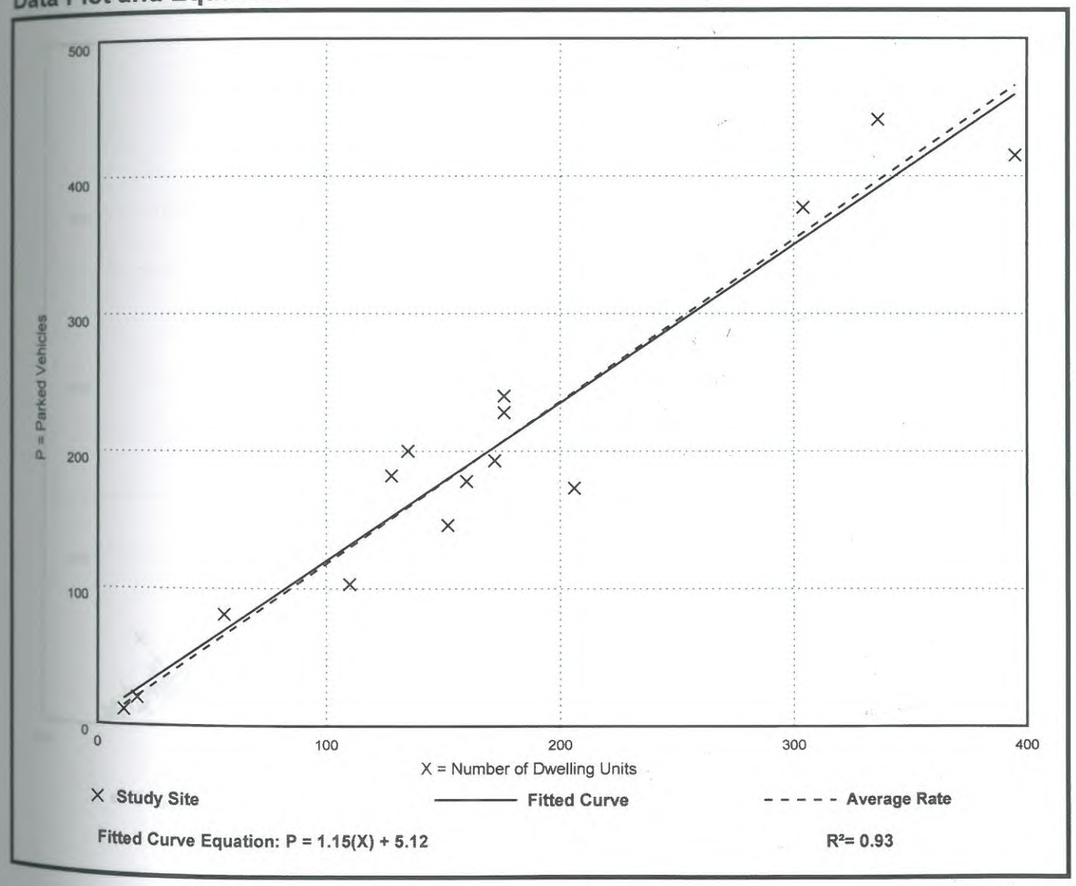
Multifamily Housing - 2+ BR (Low-Rise)
Not Close to Rail Transit (220)

Peak Period Parking Demand vs: Dwelling Units
On a: Saturday
Setting/Location: General Urban/Suburban
Number of Studies: 15
Avg. Num. of Dwelling Units: 169

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.18	0.84 - 1.48	1.07 / 1.44	***	0.19 (16%)

Data Plot and Equation



Fitted Curve Equation: P = 1.15(X) + 5.12

R^2= 0.93

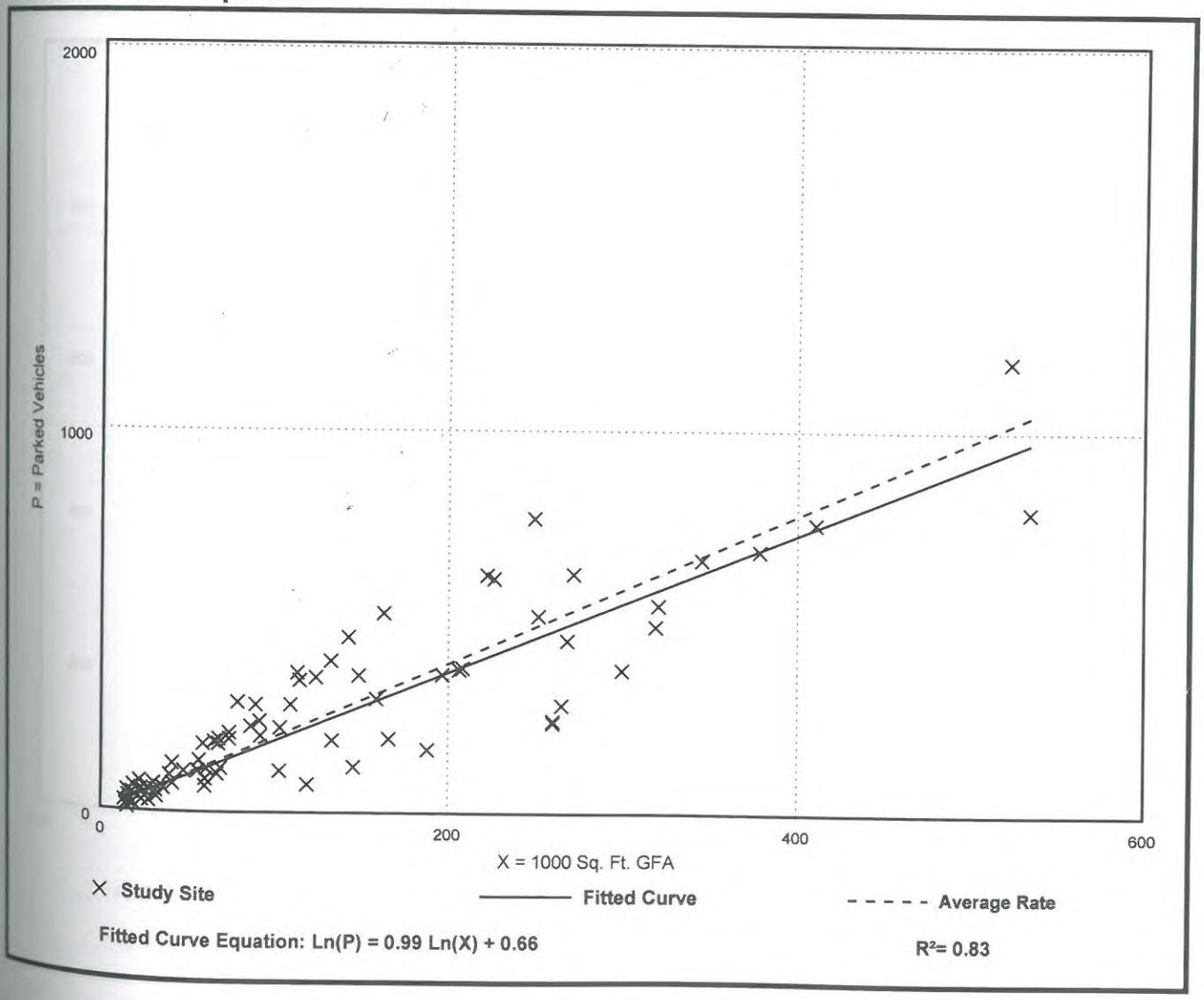
General Office Building
(710)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA
On a: Weekday (Monday - Friday)
Setting/Location: General Urban/Suburban
Number of Studies: 77
Avg. 1000 Sq. Ft. GFA: 131

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.95	0.50 - 3.60	1.68 / 2.98	1.79 - 2.11	0.70 (36%)

Data Plot and Equation



Fitted Curve Equation: Ln(P) = 0.99 Ln(X) + 0.66

R^2= 0.83

Land Use: 932 High-Turnover (Sit-Down) Restaurant

Description

A high-turnover (sit-down) restaurant is full-service eating establishment with a typical duration of stay of 60 minutes or less. This type of restaurant is usually moderately priced, frequently belongs to a restaurant chain, and is commonly referred to as casual dining. Generally, these restaurants serve lunch and dinner; they may also be open for breakfast and are sometimes open 24 hours a day. These restaurants typically do not accept reservations. A patron commonly waits to be seated, is served by wait staff, orders from a menu, and pays after the meal. Some facilities offer carry-out for a small proportion of their customers. Some facilities within this land use may also contain a bar area for serving food and alcoholic drinks.

Land Use Subcategory

Data are separated into two subcategories for this land use:

- Restaurants that serve breakfast
- Restaurants that do not serve breakfast

The "serves breakfast" subcategory includes restaurants that serve customers during breakfast, lunch, and dinner; during breakfast and lunch; and during breakfast only. The "does not serve breakfast" subcategory includes restaurants that serve customers during lunch and dinner, during dinner only, and during lunch only.

Time-of-Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a weekday (Monday–Thursday) at restaurants that serve breakfast, lunch, and dinner (10 study sites) and at restaurants that serve only lunch and dinner (25 sites). The following table also presents a time-of-day distribution of parking demand on a Saturday at restaurants that serve breakfast, lunch, and dinner (nine study sites) and at restaurants that serve only lunch and dinner (six sites).

Hour Beginning	Percent of Monday–Thursday Peak Parking Demand		Percent of Saturday Peak Parking Demand	
	Serving Breakfast, Lunch, and Dinner	Serving Lunch and Dinner	Serving Breakfast, Lunch, and Dinner	Serving Lunch and Dinner
12:00–4:00 a.m.	–	–	–	–
5:00 a.m.	–	–	–	–
6:00 a.m.	–	–	–	–
7:00 a.m.	–	–	–	–
8:00 a.m.	64	–	55	–
9:00 a.m.	74	–	76	–
10:00 a.m.	82	–	91	–
11:00 a.m.	89	28	100	33
12:00 p.m.	100	96	97	56
1:00 p.m.	86	100	91	69
2:00 p.m.	57	51	73	58
3:00 p.m.	44	37	51	49
4:00 p.m.	39	34	43	63
5:00 p.m.	62	56	57	77
6:00 p.m.	73	87	66	100
7:00 p.m.	95	91	80	100
8:00 p.m.	76	73	62	85
9:00 p.m.	–	–	–	55
10:00 p.m.	–	–	–	35
11:00 p.m.	–	–	–	–

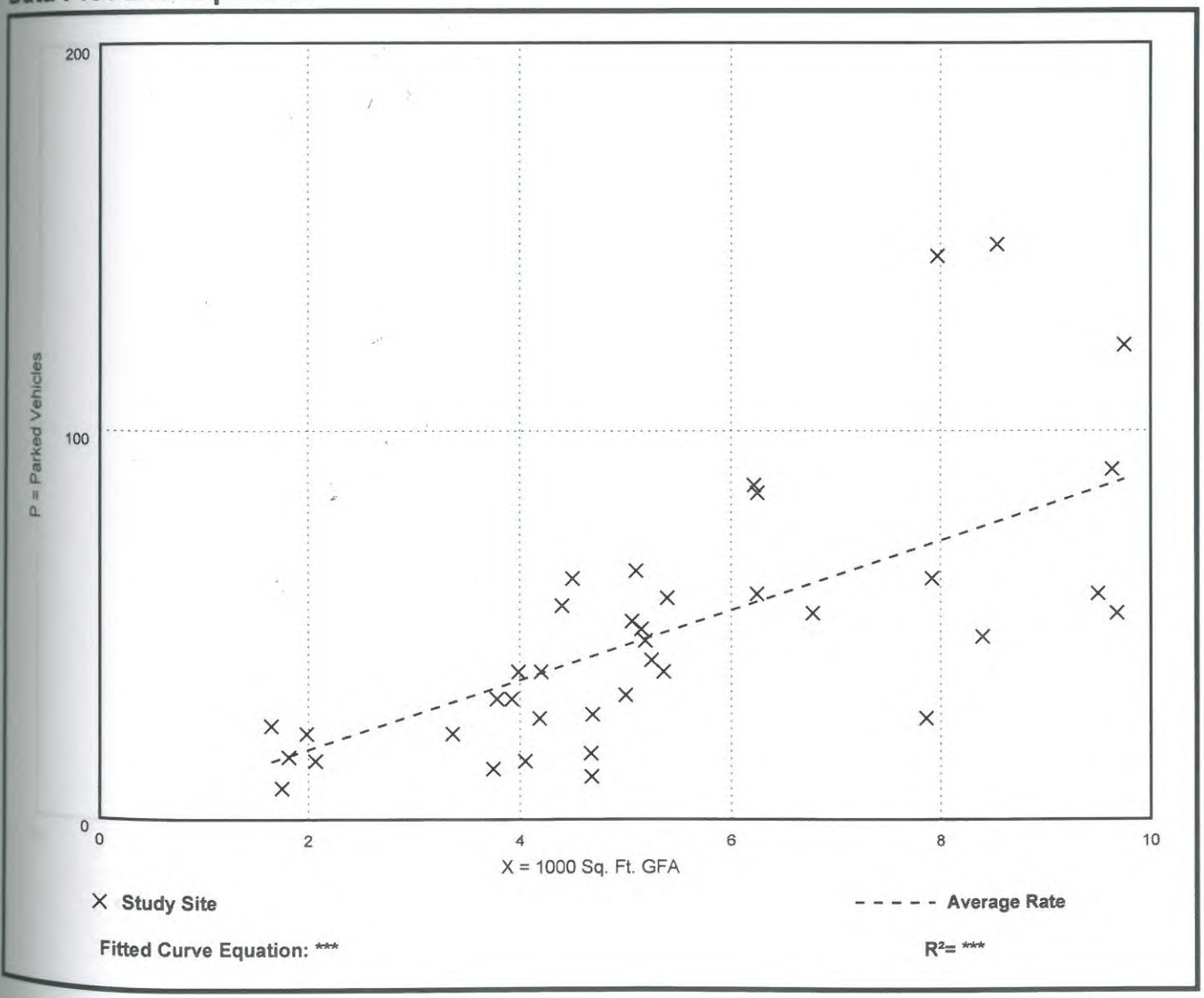
High-Turnover (Sit Down) Restaurant
Does Not Serve Breakfast (932)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA
On a: Weekday (Monday - Thursday)
Setting/Location: General Urban/Suburban
Number of Studies: 39
Avg. 1000 Sq. Ft. GFA: 5.4

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
8.97	2.35 - 18.20	6.66 / 13.44	7.71 - 10.23	4.03 (45%)

Data Plot and Equation



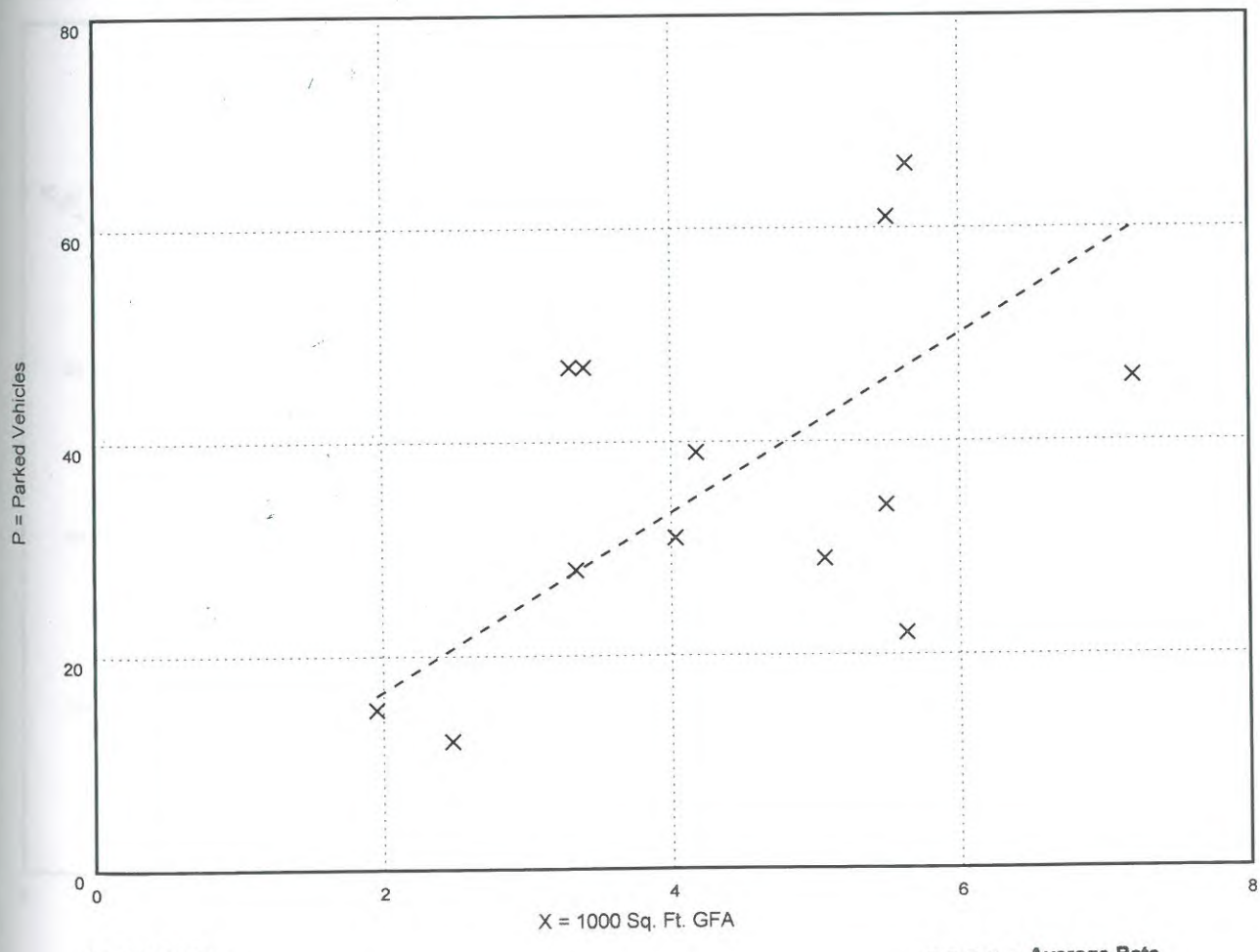
High-Turnover (Sit Down) Restaurant
Serves Breakfast (932)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA
On a: Weekday (Monday - Thursday)
Setting/Location: General Urban/Suburban
Number of Studies: 13
Avg. 1000 Sq. Ft. GFA: 4.4

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
8.34	3.91 - 14.24	6.31 / 13.61	***	3.25 (39%)

Data Plot and Equation



Fitted Curve Equation: *

R^2= ***

Land Use: 934 Fast-Food Restaurant with Drive-Through Window

Description

This land use includes any fast-food restaurant with a drive-through window. This type of restaurant is characterized by a large drive-through and large carry-out clientele, long hours of service (some are open for breakfast, all are open for lunch and dinner, some are open late at night or 24 hours a day), and high turnover rates for eat-in customers. The restaurant does not provide table service. A patron generally orders from a menu board and pays before receiving the meal. A typical duration of stay for an eat-in patron is less than 30 minutes.

Time-of-Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a Monday-through-Thursday weekday (one study site), a Saturday (two study sites), and a Sunday (one study site) in a general urban/suburban setting.

Hour Beginning	Percent of Peak Parking Demand		
	Monday through Thursday	Saturday	Sunday
12:00–4:00 a.m.	–	–	–
5:00 a.m.	–	–	–
6:00 a.m.	–	–	–
7:00 a.m.	–	–	–
8:00 a.m.	–	–	–
9:00 a.m.	–	–	–
10:00 a.m.	20	–	–
11:00 a.m.	40	50	34
12:00 p.m.	100	84	57
1:00 p.m.	93	100	100
2:00 p.m.	80	94	71
3:00 p.m.	53	64	48
4:00 p.m.	33	64	55
5:00 p.m.	40	59	64
6:00 p.m.	37	100	55
7:00 p.m.	20	72	57
8:00 p.m.	33	72	57
9:00 p.m.	20	61	66
10:00 p.m.	–	–	–
11:00 p.m.	–	–	–

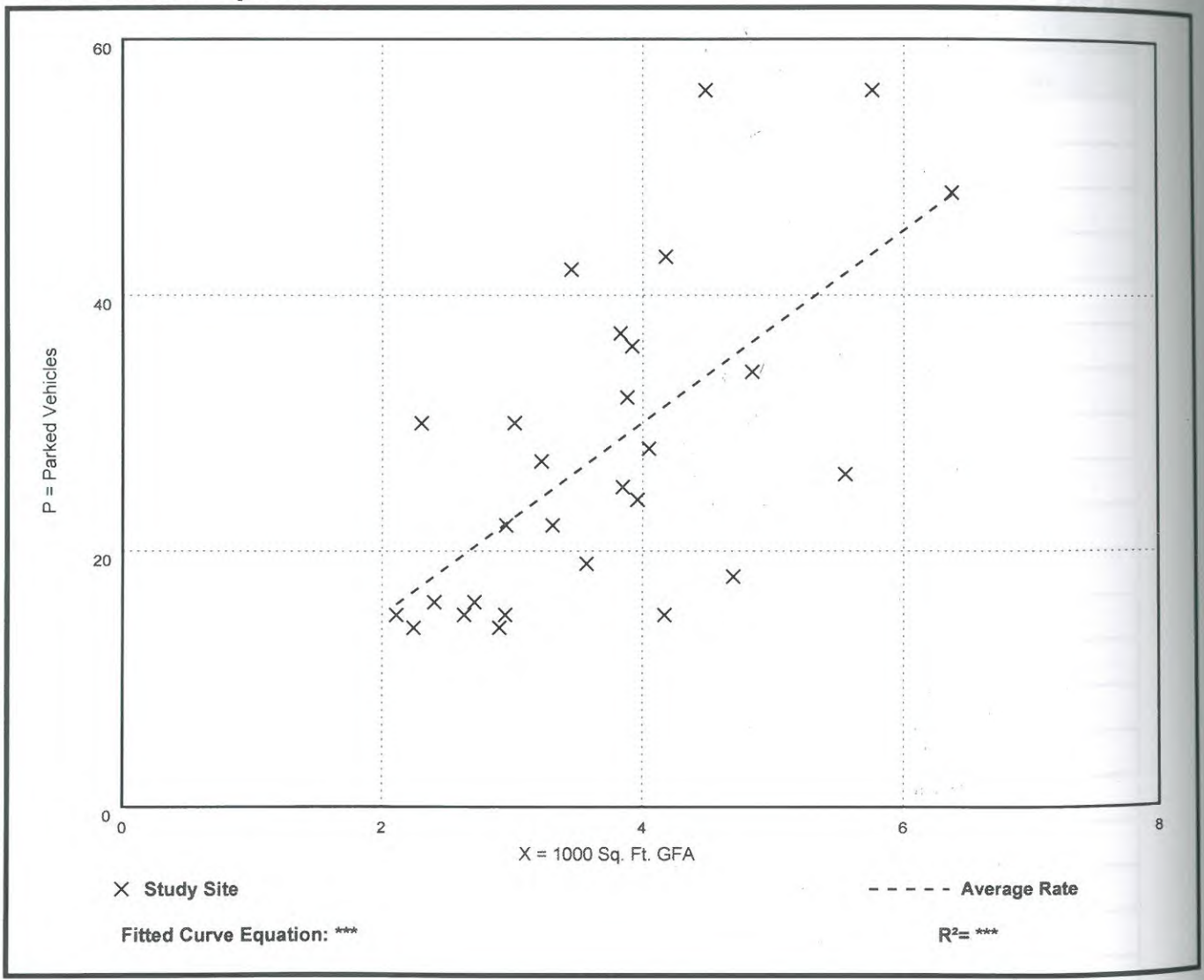
Fast Food Restaurant with Drive-Through Window (934)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA
On a: Weekday (Monday - Thursday)
Setting/Location: General Urban/Suburban
Number of Studies: 28
Avg. 1000 Sq. Ft. GFA: 3.7

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
7.51	3.60 - 13.04	6.17 / 10.17	6.58 - 8.44	2.52 (34%)

Data Plot and Equation



Land Use: 822 Strip Retail Plaza (<40k)

Description

A strip retail plaza is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. Each study site in this land use has less than 40,000 square feet of gross leasable area (GLA). Because a strip retail plaza is open-air, the GLA is the same as the gross floor area (GFA) of the building.

The 40,000 square feet GLA threshold between shopping plaza and strip retail plaza (Land Use 822) is based on an examination of the parking demand database. All shopping plazas with a supermarket as their anchor in the database are larger than 40,000 square feet GLA.

Time-of-Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a Monday–Thursday (five study sites), a Friday (two study sites), and a Saturday (four study sites).

Hour Beginning	Percent of Peak Parking Demand		
	Monday–Thursday	Friday	Saturday
12:00–4:00 a.m.	–	–	–
5:00 a.m.	–	–	–
6:00 a.m.	–	–	–
7:00 a.m.	–	–	–
8:00 a.m.	19	19	–
9:00 a.m.	33	40	38
10:00 a.m.	47	44	55
11:00 a.m.	55	52	66
12:00 p.m.	89	96	85
1:00 p.m.	100	96	100
2:00 p.m.	73	84	96
3:00 p.m.	73	52	79
4:00 p.m.	66	50	66
5:00 p.m.	70	63	64
6:00 p.m.	75	49	67
7:00 p.m.	70	100	70
8:00 p.m.	54	94	70
9:00 p.m.	48	73	51
10:00 p.m.	–	–	–
11:00 p.m.	–	–	–

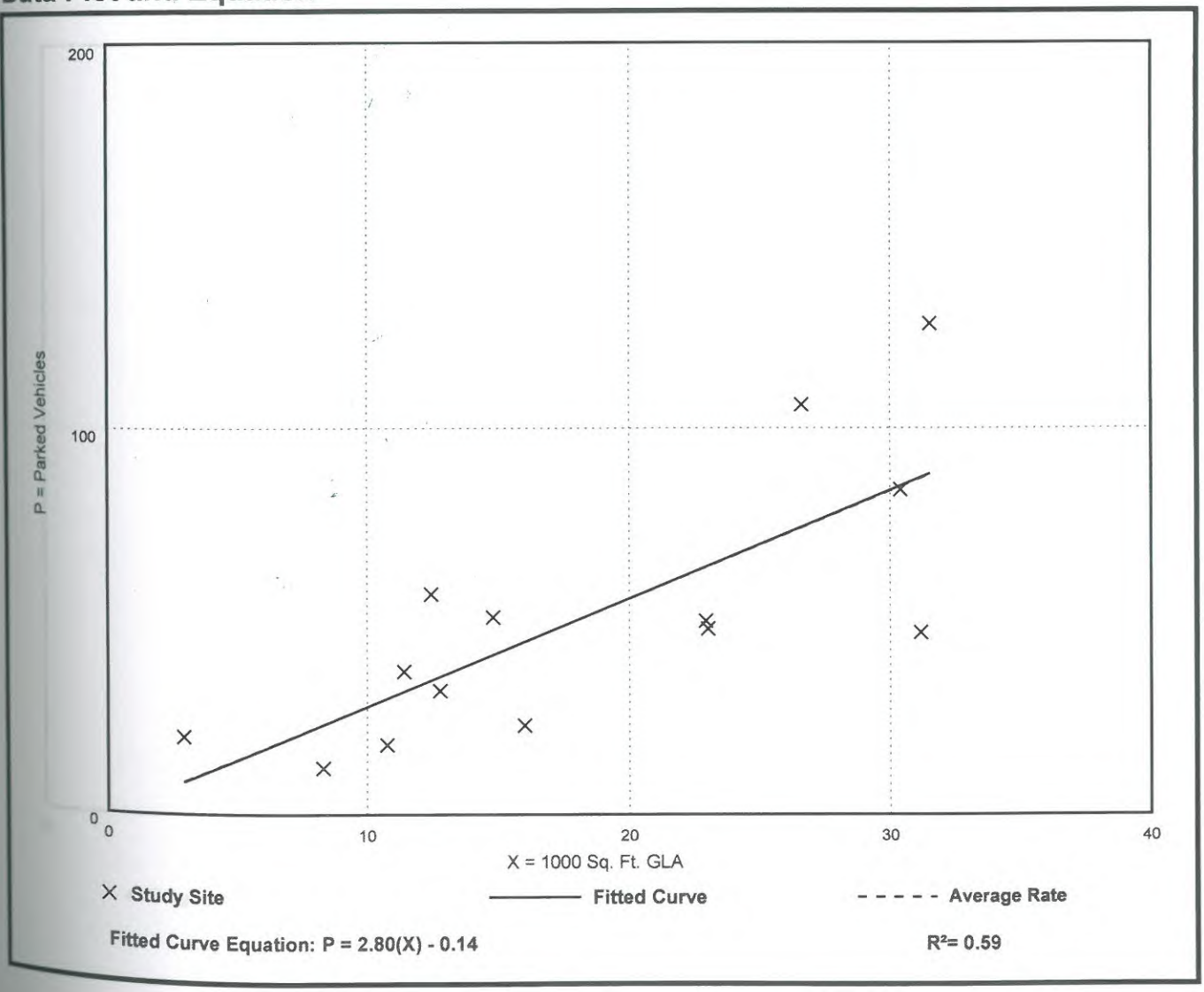
Strip Retail Plaza (< 40k)
(822)

Peak Period Parking Demand vs: 1000 Sq. Ft. GLA
On a: Weekday (Monday - Thursday)
Setting/Location: General Urban/Suburban
Number of Studies: 14
Avg. 1000 Sq. Ft. GLA: 18

Peak Period Parking Demand per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
2.79	1.44 - 6.67	2.07 / 4.44	***	1.14 (41%)

Data Plot and Equation



Fitted Curve Equation: P = 2.80(X) - 0.14

R^2= 0.59

FIGURE 2-2 **Base Parking Ratios**

	Weekday (parking spaces/unit land use)		Weekend (parking spaces/unit land use)		Peak ratio	Units	Source
Land use	**Visitors**	**Employees**	**Visitors**	**Employees**			
Retail <400,000 sq ft	2.90	0.70	3.20	0.80	4.00	ksf GLA	1
Retail 400,000–600,000 sq ft	sliding scale between <400,000 and 600,000				scaled 4.00 to 4.50	ksf GLA	1
Retail 600,000–1 million sq ft	3.20	0.80	3.60	0.90	4.50	ksf GLA	1
Retail 1 million–2 million sq ft	sliding scale between 1 million and 2 million sq ft				scaled 4.00 to 4.50	ksf GLA	2
Retail >2 million sq ft	2.90	0.70	3.20	0.80	4.00	ksf GLA	2
Supermarket/grocery	4.00	0.75	4.00	0.75	4.75	ksf GLA	2,3
Pharmacy	3.00	0.40	3.00	0.40	3.40	ksf GLA	3
Discount stores/ superstores	3.40	0.85	3.80	0.95	4.75	ksf GLA	3
Home improvement stores/garden	3.10	0.80	3.45	0.90	4.35	ksf GLA	2
Fine/casual dining	13.25	2.25	15.25	2.50	17.75	ksf GLA	2,3
Family restaurant	15.25	2.15	15.00	2.10	17.10	ksf GLA	2,3
Fast casual/fast food	12.40	2.00	12.70	2.00	14.70	ksf GLA	3
Bar/lounge/nightclub	15.25	1.25	17.50	1.50	19.00	ksf GLA	2
Family entertainment	1.80	0.20	2.50	0.25	2.75	ksf GLA	2
Active entertainment	1.50	0.15	1.80	0.20	2.00	ksf GLA	2
Amusement park/ water park	3.00	0.30	3.70	0.37	4.07	ksf GLA	2
Adult active entertainment	9.00	1.00	10.00	1.20	11.20	ksf GLA	2
Cineplex	0.15	0.01	0.24	0.01	0.25	seat	2,3
Specialty movie theater	0.18	0.02	0.29	0.01	0.30	seat	2,3
Live theater	0.30	0.07	0.33	0.07	0.40	seat	2,3
Outdoor amphitheater	0.30	0.07	0.33	0.07	0.40	seat	2
Public park/ destination open space	4.00	0.40	5.00	0.50	5.50	acre	2
Museum/aquarium	4.00	0.40	4.50	0.50	5.00	ksf GLA	2
Public library	2.00	0.25	1.90	2.00	3.90	ksf GLA	2
Health club	6.60	0.40	5.50	0.25	7.00	ksf GLA	2,3
Daycare center	1.50	2.00			3.50	ksf GFA	2,3
Convention center	5.50	0.50	5.50	0.50	6.00	ksf GFA	2

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FIGURE 2-2 (continued)

	Weekday (parking spaces/unit land use)		Weekend (parking spaces/unit land use)		Peak ratio	Units	Source
Land use	**Visitors**	**Employees**	**Visitors**	**Employees**			
Hotel–business	1.00	0.15	1.00	0.15	1.15	key	2,3
Hotel–leisure	1.00	0.15	1.00	0.15	1.15	key	2,3
Restaurant/lounge	6.67	1.20	7.67	1.33	9.00	ksf GLA	2,3
Meeting/banquet (0–20 sq ft/key)	scaled from 0 to 30	scaled from 0 to 2.0	scaled from 0 to 20	scaled from 0 to 2.0	scaled from 0 to 32	ksf GLA	2,3
Meeting/banquet (20–50 sq ft/key)	scaled from 30 to 20	scaled from 2 to 1.5	scaled from 20 to 10	scaled from 2 to 1.5	scaled from 32 to 21.5	ksf GLA	2,3
Meeting/banquet (50–100 sq ft/key)	scaled from 20 to 10	scaled from 1.5 to 1.0	scaled from 10 to 5.5	scaled from 1.5 to 1.0	scaled from 21.5 to 11.1	ksf GLA	2,3
Convention (100–200 sq ft/key)	scaled from 10 to 5.5	scaled from 1 to 0.5	5.50	scaled from 1 to 0.5	scaled from 11.1 to 6	ksf GLA	2,3
Convention (>200 sq ft/key)	use convention center but adjust for captive on site						2,3
Residential							
Studio efficiency	0.10	0.85	0.15	0.85	1.00	unit	2,3
1 bedroom	0.10	0.90	0.15	0.90	1.05	unit	2,3
2 bedrooms	0.10	1.65	0.15	1.65	1.80	unit	2,3
3+ bedrooms	0.10	2.50	0.15	2.50	2.65	unit	2,3
Senior housing	0.55	0.30	0.42	0.30	0.85	unit	2,3
Office <25,000 sq ft	0.30	3.50	0.03	0.35	3.80	ksf GFA	3
Office 25,000–100,000 sq ft	sliding scale between <25,000 and 100,000				scaled from 3.8 to 3.4	ksf GFA	3
Office = 100,000 sq ft	0.25	3.15	0.03	0.32	3.40	ksf GFA	3
Office 100,000–500,000 sq ft	sliding scale between 100,000 and 200,000				scaled from 3.4 to 2.8	ksf GFA	3
Office >500,000 sq ft	0.20	2.60	0.02	0.26	2.80	ksf GFA	3
Open plan/ high-density office	0.25	5.75	0.03	0.58	6.00	ksf GFA	2
Medical/dental office	3.00	1.60	0.00	0.00	4.60	ksf GFA	2,3
Bank (drive-in branch)	3.50	2.50	3.00	1.75	6.00	ksft GFA	2,3
Arena	0.27	0.03	0.30	0.03	0.33	seat	2
Pro football stadium	0.30	0.01	0.30	0.01	0.31	seat	2
Pro baseball stadium	0.31	0.01	0.34	0.01	0.35	seat	2

Sources:

1. *Parking Requirements for Shopping Centers*, 2nd ed. (Washington, DC: ULI, 1999).
2. Developed by Team Members from a combination of sources.
3. *Parking Generation*, 5th ed. (Washington, DC: Institute of Transportation Engineers, 2019).

Note: New land uses and changes to second edition titles shown in **bold.** Changes or new ratios are highlighted in blue.

FIGURE 2-4 **Weekday Time-of-Day Adjustments**

Land use		6 a.m.	7 a.m.	8 a.m.	9 a.m.	10 a.m.	11 a.m.	12 p.m.	1 p.m.	2 p.m.	3 p.m.	4 p.m.	5 p.m.	6 p.m.	7 p.m.	8 p.m.	9 p.m.	10 p.m.	11 p.m.	12 a.m.
Retail typical	Visitors	1%	5%	15%	35%	60%	75%	100%	100%	95%	85%	85%	85%	90%	80%	65%	45%	15%	5%	0%
December	Visitors	1%	5%	15%	30%	55%	75%	90%	100%	100%	95%	80%	85%	90%	90%	85%	50%	30%	10%	0%
Late December	Visitors	1%	5%	10%	20%	40%	65%	90%	100%	100%	100%	95%	85%	70%	55%	40%	25%	15%	5%	0%
All	Employees	10%	15%	25%	45%	75%	95%	100%	100%	100%	100%	100%	100%	100%	100%	90%	60%	40%	20%	0%
Supermarket/ grocery	Visitors	5%	20%	30%	50%	60%	67%	85%	90%	95%	97%	100%	100%	100%	85%	55%	35%	20%	5%	5%
	Employees	20%	30%	40%	80%	90%	100%	100%	100%	100%	100%	100%	100%	80%	50%	35%	20%	20%	20%	20%
Pharmacy	Visitors	5%	20%	30%	60%	60%	67%	85%	90%	95%	97%	100%	100%	100%	85%	55%	35%	20%	5%	5%
	Employees	20%	30%	40%	80%	90%	100%	100%	100%	100%	100%	100%	100%	80%	50%	35%	20%	20%	20%	20%
Discount stores/ superstores	Visitors	15%	35%	45%	65%	75%	85%	100%	100%	100%	100%	95%	85%	75%	60%	45%	30%	10%	5%	1%
	Employees	25%	45%	55%	75%	85%	100%	100%	100%	100%	100%	100%	95%	85%	70%	55%	40%	20%	20%	20%
Home improvement stores/garden	Visitors	15%	20%	35%	55%	85%	99%	100%	99%	98%	90%	85%	80%	75%	60%	50%	30%	10%	0%	0%
	Employees	25%	30%	45%	65%	95%	100%	100%	100%	100%	100%	95%	90%	85%	70%	60%	40%	20%	0%	0%
Food and beverage																				
Fine/casual dining	Visitors	0%	0%	0%	0%	15%	40%	75%	75%	65%	40%	50%	75%	95%	100%	100%	100%	95%	75%	25%
	Employees	0%	20%	50%	75%	90%	90%	90%	90%	90%	75%	75%	100%	100%	100%	100%	100%	100%	85%	35%
Family restaurant	Visitors	25%	50%	60%	75%	85%	90%	100%	90%	50%	45%	45%	75%	80%	80%	80%	60%	55%	75%	25%
	Employees	50%	75%	90%	90%	100%	100%	100%	100%	100%	75%	75%	95%	95%	95%	95%	80%	65%	65%	35%
Fast casual/ fast food/food court/food halls	Visitors	5%	10%	20%	30%	55%	85%	100%	100%	90%	60%	55%	60%	85%	80%	50%	30%	20%	10%	5%
	Employees	20%	20%	30%	40%	75%	100%	100%	100%	95%	70%	60%	70%	90%	90%	60%	40%	30%	20%	20%
Bar/lounge/ nightclub	Visitors	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	50%	75%	100%	100%	75%	50%
	Employees	0%	0%	0%	5%	5%	5%	5%	10%	10%	10%	20%	45%	70%	100%	100%	100%	100%	90%	60%
Entertainment																				
Family entertainment	Visitors	0%	0%	0%	0%	45%	65%	85%	95%	100%	95%	90%	70%	60%	45%	0%	0%	0%	0%	0%
	Employees	0%	0%	5%	25%	75%	100%	100%	100%	100%	100%	100%	80%	70%	55%	10%	5%	5%	5%	5%
Active entertainment	Visitors	0%	0%	0%	0%	25%	65%	85%	90%	95%	95%	90%	95%	100%	95%	90%	65%	10%	0%	0%
	Employees	5%	5%	5%	25%	75%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	75%	10%	5%	5%
Adult active entertainment	Visitors	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	50%	75%	100%	100%	100%	100%
	Employees	0%	0%	0%	5%	5%	5%	5%	10%	10%	10%	20%	45%	70%	100%	100%	100%	100%	100%	100%
All movies typical	Visitors	0%	0%	0%	0%	0%	0%	20%	45%	55%	55%	55%	60%	60%	80%	100%	100%	80%	65%	40%
Late December	Visitors	0%	0%	0%	0%	0%	0%	35%	60%	75%	80%	80%	80%	70%	80%	100%	100%	85%	70%	55%
All	Employees	0%	0%	0%	0%	0%	10%	50%	60%	60%	75%	75%	100%	100%	100%	100%	100%	100%	70%	50%
Live theater	Visitors	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	25%	100%	100%	0%	0%	0%
	Employees	0%	10%	10%	20%	20%	20%	30%	30%	30%	30%	30%	30%	100%	100%	100%	100%	30%	10%	5%
Outdoor amphitheater	Visitors	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	25%	100%	100%	0%	0%	0%
	Employees	0%	10%	10%	20%	20%	20%	30%	30%	30%	30%	30%	30%	100%	100%	100%	100%	30%	10%	5%
Public park/ destination open space	Visitors	1%	5%	10%	25%	50%	65%	85%	95%	100%	95%	90%	70%	90%	100%	100%	100%	80%	50%	10%
	Employees	5%	10%	25%	50%	75%	100%	100%	100%	100%	100%	100%	80%	100%	100%	100%	100%	100%	60%	20%
Museum/ aquarium	Visitors	0%	0%	0%	0%	45%	65%	85%	95%	100%	95%	90%	85%	60%	30%	10%	0%	0%	0%	0%
	Employees	5%	5%	5%	25%	75%	100%	100%	100%	100%	100%	100%	80%	75%	10%	5%	0%	0%	5%	5%
Arena	Visitors	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	10%	25%	100%	100%	85%	0%	0%
No matinee	Employees	0%	10%	10%	20%	20%	20%	30%	30%	30%	30%	30%	30%	100%	100%	100%	100%	30%	10%	5%

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FIGURE 2-4 (continued)

Land use		6 a.m.	7 a.m.	8 a.m.	9 a.m.	10 a.m.	11 a.m.	12 p.m.	1 p.m.	2 p.m.	3 p.m.	4 p.m.	5 p.m.	6 p.m.	7 p.m.	8 p.m.	9 p.m.	10 p.m.	11 p.m.	12 a.m.
Entertainment (continued)																				
Pro football stadium	Visitors	0%	0%	0%	1%	1%	1%	5%	5%	5%	5%	5%	5%	10%	50%	100%	100%	85%	25%	0%
8 p.m. start	Employees	0%	10%	10%	20%	20%	20%	30%	30%	30%	30%	30%	30%	100%	100%	100%	100%	100%	25%	10%
Pro baseball stadium	Visitors	0%	0%	0%	1%	1%	1%	5%	5%	5%	5%	5%	5%	10%	50%	100%	100%	85%	25%	0%
	Employees	0%	10%	10%	20%	20%	20%	30%	30%	30%	30%	30%	30%	100%	100%	100%	100%	100%	25%	10%
Health club	Visitors	70%	40%	40%	70%	70%	80%	60%	70%	70%	70%	80%	90%	100%	90%	80%	70%	35%	10%	0%
	Employees	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	100%	100%	75%	50%	20%	20%	20%	0%
Public library	Visitors	0%	0%	0%	100%	100%	98%	98%	78%	72%	65%	70%	79%	60%	50%	40%	0%	0%	0%	0%
	Employees	0%	10%	50%	100%	100%	100%	100%	100%	100%	100%	100%	90%	75%	50%	20%	10%	0%	0%	0%
Daycare center	Visitors	0%	2%	25%	75%	20%	20%	20%	20%	20%	20%	100%	50%	20%	5%	0%	0%	0%	0%	0%
	Employees	0%	50%	75%	90%	90%	90%	90%	90%	90%	100%	100%	100%	60%	40%	10%	0%	0%	0%	0%
Convention center	Visitors	0%	0%	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	30%	30%	10%	0%	0%	0%
	Employees	5%	30%	33%	33%	100%	100%	100%	100%	100%	100%	90%	70%	40%	25%	20%	20%	5%	0%	0%
Hotel and residential																				
Hotel–business	Visitors	95%	90%	80%	70%	60%	60%	55%	55%	60%	60%	65%	70%	75%	75%	80%	85%	95%	100%	100%
Hotel–leisure	Visitors	95%	95%	90%	80%	70%	70%	65%	65%	70%	70%	75%	80%	85%	85%	90%	95%	95%	100%	100%
Employee	Employees	10%	30%	100%	100%	100%	100%	100%	100%	100%	100%	70%	70%	40%	20%	20%	20%	20%	10%	5%
Restaurant/ lounge	Visitors	0%	10%	30%	10%	10%	5%	100%	100%	33%	10%	10%	30%	55%	60%	70%	67%	60%	40%	30%
Meeting/banquet (<100 sq ft/key)	Visitors	0%	0%	30%	60%	60%	60%	65%	65%	65%	65%	65%	100%	100%	100%	100%	100%	50%	0%	0%
Convention (>100 sq ft/key)	Visitors	0%	0%	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	30%	30%	10%	0%	0%	0%
Employee	Employees	10%	10%	60%	100%	100%	100%	100%	100%	100%	100%	100%	100%	60%	40%	40%	20%	0%	0%	0%
Residential guest	Visitors	0%	10%	20%	20%	20%	20%	20%	20%	20%	20%	20%	40%	60%	100%	100%	100%	100%	80%	50%
Resident reserved	Residents	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Residential suburban	Residents	95%	80%	67%	55%	50%	45%	40%	40%	40%	40%	45%	50%	60%	70%	80%	85%	95%	97%	100%
Residential urban	Residents	95%	85%	75%	65%	60%	55%	50%	50%	50%	55%	60%	65%	70%	75%	80%	85%	95%	97%	100%
Active senior housing	Visitors & employees	95%	97%	100%	100%	99%	98%	98%	99%	98%	100%	99%	94%	96%	98%	97%	97%	97%	98%	98%
	Residents	95%	97%	100%	100%	99%	98%	98%	99%	98%	100%	99%	94%	96%	98%	97%	97%	97%	98%	98%
Office																				
Office	Visitors	0%	1%	20%	60%	100%	45%	15%	45%	95%	45%	15%	10%	5%	2%	1%	0%	0%	0%	0%
	Employees unreserved	3%	15%	50%	90%	100%	100%	85%	85%	95%	95%	85%	60%	25%	15%	5%	3%	1%	0%	0%
	Employees reserved	00%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Medical/ dental office	Visitors	0%	0%	90%	90%	100%	100%	30%	90%	100%	100%	90%	80%	67%	30%	15%	0%	0%	0%	0%
	Employees	0%	20%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	67%	30%	15%	0%	0%	0%	0%
Bank (drive-in branch)	Visitors	0%	0%	50%	90%	100%	50%	50%	50%	70%	50%	80%	100%	0%	0%	0%	0%	0%	0%	0%
	Employees	0%	0%	60%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%

Source: See chapter 4 discussions for each land use.

FIGURE 2-5 **Weekend Time-of-Day Adjustments**

Land use		6 a.m.	7 a.m.	8 a.m.	9 a.m.	10 a.m.	11 a.m.	12 p.m.	1 p.m.	2 p.m.	3 p.m.	4 p.m.	5 p.m.	6 p.m.	7 p.m.	8 p.m.	9 p.m.	10 p.m.	11 p.m.	12 a.m.
Retail typical	Visitors	1%	5%	30%	50%	70%	90%	95%	100%	100%	95%	90%	80%	75%	70%	65%	50%	30%	10%	0%
December	Visitors	1%	5%	10%	35%	60%	85%	100%	100%	100%	100%	90%	80%	65%	60%	55%	50%	35%	15%	1%
Late December	Visitors	1%	5%	10%	20%	40%	60%	80%	95%	100%	100%	95%	85%	70%	60%	50%	30%	20%	10%	0%
All	Employees	10%	15%	40%	75%	85%	95%	100%	100%	100%	100%	100%	95%	85%	80%	75%	65%	45%	15%	0%
Supermarket/ grocery	Visitors	10%	25%	50%	75%	95%	100%	100%	100%	100%	100%	100%	90%	50%	33%	25%	15%	5%	4%	3%
	Employees	15%	35%	70%	85%	100%	100%	100%	100%	85%	75%	60%	55%	45%	40%	30%	20%	10%	10%	5%
Pharmacy	Visitors	8%	25%	50%	75%	95%	100%	100%	100%	100%	100%	100%	90%	50%	33%	25%	15%	5%	4%	3%
	Employees	15%	35%	70%	85%	100%	100%	100%	100%	85%	75%	60%	55%	45%	40%	30%	20%	10%	10%	5%
Discount stores/ superstores	Visitors	10%	15%	20%	30%	45%	65%	85%	95%	100%	100%	100%	95%	80%	60%	45%	30%	10%	5%	1%
	Employees	20%	25%	30%	40%	55%	75%	95%	100%	100%	100%	100%	100%	90%	70%	55%	40%	20%	15%	0%
Home improvement stores/garden	Visitors	15%	20%	35%	55%	60%	80%	95%	100%	95%	95%	80%	75%	75%	80%	90%	70%	10%	0%	9%
	Employees	25%	30%	45%	65%	70%	90%	100%	100%	100%	100%	90%	85%	85%	90%	100%	80%	20%	0%	0%
Food and beverage																				
Fine/casual dining	Visitors	0%	0%	0%	0%	0%	15%	50%	55%	45%	45%	45%	60%	90%	95%	100%	90%	90%	90%	50%
	Employees	0%	20%	30%	60%	75%	75%	75%	75%	75%	75%	75%	100%	100%	100%	100%	100%	100%	85%	50%
Family restaurant	Visitors	10%	25%	45%	70%	90%	90%	100%	85%	65%	40%	45%	60%	70%	70%	65%	30%	25%	15%	10%
	Employees	50%	75%	90%	90%	100%	100%	100%	100%	100%	75%	75%	95%	95%	95%	95%	80%	65%	65%	35%
Fast casual/ fast food/food court/food halls	Visitors	5%	10%	20%	30%	55%	85%	100%	100%	90%	60%	55%	60%	85%	80%	50%	30%	20%	10%	5%%
	Employees	15%	20%	30%	40%	75%	100%	100%	100%	95%	70%	60%	70%	90%	90%	60%	40%	30%	20%	20%
Bar/lounge/ nightclub	Visitors	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	50%	75%	100%	100%	100%	100%
	Employees	0%	0%	0%	5%	5%	5%	5%	10%	10%	10%	20%	45%	70%	100%	100%	100%	100%	100%	100%
Entertainment																				
Family entertainment	Visitors	0%	0%	0%	0%	25%	65%	85%	90%	95%	95%	90%	95%	100%	95%	90%	65%	10%	0%	0%
	Employees	5%	5%	5%	25%	75%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	75%	10%	5%	5%
Active entertainment	Visitors	0%	0%	0%	0%	25%	65%	85%	90%	95%	95%	90%	95%	100%	95%	90%	65%	10%	0%	0%
	Employees	5%	5%	5%	25%	75%	100%	100%	100%	100%	100%	90%	100%	100%	100%	100%	75%	10%	5%	5%
Adult active entertainment	Visitors	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	50%	75%	100%	100%	100%	100%
	Employees	0%	0%	0%	5%	5%	5%	5%	10%	10%	10%	20%	45%	70%	100%	100%	100%	100%	100%	100%
All movies typical	Visitors	0%	0%	0%	0%	0%	0%	20%	45%	55%	55%	55%	60%	60%	80%	100%	100%	100%	80%	50%
Late December	Visitors	0%	0%	0%	0%	0%	0%	35%	60%	75%	80%	80%	80%	70%	80%	100%	100%	100%	85%	70%
All	Employees	0%	0%	0%	0%	0%	0%	50%	60%	60%	75%	75%	100%	100%	100%	100%	100%	100%	70%	50%
Live theater	Visitors	0%	0%	0%	1%	1%	1%	1%	17%	67%	67%	1%	1%	1%	25%	100%	100%	0%	0%	0%
	Employees	0%	10%	10%	20%	20%	20%	30%	100%	100%	100%	30%	30%	100%	100%	100%	100%	30%	10%	5%
Outdoor amphitheater	Visitors	0%	0%	0%	1%	1%	1%	1%	17%	67%	67%	1%	1%	1%	25%	100%	100%	0%	0%	0%
	Employees	0%	10%	10%	20%	20%	20%	30%	100%	100%	100%	30%	30%	100%	100%	100%	100%	30%	10%	5%
Public park/ destination open space	Visitors	0%	0%	0%	1%	30%	60%	75%	90%	97%	100%	98%	85%	70%	80%	100%	100%	95%	50%	10%
	Employees	0%	0%	10%	25%	75%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	90%	80%
Museum/ aquarium	Visitors	0%	0%	0%	0%	45%	65%	85%	95%	100%	95%	90%	85%	60%	30%	10%	0%	0%	0%	0%
	Employees	5%	5%	5%	25%	75%	100%	100%	100%	100%	100%	100%	80%	75%	10%	5%	0%	0%	5%	5%
Arena	Visitors	0%	0%	0%	1%	1%	1%	1%	25%	95%	95%	81%	1%	1%	25%	100%	100%	0%	0%	0%
No matinee	Employees	0%	10%	10%	20%	20%	20%	30%	100%	100%	100%	100%	30%	100%	100%	100%	100%	30%	10%	5%

(continued on next page)

FIGURE 2-5 (continued)

Land use		6 a.m.	7 a.m.	8 a.m.	9 a.m.	10 a.m.	11 a.m.	12 p.m.	1 p.m.	2 p.m.	3 p.m.	4 p.m.	5 p.m.	6 p.m.	7 p.m.	8 p.m.	9 p.m.	10 p.m.	11 p.m.	12 a.m.
Entertainment (continued)																				
Pro football stadium	Visitors	0%	0%	1%	1%	5%	5%	50%	100%	100%	85%	25%	0%	0%	0%	0%	0%	0%	0%	0%
8 p.m. start	Employees	0%	5%	10%	20%	30%	30%	100%	100%	100%	100%	25%	10%	5%	5%	0%	0%	0%	0%	0%
Pro baseball stadium	Visitors	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	50%	90%	100%	100%	100%	0%	0%
	Employees	0%	0%	0%	5%	5%	5%	5%	5%	5%	5%	20%	75%	75%	100%	100%	100%	100%	100%	100%
Health club	Visitors	80%	45%	35%	50%	35%	50%	50%	30%	25%	30%	55%	100%	95%	60%	30%	10%	1%	1%	0%
	Employees	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	75%	100%	100%	75%	50%	20%	20%	20%	0%
Public library	Visitors	0%	0%	0%	0%	100%	90%	80%	65%	50%	35%	11%	5%	5%	0%	0%	0%	0%	0%	0%
	Employees	0%	0%	10%	50%	100%	100%	100%	100%	100%	50%	10%	10%	10%	10%	0%	0%	0%	0%	0%
Daycare center	Visitors	0%	2%	25%	75%	20%	20%	20%	20%	20%	20%	100%	50%	20%	5%	0%	0%	0%	0%	0%
	Employees	0%	50%	75%	90%	90%	90%	90%	90%	90%	100%	100%	100%	60%	40%	10%	0%	0%	0%	0%
Convention center	Visitors	0%	0%	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	30%	30%	10%	0%	0%	0%
	Employees	5%	30%	33%	33%	100%	100%	100%	100%	100%	100%	90%	70%	40%	25%	20%	20%	5%	0%	0%
Hotel and residential																				
Hotel–business	Visitors	95%	90%	80%	70%	60%	60%	55%	55%	60%	60%	65%	70%	75%	75%	80%	85%	95%	100%	100%
Hotel–leisure	Visitors	95%	95%	90%	80%	70%	70%	65%	65%	70%	70%	75%	80%	85%	85%	90%	95%	95%	100%	100%
Employee	Employees	10%	30%	100%	100%	100%	100%	100%	100%	100%	100%	70%	70%	40%	20%	20%	20%	20%	10%	5%
Restaurant/ lounge	Visitors	0%	10%	30%	10%	10%	5%	100%	100%	33%	10%	10%	30%	55%	60%	70%	67%	60%	40%	30%
Meeting/banquet (<100 sq ft/key)	Visitors	0%	0%	30%	60%	60%	60%	65%	65%	65%	65%	65%	100%	100%	100%	100%	100%	50%	0%	0%
Convention (>100 sq ft/key)	Visitors	0%	0%	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	30%	30%	10%	0%	0%	0%
Employee	Employees	10%	10%	60%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	60%	10%	10%
Residential guest	Visitors	0%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	40%	60%	100%	100%	100%	100%	80%	50%
Resident reserved	Residents	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Residential suburban	Residents	100%	95%	88%	80%	75%	70%	68%	65%	65%	68%	71%	74%	77%	80%	83%	86%	89%	92%	100%
Residential urban	Residents	90%	85%	80%	75%	70%	69%	68%	67%	66%	55%	60%	55%	50%	55%	65%	75%	85%	90%	100%
Active senior housing	Visitors	94%	98%	97%	95%	93%	94%	97%	99%	100%	100%	99%	98%	98%	98%	97%	95%	94%	98%	98%
	Employees	94%	98%	97%	95%	93%	94%	97%	99%	100%	100%	99%	98%	98%	98%	97%	95%	94%	98%	98%
Office																				
Office	Visitors	0%	20%	60%	80%	90%	100%	90%	80%	60%	40%	20%	10%	5%	0%	0%	0%	0%	0%	0%
	Employees unreserved	0%	20%	60%	80%	90%	100%	90%	80%	60%	40%	20%	10%	5%	0%	0%	0%	0%	0%	0%
	Employees reserved	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Medical/ dental office	Visitors	0%	0%	90%	90%	100%	100%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Employees	0%	20%	100%	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bank (drive-in branch)	Visitors	0%	0%	25%	40%	75%	100%	90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Employees	0%	0%	90%	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Source: See chapter 4 discussions for each land use.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Craftsman on Elliot	**Organization:**	Lee Eng
Project Location:	Mesa AZ	**Performed By:**	MAJ
Scenario Description:	Full site build-out	**Date:**	3/12/2024
Analysis Year:		**Checked By:**	MAJ
Analysis Period:	**AM Peak Hour**	**Date:**	3/12/2024

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office	712	15	1,000 SF GFA	26	21	5
Retail	822	16	1,000 SF GFA	40	24	16
Restaurant	932,934	9	1,000 SF GFA	170	89	81
Cinema/Entertainment				0		
Residential	221	386	DU	158	36	122
Hotel				0		
All Other Land Uses[2]				0		
				394	170	224

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00			1.00		
Retail	1.00			1.00		
Restaurant	1.00			1.00		
Cinema/Entertainment	1.00			1.00		
Residential	1.00			1.00		
Hotel	1.00			1.00		
All Other Land Uses[2]	1.00			1.00		

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	3	0	0	0
Retail	1		2	0	1	0
Restaurant	3	2		0	2	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	1	18	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	394	170	224
Internal Capture Percentage	18%	21%	16%
External Vehicle-Trips[5]	324	135	189
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	24%	80%
Retail	17%	25%
Restaurant	26%	9%
Cinema/Entertainment	N/A	N/A
Residential	8%	16%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Craftsman on Elliot	**Organization:**	Lee Eng
Project Location:	Mesa AZ	**Performed By:**	MAJ
Scenario Description:	Full site build-out	**Date:**	3/12/2024
Analysis Year:		**Checked By:**	MAJ
Analysis Period:	**PM Street Peak Hour**	**Date:**	3/12/2024

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office	712	15	1,000 SF GFA	32	11	21
Retail	822	16	1,000 SF GFA	110	55	55
Restaurant	932,934	9	1,000 SF GFA	137	76	61
Cinema/Entertainment				0		
Residential	221	386	DU	151	92	59
Hotel				0		
All Other Land Uses[2]				0		
				430	234	196

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00			1.00		
Retail	1.00			1.00		
Restaurant	1.00			1.00		
Cinema/Entertainment	1.00			1.00		
Residential	1.00			1.00		
Hotel	1.00			1.00		
All Other Land Uses[2]	1.00			1.00		

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		4	1	0	0	0
Retail	1		16	0	14	0
Restaurant	2	25		0	11	0
Cinema/Entertainment	0	0	0		0	0
Residential	2	6	11	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	430	234	196
Internal Capture Percentage	43%	40%	47%
External Vehicle-Trips[5]	244	141	103
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	45%	24%
Retail	64%	56%
Restaurant	37%	62%
Cinema/Entertainment	N/A	N/A
Residential	27%	32%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Craftsman on Elliot

Mesa, Arizona

Traffic Impact Analysis

Lee Engineering Project No. 1313.01

March 2024

Prepared for:

Martens Development Company
6710 N. Scottsdale Road, Suite 140
Scottsdale, AZ 85253

Prepared by:

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Craftsman on Elliot

Traffic Study

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March 2024



1313.01

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1.0 EXECUTIVE SUMMARY

- The subject site is planned for a mixed-use development consisting of the following:
  - 386 apartments in 4-story buildings (three buildings at 22,000 SF and one building at 19,200 SF) in the center of the subject development.
  - 16,300 SF retail.
  - 2,500 SF fast-food restaurant with a drive-through window on the southeast corner of the development.
  - 6,000 SF sit-down restaurant with an outdoor patio area on the southwest corner of the development.
  - 15,000 SF office buildings (two buildings at 7,500 SF each) on the east side of the development.

- A total of 797 parking spaces will be provided throughout the development, consisting of 573 parking spaces dedicated to the residential portion of the development, and146 parking spaces dedicated to the retail portion. It is noted that 78 parking spaces are to be shared between the residential and retail portions of the development. A separate parking study provides more details.

- The site plan proposes the following five access points into and out of the site:
  - Site driveway D1: on Hawes Road about 630 feet north of Elliot Road (aligned with the Amazon Fulfilment Center driveway) and planned as a full-movement driveway.
  - Site driveway D2: on Hawes Road about 230 feet north of Elliot Road (aligned with the Amazon Fulfilment Center driveway) and planned as a right-in/right-out driveway.
  - Site driveway D3: on Elliot Road about 700 feet west of Hawes Road and planned as a ¾ driveway. In response to this development's TIA pre-submittal, City of Mesa requested that this access point not permit left-turn out movements.
  - Site driveway D4: on 82nd Street (future roadway) about 630 feet north of Elliot Road and planned as a full-movement driveway.
  - Site driveway D5: on 82nd Street about 230 feet north of Elliot Road and planned as a full-movement driveway.

- Turning movements at the intersection of Hawes Road and Elliot Road were collected on Thursday, June 15, 2023 and documented that the study area's peak hours begin at 7:30 a.m. and 5:00 p.m.

- From 2018 to 2022, the intersection of Hawes and Elliot Roads and the site's frontage experienced 7 crashes, an excellent overall safety performance averaging 1.4 crashes per year.

- The site is expected to generate about 3,194 trips on a typical weekday, with 277 of those trips in the morning peak hour and 274 trips in the afternoon peak hour.

- All site access points are estimated to operate in an acceptable manner through the 2030 horizon year.

- The eastbound left-turn movement at site driveway D3 is expected to operate at LOS E in 2025 and 2030 during the afternoon peak hour. However, this movement is expected to operate with a maximum v/c ratio of 0.27, below capacity.

- MUTCD signal warrants 1A, 1B, and 2 were analyzed for existing and projected 2025 background conditions at the intersection of Elliot Road and Hawes Road. Volume warrants were met under background 2025 conditions for warrants 1A, 1B, and 2 at the 70% threshold.

- The following turn lanes are warranted or proposed at site driveways:
    - A northbound left-turn lane is warranted on Hawes Road approaching site driveway D1. Its total storage is recommended as 165 feet with a 60-foot gap. However, this length may need to be shortened due to the limited available distance on Hawes Road from the north end of the raised median to the south edge of site driveway D1 (114 feet)..
    - A southbound right-turn lane is not warranted approaching site driveway D2. However, since a turn lane is proposed on the site plan, it should have a storage length of 145 feet with a 60-foot gap.
    - A left-turn lane is required on eastbound Elliot Road approaching site driveway D3 to maintain safe and effective traffic operations. The left-turn lane is recommended to have a 90-foot gap and 250-feet storage length.
    - A right-turn lane is warranted on westbound Elliot Road approaching site driveway D3. The right-turn lane is recommended to have a 90-foot gap and 280-foot storage length.

- The recommended length of the northbound left-turn lane into site driveway D1 (225 feet) may need to be shortened due to the limited available distance on Hawes Road from the north end of the raised median to the south edge of site driveway D1 (114 feet).

- The roadways near the proposed site access points are on horizontal tangent alignments with little vertical profile, suggesting that roadway elements are not likely to constrain sight distance.

2.0 BACKGROUND

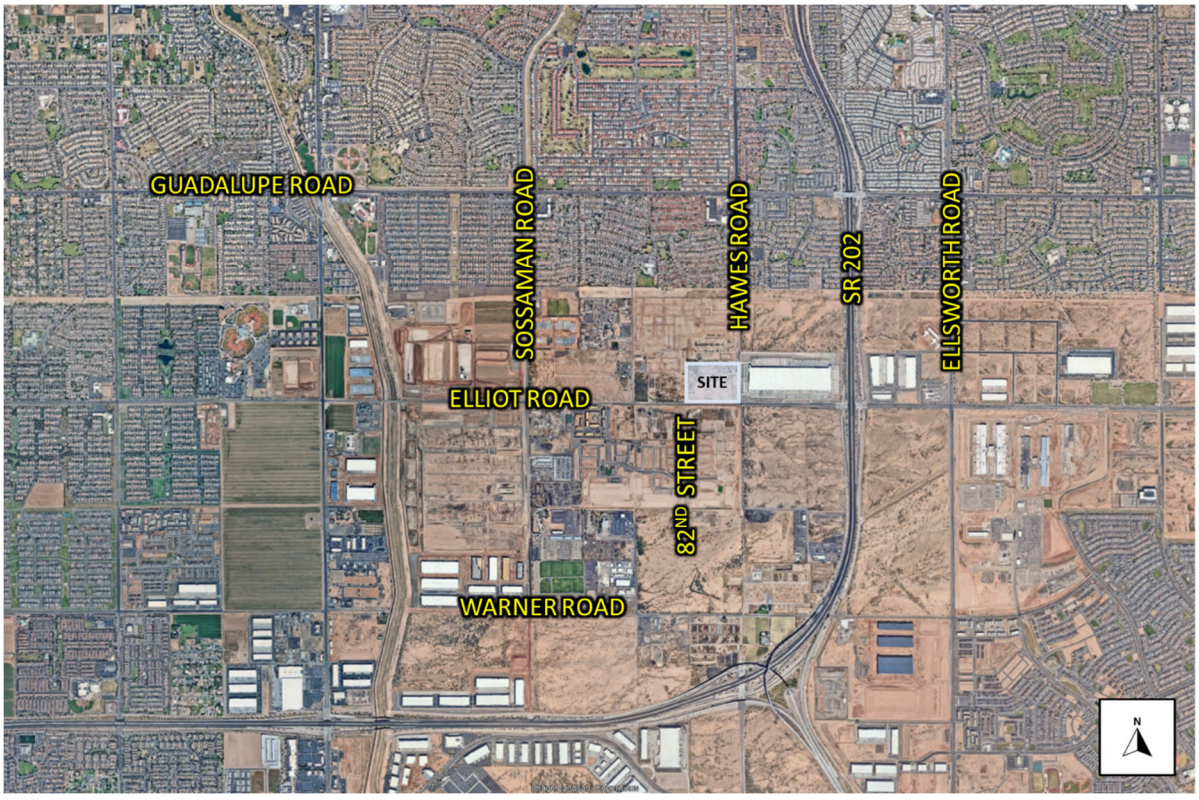
A development is proposed for the northwest corner of Elliot Road and Hawes Road in the City of Mesa, Arizona. The site is located west of SR 202 and north of Elliot Road. Lee Engineering was recently engaged to conduct a Traffic Impact Study (TIS) of the site for the purposes of estimating its traffic impacts on the adjacent roadway network.

The location of the site is shown in **Figure 1**; a preliminary site plan is shown in **Figure 2**.

This report is intended to provide a TIS of the subject site in compliance with the City of Mesa TIS Guidelines. Lee Engineering contacted the City of Mesa on May 4, 2023, to confirm the study requirements, inquire about the latest TIS guidelines available from the City, and set up a pre-scoping discussion if needed. Lee Engineering received consensus to collect count data at the intersection of Elliot Road and Hawes Road and was provided the latest version of the TIS guidelines.

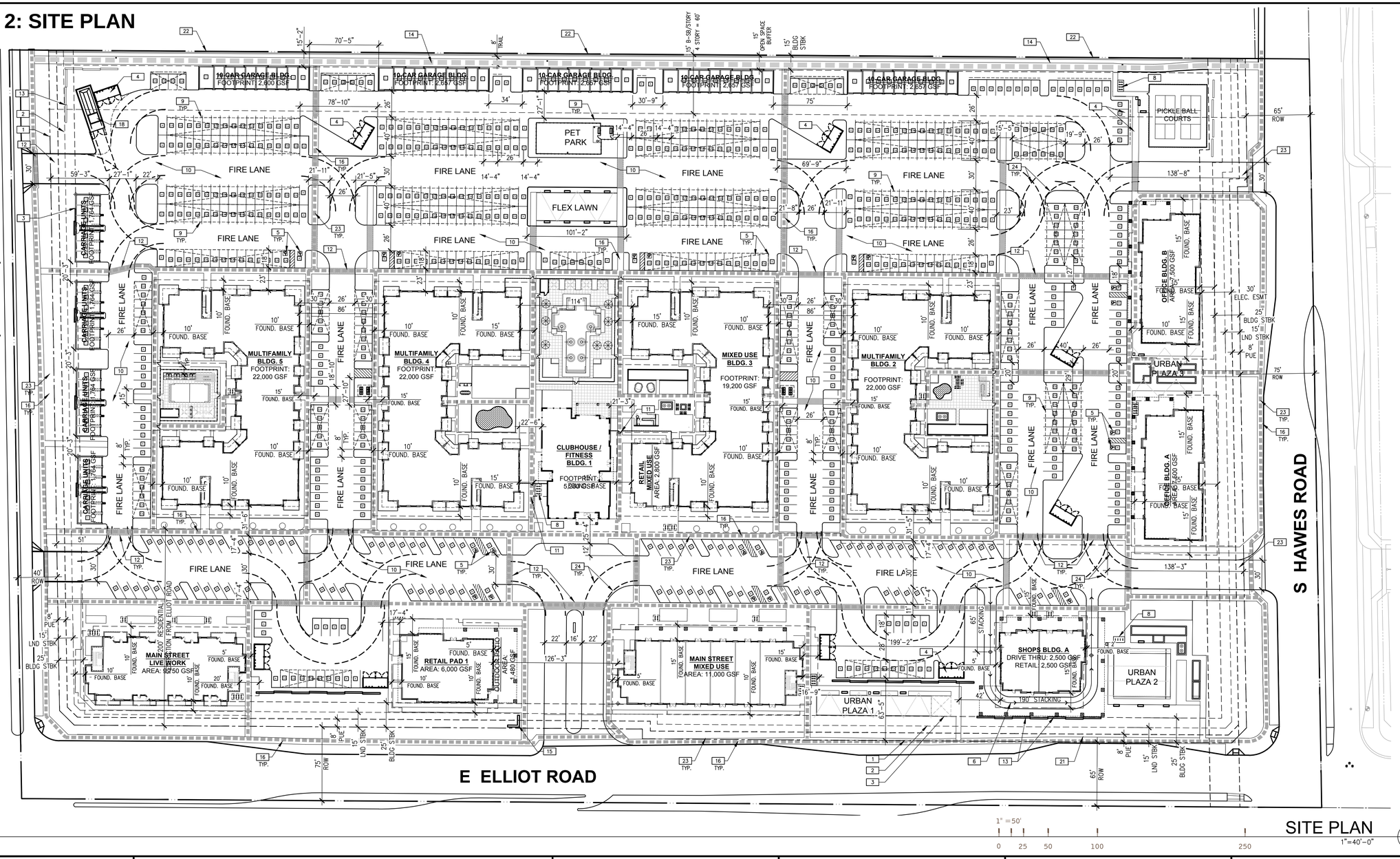
Pre-TIA documentation was submitted to the City of Mesa for review on July 13, 2023, and approval with comments was received on August 2, 2023 (attached in **Appendix A**). This report was prepared following the methodologies for a Category I analysis (development generating fewer than 500 vehicle trips during any peak hour). Comments received on the pre-TIA document have been addressed as part of this report.

Figure 1: Vicinity Map



CAUTION: IF THIS SHEET IS NOT 24"x36" IT IS A REDUCED PRINT

FIGURE 2: SITE PLAN



SITE PLAN
1" =50'
1"=40'-0"
0 25 50 100 250
N

SITE PLAN KEYNOTES

1. PROPERTY LINE (——— ———)
2. LANDSCAPE SETBACK LINE
3. 25' MAX. BUILDING SETBACK LINE
4. C.O.M. STANDARD DOUBLE BIN ENCLOSURE. SEE SITE DETAILS SHEET.
5. C.O.M. STANDARD ACCESSIBLE PARKING STALL. SEE SITE DETAILS SHEET.
6. DRIVE–THRU STACKING PER MZO SECTION 11.31.18(E)
7. RETENTION BASIN; SEE CIVIL PLANS.
8. BIKE RACKS (8 BIKE STALLS PER RACK), TYPICAL.
9. PRE–ENGINEERED PARKING SHADE STRUCTURE; TYPICAL. SEE SITE DETAILS SHEET.
10. FIRE LANE, PAINT CURB PER CITY STANDARDS.
11. SECURED–ACCESS PEDESTRIAN GATE. SEE LANDSCAPE PLANS.
12. 6" WIDE PAVERS FINISH PEDESTRIAN CROSSWALKS AT PAVEMENT, RAISE 3" ABOVE VEHICLE LANE PER MZO SECTION 11–32–4(G)
13. DECORATIVE SCREEN WALL. SEE LANDSCAPE PLANS.
14. 8'–0" STABILIZED D.G. PEDESTRIAN TRAIL PER HAWES CROSSING PAD (▩ ▩ ▩)
15. PROPOSED FUTURE MONUMENT SIGN LOCATION.
16. 6' CONCRETE SIDEWALK, TYPICAL.
17. CITY OF MESA TYPICAL PARKING STALL LAYOUT. SEE SITE DETAILS SHEET.
18. C.O.M. STANDARD CMU TRASH COMPACTOR ENCLOSURE. SEE SITE DETAILS SHEET.
19. DECORATIVE SECURITY METAL FENCE. SEE LANDSCAPE PLANS FOR FENCE DESIGN
20. SITE ACCESS DRIVEWAY TO ALIGN WITH ADJACENT PROPERTY.
21. PROPOSED FUTURE BUS PAD. OFF–SITE STREET DESIGN SHOWN FOR REFERENCE ONLY.
22. 6' H SCREENING WALL ALONG NORTH PROPERTY LINE; SEE LANDSCAPE PLANS.
23. PEDESTRIAN CIRCULATION PATH (▬ ▬ ▬), ON 6'–0" WIDE ADA COMPLIANT SIDEWALK.
24. FIRE TRUCK MANEUVERING CLEARANCE; 35' INSIDE RADIUS, 55' OUTSIDE RADIUS

- A RESIDENTIAL PARKING
- CA COVERED RESIDENTIAL PARKING
- G PRIVATE RESIDENTIAL GARAGE
- R RETAIL PARKING
- CR COVERED RETAIL PARKING
- M SHARED PARKING

TRASH VOLUME CALCULATION

REFERENCE CITY OF MESA STANDARD DETAIL M-62.02.2(2), M-62.02.2(3), AND M-62.02.2(4)

MULTI-FAMILY TRASH CALCULATION:

	D.U.	CY TRASH PER WEEK PER UNIT	TOTAL TRASH PER WEEK	COMPACTOR RATIO	TOTAL TRASH (CY)
TRASH	386	0.5	193	4:1	48.25
	CONTAINER TYPE	NUMBER	CAPACITY (CY)	PICKUPS PER WEEK	CAPACITY PER WEEK PER CONTAINTER
	COMPACTOR	1	25	1	25
	STANDARD BIN	5	6	1	30
	TOTAL CAPACITY PER WEEK				55
RECYCLING	D.U.	CY TRASH PER WEEK PER UNIT	TOTAL TRASH PER WEEK		TOTAL RECYCLING (CY)
	386	0.125	48.25		48.25
	CONTAINER TYPE	NUMBER	CAPACITY (CY)	PICKUPS PER WEEK	CAPACITY PER WEEK PER CONTAINTER
	STANDARD BIN	5	6	2	60

NOTE:
TRASH FROM UNITS WILL BE COLLECTED BY A PERMANENT CONCIERGE SERVICE, PROVIDED BY THE APARTMENT COMPLEX

COMMERCIAL TRASH CALCULATION:

REFERENCE TO CITY OF MESA STANDARD DETAIL M-62.02.2 (1)
EACH COMMERCIAL BUILDING REQUIRES (1) DOUBLE ENCLOSURE

DOUBLE ENCLOSURE PROVIDED: 4

DEVELOPMENT DATA

PROJECT DESCRIPTION
THE SCOPE OF THIS PROJECT IS THE MASTER PLANNING OF A MIXED USE DEVELOPMENT THAT INCLUDES 4 NEW MULTI STORY MULTIFAMILY APARTMENT BUILDINGS AND 5 COMMERCIAL USE SINGLE STORY BUILDINGS, BUILT OVER ONE PHASE.

A.P.N.	304-04-031
LOCATION	NWC ELLIOT RD. AND S. HAWES RD., MESA, AZ
GROSS SITE AREA	978,357 SF (22.46 ACRES)
NET SITE AREA	838,780 SF (19.26 ACRES)
CURRENT ZONING	MX-U (MIXED USE URBAN)
PROPOSED USE	COMMERCIAL AND MULTIFAMILY DEVELOPMENT
EXISTING USE:	VACANT LOT / AGRICULTURE
GENERAL PLAN:	MIXED USE / EMPLOYMENT

LOT USE PERCENTAGES (NET AREAS):

RESIDENTIAL	553,280 SF (12.71 AC) = 65%
COMMERCIAL	285,500 SF (6.55 AC) = 35%

MAXIMUM SETBACKS PROVIDED:

	SIDE(E)	REAR(N)	SIDE(W)	FRONT(S)
BUILDING	25'	25'	25'	25'
LANDSCAPE	15'	15'	15'	15'

URBAN PLAZA AREA:

URBAN PLAZA #1	8,300 SF
URBAN PLAZA #2	13,750 SF
URBAN PLAZA #3	2,500 SF
TOTAL URBAN PLAZA AREA:	24,550 SF

TOTAL SITE AREA:	838,780 SF
REQUIRED COVERAGE:	2.0% *(PER HAWES CROSSING PAD)*
AREA REQUIRED (2.0%) =	16,776 SF
AREA PROVIDED (2.9%) =	24,550 SF

RESIDENTIAL PROJECT DATA

VALUES ARE APPROXIMATE FOR INITIAL SITE PLANNING PURPOSES

RESIDENTIAL SITE AREA		553,280 SF (12.71 AC)
RESIDENTIAL BUILDING		
MIXED-USE APARTMENTS	(1) x	19,200 SF = 19,200 SF
APARTMENTS	(3) x	22,000 SF = 66,000 SF
CARRIAGE HOUSE	(4) x	1,600 SF = 6,400 SF
MAIN ST LIVE/WORK	(1) x	11,000 SF
MAIN ST MIXED-USE	(1) x	11,000 SF
TOTAL BUILDING AREA		**113,600 SF**
RESIDENTIAL UNITS		
MIXED-USE APARTMENTS	(1) x	(84) DU ea = 84 DU
APARTMENTS	(3) x	(88) DU ea = 264 DU
CARRIAGE HOUSE	(4) x	(2) DU ea = 8 DU
MAIN ST LIVE/WORK	(1) x	18 DU
MAIN ST MIXED-USE	(1) x	12 DU
TOTAL UNITS		**386 DU**
50% MRU CAP: 193		
DENSITY		
DENSITY ALLOWED		25 D.U. / AC
DENSITY PROVIDED		
GROSS = 386 / 22.46 =		17.19 DU/AC
NET = 386 / 19.26 =		20.04 DU/AC
BUILDINGS COVERAGE		
TOTAL BUILDINGS AREA		113,600 SF
BUILDING COVERAGE		21%
PARKING		
386 UNITS (1.6 SP/DU) =		618 SP
RESIDENTIAL (SURFACE):		94 SP
RESIDENTIAL (GARAGE):		74 SP
RESIDENTIAL (COVERED):		405 SP
SHARED (SURFACE):		78 SP
TOTAL PARKING		**651 SP**
PARKING RATIO		
651 SP / 386 DU =		1.68 SP/DU

COMMERCIAL PROJECT DATA

VALUES ARE APPROXIMATE FOR INITIAL SITE PLANNING PURPOSES

COMMERCIAL SITE AREA		285,500 SF (6.55 AC)
BUILDINGS COVERAGE		
TOTAL BUILDINGS AREA		42,050 SF
BUILDING COVERAGE		14.71%
OPEN SPACE (5%)		
REQUIRED (42,000*.05) =		2,100 SF
PROVIDED =		24,550 SF
BUILDING TYPE		
OFFICE		15,000 SF
REST - SIT DOWN		6,000 SF
REST. - PATIO		1,480 SF
REST - DRIVE THRU		2,500 SF
RETAIL		16,300 SF
TOTAL COMMERCIAL		41,280 SF
PARKING		
REQUIRED		
OFFICE	1/375 SF	40
REST. - SIT DOWN	1/75 SF	80
REST. - PATIO	1/200 SF	8
REST - DRIVE THRU	1/100 SF	25
RETAIL	1/275 SF	60
		213
DEDICATED RETAIL:		104
COVERED:		42
SHARED:		78
PROVIDED:		224
PARKING RATIO: 5.3 SP / 1,000 SF		

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THE CRAFTSMAN ON ELLIOT
8264 EAST ELLIOT ROAD
MESA, ARIZONA 85212

OVERALL SITE PLAN

REMARKS	DATE
SP/DRB SUBMITTAL #4	20240311

PA / PM:	C.BRUCE
DRAWN BY:	W.M.
JOB NO.:	PHX22-0196-00

SHEET
DR050

3.0 EXISTING TRANSPORTATION SYSTEM

Elliot Road is classified as an arterial street, according to the City of Mesa.[1] Between Hawes Road and SR 202, Google Earth aerial imagery indicates that in June 2022, Elliot Road has been reconstructed to provide two westbound lanes and one eastbound lane following the construction of the Amazon Fulfilment Center north of Elliot Road (opened on June 9, 2023). Additionally, curbs, gutter, sidewalks, and streetlighting were provided as part of these improvements and are present fronting this site.

Through the Hawes Road intersection and fronting the subject site, Elliot Road carries one lane in each direction. Elliot Road is posted with a 45-mph speed limit, and it carries about 7,900 vehicles per day through Hawes Road, according to the City of Mesa 2022 Traffic Volume Map.

The City's 2040 Transportation Plan calls for Elliot Road to be widened to a 6-lane divided roadway in the future.

Hawes Road is also classified as an arterial roadway by the City of Mesa, but it carries much less traffic in the study area: about 1,700 vehicles per day, according to the city's 2022 Traffic Volume Map. Adjacent to the Amazon Fulfilment Center and fronting the subject site, Hawes Road is an undivided roadway that carries one lane in each direction separated by a two-way left-turn lane (TWLTL). As part of the improvements on Elliot Road, Google Earth aerial imagery shows that the east side of Hawes Road adjacent to the Amazon Fulfilment Center has been reconstructed to be equipped with curbs, gutters, sidewalks, and streetlighting. Additionally, these improvements included the reconstruction of the southbound approach of Hawes Road at its intersection with Elliot Road to include a separate right-turn lane and a shared through and left-turn lane. It is posted with a 35-mph speed limit.

South of Elliot Road, Hawes Road is not continuous to the next mile-line arterial street, Warner Road. It is marked with a DEAD END sign and has no pavement markings.

The City's 2040 Transportation Plan calls for Hawes Road to be widened to a 6-lane divided roadway in the future.

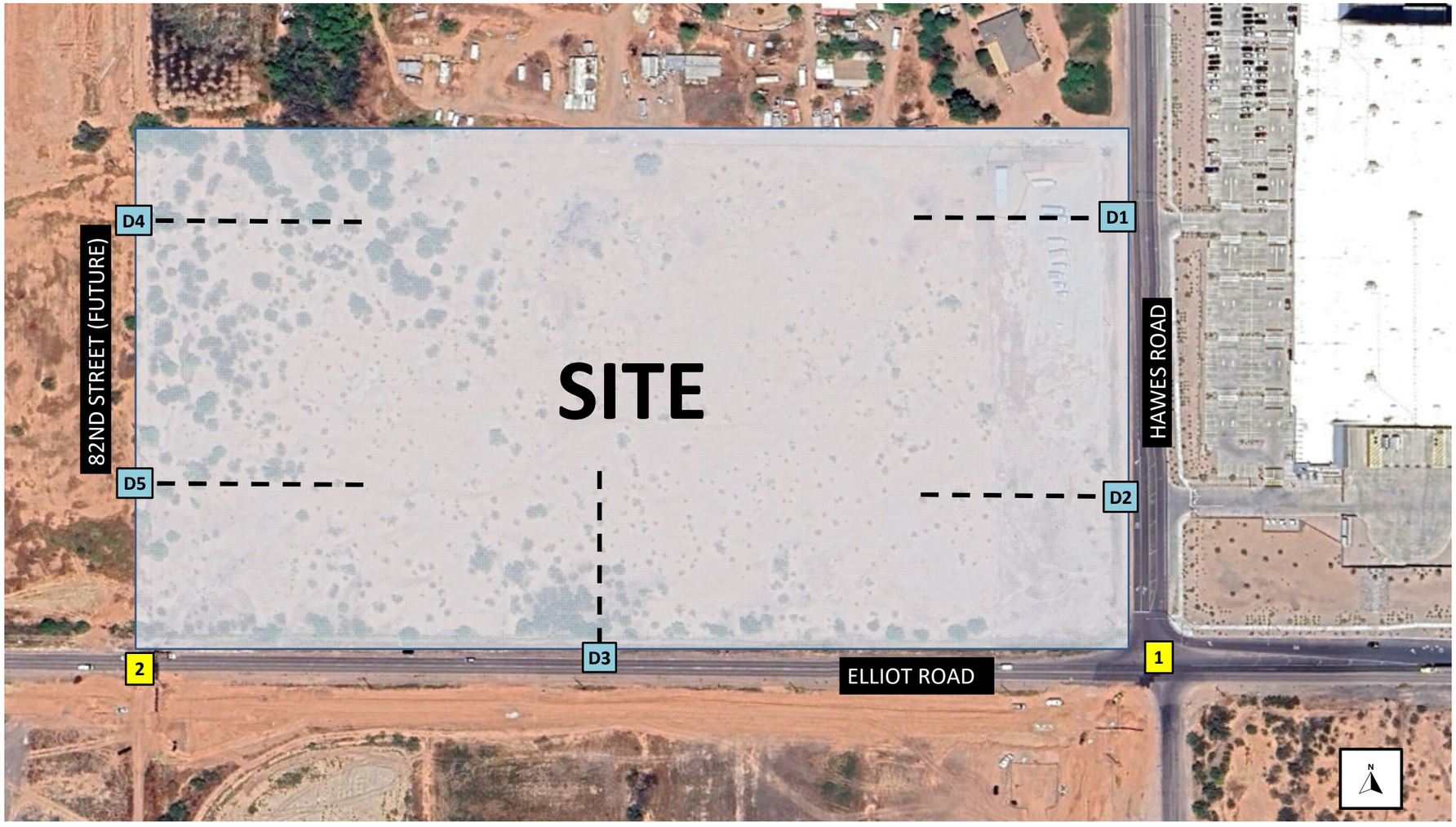
The intersection of Elliot and Hawes Roads is stop controlled on Hawes Road. At Elliot Road, there is a slight offset between the north and south legs of Hawes Road, but the offset is small enough that both legs operate sufficiently as a single intersection.

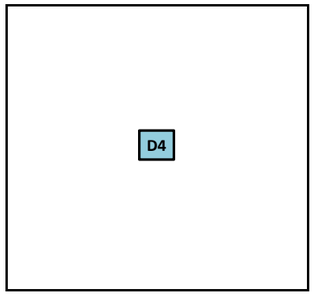
4.0 DATA COLLECTION

Turning movements at the intersection of Hawes Road and Elliot Road were collected by Field Data Services on Thursday, June 15, 2023. Turning movement counts were collected for a 24-hour period.

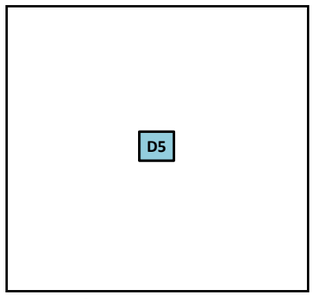
[1] City of Mesa 2040 Transportation Plan, Functional Classification Map 2.2.14, p. 68.

The results of data collection indicate the study area's peak hours begin at 7:30 a.m. and 5:00 p.m. The 2023 peak-hour volumes, existing lane configurations at the study intersections, and current traffic control are provided in **Figure 3**. Complete count data is provided in **Appendix B**.

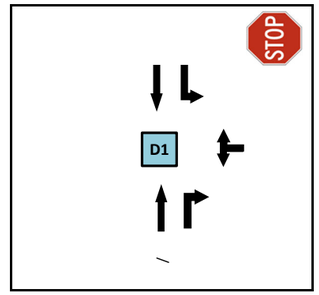




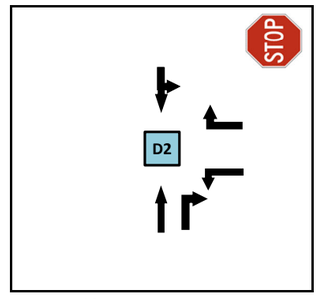
82nd Street & Site Driveway 4



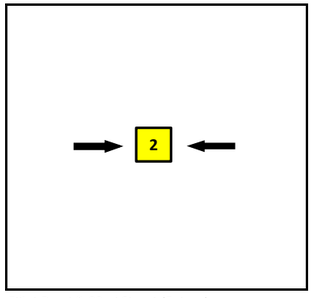
82nd Street & Site Driveway 5



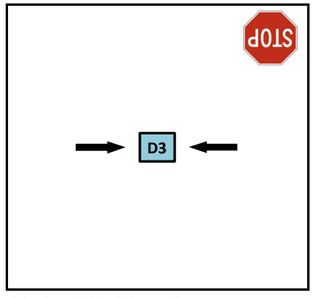
Hawes Road & Site Driveway 1



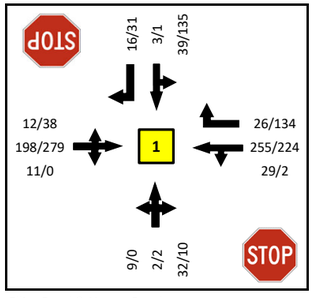
Hawes Road & Site Driveway 2



Elliot Road & 82nd Street (Future)



Elliot Road & Site Driveway 3



Elliot Road & Hawes Road

LEE ENGINEERING

2023 EXISTING PEAK HOUR VOLUME, LANE CONFIGURATIONS, AND TRAFFIC CONTROL

Legend
AM/PM

FIGURE 3

5.0 CRASH DATA

Crashes were reviewed using ADOT's Safety DataMart for the most recent 5-year period for which data is available, from 2018 to 2022. The study area included crashes that occurred at the intersection of Hawes and Elliot Roads and along the site's frontage on Hawes and Elliot Roads. During the 5 years evaluated, the study area experienced 7 crashes (averaging 1.4 crashes per year), very good safety performance. For context, an intersection typically can meet the crash warrant in the *Manual on Uniform Traffic Control Devices* (MUTCD) if it experiences at least 5 crashes per year. A summary of crashes is provided in **Appendix C**, leading to the following observations:

- One crash occurred during 2019, one in 2020, two in 2021, and three in 2022.
- No fatal crashes were reported in the study area. The majority of crashes involved property damage only, while only two crashes involved possible and serious injuries.
- The manner of collision indicated two single-vehicle crashes, and one each of angle, U-turn, side swipe opposite direction, rear-end, and head-on crashes.
- No crashes involved non-motorists.
- Two of the crashes occurred during daylight hours, and the remaining occurred after dark.

While no crash is desirable, the study area's average of 1.4 crashes per year is an acceptable safety record. Since no particular crash type is overrepresented, no clear safety countermeasures are apparent.

6.0 PROPOSED DEVELOPMENT

6.1 Development Description

The conceptual site layout plan is attached. The site is planned for a mixed-use development consisting of the following:

- 386 apartments in 4-story buildings (three buildings at 22,000 SF and one building at 19,200 SF) in the center of the subject development.
- 16,300 SF retail.
- 2,500 SF fast-food restaurant with a drive-through window on the southeast corner of the development.
- 6,000 SF sit-down restaurant with an outdoor patio area on the southwest corner of the development.
- 15,000 SF office buildings (two buildings at 7,500 SF each) on the east side of the development.

The site is on parcel number 304-04-031, according to the Maricopa County Assessor's Office, with a zoning of MX-U (Mixed Use Urban). The parcel is currently vacant with native desert vegetation.

The following land uses are adjacent to the subject parcel:

- North of site: Agricultural land
- South of site: Vacant (Proposed Hawes Crossing Development)
- East of site: Amazon Fulfilment Center

- West of site: Vacant (Proposed Hawes Crossing Development)

Passenger car parking lots are proposed to be situated throughout the subject site between the structures. A total of 573 parking spaces are dedicated for the residential portion of the development, while 146 parking spaces are dedicated for the retail portion. It is noted that 78 parking spaces are to be shared between the residential and retail portions of the development, equaling a total of 797 parking spaces provided throughout the subject development. Additionally, five 10-car garage buildings are proposed to be situated on the north side of the subject development. A parking study of the site has been provided under separate cover.

The development is assumed to open in the year 2025.

6.2 Access

The site plan proposes the following five access points into and out of the site:

- Site driveway D1: on Hawes Road about 630 feet north of Elliot Road (aligned with the Amazon Fulfilment Center driveway) and planned as a full-movement driveway.
- Site driveway D2: on Hawes Road about 230 feet north of Elliot Road (aligned with the Amazon Fulfilment Center driveway) and planned as a right-in/right-out driveway.
- Site driveway D3: on Elliot Road about 700 feet west of Hawes Road and planned as a ¾ driveway. In response to this development's TIA pre-submittal, City of Mesa requested that this access point not permit left-turn out movements.
- Site driveway D4: on 82nd Street (future roadway) about 630 feet north of Elliot Road and planned as a full-movement driveway.
- Site driveway D5: on 82nd Street about 230 feet north of Elliot Road and planned as a full-movement driveway.

6.3 Projected Traffic

6.3.1 Background Traffic Growth

Background traffic consists of two components: trips generated from the overall growth of the local and surrounding community and trips generated by specific development projects near the site.

Ambient Traffic Growth Rate

To determine ambient traffic growth of the general study area, an annual background traffic growth rate of 2.0% per year was assumed based on studies of nearby developments.

In accordance with the requirements of the City of Mesa's TIS guidelines for a Category I study for a development generating fewer than 500 peak-hour trips, analysis of the opening year (2025) and 5-year horizon after opening (2030) were conducted.

To estimate 2025 Background conditions (without site traffic), the existing 2023 traffic volumes in **Figure 3** were increased by 4.04%, or 2.0% growth for 2 years. Similarly, to estimate 2030

conditions, the **Figure 3** volumes were increased by 14.87%, or 2.0% growth for 7 years.

Other Developments Influencing Study Area Traffic Growth

The Hawes Crossing development is proposed to be located northwest of the State Route 202 (SR 202) and State Route 24 (SR 24) system interchange in Mesa, Arizona. A traffic impact study was completed for this development in November 2019. The development land uses are proposed to include single family residential, multi-family residential, commercial, office, and technology land uses on approximately 1,132 acres. The site is anticipated to generate approximately 125,486 daily trips with 5,784 trips during the morning peak hour and 10,746 trips during the afternoon peak hour.

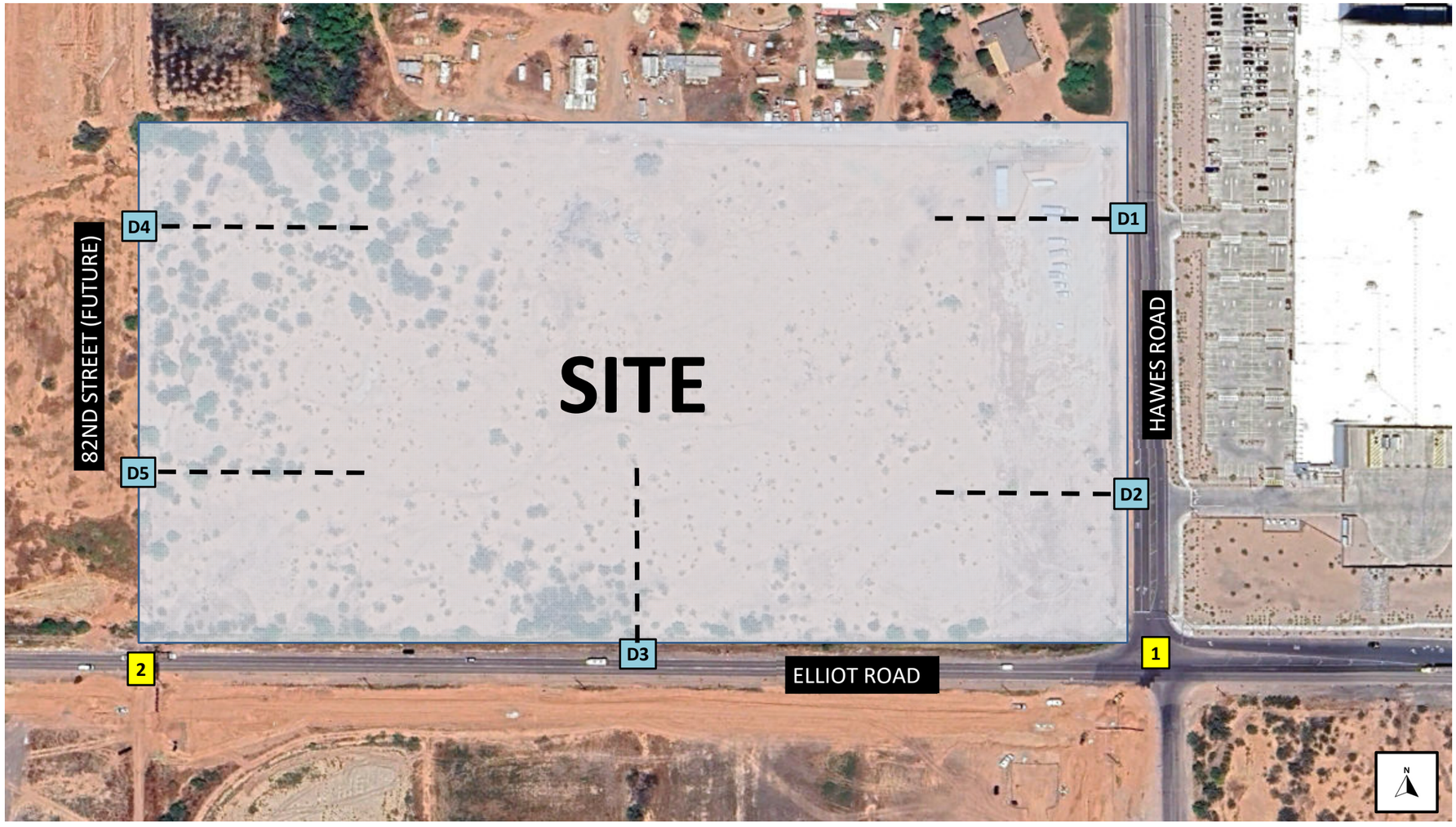
A separate traffic impact study was completed in July 2023 for the mixed-use development (part of the Hawes Crossing Development) on the northwest corner of Elliot Road and 82nd Street. The development land uses include multi-family residential, retail, and a fast-food restaurant. The site is anticipated to generate 1,962 daily trips, 218 trips during the morning peak hour, and 147 trips during the afternoon peak hour.

The morning and afternoon peak-hour site-generated traffic from the Hawes Crossing development studies were used to estimate the trip contributions for use in this report. The information provided for each report is provided in **Appendix D**. **Figure 4** shows the combined daily, morning, and afternoon peak-hour traffic volumes these adjacent developments are projected to add to the study area intersections (Elliot Road intersections with Hawes Road and 82nd Street).

It is noted that the volumes derived from the Hawes Crossing Master Traffic Impact Analysis study contain trips generated by the anticipated development on the northwest corner of Elliot Road and 82nd Street and the subject proposed Craftsman on Elliot development on the northwest corner of Elliot Road and Hawes Road. However, a volume reduction was not performed for these volumes as a conservative approach.

Figure 5 shows the 2025 Background traffic volumes (ambient traffic growth added to the traffic generated from adjacent developments)

Figure 6 shows the 2030 Background traffic volumes (ambient traffic growth added to the traffic generated from adjacent developments).



D4

82nd Street & Site Driveway 4

D5

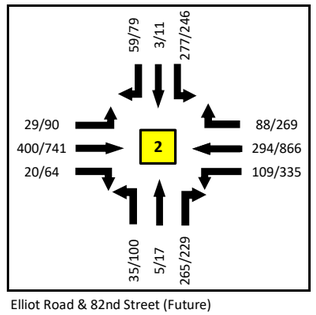
82nd Street & Site Driveway 5

D1

Hawes Road & Site Driveway 1

D2

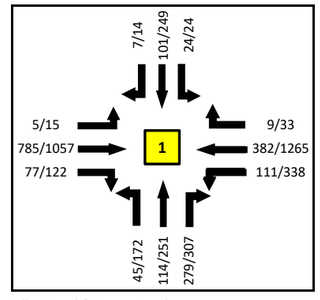
Hawes Road & Site Driveway 2



Elliot Road & 82nd Street (Future)

D3

Elliot Road & Site Driveway 3



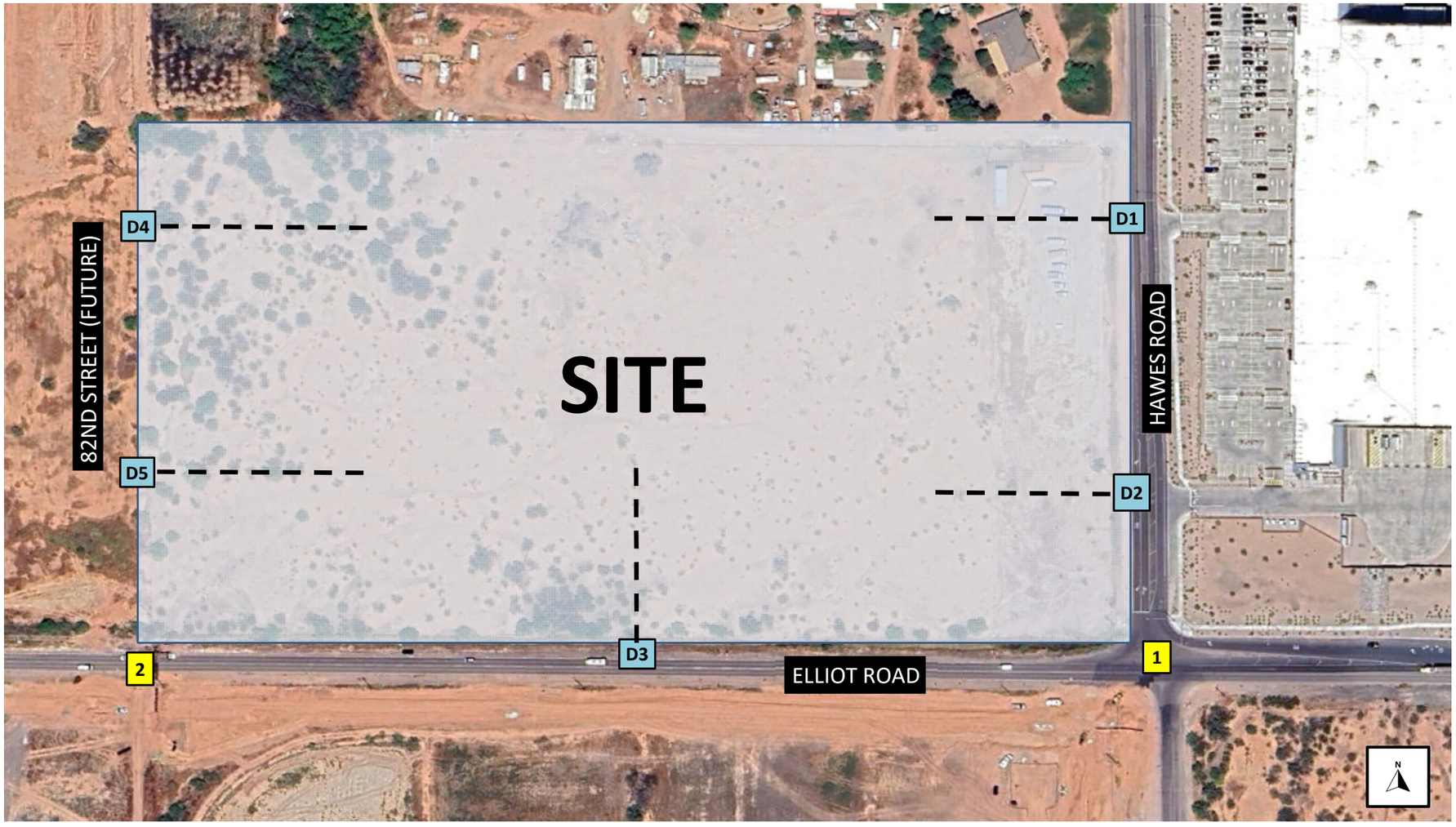
Elliot Road & Hawes Road

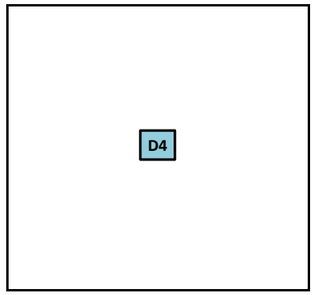
LEE ENGINEERING

Background Traffic Volumes - Site Adjacent Development Traffic

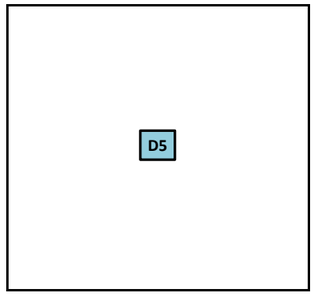
Legend
AM/PM

FIGURE 4

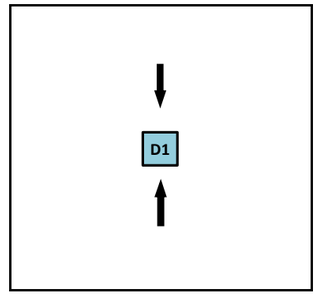




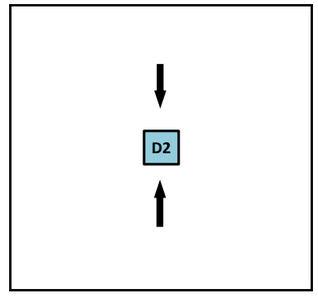
82nd Street & Site Driveway 4



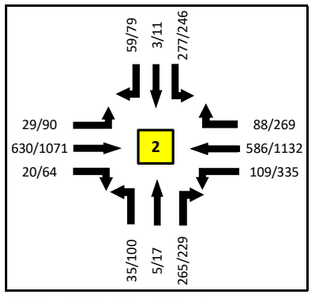
82nd Street & Site Driveway 5



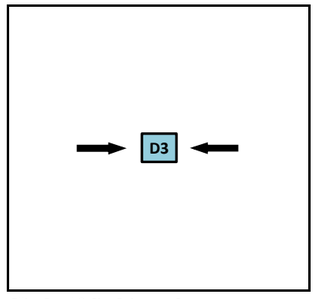
Hawes Road & Site Driveway 1



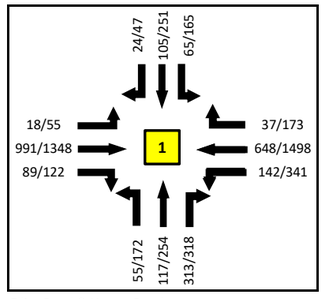
Hawes Road & Site Driveway 2



Elliot Road & 82nd Street (Future)



Elliot Road & Site Driveway 3



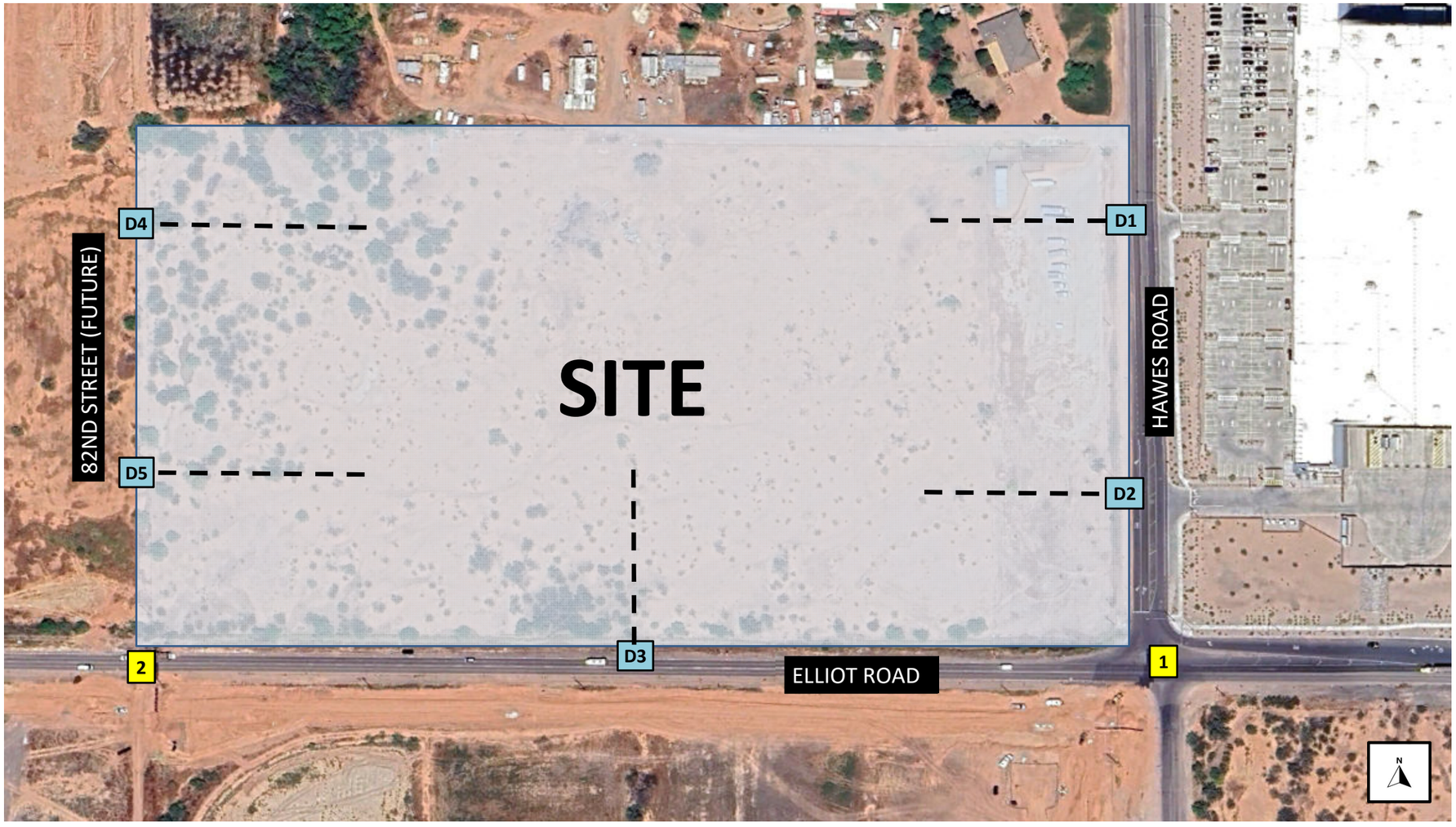
Elliot Road & Hawes Road

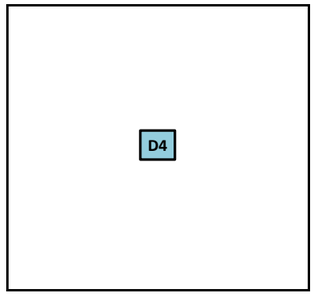
LEE ENGINEERING

2025 BACKGROUND CONDITIONS DIAGRAM

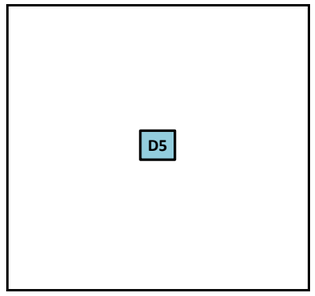
Legend
AM/PM

FIGURE 5

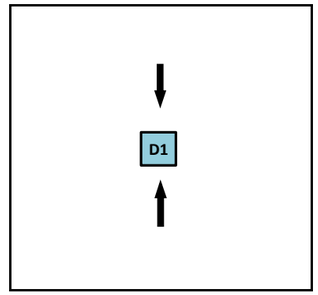




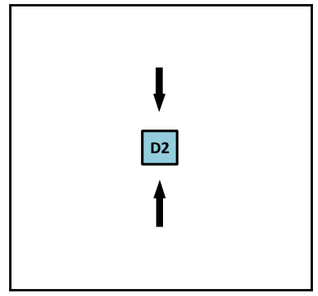
82nd Street & Site Driveway 4



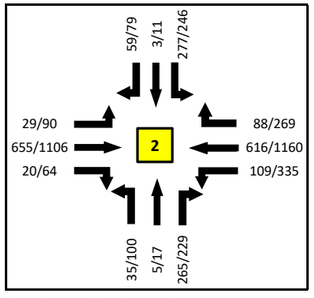
82nd Street & Site Driveway 5



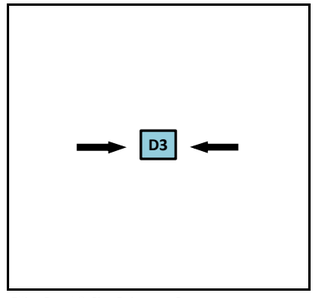
Hawes Road & Site Driveway 1



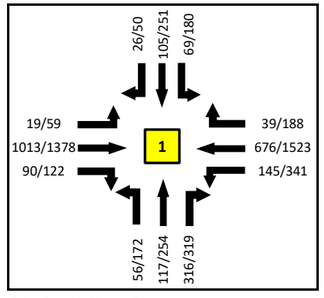
Hawes Road & Site Driveway 2



Elliot Road & 82nd Street (Future)



Elliot Road & Site Driveway 3



Elliot Road & Hawes Road

LEE ENGINEERING

2030 BACKGROUND CONDITIONS DIAGRAM

Legend
AM/PM

FIGURE 6

6.3.2 Trip Generation

The first step in estimating traffic to and from the proposed development is to calculate trip generation, which is the total vehicle trips to and from the site over a given time period. The Institute of Transportation Engineers *Trip Generation* Manual, 11th Edition, was used to estimate site traffic. Based on the site plan provided, the following ITE land use codes (LUCs) best represent the site:

- LUC 221, Multifamily Housing (Mid-Rise), 386 dwelling units
- LUC 822, Strip Retail Center (<40K), 16,300 square feet
- LUC 934, Fast-Food Restaurant with Drive-Through Window, 2,500 square feet
- LUC 932, High-Turnover (Sit-Down) Restaurant, 6,000 square feet
- LUC 712, Small Office Building, 15,000 square feet

A number of trip reduction factors can be applied to specific land uses to better estimate the total number of trips the site is expected to generate. The factors include the site's mix of land uses (internal site interaction), vehicles already on the adjacent roadway attracted to the site due to its offered convenience (pass-by trips), and availability of alternative travel modes.

6.3.3 Mode Split

It is anticipated that all site trips will be vehicle-based trips to and from the site. No credit for bus, bike, walk, or other alternative travel modes were taken.

6.3.4 Pass-by Traffic

When motorists make an intermediate stop at an adjacent land use on the way to their primary trip destination, they are said to have made a pass-by trip. Pass-by trips are not new trips added to the roadway network, as these trips divert from existing traffic streams to reach the site. The *ITE Trip Generation Handbook* publishes average pass-by rates for different land uses based on studies at similar types of developments. The following pass-by rates were used for this analysis as recommended by ITE:

- 34% during the afternoon peak period for the strip retail center.
- 62% and 56% during the morning and afternoon peak periods, respectively, for the fast-food restaurant.
- 43% during the afternoon peak period for the sit-down restaurant.

Figure 7 shows how morning and afternoon peak-hour pass-by trips were accounted for in this analysis.

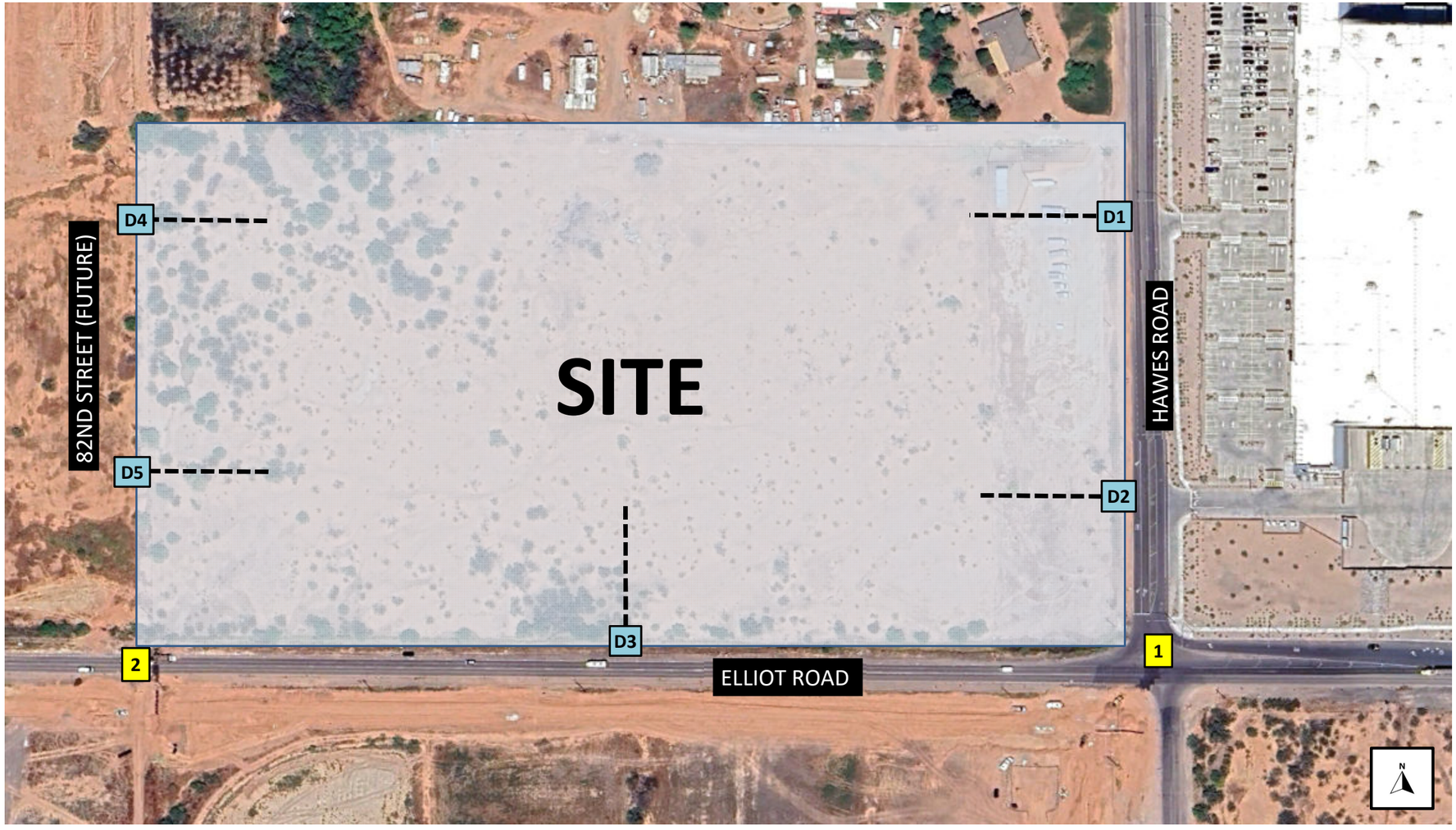
6.3.5 Internal Site Interaction

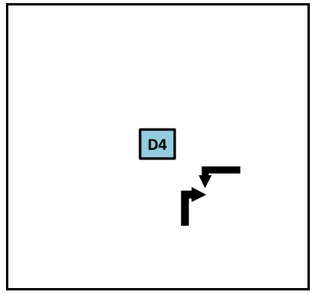
Internal trip capture is the portion of the total trips generated by a mixed-use development that begin and end on-site. An office tenant who walks over to one of the Shops & Offices restaurants for lunch would be making an internal trip. The importance of internal trip capture is that internal trips satisfy a portion of the total development's trip generation without adding any traffic volume

or turning movements to the external roadway network. In short, pass-by trips get assigned to site driveways and internally captured trips do not.

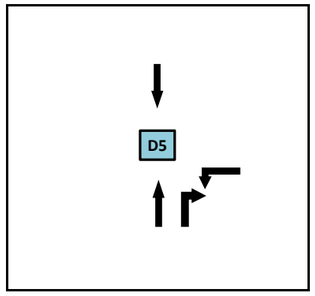
The internal site interaction reduction percentage was estimated using the NCHRP Report 684 spreadsheet estimator (attached in **Appendix E**). For the purposes of this analysis, the percentage has been conservatively capped at 15%.

Table 1 presents the trip generation data for the site. In total, the site is expected to generate about 3,194 trips on a typical weekday, with 277 of those trips in the morning peak hour and 274 trips in the afternoon peak hour.

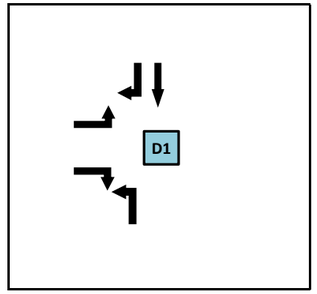




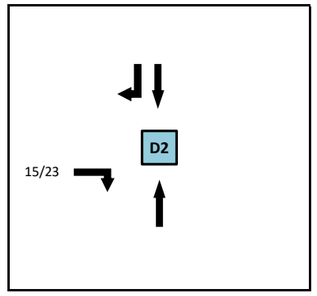
82nd Street & Site Driveway 4



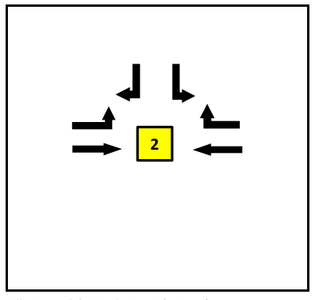
82nd Street & Site Driveway 5



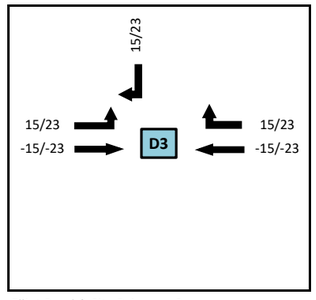
Hawes Road & Site Driveway 1



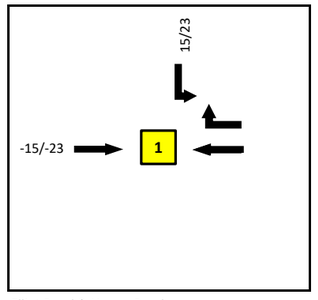
Hawes Road & Site Driveway 2



Elliot Road & 82nd Street (Future)



Elliot Road & Site Driveway 3



Elliot Road & Hawes Road

LEE ENGINEERING

PASS BY TRIPS

Legend
AM/PM

FIGURE 7

Table 1: Site Trip Generation

		Craftsman on Elliot					
Description	Land Use	Residential	Retail			Office	
	ITE Land Use Code	221	822	934	932	712	
	ITE Land Use Title	Multifamily Housing (Mid-Rise)	Strip Retail Center (<40K)	Fast-Food Restaurant with Drive-Through Window	High-Turnover (Sit-Down) Restaurant	Small Office Building	
	Land Use Variable	Dwelling Units	1000 SF GLA	1000 SF GFA	1000 SF GFA	1000 SF GFA	
	Variable Amount (X)	386	16.300	2.500	6.000	15.000	
Trip Rates	Weekday	T = 4.77(X) - 46.46	T = 42.20(X) + 229.68	T = 467.48(X)	T = 107.20X)	T = 14.39X)	
	AM Peak Hour	T = 0.44(X) - 11.61	Ln(T) = 0.66 Ln(X) + 1.84	(T) = 44.61(X)	T = 9.57(X)	T = 1.67(X)	
	PM Peak Hour	T = 0.39(X) + 0.34	Ln(T) = 0.71 Ln(X) + 2.72	(T) = 33.03(X)	T = 9.05(X)	T = 2.16(X)	
Inbound Percent	Weekday	50%	50%	50%	50%	50%	
	AM Peak Hour	23%	60%	51%	55%	82%	
	PM Peak Hour	61%	50%	52%	61%	34%	
Total Trip Ends	Weekday	1795	918	1169	643	216	4741
	AM Peak Hour Inbound	36	24	57	32	21	170
	AM Peak Hour Outbound	122	16	55	26	5	224
	PM Peak Hour Inbound	92	55	43	33	11	234
	PM Peak Hour Outbound	59	55	40	21	21	196
Internal Site Interaction Reduction Percent [1]	Daily	15%	15%	15%	15%	15%	
	AM	15%	15%	15%	15%	15%	
	PM	15%	15%	15%	15%	15%	
External Trips	Weekday	1526	780	994	547	184	4031
	AM Peak Hour Inbound	31	20	48	27	18	144
	AM Peak Hour Outbound	104	14	47	22	4	191
	PM Peak Hour Inbound	78	47	37	28	9	199
	PM Peak Hour Outbound	50	47	34	18	18	167
Pass-by Traffic [2]	AM Peak Hour Percentage	0%	0%	62%	0%	0%	
	PM Peak Hour Percentage	0%	34%	56%	43%	0%	
	AM Peak Hour Trip Ends	0	0	59	0	0	
	PM Peak Hour Trip Ends	0	32	40	20	0	
New Trip Ends	Weekday	1526	647	408	429	184	3194
	AM Peak Hour Inbound	31	20	19	27	18	115
	AM Peak Hour Outbound	104	14	18	22	4	162
	PM Peak Hour Inbound	78	31	17	18	9	153
	PM Peak Hour Outbound	50	31	14	8	18	121

1. NCHRP Report 684 Estimator. Daily site interaction estimated as the average of AM and PM values. The maximum site interaction reduction percentage has been capped at 14%.

2. Trip Generation Handbook, 3rd Ed., ITE, 2017. Daily pass-by percent is the average of the AM and PM values. The maximum pass-by trip percentage has been capped at 50%.

6.3.6 Trip Distribution and Assignment

Site-generated trips have been distributed onto the adjacent roadway network based in part on existing traffic volume collected as a result of this study and in part on engineering judgment, considering traffic patterns in the nearby and broader area. The distribution percentages assumed for this study are presented in **Figure 8**.

For simplicity, the percentages were assumed to be the same for all time periods as well as for entering and exiting traffic. As indicated on the figure, the site traffic distribution is proposed as follows in **Table 2**:

Table 2. Site Trip Distribution

To/from north on Hawes Road	10%
To/from south on Hawes Road	10%
To/from east on Elliot Road	65%
To/from west on Elliot Road	10%
To/from south on 82nd Street	5%

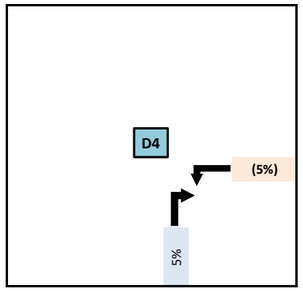
Based on the trip generation values and distribution percentages above, site-generated traffic volumes are presented in **Figure 9**.

6.3.7 Total Traffic Conditions

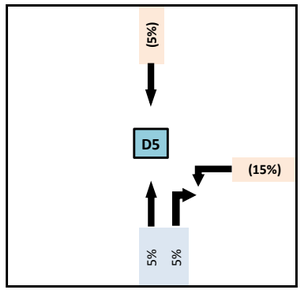
To determine the total traffic volumes for the 2025 opening year of the proposed development, the pass-by trips and the site-related volumes were added to the background 2025 volumes. **Figure 10** presents the total traffic volume estimated for 2025.

Similarly, **Figure 11** displays the 2030 total volume conditions, estimated by adding the pass-by trips and the site-related volumes to the 2030 background volumes.

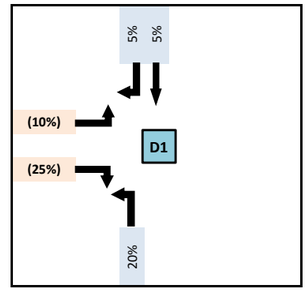




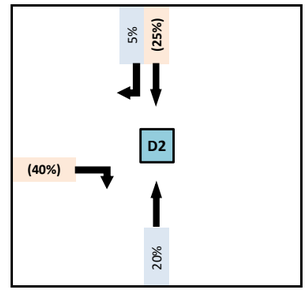
82nd Street & Site Driveway 4



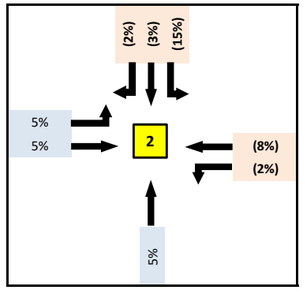
82nd Street & Site Driveway 5



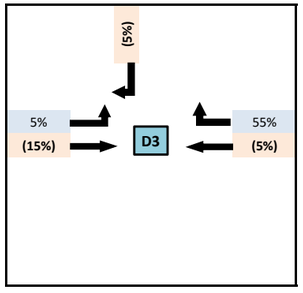
Hawes Road & Site Driveway 1



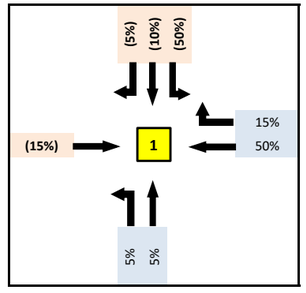
Hawes Road & Site Driveway 2



Elliot Road & 82nd Street (Future)



Elliot Road & Site Driveway 3



Elliot Road & Hawes Road

LEE ENGINEERING

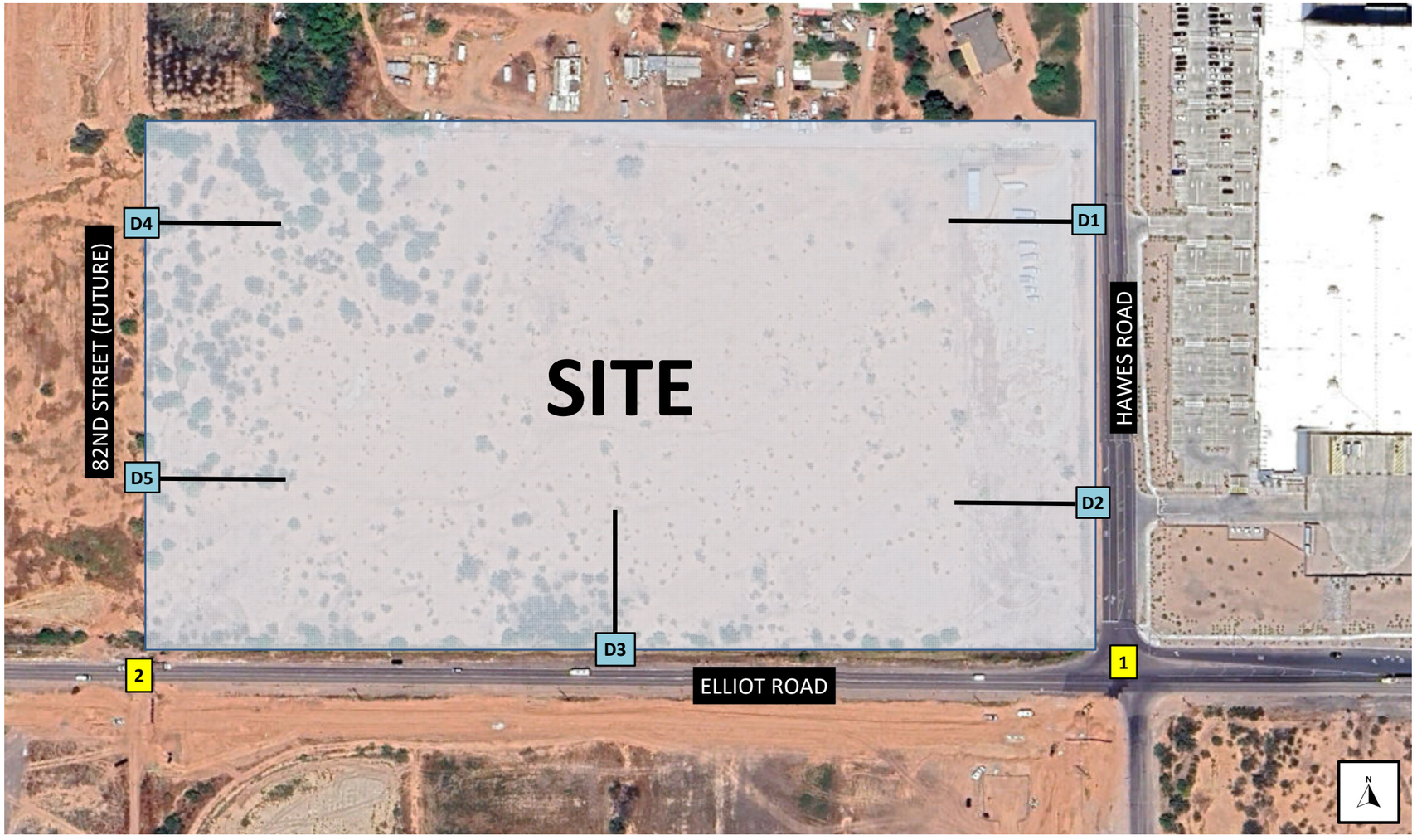
SITE TRAFFIC DISTRIBUTION

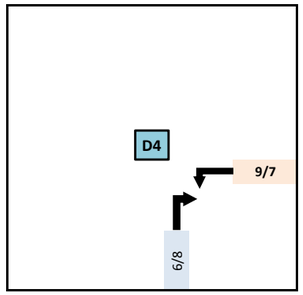
LEGEND

XX% ARRIVALS

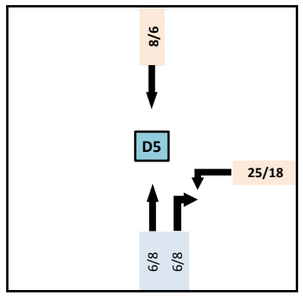
(XX%) DEPARTURES

FIGURE 8

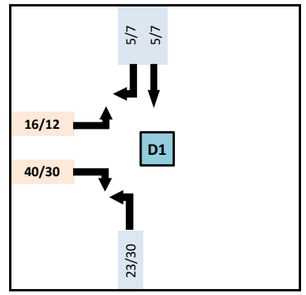




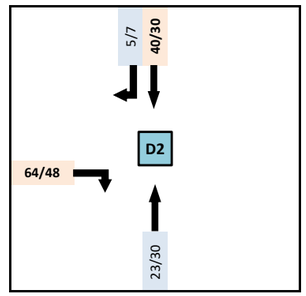
82nd Street & Site Driveway 4



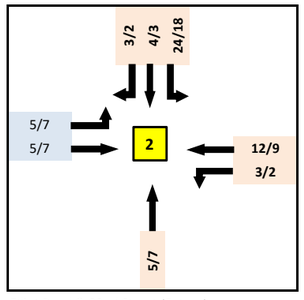
82nd Street & Site Driveway 5



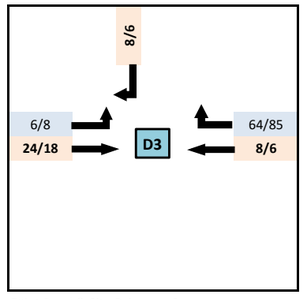
Hawes Road & Site Driveway 1



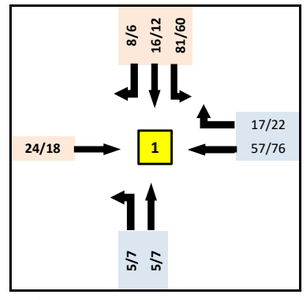
Hawes Road & Site Driveway 2



Elliot Road & 82nd Street (Future)



Elliot Road & Site Driveway 3



Elliot Road & Hawes Road

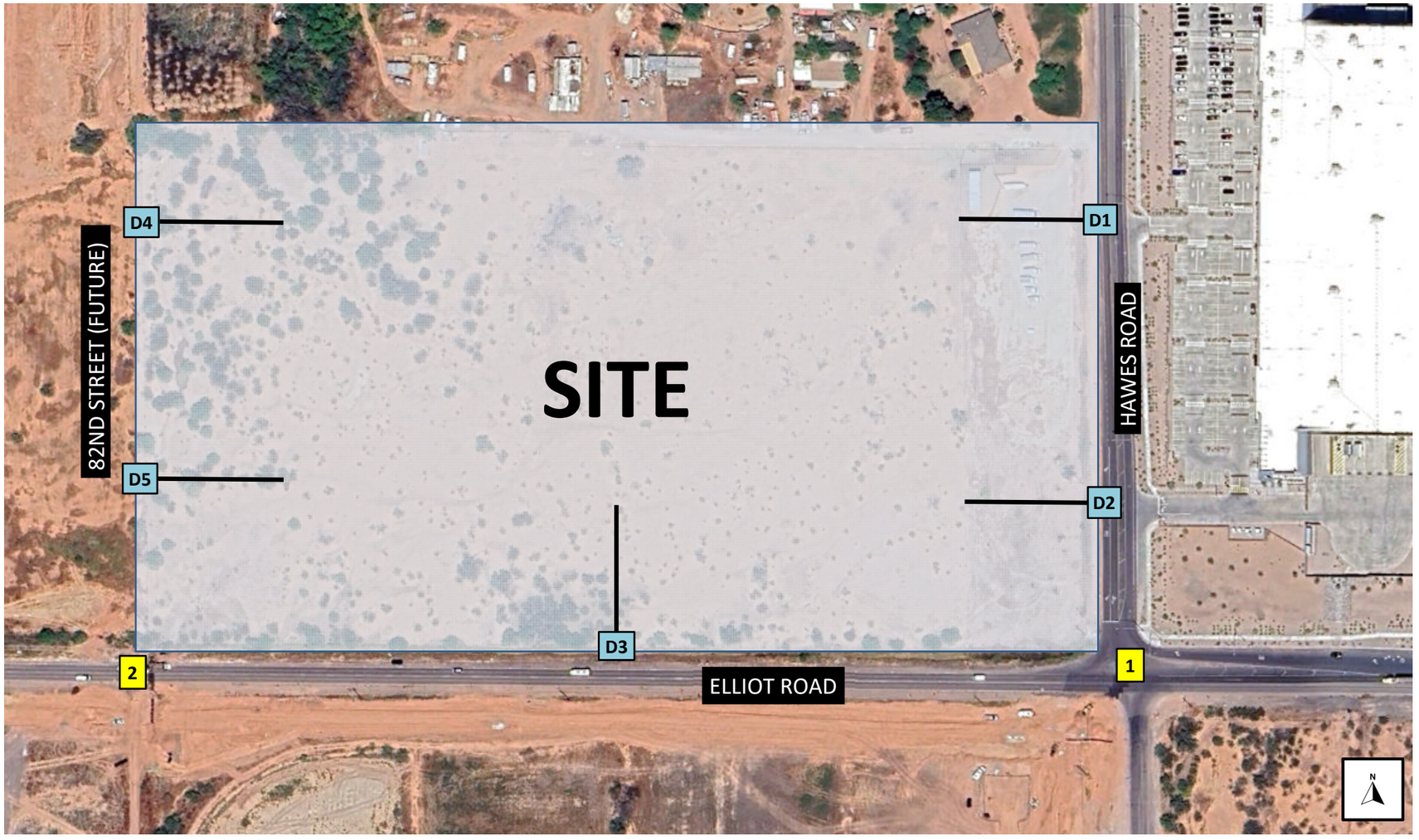
LEE ENGINEERING

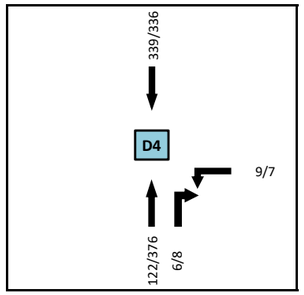
SITE GENERATED TRAFFIC VOLUMES - NEW TRIPS
AM/PM PEAK HOUR VOLUMES

LEGEND

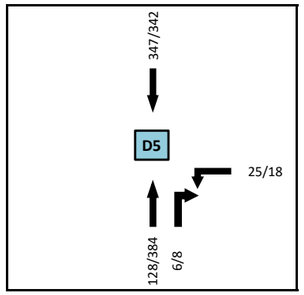
XX ARRIVALS
(XX) DEPARTURES

FIGURE 9





82nd Street & Site Driveway 4



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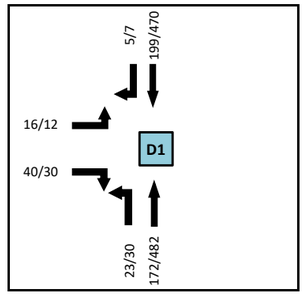
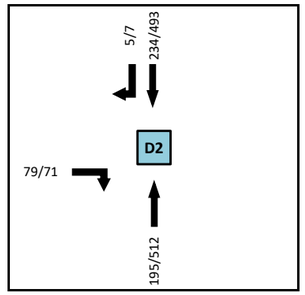


Hawes Road & Site Driveway 1



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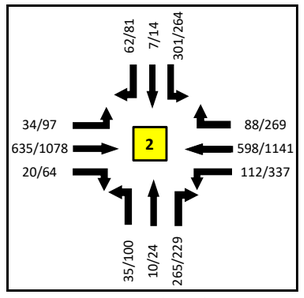
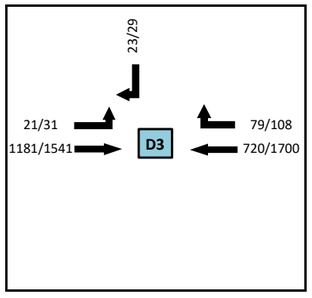
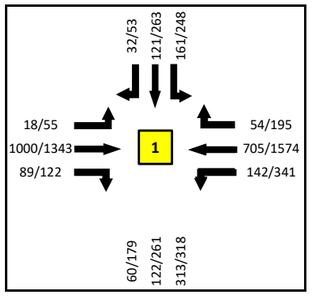


Elliot Road & 82nd Street (Future)



Elliot Road & Site Driveway 3



Elliot Road & Hawes Road

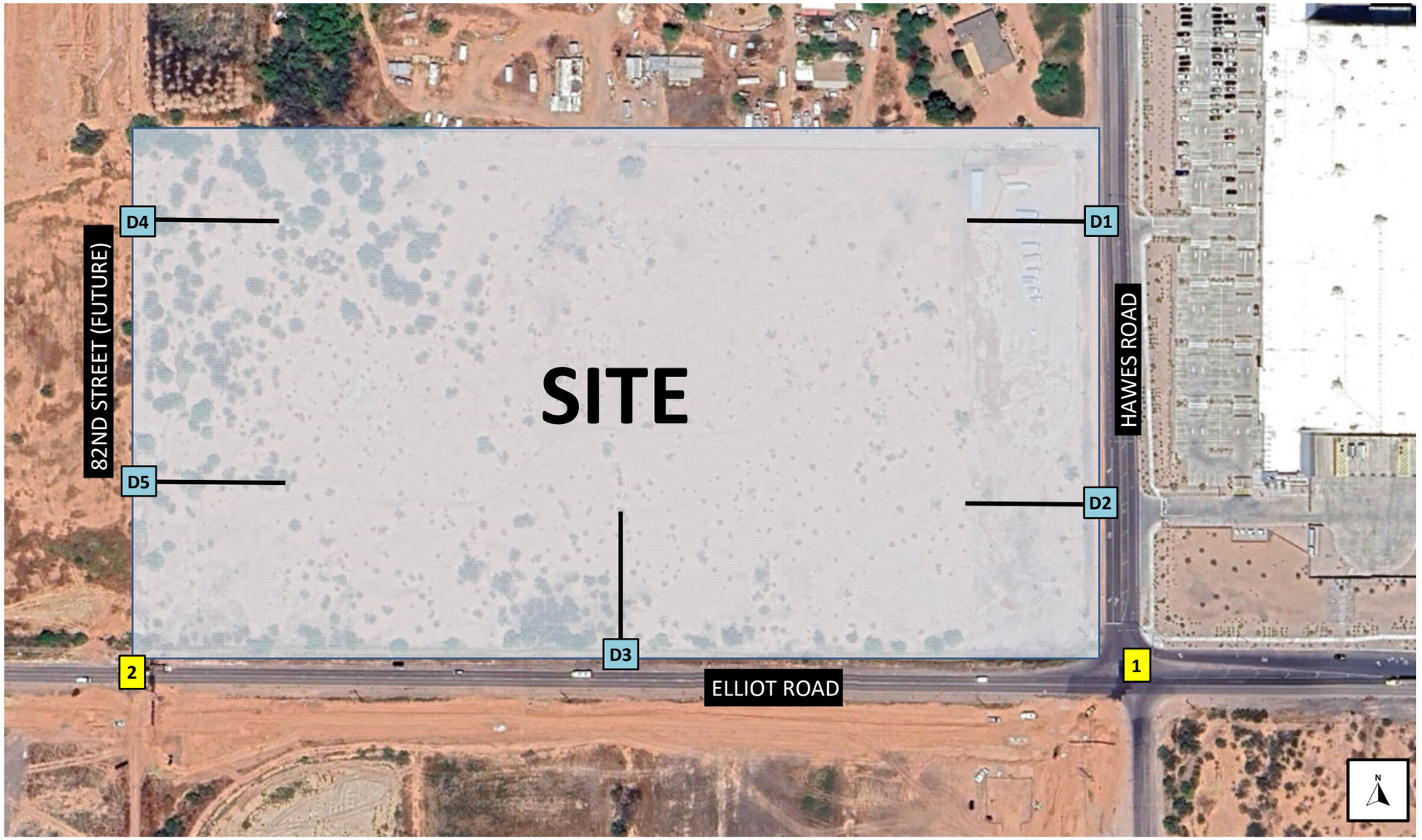
LEE ENGINEERING

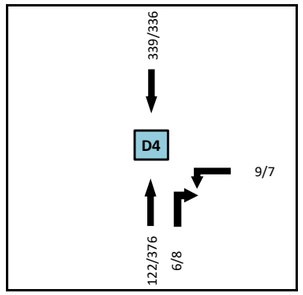
BUILD-OUT YEAR (2025) TOTAL TRAFFIC VOLUMES

Legend

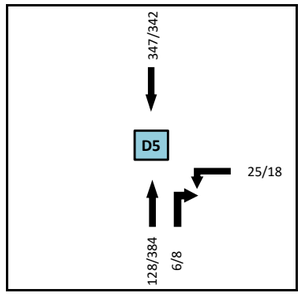
AM/PM

FIGURE 10

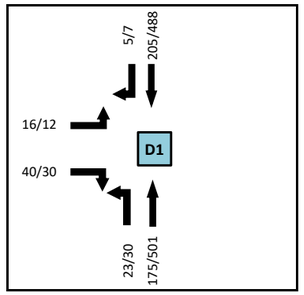




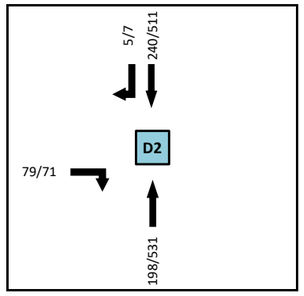
82nd Street & Site Driveway 4



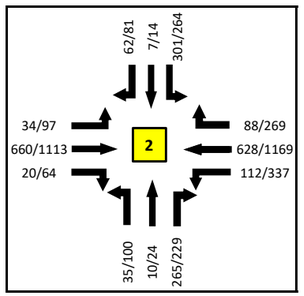
82nd Street & Site Driveway 5



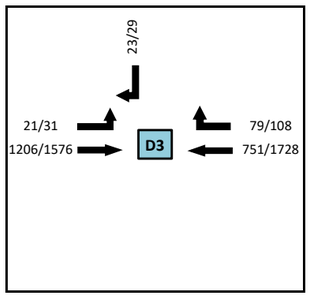
Hawes Road & Site Driveway 1



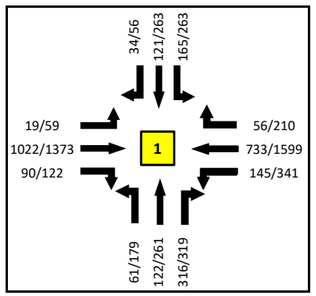
Hawes Road & Site Driveway 2



Elliot Road & 82nd Street (Future)



Elliot Road & Site Driveway 3



Elliot Road & Hawes Road

LEE ENGINEERING

HORIZON YEAR (2030) TOTAL TRAFFIC VOLUMES

Legend

AM/PM

FIGURE 11

6.4 Traffic Operational Analysis

The study-area intersections were analyzed based on the methodologies in the *Highway Capacity Manual* 6th Edition (HCM6, 2017) and evaluated using Synchro software (version 11). To provide an indication of intersection performance, signalized and unsignalized intersections are typically reported in terms of Levels of Service (LOS). Stop-controlled intersection analysis is based on the minor street approach or critical movement, whichever is applicable. The capacity criteria for signalized and unsignalized intersection analysis are presented in **Table 3**.

Table 3. Level of Service Criteria for Signalized and Unsignalized Intersections

Level of Service (LOS)	Average Control Delay (sec/veh)	
	Signalized	Unsignalized
A	≤ 10.0	≤ 10.0
B	> 10.0 and ≤ 20.0	> 10.0 and ≤ 15.0
C	> 20.0 and ≤ 35.0	> 15.0 and ≤ 25.0
D	> 35.0 and ≤ 55.0	> 25.0 and ≤ 35.0
E	> 55.0 and ≤ 80.0	> 35.0 and ≤ 50.0
F	> 80.0	> 50.0

Source: *Highway Capacity Manual 2017*, Transportation Research Board

Additional performance measures such as volume to capacity (v/c) ratios and queue lengths also provide an indication of operation. The HCM offers the following in Chapter 19:

> "For a typical major street with two lanes in each direction and an average traffic volume in the range of 15,000 to 20,000 vehicles/day (roughly equivalent to a peak hour flow rate of 1,500 to 2,000 vehicles/hour), the delay equation will predict greater than 50s of delay (LOS F) for many urban two-way-stop-controlled (TWSC) intersections that allow minor-street left-turn movements. LOS F will be predicted regardless of the volume of minor-street left-turning traffic. Even with a LOS F estimate, most low-volume minor-street approaches would not meet any of the volume or delay warrants for signalization noted in the *Manual on Uniform Traffic Control Devices*. As a result, analysts who use the HCM LOS thresholds as the sole measure to determine the design accuracy of TWSC intersections should do so with caution. In evaluating the overall performance of TWSC intersections, it is important to consider measures of effectiveness such as volume-to-capacity ratios for individual movements, average queue lengths, and 95th percentile queue lengths in addition to considering delay. By focusing on a single measure of effectiveness for the worst movement only, such as delay for the minor-street left-turn, users may make less effective traffic control decisions."

Considering the above guidance, for the purposes of this study, TWSC movements operating at LOS E or F with v/c ratios under 0.80 and acceptable queue lengths will be considered as operating at an acceptable level when the side street traffic volumes do not warrant a traffic signal.

The study-area intersections were evaluated using Synchro software to estimate the peak-hour traffic operations. The study-area intersections were evaluated for existing conditions, without site traffic, and future conditions in 2025 and 2030 both with and without site traffic.

6.4.1 Existing Conditions

Only one intersection in the study area is currently in operation. The traffic operational performance of this intersection in existing conditions is presented in **Table 4**. Complete Synchro results from this and other scenarios evaluated can be found in **Appendix F**.

Table 4. Traffic Operational Performance, Existing Conditions

	2023 Existing							
	AM Peak				PM Peak			
Intersection / Movement	LOS	Delay	V/C	Queue	LOS	Delay	V/C	Queue
Int 1. Hawes Road & Elliot Road (MSS)								
EB Approach	A	7.9		<50	A	8.2		<50
WB Thru/Left	A	7.7		<50	A	7.9		<50
NB Approach	B	11.1		<50	B	11.1		<50
SB Left/Thru	C	15.8		<50	C	21.2		<50
SB Right	A	9.8		<50	A	9.7		<50

Notes:

MSS - Minor Street Stop control, Delay shown in seconds, V/C shown if LOS E/F, Queue is the reported 95th percentile length in feet.

The results indicate that all movements in the study area under existing conditions operate at excellent LOS C or better during both morning and afternoon peak hours (maximum v/c = 0.40).

6.4.2 2025 & 2030 Background (No-Build) Conditions

It is noted that the Hawes Crossing Master Traffic Impact Analysis study provides proposed lane configurations and traffic controls for the nearby study area, which includes the intersections of Elliot Road with Hawes Road and 82nd Street (information provided in **Appendix D**).

Furthermore, review of the City of Mesa Capital Projects Explorer indicated that the subject project (CP 0982) to construct 2.5 miles of a six-lane new roadway on Elliot Road from Ellsworth Road to Sossaman Road is in the active stage and has a project start date of November 205 and an ending date of March 2027.

The lane configurations and traffic controls provided in the Master TIA were used for analysis of the opening year (2025) and horizon year (2030) conditions. The study area intersections for the 2025 and 2030 No-Build traffic scenarios were analyzed during both the morning and afternoon peak hours, and results are shown in **Table 5** and **Table 6**.

Table 5. Traffic Operational Performance, 2025 No-Build Conditions

	2025 Background							
	AM Peak				PM Peak			
Intersection / Movement	LOS	Delay	V/C	Queue	LOS	Delay	V/C	Queue
Int 1. Hawes Road & Elliot Road (S)	B	14.9			C	26.3		
EB Left	A	7.8		<50	B	15.6		<50
EB Thru	B	18.1		204	C	32.8		433
EB Right	A	1.9		<50	A	5.1		<50
WB Left	B	11.2		65	D	42.8		318
WB Thru	B	10.5		112	B	17.1		344
WB Right	A	0.1		<50	A	2.5		<50
NB Left	B	19.5		<50	C	33.3		84
NB Thru	C	28.3		56	D	46.4		142
NB Right	B	11.4		85	B	11.3		84
SB Left	C	21.2		60	D	42.7		170
SB Thru	C	26.6		51	D	40.4		135
SB Right	A	0.3		<50	A	0.7		<50
Int 2. Elliot Road & 82nd Street (S)	B	18.3			C	27.4		
EB Left	B	13.5		<50	C	20.2		62
EB Thru/Right	C	24.0		161	C	33.8		365
WB Left	B	15.3		71	D	38.2		300
WB Thru/Right	B	17.1		147	C	20.6		361
NB Left	B	15.5		<50	C	32.3		98
NB Thru/Right	B	11.1		73	B	17.2		92
SB Left	B	19.6		173	D	38.7		227
SB Thru/Right	A	6.7		<50	B	11.5		50

Notes:

S - Signal, Delay shown in seconds, V/C shown if LOS E/F, Queue is the reported 95th percentile length in feet.

The results in **Table 5** indicate that all movements at the study intersections under 2025 background conditions are expected to operate at LOS D or better during the morning and afternoon peak hours.

Table 6. Traffic Operational Performance, 2030 No-Build Conditions

	2030 Background							
	AM Peak				PM Peak			
Intersection / Movement	LOS	Delay	V/C	Queue	LOS	Delay	V/C	Queue
Int 1. Hawes Road & Elliot Road (S)	B	15.1			C	27.0		
EB Left	A	7.9		<50	B	16.9		<50
EB Thru	B	18.3		214	C	34.0		452
EB Right	A	1.9		<50	A	2.1		<50
WB Left	B	11.4		67	D	44.3		325
WB Thru	B	10.5		117	B	17.8		361
WB Right	A	0.1		<50	A	2.5		<50
NB Left	C	20.2		<50	C	33.5		83
NB Thru	C	28.9		58	D	47.3		144
NB Right	B	11.8		90	B	11.4		85
SB Left	C	22.1		66	D	44.2		185
SB Thru	C	28.6		53	D	40.1		134
SB Right	A	0.4		<50	A	0.7		<50
Int 2. Elliot Road & 82nd Street (S)	B	17.6			C	27.8		
EB Left	B	12.7		<50	C	21.3		64
EB Thru/Right	C	23.0		162	C	34.2		380
WB Left	B	14.4		68	D	39.0		302
WB Thru/Right	B	16.5		150	C	20.8		371
NB Left	B	15.0		<50	C	32.6		99
NB Thru/Right	B	10.8		72	B	17.3		92
SB Left	B	17.8		168	D	39.1		228
SB Thru/Right	A	7.8		<50	B	11.6		<50

Notes:

S - Signal, Delay shown in seconds, V/C shown if LOS E/F, Queue is the reported 95th percentile length in feet.

Results in **Table 6** indicate that all movements at the study intersections are expected to continue to operate at LOS D or better in 2030.

6.4.3 2025 & 2030 Total Traffic (Build) Conditions

The study intersections were analyzed using the morning and afternoon peak-hour volumes corresponding to the 2025 and 2030 Total traffic conditions. The volumes corresponding to each scenario were evaluated using Synchro to estimate the operational conditions of each intersection.

Table 7 and **Table 8** summarize the results of the Synchro analysis at the study intersections assuming the geometrics and traffic control for the total traffic conditions.

Table 7. Traffic Operational Performance, 2025 Total Conditions

	2025 Total							
	AM Peak				PM Peak			
Intersection / Movement	LOS	Delay	V/C	Queue	LOS	Delay	V/C	Queue
Int 1. Hawes Road & Elliot Road (S)	B	18.1			C	28.3		
EB Left	B	10.1		<50	B	18.2		<50
EB Thru	C	22.4		243	D	35.6		445
EB Right	A	0.5		<50	A	2.9		<50
WB Left	B	14.5		78	D	45.8		354
WB Thru	B	13.3		142	B	19.7		397
WB Right	A	0.2		<50	A	2.7		<50
NB Left	B	19.7		<50	C	32.7		84
NB Thru	C	31.5		64	D	47.7		147
NB Right	B	15.8		116	B	11.3		85
SB Left	C	23.0		134	D	46.3		264
SB Thru	C	26.5		60	D	38.8		137
SB Right	A	0.3		<50	A	0.6		<50
Int 2. Elliot Road & 82nd Street (S)	B	19.8			C	29.2		
EB Left	B	14.1		<50	C	22.3		71
EB Thru/Right	C	24.8		168	D	35.0		371
WB Left	B	16.1		76	D	38.9		327
WB Thru/Right	C	20.0		158	C	23.4		385
NB Left	B	15.9		<50	C	32.5		97
NB Thru/Right	B	11.9		80	B	18.6		100
SB Left	C	20.7		195	D	39.9		245
SB Thru/Right	A	7.2		<50	B	11.5		52
Hawes Road & Site Driveway D1 (MSS)								
EB Approach	A	9.8		<50	B	11.9		<50
NB Left	A	7.7		<50	A	8.6		<50
Hawes Road & Site Driveway D2 (MSS)								
EB Approach	A	9.4		<50	B	10.5		<50
Elliot Road & Site Driveway D3 (MSS)								
SB Approach	B	12.3		<50	C	22.9		<50
EB Left	A	13.4		<50	E	42.1	0.26	<50
82nd Street & Site Driveway D4 (MSS)								
WB Approach	A	12.0		<50	C	15.1		<50
82nd Street & Site Driveway D5 (MSS)								
WB Approach	B	12.4		<50	C	15.7		<50

Notes:

S - Signal, MSS - Minor Street Stop control, Delay shown in seconds, V/C shown if LOS E/F, Queue is the reported 95th percentile length in feet.

With the addition of site-related traffic, the results in **Table 7** indicate that most movements at the study intersections are expected to operate at LOS D or better during both the morning and afternoon peak hours with an increase in delay in 2025 compared to background conditions. The eastbound left-turn movement at the site driveway D3 intersection with Elliot Road is expected to

operate at LOS E during the afternoon peak hour. However, this movement is expected to operate with a v/c ratio of 0.26, below capacity.

Table 8: Traffic Operational Performance, 2030 Total Conditions

	2030 Total							
	AM Peak				PM Peak			
Intersection / Movement	LOS	Delay	V/C	Queue	LOS	Delay	V/C	Queue
Int 1. Hawes Road & Elliot Road (S)	B	18.3			C	30.3		
EB Left	B	10.3		<50	C	20.9		<50
EB Thru	C	22.6		255	D	38.4		465
EB Right	A	0.5		<50	A	2.2		<50
WB Left	B	14.9		81	D	50.9		381
WB Thru	B	13.4		149	C	21.8		428
WB Right	A	0.2		<50	A	2.8		<50
NB Left	C	20.1		<50	C	32.6		82
NB Thru	C	31.9		64	D	49.7		150
NB Right	B	16.4		121	B	11.6		86
SB Left	C	23.7		138	D	50.3		294
SB Thru	C	26.9		60	D	37.5		134
SB Right	A	0.3		<50	A	0.6		<50
Int 2. Elliot Road & 82nd Street (S)	C	20.2			C	29.5		
EB Left	B	14.1		<50	C	23.0		73
EB Thru/Right	C	25.8		176	D	35.3		386
WB Left	B	16.2		76	D	40.4		334
WB Thru/Right	B	19.7		167	C	23.6		397
NB Left	B	15.7		<50	C	33.0		97
NB Thru/Right	B	12.4		81	B	18.7		100
SB Left	C	21.3		196	D	40.8		247
SB Thru/Right	A	8.0		<50	B	11.6		51
Hawes Road & Site Driveway D1 (MSS)								
EB Approach	A	9.9		<50	B	12.1		<50
NB Left	A	7.7		<50	A	8.6		<50
Hawes Road & Site Driveway D2 (MSS)								
EB Approach	A	9.5		<50	B	10.6		<50
Elliot Road & Site Driveway D3 (MSS)								
SB Approach	B	12.5		<50	C	23.3		<50
EB Left	A	13.7		<50	E	43.7	0.27	<50
82nd Street & Site Driveway D4 (MSS)								
WB Approach	B	12.0		<50	C	15.1		<50
82nd Street & Site Driveway D5 (MSS)								
WB Approach	B	12.4		<50	C	15.7		<50

Notes:

S - Signal, MSS - Minor Street Stop control, Delay shown in seconds, V/C shown if LOS E/F, Queue is the reported 95th percentile length in feet.

Results in **Table 8** indicate that most movements are expected to continue to operate a LOS D or better during the morning and afternoon peak periods. As in 2025, the only movement expected to operate at LOS E is the eastbound left-turn movement at site driveway D3 during the afternoon peak period. However, its v/c ratio of 0.27 indicates that it is expected to operate well below capacity.

6.5 Signal Warrant Evaluation

The intersection of Hawes Road and Elliot Road was evaluated to determine if a traffic signal would be appropriate. Traffic signals can be helpful under certain, but not all, traffic conditions. The *Manual on Uniform Traffic Control Devices* (MUTCD) contains nine traffic signal warrants outlining specific criteria that may make a traffic signal justifiable at an intersection. A signal should only be installed if one or more MUTCD warrants are met. However, satisfaction of a warrant does not require the installation of a signal. For the purposes of this analysis, only Warrants 1 and 2 were reviewed.

6.5.1 Existing Conditions

The MUTCD advises that a signal warrant study "should consider the effect of right-turn vehicles from the minor-street approaches. Engineering judgment should be used to determine what, if any, portion of the right-turn traffic is subtracted from the minor-street traffic count when evaluating the count against the signal warrants."

Specifically, the MUTCD recommends that "right-turn traffic should not be included in the minor-street volume if the movement enters the major street with minimal conflict." At the subject intersection, southbound right-turning traffic from Hawes Road has a dedicated right-turn lane capable of fully accommodating right-turning traffic. Southbound right-turning traffic has clear sight distance to the left. If a traffic signal were constructed, it is virtually certain that right turns on red would be permitted. Motorists who turn right on red do not gain any operational or safety benefit from a traffic signal, so they are often excluded from consideration for the purposes of signal warrant analysis. Since the right-turn-on-red movement is clearly permissible and the right-turn volume is modest, in this study analysis a right-turn reduction of 100% was assumed for the minor-street (southbound) approach. Because of the 100% right-turn reduction, the southbound approach is assumed to consist of one lane for the purposes of this analysis. It is noted that the minor-street northbound approach consists of a single lane.

As such, the warrants were evaluated assuming one lane on the major street (Elliot Road) and one lane on the minor street (Hawes Road).

The MUTCD suggests that the warranting threshold values may be reduced to 70 percent of their normal values "when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000." The posted 45-mph speed limit on Elliot Road is above the threshold. Therefore, the 70 percent warrant thresholds were used for evaluation.

Warrant 1: Eight-Hour Vehicular Volume

The 8-hour vehicular volume warrant has two parts: Condition A, applicable where a signal may be needed due to a high volume of intersecting traffic, and Condition B, where traffic is so heavy on the major street that minor street traffic suffers excessive delay or conflict. If the amount of traffic at an intersection exceeds the thresholds in **Table 9**, a signal is warranted under Warrant 1.

Table 9: Warrant 1, Eight-Hour Vehicular Volume Threshold Values

Condition A—Minimum Vehicular Volume

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100%[a]	80%[b]	70%[c]	56%[d]	100%[a]	80%[b]	70%[c]	56%[d]
1	1	500	400	350	280	150	120	105	84
2 or more	1	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
1	2 or more	500	400	350	280	200	160	140	112

Condition B—Interruption of Continuous Traffic

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100%[a]	80%[b]	70%[c]	56%[d]	100%[a]	80%[b]	70%[c]	56%[d]
1	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	56
1	2 or more	750	600	525	420	100	80	70	56

[a] Basic minimum hourly volume
[b] Used for combination of Conditions A and B after adequate trial of other remedial measures
[c] May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000
[d] May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Table 9 indicates the first row of both conditions is the appropriate row for consideration. The relevant (70%) threshold values for Warrant 1 Condition A are 350 vph on the major street and 105 vph on the minor street approach and 525 vph/53 vph for Warrant 1 Condition B.

Table 10 shows the traffic volume at this intersection by hour and the results of the evaluation of Warrant 1.

Table 10: Results of Signal Warrant 1 Evaluation – Existing Conditions

Start time	Approach volumes						Signal Warrant 1 Evaluation					
							Condition A			Condition B		
							Threshold values		Results	Threshold values		Results
	NB	SB	EB	WB	Both major	Higher-volume minor	Major	Minor		Major	Minor	
12:00 AM	3	6	15	25	40	6	350	105	not met	525	53	not met
1:00 AM	1	-	9	10	19	1	350	105	not met	525	53	not met
2:00 AM	-	8	12	10	22	8	350	105	not met	525	53	not met
3:00 AM	1	14	30	44	74	14	350	105	not met	525	53	not met
4:00 AM	10	128	112	141	253	128	350	105	not met	525	53	not met
5:00 AM	42	35	105	191	296	42	350	105	not met	525	53	not met
6:00 AM	53	43	169	338	507	53	350	105	not met	525	53	not met
7:00 AM	43	37	201	311	512	43	350	105	not met	525	53	not met
8:00 AM	41	42	206	278	484	42	350	105	not met	525	53	not met
9:00 AM	34	20	228	249	477	34	350	105	not met	525	53	not met
10:00 AM	55	27	185	271	456	55	350	105	not met	525	53	not met
11:00 AM	45	33	254	268	522	45	350	105	not met	525	53	not met
12:00 PM	40	27	249	260	509	40	350	105	not met	525	53	not met
1:00 PM	71	33	241	289	530	71	350	105	not met	525	53	met
2:00 PM	48	34	241	244	485	48	350	105	not met	525	53	not met
3:00 PM	60	47	276	282	558	60	350	105	not met	525	53	met
4:00 PM	19	50	271	266	537	50	350	105	not met	525	53	not met
5:00 PM	12	136	317	360	677	136	350	105	met	525	53	met
6:00 PM	5	49	219	229	448	49	350	105	not met	525	53	not met
7:00 PM	11	23	154	160	314	23	350	105	not met	525	53	not met
8:00 PM	3	9	150	136	286	9	350	105	not met	525	53	not met
9:00 PM	3	20	90	79	169	20	350	105	not met	525	53	not met
10:00 PM	1	11	68	44	112	11	350	105	not met	525	53	not met
11:00 PM	10	10	32	37	69	10	350	105	not met	525	53	not met
							Hours met		**1**	**Hours met**		**3**

As shown in **Table 10**, neither Condition A nor Condition B are met. Condition A is met for one of the required eight hours of the day. Traffic on Elliot Road is sufficiently high to meet Condition A for thirteen hours, but volume on Hawes Road only exceeds 105 vph for only two hours. In Condition B, traffic volume on Elliot Road exceeds the 525-vph threshold for four hours and the volume on Hawes Road exceeds the 53-vph threshold for six hours. **Warrant 1 is not met.**

Warrant 2: Four-Hour Vehicular Volume

The four-hour warrant is intended for application at intersections where traffic during any four hours of an average day reaches a level that indicates that a signal would be beneficial. Warrant 2 is met when the plotted points representing the traffic volumes during four hours of the day lie above the relevant curve in **Figure 12**.

The bottom line in the chart applies to the subject intersection since the major approach has one lane and the minor approach has one lane.

Figure 12: Warrant 2, Four-Hour Vehicular Volume Threshold Values – Existing Conditions

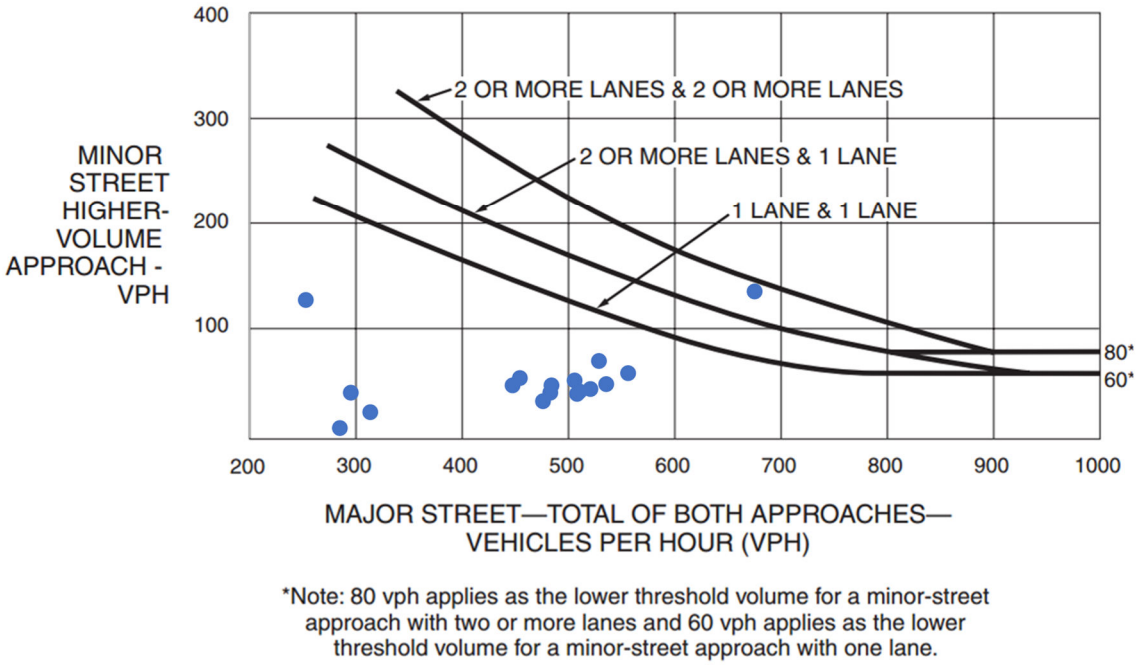


Figure 12 also displays the plotted points of all 24 hours of the day with available traffic volume. As can be seen from the figure, one plotted point lies above the relevant curve, short of the four points needed to meet this warrant, and as such, **Warrant 2 is not met.**

6.5.2 2025 Background Conditions

The subject intersection was evaluated for the 2025 background conditions without the proposed site traffic based on the criteria in the MUTCD previously described.

The morning and afternoon peak-hour volumes used in the analysis were taken from **Figure 5**. The 8th and 4th highest hours were calculated based on the hourly adjustment factors in ADOT TGP 611 and shown below (4th highest hour is 85.1% of the highest peak hour and the 8th highest hour is 74.2% of the highest peak hour). **Table 11** summarizes the results of the analysis.

Afternoon peak-hour approach volumes were converted to 4th highest hourly volumes and 8th highest hourly volumes using the adjustment factors in ADOT TGP 611. (Afternoon volumes were used because they are higher than morning peak volumes). Volumes derived from this conversion

are presented in **Table 11**. It noted that the northbound approach volumes were used for the minor approach because they are higher compared to the southbound approach volumes.

Table 11. Elliot/Hawes 4th and 8th Highest Hourly Volumes, Background 2025

Approaches	***2025 Background Peak-Hour Volume (vph)***	***Predicted 4th highest hourly volume*** (0.656/0.771 x peak-hour volume)	***Predicted 8th highest hourly volume*** (0.572/0.771 x peak-hour volume
Major (Sum of Eastbound and Westbound)	3537 vph	3006 vph	2617 vph
Minor (Northbound)	744 vph	632 vph	551 vph

The preliminary signal needs assessment results are shown in **Table 12**. It is noted that the analysis was completed based on the ultimate future lane configuration on Hawes Road and Elliot Road as previously discussed. Hence, the analysis assumed 2 or more lanes on the major street (Elliot Road) and 2 or more lanes on the minor street (Hawes Road). The preliminary results indicate that a traffic signal is warranted under 2025 background conditions without the added proposed site traffic. A traffic signal is recommended at the subject intersection and will be needed to accommodate the future significant change in traffic patterns in the study area due to the growing developments.

Table 12. Elliot Road & Hawes Road Signal Warrant Summary

Signal Warrant	***MUTCD requirement to satisfy warrant***		***Predicted 2025 volume***		***Result***
	Major Street (both approaches)	***Minor Street (higher-volume approach)***	***Major Street (both approaches)***	***Minor Street (higher-volume approach)***	
Warrant 1A	420	140	8th highest hour: 2617	8th highest hour: 551	Met
Warrant 1B	630	70	8th highest hour: 2617	8th highest hour: 551	Met
Warrant 2	Curve in MUTCD Fig. 4C-2		4th highest hour: 3006	4th highest hour: 632	Met

6.6 Turn Lane Warrants

6.6.1 Right-Turn Lanes

The Right-Turn Deceleration Lane Warrant Analysis in Mesa's TIA guidelines indicates that *"a right-turn deceleration lane will be warranted if the projected right-turn in hourly volume is greater than 60 vehicles per hour for 2-lane or 4-lane roadways and 90 vehicles per hour for 6-lane roadways."* The site driveways' right-turning volumes under 2030 Build conditions were analyzed and compared to these criteria. A summary of the results is presented in **Table 13**:

Table 13: Right-Turn Warrants Analysis Results

Location	***Number of Lanes***	***2030 Projected Peak-Hour Right-Turn Entering Volume***	***Criterion***	***Right-Turn Lane Warranted?***
Site Driveway D1	4 Lanes	7 vph	60 vph	NO
Site Driveway D2	4 Lanes	7 vph	60 vph	NO
Site Driveway D3	6 Lanes	108 vph	90 vph	YES
Site Driveway D4	2 Lanes	8 vph	60 vph	NO
Site Driveway D5	2 Lanes	8 vph	60 vph	NO

The results indicate that a westbound right-turn deceleration lane is warranted at site driveway D3 on Elliot Road since the expected right-turn volume of 108 vph exceeds the minimum right-turning volume criterion of 90 vph for a 6-lane roadway.

It is noted that a right-turn deceleration lane is also proposed as part of the subject development at site driveway D2 on Hawes Road despite not meeting the city's turn lane criterion.

6.6.2 Left-Turn Lanes

No left-turn-lane warranting criteria were found in the City of Mesa TIA Guidelines. As such, to determine if left-turn lanes are needed at the site driveways, ADOT TGP 245 was referenced. ADOT TGP 245 allows individual locations to be evaluated for left-turn lanes based on a combination of through traffic volume, turning traffic volume, speed limit, and number of through lanes.

Site Driveways D1 and D2 on Hawes Road

The warranting criteria for these driveways are shown in **Table 14** with a red box highlighting the minimum number of turn vehicles for the prevailing intersection conditions.

Table 14: ADOT TGP 245 Left Turn Lane Warrants

Peak Hour Traffic Volume on the Highway in Advancing Direction	Minimum Peak Hour Left-turn Traffic Volume			
	# of thru lanes per direction			
	1		2 (Undivided)*	
	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed
≤ 200	30	15	-	-
201 – 300	12	12	40	30
301 – 400	12	12	30	25
401 – 500	12	12	25	18
501 – 600	12	12	15	12
601 – 1000	12	12	10	8
1000+	12	8	10	8

Referencing **Figure 11**, it is estimated that 30 vehicles will make a left-turn into site driveway D1 during the afternoon peak hour, exceeding the 15 vehicles that would warrant the turn lane. Based on this analysis, a left-turn lane is warranted at site driveway D1.

At site driveway D2, a raised median will prevent left turns, so left-turn warrants were not analyzed.

Site Driveway D3 on Elliot Road

Elliot Road is classified as an arterial roadway. The City's 2040 Transportation Plan calls for Elliot Road to be widened to a 6-lane divided roadway in the future. Hence, an eastbound left-turn lane is required at site driveway D3 to maintain safe and effective traffic operations.

Site Driveways D4 and D5 on 82nd Street

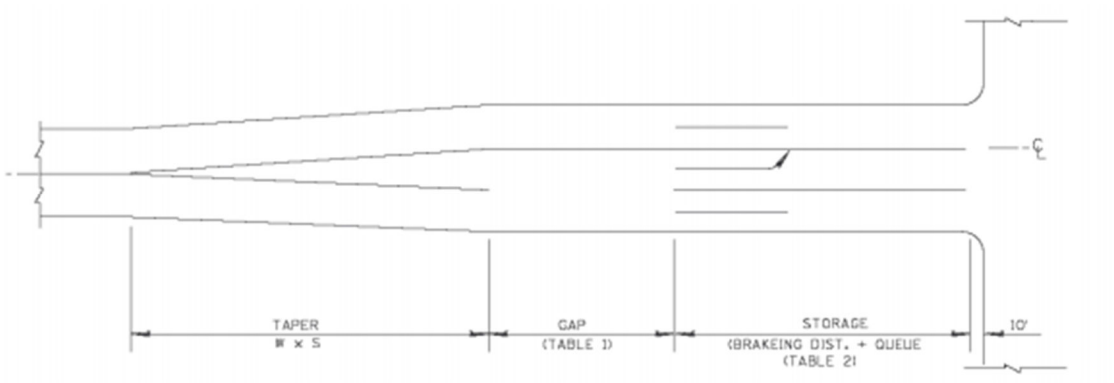
Left-turn-lane warrant analysis was not conducted at site driveways D4 and D5 since no traffic was assumed to approach the site from the north on this roadway.

6.7 Turn Lane Design

Site Driveway D1 Left-Turn Lane

ADOT TGP 430 was used for guidance on design of left-turn lanes. The ADOT-recommended design of left-turn lanes is shown in **Figure 13.**

Figure 13: ADOT TGP 430 Left-Turn Lane Design



The storage length is the combination of the braking distance and the queue length. The queue length depends on the anticipated traffic control for the intersection and the traffic volume at the turn.

$$Storage\ Length = Braking\ Distance + Queue\ Length$$

ADOT TGP 430 Table 430-1, shown in **Table 15**, was used to determine the length of the gap for the left-turn lane. Based on a 35-mph posted speed limit on Hawes Road, a gap length of 60 feet is appropriate.

Table 15: ADOT TGP 430 Right Turn Lane Gap Lengths

POSTED or DESIGN SPEED (mph)	GAP (feet)
< 40	60
40 - 50	90
> 50	140

Table 16 shows that based on a 35-mph posted speed limit on Hawes Road, a braking distance of 115 feet is desirable.

Table 16: ADOT TGP 430 Braking Distance

POSTED or DESIGN SPEED (mph)	DESIRABLE		MINIMUM		
	BRAKING SPEED (mph)	BRAKING DISTANCE (feet)	ENTERING SPEED (mph)	BRAKING SPEED (mph)	BRAKING DISTANCE (feet)
30	29	80	20	20	20
35	34	115	25	25	40
40	38	150	30	29	50
45	43	200	35	34	85
50	47	245	40	38	120
55	52	300	45	42	145
60	56	360	50	47	200
65	60	415	55	52	265
70	64	490	60	56	315
75	70	585	65	61	400

The queue length is the portion of the storage length required to temporarily store turning traffic until conditions allow the turning maneuver to be completed in a safe manner, in addition to the length required for braking. The queue length depends on the anticipated traffic control for the intersection (minor street stop-controlled) and the turning traffic volume (30 vph).

Referencing **Figure 11,** about 30 vehicles are expected to make a left turn from northbound Hawes Road into site driveway D1 during the afternoon peak hour. ADOT recommends considering the number of turning vehicles arriving in a two-minute period within the peak hour as the queue length; this amounts to 1.03 vehicles. At 25 feet per vehicle, this makes the queue length 25 feet. ADOT TGP 430 suggests a minimum queue length of 50 feet. Consequently, a queue length of 50 feet is appropriate to meet ADOT design requirements.

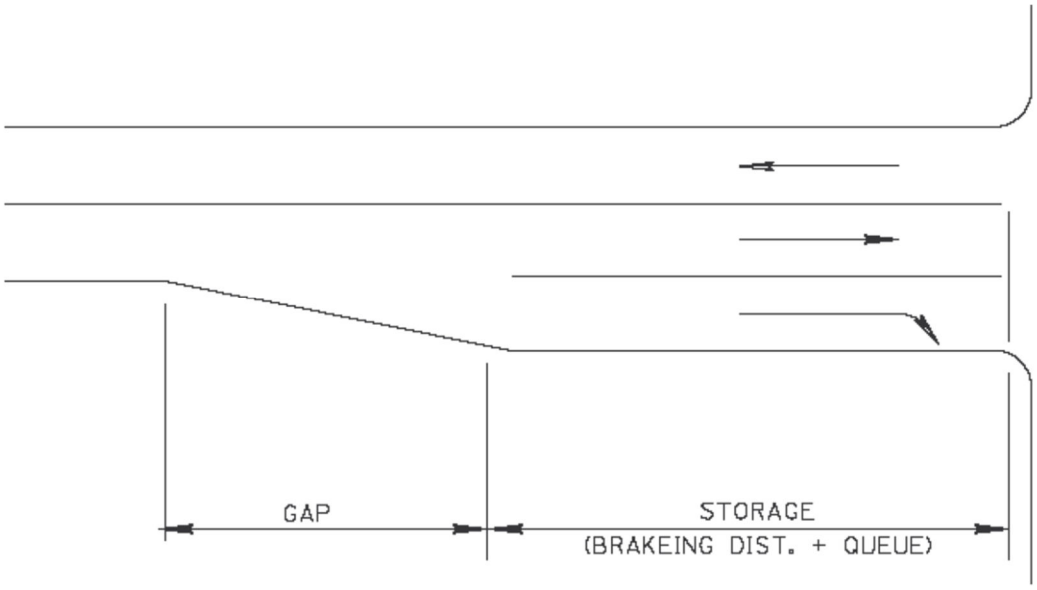
As a result, the total storage is recommended as 165 feet, calculated as the 115 feet braking distance plus the 50 feet queue length.

However, the site plan for the proposed development indicates only 114 feet is available from the north end of the raised median on Hawes Road to the south edge of site driveway D1. Hence, the recommended design of the left-turn lane (total of 225 feet) may not be able to be accommodated at this location.

Site Driveway D2 Right-Turn Lane

ADOT TGP 430 was also used for guidance on the design of right-turn lanes. A right-turn lane is not warranted at site driveway D2, but design parameters are included here since a turn lane has been proposed for construction. The ADOT-recommended design of right-turn lanes is shown in **Figure 14**, which is based on the traffic control, braking distance, volume, and other criteria.

Figure 14: ADOT TGP 430 Right-Turn Lane Design



Referencing **Table 15** and **Table 16**, based on a 35-mph posted speed limit on Hawes Road, a gap length of 60 feet is appropriate and a braking distance of 115 feet is desirable.

Referencing **Figure 11,** the afternoon right-turn peak-hour traffic volume is estimated to be 7 vehicles per hour, or (rounded) one vehicle in two minutes. At 25 feet per vehicle, this makes the queue length 25 feet. A queue length of 50 feet is appropriate to meet ADOT design requirements. ADOT also permits a reduction of 20 feet in queue length for free-flow right-turn movement such as the subject right-turn. As such, the queue length can be reduced from 50 feet to 30 feet.

As a result, the total storage is recommended as 145 feet, calculated as the 115 feet braking distance plus the 30 feet queue length.

Site Driveway D3 Left-Turn Lane

Referencing **Table 15** and **Table 16**, based on a 45-mph posted speed limit on Elliot Road, a gap length of 90 feet is appropriate and a braking distance of 200 feet is desirable.

Referencing **Figure 11,** about 31 vehicles are expected to make a left turn from the eastbound Elliot Road into site driveway D3 during the afternoon peak hour. ADOT recommends considering the number of turning vehicles arriving in a two-minute period within the peak hour as the queue length; this amounts to 1.03 vehicles. At 25 feet per vehicle, this makes the queue length 25 feet. ADOT TGP 430 suggests a minimum queue length of 50 feet. Consequently, a queue length of 50 feet is appropriate to meet ADOT design requirements.

As a result, the total storage is recommended as 250 feet, calculated as the 200 feet braking distance plus the 50 feet queue length.

Site Driveway D3 Right-Turn Lane

Referencing **Table 15** and **Table 16**, based on a 45-mph posted speed limit on Elliot Road, a gap length of 90 feet is appropriate and a braking distance of 200 feet is desirable.

Referencing **Figure 11,** the afternoon right-turn peak-hour traffic volume is estimated to be 108 vehicles per hour. ADOT recommends considering the number of vehicles arriving in a two-minute period as the queue length; this amounts to 3.6 vehicles (rounded up to 4). At 25 feet per vehicle, this makes the queue length 100 feet. ADOT also permits a reduction of 20 feet in queue length for free-flow right-turn movement such as the subject right-turn. As such, the queue length can be reduced from 100 feet to 80 feet.

As a result, the total storage is recommended as 280 feet, calculated as the 200 feet braking distance plus the 80 feet queue length.,.

6.8 Sight Distance

To provide safety for drivers exiting the subject development, AASHTO's *A Policy on Geometric Design of Highways and Streets* recommends the following minimum intersection sight distance (ISD) for left- and right-turn movements from a stopped condition for departing drivers stopped 15 feet from the edge of the traveled way. For left-turn or crossing maneuvers, the sight distance equation recommends adding time for each additional lane (12 feet of pavement width) above one lane to be crossed, including turn lanes, equal to 0.5 seconds for passenger cars and 0.7 seconds for single-unit trucks. It is noted that the posted speed limits on Elliot Road and Hawes Road are 45 mph and 35 mph, respectively. The north leg of the intersection of 82nd Street and Elliot Road is due for construction. Hence, the speed limit on this segment is assumed to be 35 mph.

Table 17 and **Table 18** show the time gap for a passenger vehicle to make a right-turn and left-turn from a stopped position, respectively.

Table 17: Time Gap, Right Turns from Minor Street

Design Vehicle	Time Gap (t_g)(s) at Design Speed of Major Road
Passenger car	6.5
Single-unit truck	8.5
Combination truck	10.5

Table 18: Time Gap, Left Turns from Minor Street

Design Vehicle	Time Gap (t_g)(s) at Design Speed of Major Road
Passenger car	7.5
Single-unit truck	9.5
Combination truck	11.5

The intersection sight distance is calculated as follows u:

$$ISD = 1.47 * V_{major} * t_g$$

Table 19 provides the intersection sight distance calculations for right- and left-turning maneuvers at the site driveways.

Table 19: Intersection Sight Distance Calculations Summary

Location	*Turning Maneuver*	*V_{major} (mph)*	*t_g (sec)*	*ISD (feet)*
Site Driveway D1 on Hawes Road	Right Turn	35 mph	6.5 sec	335 feet
	Left Turn		8.5 sec	440 feet
Site Driveway D2 on Hawes Road	Right Turn	35 mph	6.5 sec	335 feet
Site Driveway D3 on Elliot Road	Right Turn	45 mph	6.5 sec	430 feet
Site Driveways D4 & D5 on 82nd Street	Right Turn	35 mph	6.5 sec	335 feet
	Left Turn		7.5 sec	390 feet

All site access points should be designed to accommodate these sight distance recommendations. A review of the site reveals that the roadways near the proposed access points are on horizontal tangent alignments with little vertical profile, suggesting that roadway elements are not likely to constrain sight distance. The site developer should ensure that no fixed objects, such as landscaping or signage, are positioned in such a way as to cause sight distance to fall below the recommendations in **Table 19**.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The study has documented the following conclusions and recommendations:

- The subject site is planned for a mixed-use development consisting of the following:
  - 386 apartments in 4-story buildings (three buildings at 22,000 SF and one building at 19,200 SF) in the center of the subject development.
  - 16,300 SF retail.

- 2,500 SF fast-food restaurant with a drive-through window on the southeast corner of the development.
- 6,000 SF sit-down restaurant with an outdoor patio area on the southwest corner of the development.
- 15,000 SF office buildings (two buildings at 7,500 SF each) on the east side of the development.

- A total of 797 parking spaces will be provided throughout the development, consisting of 573 parking spaces dedicated to the residential portion of the development, and146 parking spaces dedicated to the retail portion. It is noted that 78 parking spaces are to be shared between the residential and retail portions of the development. A separate parking study provides more details.

- The site plan proposes the following five access points into and out of the site:
  - Site driveway D1: on Hawes Road about 630 feet north of Elliot Road (aligned with the Amazon Fulfilment Center driveway) and planned as a full-movement driveway.
  - Site driveway D2: on Hawes Road about 230 feet north of Elliot Road (aligned with the Amazon Fulfilment Center driveway) and planned as a right-in/right-out driveway.
  - Site driveway D3: on Elliot Road about 700 feet west of Hawes Road and planned as a ¾ driveway. In response to this development's TIA pre-submittal, City of Mesa requested that this access point not permit left-turn out movements.
  - Site driveway D4: on 82nd Street (future roadway) about 630 feet north of Elliot Road and planned as a full-movement driveway.
  - Site driveway D5: on 82nd Street about 230 feet north of Elliot Road and planned as a full-movement driveway.

- Turning movements at the intersection of Hawes Road and Elliot Road were collected on Thursday, June 15, 2023, and documented that the study area's peak hours begin at 7:30 a.m. and 5:00 p.m.

- From 2018 to 2022, the intersection of Hawes and Elliot Roads and the site's frontage experienced 7 crashes, an excellent overall safety performance averaging 1.4 crashes per year.

- The site is expected to generate about 3,194 trips on a typical weekday, with 277 of those trips in the morning peak hour and 274 trips in the afternoon peak hour.

- All site access points are estimated to operate in an acceptable manner through the 2030 horizon year.

- The eastbound left-turn movement at site driveway D3 is expected to operate at LOS E in 2025 and 2030 during the afternoon peak hour. However, this movement is expected to operate with a maximum v/c ratio of 0.27, below capacity.

- MUTCD signal warrants 1A, 1B, and 2 were analyzed for existing and projected 2025 background conditions at the intersection of Elliot Road and Hawes Road. Volume

warrants were met under background 2025 conditions for warrants 1A, 1B, and 2 at the 70% threshold.

- The following turn lanes are warranted or proposed at site driveways:
    - A northbound left-turn lane is warranted on Hawes Road approaching site driveway D1. Its total storage is recommended as 165 feet with a 60-foot gap. However, this length may need to be shortened due to the limited available distance on Hawes Road from the north end of the raised median to the south edge of site driveway D1 (114 feet).
    - A southbound right-turn lane is not warranted approaching site driveway D2. However, since a turn lane is proposed on the site plan, it should have a storage length of 145 feet with a 60-foot gap.
    - A left-turn lane is required on eastbound Elliot Road approaching site driveway D3 to maintain safe and effective traffic operations. The left-turn lane is recommended to have a 90-foot gap and 250-feet storage length.
    - A right-turn lane is warranted on westbound Elliot Road approaching site driveway D3. The right-turn lane is recommended to have a 90-foot gap and 280-foot storage length.

- The recommended length of the northbound left-turn lane into site driveway D1 (225 feet) may need to be shortened due to the limited available distance on Hawes Road from the north end of the raised median to the south edge of site driveway D1 (114 feet).

- The roadways near the proposed site access points are on horizontal tangent alignments with little vertical profile, suggesting that roadway elements are not likely to constrain sight distance.

APPENDIX A: PRE-TIA

ARIZONA
TEXAS
NEW MEXICO
OKLAHOMA

July 13, 2023

Mr. Peter Vargas
City of Mesa
55 N. Center St.
Mesa, AZ 85201

RE: Proposed Craftsman on Elliot, NWC Elliot and Hawes Roads

In our email correspondence on May 25, 2023, about the Traffic Impact Study (TIS) for the subject development, you requested that we submit our assumptions for your approval prior to beginning work. The information below describes the assumptions we plan to use in our analysis .

Project Location

The parcel proposed for development is located on the northwest corner of the intersection of Elliot and Hawes Roads, in Mesa, Arizona.

Brief Description of Project (land use, intensity, timeframe/phasing)

The conceptual site layout plan is attached. The site is planned for a mixed-use development consisting of the following:

- 352 apartments in 4-story buildings (both one- and two-bedroom units)
- 19,920 SF retail with tenants to be determined
- 16,560 SF office

Site Plan indicates other specific uses such as drive-thrus and restaurant

Based on the site layout, the following land use codes will be assumed:

- ITE Land Use Code 221, Multifamily Housing (Mid-Rise), (352 dwelling units)
- ITE Land Use Code 822, Strip Retail Center (<40K), (19,920 SF GFA)
- ITE Land Use Code 712, Small Office Building, (16,560 SF GFA)

should also include Land Use Group 900

Proposed Access (number, location, restrictions)

Access to the site is proposed from the following driveways:

- Site driveway D1: on Hawes Road about 630 feet north of Elliot Road (aligned with Amazon Fulfilment Center driveway) and planned as a full-movement driveway.
- Site driveway D2: on Hawes Road about 230 feet north of Elliot Road (aligned with Amazon Fulfilment Center driveway) and planned as a right-in/right-out driveway.
- Site driveway D3: on Elliot Road about 700 feet west of Hawes Road and planned as a full-movement driveway.

this driveway will be 3/4 - or left in. Not full-movement

- Site driveway D4: on 82nd Street (future roadway) about 630 feet north of Elliot Road and planned as a full-movement driveway.
- Site driveway D5: on 82nd Street about 230 feet north of Elliot Road and planned as a full-movement driveway.

Assumptions

Trip Generation

The trip generation for the subject site, based on the latest version of the ITE *Trip Generation* Manual (11th Edition), is shown in Table 1. The development is expected to generate 2,604 daily, 206 morning, and 240 afternoon peak-hour new trip ends, plus pass-by trips.

Table 1. Trip Generation Estimate

			Craftsman on Elliot			
Description	Land Use		Residential	Retail	Office	
	ITE Land Use Code		221	822	712	
	ITE Land Use Title		Multifamily Housing (Mid-Rise)	Strip Retail Center (<40K)	Small Office Building	
	Land Use Variable		Dwelling Units	1000 SF GLA	1000 SF GFA	
	Variable Amount (X)		352	19.920	16.560	
Trip Rates	Weekday		T = 4.77(X) - 46.46	T = 42.20(X) + 229.68	T = 14.39(X)	
	AM Peak Hour		T = 0.44(x) - 11.61	Ln(T) = 0.66 Ln(X) + 1.84	T = 1.67(X)	
	PM Peak Hour		T = 0.39(X) + 0.34	Ln(T) = 0.71 Ln(X) + 2.72	T = 2.16(X)	
Inbound Percent	Weekday		50%	50%	50%	
	AM Peak Hour		23%	60%	82%	Totals
	PM Peak Hour		61%	50%	34%	
Total Trip Ends	Weekday		1633	1070	238	2941
	AM Peak Hour Inbound		33	27	23	83
	AM Peak Hour Outbound		110	18	5	133
	PM Peak Hour Inbound		84	63	12	159
	PM Peak Hour Outbound		54	63	24	141
Internal Site Interaction Reduction Percent (1)		Daily	2%	9%	14%	6%
		AM	2%	9%	14%	5%
		PM	2%	8%	14%	7%
External Trips	Weekday		1541	1010	225	2775
	AM Peak Hour Inbound		31	25	22	78
	AM Peak Hour Outbound		106	17	5	128
	PM Peak Hour Inbound		79	59	11	149
	PM Peak Hour Outbound		50	59	22	131
Pass-by Traffic (2)	AM Peak Hour Percentage		0%	0%	0%	
	PM Peak Hour Percentage		0%	34%	0%	
	AM Peak Hour Trip Ends		0	0	0	0
	PM Peak Hour Trip Ends		0	40	0	40
New Trip Ends	Weekday (3)		1541	838	225	2604
	AM Peak Hour Inbound		31	25	22	78
	AM Peak Hour Outbound		106	17	5	128
	PM Peak Hour Inbound		79	39	11	129
	PM Peak Hour Outbound		50	39	22	111

Trip Reductions (Internal Capture, Alternative Travel Mode, and Pass-by)

- The internal site interaction percentage, estimated using the NCHRP Report 684 spreadsheet estimator, is proposed to be capped at 14%.
- No alternative travel modes are proposed to be applied or are applicable.
- The retail pass-by trip percentage, based on the ITE *Trip Generation Handbook*, 3rd Edition, is expected to be 34 percent during the afternoon peak hour. No pass-by trips are expected during the morning peak hour or for the office or residential uses.

Study Horizon Years

Per the City of Mesa's TIS guidelines, the study falls into a Category I analysis generating fewer than 500 peak-hour trips. Analysis of the opening year and a 5-year horizon after opening will be conducted. The anticipated opening year will be assumed as 2024.

Study Area Intersections

For Category I, the City of Mesa requires analysis of all roadway segments and intersections within ¼ mile and major driveways within 500 feet. Hence, the study area of this TIS will include the intersection of Elliot and Hawes Roads and all site driveways. Turning movements at Elliot and Hawes Roads were collected on Thursday, June 15, 2023, for a 24-hour period.

include 82nd St and Elliot in analysis

Trip Distribution

Vehicles are proposed to be distributed based on engineering judgment as follows:

- 70% to/from the east on Elliot Road (in the direction of the nearest SR 202 interchange)
- 15% to/from the north on Hawes Road
- 15% to/from the west on Elliot Road

Would assume some percentage from the south via Hawes and 82nd

Projected Traffic

An annual background traffic growth rate of 2 percent per year is proposed to be assumed based on studies of nearby developments.

see Hawes Crossing Master TIS

Background Development

The City of Mesa did not provide information about other planned developments near the site; as such, the TIS will assume that any other developments are accounted for as part of background traffic growth.

Hawes Crossing Master TIA

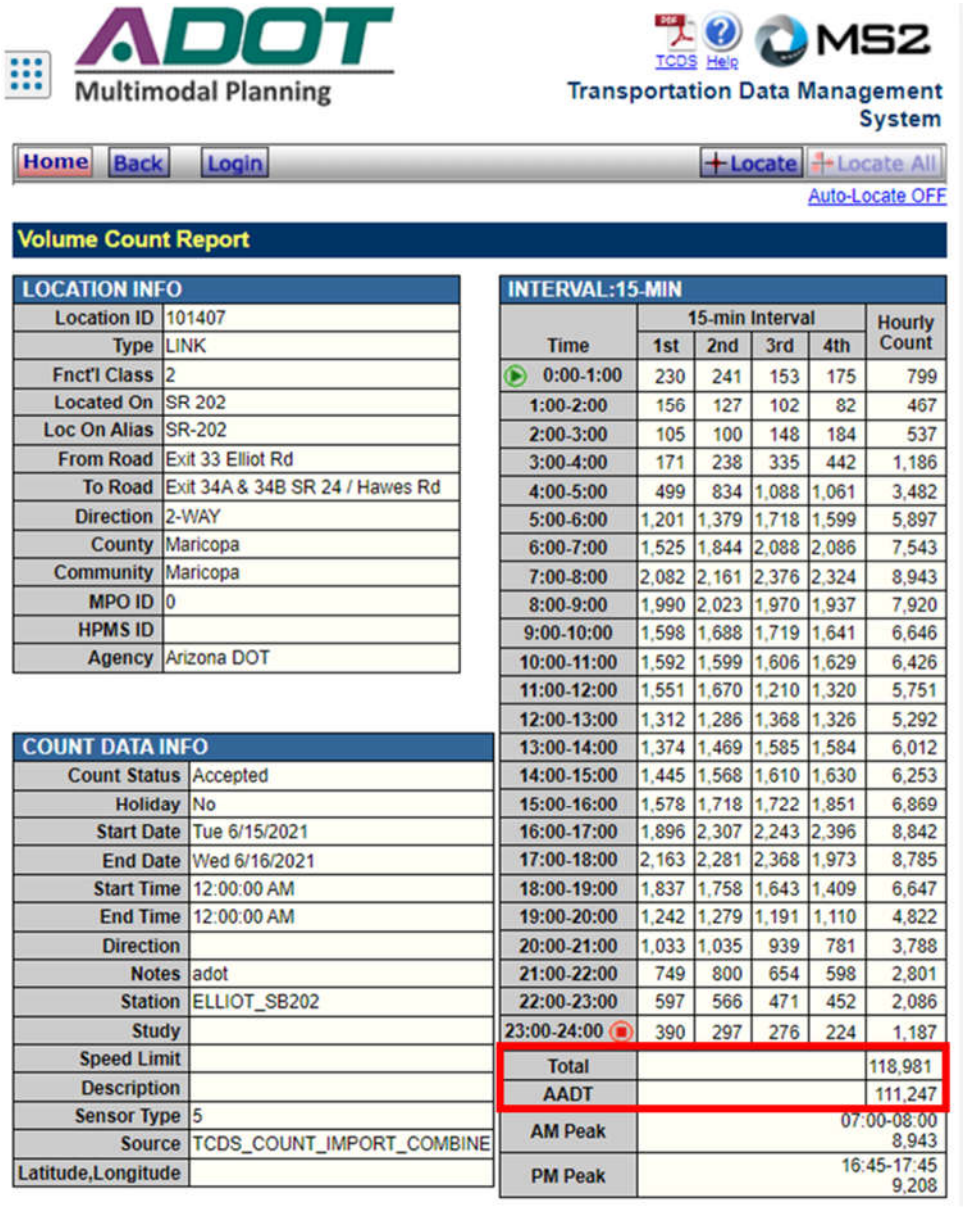
Lee Engineering has reviewed the November 2019 Hawes Crossing Master TIA, which encompasses the subject site, and will be consistent with the Master TIA where applicable.

Seasonal Adjustment

The collected traffic count data is proposed not to be seasonally adjusted. Daily volume on SR 202 south of Elliot Road (count station ID 101407) in June 2021 (this study's data collection month) was higher than the AADT, as shown in Figure 1.

This TIS shall reference the Hawes Crossing Master TIS and will need to identify if the proposed Craftsman site is changing any of the Master TIS assumptions and/or recommendations/outcomes.

Figure 1: ADOT Historical Volumes



ADOT Multimodal Planning

TCDS Help MS2 Transportation Data Management System

Home Back Login Locate Locate All

Auto-Locate OFF

Volume Count Report

LOCATION INFO	
Location ID	101407
Type	LINK
Fnct'l Class	2
Located On	SR 202
Loc On Alias	SR-202
From Road	Exit 33 Elliot Rd
To Road	Exit 34A & 34B SR 24 / Hawes Rd
Direction	2-WAY
County	Maricopa
Community	Maricopa
MPO ID	0
HPMS ID	
Agency	Arizona DOT

COUNT DATA INFO	
Count Status	Accepted
Holiday	No
Start Date	Tue 6/15/2021
End Date	Wed 6/16/2021
Start Time	12:00:00 AM
End Time	12:00:00 AM
Direction	
Notes	adot
Station	ELLIOT_SB202
Study	
Speed Limit	
Description	
Sensor Type	5
Source	TCDS_COUNT_IMPORT_COMBINE
Latitude,Longitude	

INTERVAL:15-MIN

Time	15-min Interval 1st	2nd	3rd	4th	Hourly Count
0:00-1:00	230	241	153	175	799
1:00-2:00	156	127	102	82	467
2:00-3:00	105	100	148	184	537
3:00-4:00	171	238	335	442	1,186
4:00-5:00	499	834	1,088	1,061	3,482
5:00-6:00	1,201	1,379	1,718	1,599	5,897
6:00-7:00	1,525	1,844	2,088	2,086	7,543
7:00-8:00	2,082	2,161	2,376	2,324	8,943
8:00-9:00	1,990	2,023	1,970	1,937	7,920
9:00-10:00	1,598	1,688	1,719	1,641	6,646
10:00-11:00	1,592	1,599	1,606	1,629	6,426
11:00-12:00	1,551	1,670	1,210	1,320	5,751
12:00-13:00	1,312	1,286	1,368	1,326	5,292
13:00-14:00	1,374	1,469	1,585	1,584	6,012
14:00-15:00	1,445	1,568	1,610	1,630	6,253
15:00-16:00	1,578	1,718	1,722	1,851	6,869
16:00-17:00	1,896	2,307	2,243	2,396	8,842
17:00-18:00	2,163	2,281	2,368	1,973	8,785
18:00-19:00	1,837	1,758	1,643	1,409	6,647
19:00-20:00	1,242	1,279	1,191	1,110	4,822
20:00-21:00	1,033	1,035	939	781	3,788
21:00-22:00	749	800	654	598	2,801
22:00-23:00	597	566	471	452	2,086
23:00-24:00	390	297	276	224	1,187
Total					118,981
AADT					111,247
AM Peak					07:00-08:00 8,943
PM Peak					16:45-17:45 9,208

Closure

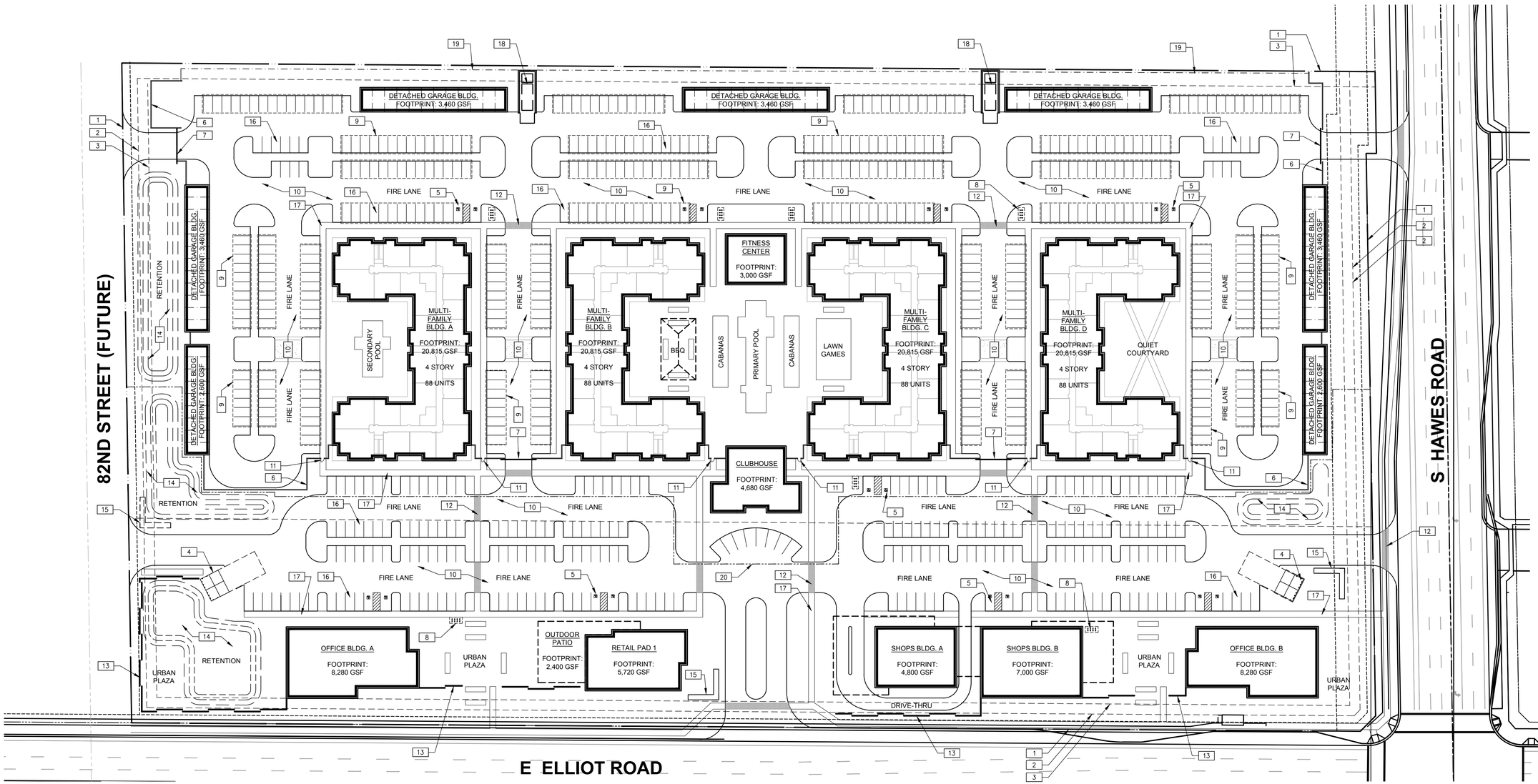
Your prompt approval of these assumptions is requested. I can be reached at rdittberner@lee-eng.com. Thank you for your attention to this study.

Respectfully submitted,

Randy Dittberner, PE, PTOE
Senior Project Manager

attachments

CAUTION: IF THIS SHEET IS NOT 24"x36" IT IS A REDUCED PRINT



1" =50'

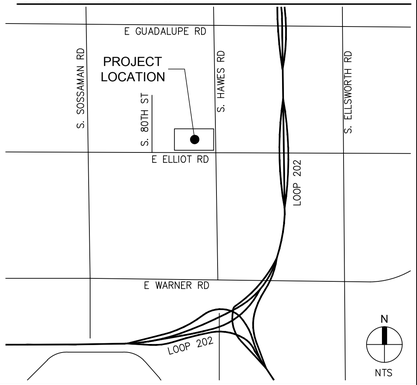
0 25 50 100 250

SITE PLAN

1"=50'-0"

N

VICINITY MAP



SITE PLAN KEYNOTES

1. PROPERTY LINE (—— · · ——)
2. LANDSCAPE SETBACK
3. BUILDING SETBACK
4. 9' x 12' CITY OF MESA STD. CMU TRASH BIN ENCLOSURE
5. CITY OF MESA STANDARD ADA PARKING STALL
6. CMU SCREEN WALL, SEE SITE CIRCULATION & SCREENING SHEET.
7. AUTOMATIC SLIDING ACCESS GATE.
8. BICYCLE RACKS (10 BIKE STALLS PER RACK), TYPICAL.
9. PRE-ENGINEERED PARKING SHADE STRUCTURE; TYPICAL.
10. FIRE LANE; CURB PAINTING PER CITY STANDARDS.
11. SECURED-ACCESS PEDESTRIAN GATE WITH EMERGENCY EGRESS HARDWARE.
12. DECORATIVE HARDSCAPE AT PEDESTRIAN CROSSWALKS
13. PARKING SCREEN WALL. SEE SITE CIRCULATION & SCREENING SHEET.
14. RETENTION BASIN
15. PROPOSED FUTURE MONUMENT SIGN LOCATION. 30' WIDE TYP.
16. CITY OF MESA TYPICAL PARKING STALL LAYOUT.
17. 6'-0" WIDE SIDEWALK, TYPICAL THROUGHOUT SITE
18. 40' x 14' CITY OF MESA STD. CMU TRASH COMPACTOR ENLOSURE
19. IRON FENCE, PAINTED. SEE SITE CIRCULATION & SCREENING SHEET.
20. SITE AREA SEPARATION LINE BETWEEN MIXED USES (—·—·—)
21. PROPOSED FUTURE BUS PAD. OFF-SITE STREET DESIGN SHOWN FOR REFERENCE ONLY.

PROJECT DATA

OVERALL SITE DATA

PROJECT DESCRIPTION

THIS PROJECT IS FOR THE MASTER PLANNING OF 4 NEW MULTIFAMILY BUILDINGS AND 5 COMMERCIAL BUILDINGS BUILT OVER ONE PHASE. MASTER PLANNING FOR THE ENTIRE PROJECT IS PART OF THIS SCOPE.

APN:	304-04-031
ZONING:	MX (MIXED USE)
PAD OVERLAY:	HAWES CROSSING VILLAGE 3
SITE AREA:	18.01 AC (784,655 SF)
LOCATION:	NWC OF E. ELLIOT RD & S. HAWES RD. MESA, ARIZONA
EXISTING USE:	VACANT LOT / AGRICULTURE
GENERAL PLAN:	MIXED USE / EMPLOYMENT

AREA & USE CALCULATIONS

SEE SHEET A1.2 FOR MIXED USE, URBAN PLAZA, OPEN SPACE, LANDSCAPE, HARDSCAPE, AND BUILDING AREA CALCULATIONS.

RESIDENTIAL PROJECT DATA

RESIDENTIAL SITE DATA

VALUES ARE APPROXIMATED FOR INITIAL SITE PLANNING PURPOSES

RESIDENTIAL SITE AREA:	11.70 AC (509,650 SF)
USE PERCENTAGE:	65%
DWELLING UNITS:	352 UNITS
DENSITY:	30.09 UNITS/ACRE
PARKING RATIO REQUIRED:	
2.1 SPACES / UNIT =	739 SPACES
PARKING PROVIDED:	
SURFACE PARKING	136
COVERED PARKING	388
DETACHED GARAGE	78
VISITOR	8
TOTAL	610 SPACES
PARKING RATIO PROVIDED:	1.73 SPACES/UNIT**

** REQUIRES APPROVAL OF S.U.P. TO REDUCE COUNT

UNIT TABLUATIONS (TYPICAL FOR BLDG. A, B, C, & D)

UNIT	TYPE	NET AREA	COUNT	TOTAL AREA	UNIT MIX %
A1	1bd/1ba	656	40	26,240	54.5%
A2	1bd/1ba	577	8	4,616	
B1	2bd/2ba	1,102	16	17,632	36.4%
B2	2bd/2ba	1,113	8	8,904	
B3	2bd/2ba	1,127	8	9,016	
S1	0bd/1ba	475	8	3,800	9.1%
TOTALS			88	70,208	100%

AVERAGE SQFT/UNIT: 798 SF

NOTE: NET AREA IS MEASURED TO THE EXTERIOR OF FRAME WALLS. BALCONIES, PATIOS, BALCONY STORAGE ARE NOT INCLUDED.

BUILDING TABLUATIONS

	# OF UNITS PER FLOOR				
	1ST	2ND	3RD	4TH	TOTAL
BLDG. A	22	22	22	22	88
BLDG. B	22	22	22	22	88
BLDG. C	22	22	22	22	88
BLDG. D	22	22	22	22	88
TOTAL					352

COMMERCIAL PROJECT DATA

COMMERCIAL SITE DATA

VALUES ARE APPROXIMATED FOR INITIAL SITE PLANNING PURPOSES

COMMERCIAL SITE AREA:	6.31 AC (275,005 SF)
USE PERCENTAGE:	35%
COVERAGE:	13.3%
PARKING REQUIRED:	
1 SPACE / 275 SF =	133 SPACES
(SHELL COMMERCIAL PER CITY OF MESA TABLE 11-32-3.A)	
PARKING PROVIDED:	180 SPACES
REQ'D ACCESSIBLE SPACES:	6 SPACES
PROVIDED PARKING RATIO:	4.93 / 1000 SF
OVERALL SITE BICYCLE PARKING:	
REQ'D: 63	PROV'D: 70

BUILDING DATA

BUILDING TYPE	BLDG AREA (GSF)	%
SHOPS A	4,800	13.2%
SHOPS B	7,000	19.2%
RETAIL PAD 1	5,720	15.7%
OUTDOOR PATIO	2,400	6.6%
OFFICE A	8,280	22.7%
OFFICE B	8,280	22.7%
	36,480 SF	100%

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Leading Design for Commercial Real Estate
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interiors
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wm|green

REGISTERED ARCHITECT
36166
KEVIN T. EVERNHAM
02/27/2023
ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT
MIXED-USE DEVELOPMENT
NWC OF E ELLIOT RD & HAWES RD
MESA, ARIZONA

SITE PLAN

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL

PA / PM:	B.SANDSTROM
DRAWN BY:	A.S.
JOB NO.:	PHX22-0196

SHEET
A1.1

APPENDIX B: COUNT DATA

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Hawes Rd DATE: 06/15/23 LOCATION: Mesa

E-W STREET: Elliot Rd DAY: THURSDAY PROJECT# 23-1211-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0.5	0.5	1	0	1	0	0	1	1	
12:00 AM	0	0	2	1	0	1	0	5	0	2	2	0	13
12:15 AM	0	0	0	0	0	0	0	4	0	0	8	5	17
12:30 AM	0	0	0	1	0	0	1	2	0	0	5	0	9
12:45 AM	0	0	1	4	0	0	0	3	0	0	3	0	11
1:00 AM	0	0	0	0	0	1	0	1	0	0	2	1	5
1:15 AM	0	0	0	0	0	1	1	4	0	0	1	1	8
1:30 AM	0	0	0	0	0	1	0	2	0	1	1	1	6
1:45 AM	0	0	1	0	0	0	0	1	0	0	2	0	4
2:00 AM	0	0	0	3	0	0	0	2	0	0	2	0	7
2:15 AM	0	0	0	1	0	0	0	1	0	0	0	0	2
2:30 AM	0	0	0	3	0	1	1	4	0	0	2	1	12
2:45 AM	0	0	0	1	0	0	0	4	0	0	4	1	10
3:00 AM	0	0	0	2	0	0	0	3	0	0	1	1	7
3:15 AM	0	0	0	3	0	0	0	4	0	0	3	0	10
3:30 AM	0	0	0	3	0	1	0	10	1	0	16	2	33
3:45 AM	0	0	1	5	1	1	0	12	0	1	7	13	41
4:00 AM	0	0	1	2	1	2	1	18	0	1	7	6	39
4:15 AM	0	0	0	24	0	2	3	25	1	6	20	6	87
4:30 AM	0	0	5	86	2	15	2	32	3	20	16	7	188
4:45 AM	0	0	4	12	1	3	2	19	6	22	27	3	99
5:00 AM	1	0	9	14	0	4	2	18	1	16	16	7	88
5:15 AM	5	0	3	4	0	1	1	17	4	12	18	7	72
5:30 AM	3	2	11	4	1	3	1	27	0	11	31	3	97
5:45 AM	3	0	5	9	3	2	2	29	3	22	34	14	126
6:00 AM	0	0	4	10	0	3	9	38	1	20	33	36	154
6:15 AM	3	1	26	15	0	8	5	35	1	13	44	66	217
6:30 AM	1	0	10	11	0	1	3	36	1	11	47	9	130
6:45 AM	0	0	8	7	0	4	1	39	0	2	46	11	118
7:00 AM	2	0	6	8	1	1	1	37	0	3	47	8	114
7:15 AM	0	0	6	12	0	3	1	46	2	13	55	12	150
7:30 AM	1	0	14	8	0	4	0	58	0	10	78	6	179
7:45 AM	3	1	10	8	0	4	4	49	3	11	63	5	161
8:00 AM	4	1	6	9	2	6	2	36	5	2	52	8	133
8:15 AM	1	0	2	14	1	2	6	55	3	6	62	7	159
8:30 AM	2	0	10	6	1	1	4	45	0	10	50	6	135
8:45 AM	0	0	15	9	0	4	3	44	3	12	51	12	153
9:00 AM	4	3	8	10	1	6	1	55	0	10	45	9	152
9:15 AM	0	0	8	3	0	6	1	54	2	5	51	6	136
9:30 AM	1	0	2	4	0	9	5	44	0	4	35	14	118
9:45 AM	0	0	8	2	0	2	3	56	7	17	44	9	148
10:00 AM	4	0	16	7	0	5	6	36	2	12	51	11	150
10:15 AM	1	1	13	3	2	4	2	53	1	9	46	8	143
10:30 AM	4	1	10	6	2	6	0	37	3	4	44	6	123
10:45 AM	2	1	2	7	0	2	1	43	1	6	62	12	139
11:00 AM	3	0	5	5	0	3	3	53	4	14	48	6	144
11:15 AM	1	0	12	6	0	2	0	45	3	8	51	10	138
11:30 AM	1	0	10	8	0	6	4	62	4	7	50	8	160
11:45 AM	1	0	12	13	1	5	4	69	3	4	56	6	174

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

veracitytrafficgroup

N-S STREET: Hawes Rd DATE: 06/15/23 LOCATION: Mesa

E-W STREET: Elliot Rd DAY: THURSDAY PROJECT# 23-1211-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0.5	0.5	1	0	1	0	0	1	1	
12:00 PM	0	0	5	6	0	3	3	48	3	4	57	5	134
12:15 PM	0	0	13	8	0	2	3	65	4	17	49	4	165
12:30 PM	0	1	10	3	0	4	7	50	2	4	44	7	132
12:45 PM	2	0	9	10	0	3	2	61	1	7	53	9	157
1:00 PM	1	1	16	9	2	2	3	62	2	15	50	9	172
1:15 PM	4	2	16	5	1	3	3	63	2	13	51	10	173
1:30 PM	7	0	10	12	0	4	1	43	0	13	56	8	154
1:45 PM	6	0	8	4	0	3	4	53	5	5	51	8	147
2:00 PM	7	1	13	5	0	5	7	55	2	6	58	6	165
2:15 PM	4	0	5	12	0	1	2	53	0	3	45	4	129
2:30 PM	3	0	5	7	0	5	1	52	2	8	41	9	133
2:45 PM	5	1	4	7	3	4	3	63	1	5	48	11	155
3:00 PM	3	0	12	8	0	6	5	60	4	6	50	10	164
3:15 PM	1	0	23	11	1	8	8	60	3	5	56	11	187
3:30 PM	0	1	14	18	0	5	3	69	0	1	64	9	184
3:45 PM	2	0	4	9	0	5	6	57	1	2	51	17	154
4:00 PM	0	0	4	9	0	6	6	54	1	6	50	9	145
4:15 PM	3	0	5	14	0	6	3	69	0	1	42	19	162
4:30 PM	0	1	1	14	0	8	8	64	0	3	55	15	169
4:45 PM	1	0	4	13	0	5	8	58	0	3	46	17	155
5:00 PM	0	2	2	71	0	17	13	85	0	0	62	17	269
5:15 PM	0	0	8	28	0	3	12	70	0	0	49	23	193
5:30 PM	0	0	0	23	0	7	7	72	0	1	56	35	201
5:45 PM	0	0	0	13	1	4	6	52	0	1	57	59	193
6:00 PM	0	0	2	18	0	11	5	72	3	1	44	16	172
6:15 PM	0	0	1	11	0	9	1	49	0	1	45	19	136
6:30 PM	0	0	1	12	2	2	5	45	0	0	43	11	121
6:45 PM	0	0	1	6	0	0	2	37	0	0	42	7	95
7:00 PM	1	1	2	5	0	1	2	46	0	2	35	4	99
7:15 PM	1	0	2	4	0	3	6	32	0	4	22	9	83
7:30 PM	2	0	1	5	0	0	1	40	1	1	24	7	82
7:45 PM	1	0	0	9	0	4	4	21	1	1	39	12	92
8:00 PM	1	0	1	4	0	5	5	43	0	0	33	8	100
8:15 PM	0	0	0	2	0	1	8	24	0	0	24	9	68
8:30 PM	0	0	0	3	0	4	2	35	0	0	23	4	71
8:45 PM	1	0	0	0	0	1	2	31	0	0	28	7	70
9:00 PM	0	0	0	6	0	1	3	27	1	1	18	6	63
9:15 PM	1	1	0	5	0	1	4	18	2	0	17	8	57
9:30 PM	0	0	0	6	0	1	2	18	0	0	8	6	41
9:45 PM	1	0	0	3	0	2	2	10	3	0	10	5	36
10:00 PM	1	0	0	2	0	2	2	14	0	1	6	4	32
10:15 PM	0	0	0	4	0	1	2	15	0	0	6	3	31
10:30 PM	0	0	0	3	0	0	2	12	0	2	11	4	34
10:45 PM	0	0	0	2	0	0	0	20	1	0	6	1	30
11:00 PM	0	1	2	2	0	0	0	7	1	0	8	3	24
11:15 PM	0	0	1	2	0	2	1	9	0	0	10	1	26
11:30 PM	0	0	0	2	0	0	0	8	0	0	8	1	19
11:45 PM	0	1	5	4	0	0	0	6	0	0	5	1	22

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	110	25	476	812	30	306	271	3449	114	470	3195	857	10115

APPENDIX C: CRASH DATA

Crash Report Summary
Craftsman on Elliot TIA

Data Period: 2018 - 2022
Total Crashes: 7

No.	Incident Date	Incident Time	Incident Year	Onroad	Crossing Feature	Offset	Injury Severity	Collision Manner	Light Condition
1	11/23/19	2:42 AM	2019	Hawes Road	Elliot Road	50.00	PDO	Single Vehicle	Dark Not Lighted
2	3/23/20	8:17 AM	2020	Hawes Road	Elliot Road	0.00	PDO	Single Vehicle	Daylight
3	2/7/21	6:32 AM	2021	Hawes Road	Elliot Road	50.00	PDO	Angle	Dawn
4	9/1/21	6:11 PM	2021	Hawes Road	Elliot Road	0.00	Possible Injury	U-Turn	Dusk
5	3/29/22	6:19 PM	2022	Elliot Road	Hawes Road	0.00	PDO	SS Opp Dir	Dawn
6	9/29/22	10:55 PM	2022	Elliot Road	Hawes Road	-300.00	Serious Injury	Head On	Dark Not Lighted
7	11/5/22	12:26 PM	2022	Elliot Road	Hawes Road	-50.00	PDO	Rear End	Daylight

APPENDIX D: SURROUNDING DEVELOPMENTS TRAFFIC IMPACT STUDIES

Hawes Crossing

Master Traffic Impact Anlaysis

Northwest of Loop 202 and
State Route 24 Interchange
Mesa, Arizona

November 2019
Project No. 17-1390

Prepared For:

Mesa-Casa Grande
Land Company, LLC
19965 East Elliot Road
Mesa, Arizona 85212

For Submittal to:
City of Mesa

Prepared By:

CivTech

10605 North Hayden Road
Suite 140
Scottsdale, Arizona 85260
480-659-4250

HAWES CROSSING
MASTER TRAFFIC IMPACT ANALYSIS

Northwest of Loop 202 and State Route 24 Interchange
Mesa, Arizona

Prepared for:

Mesa-Casa Grande Land Company, LLC
19965 E. Elliot Rd.
Mesa AZ, 85212

Prepared by:

CivTech
10605 North Hayden Road
Suite 140
Scottsdale, Arizona 85260
(480) 659-4250



November 2019
CivTech Project No. 17-1390

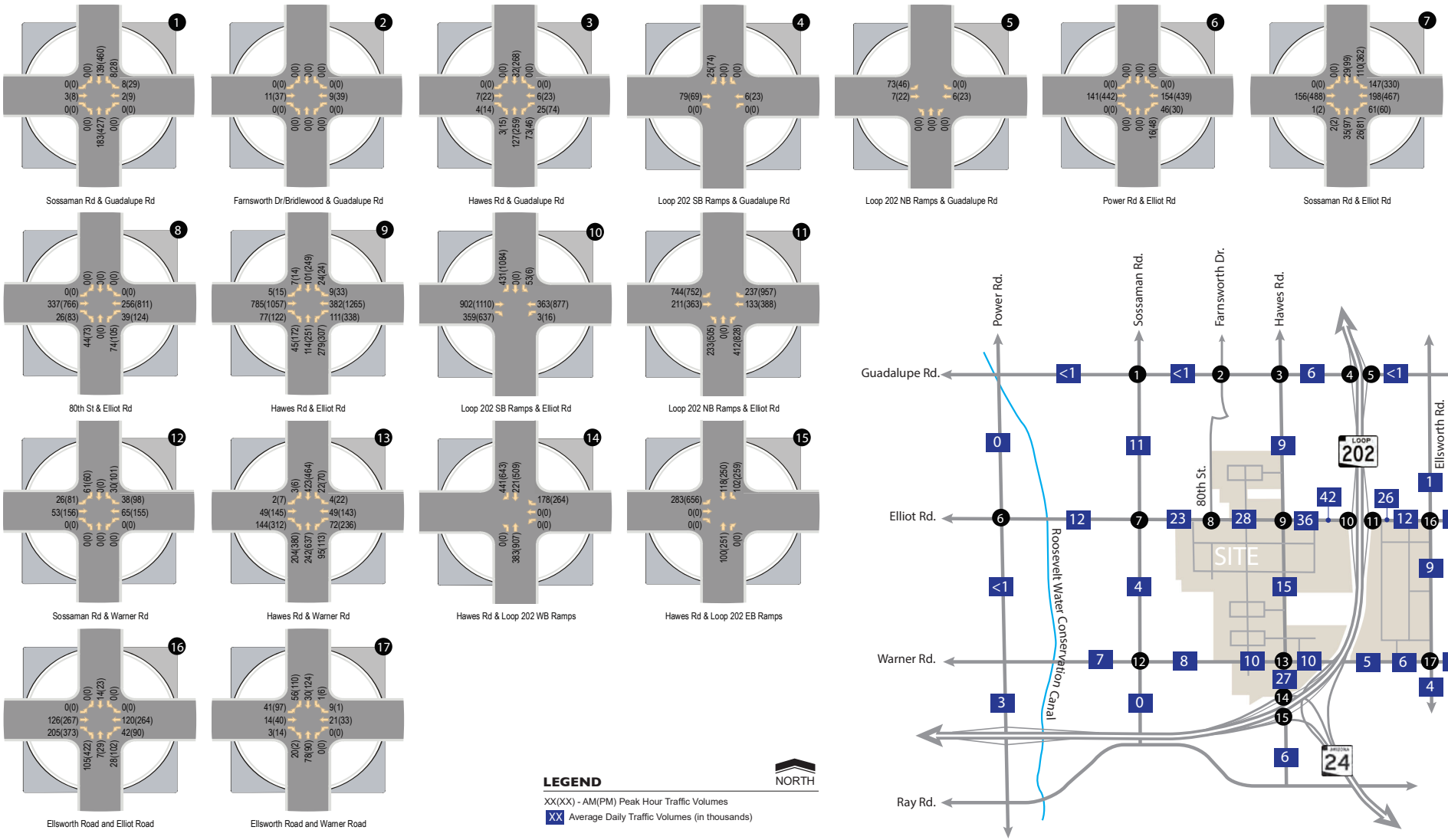


Figure 7: Site Generated Traffic Volumes A

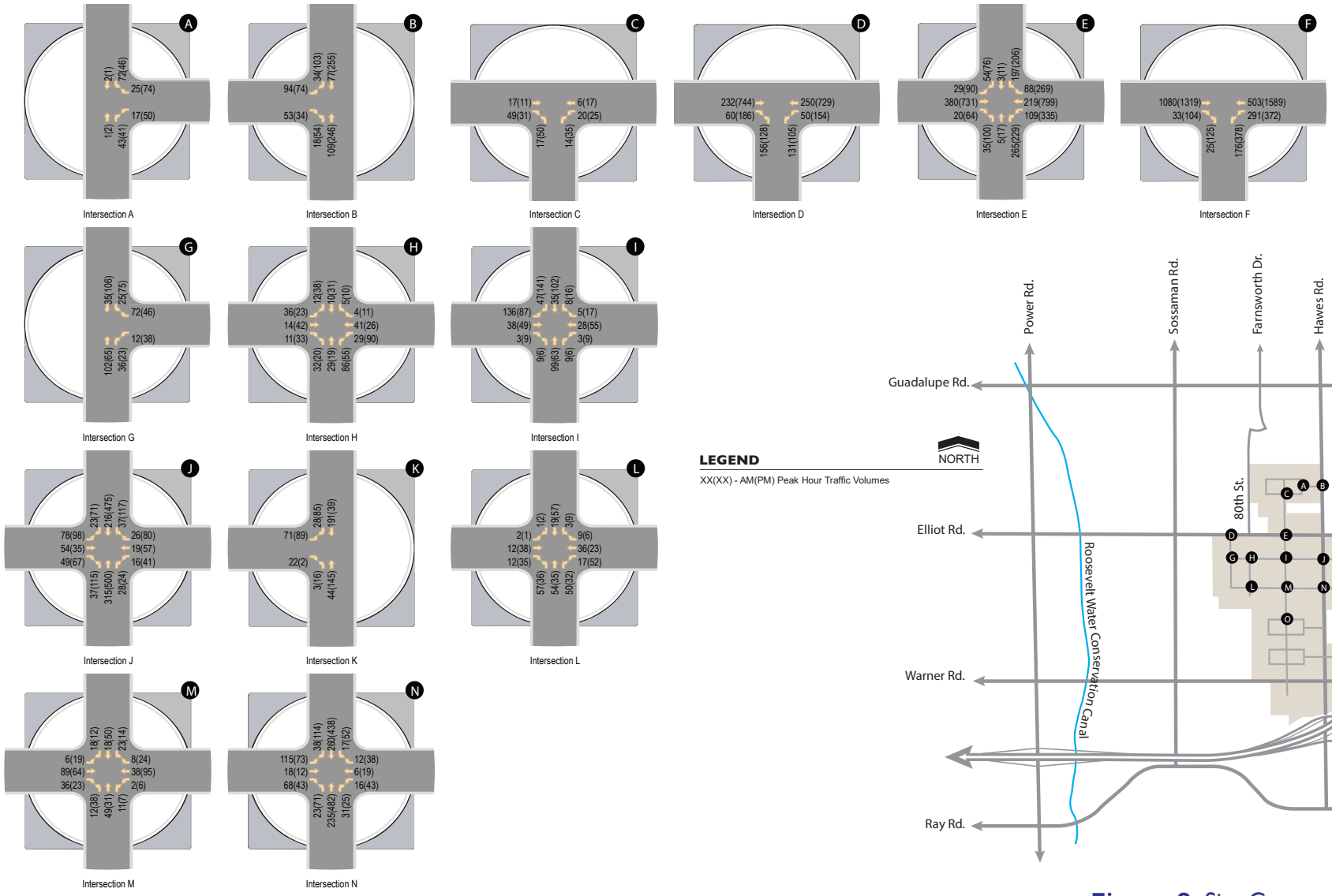


Figure 8: Site Generated Traffic Volumes B

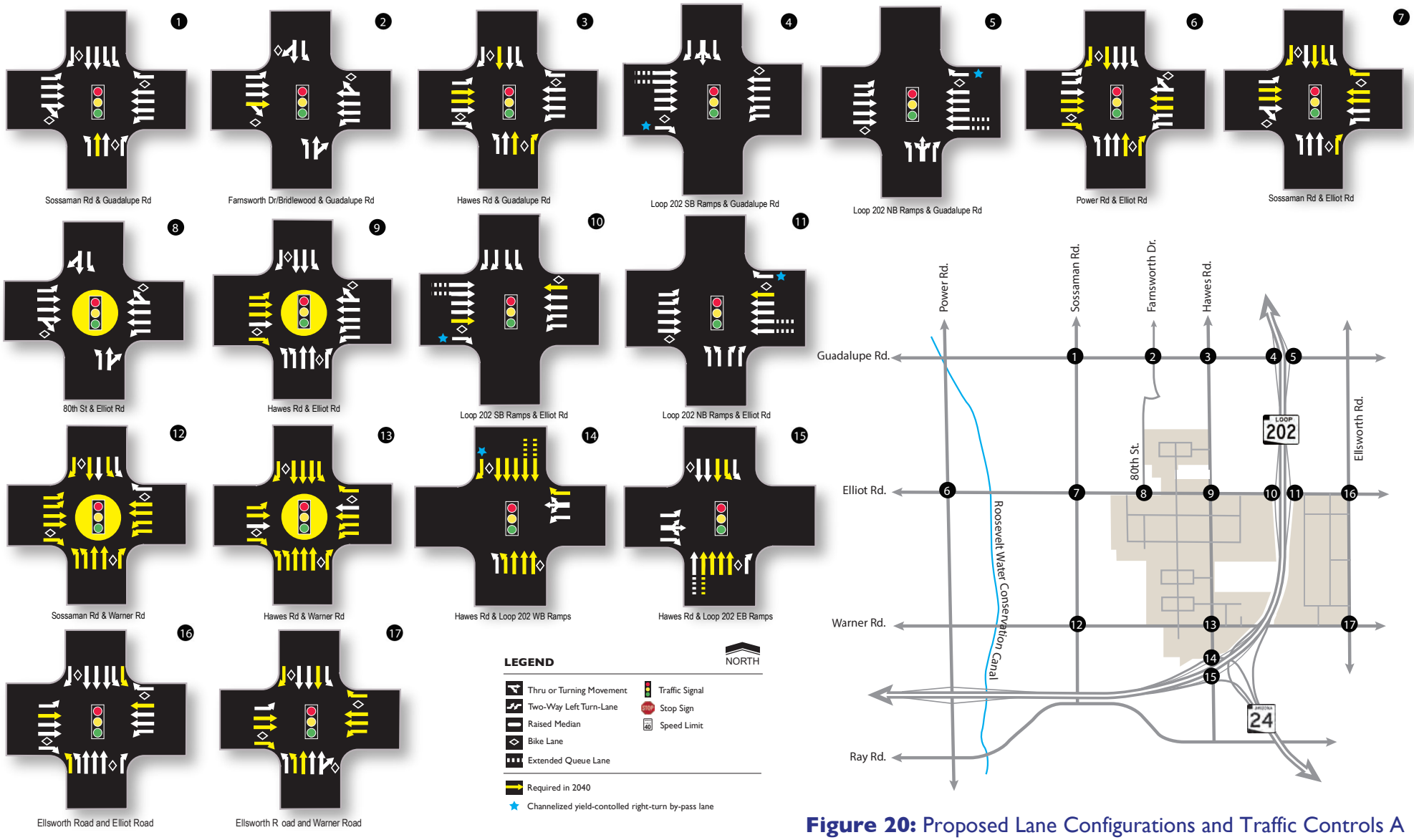


Figure 20: Proposed Lane Configurations and Traffic Controls A

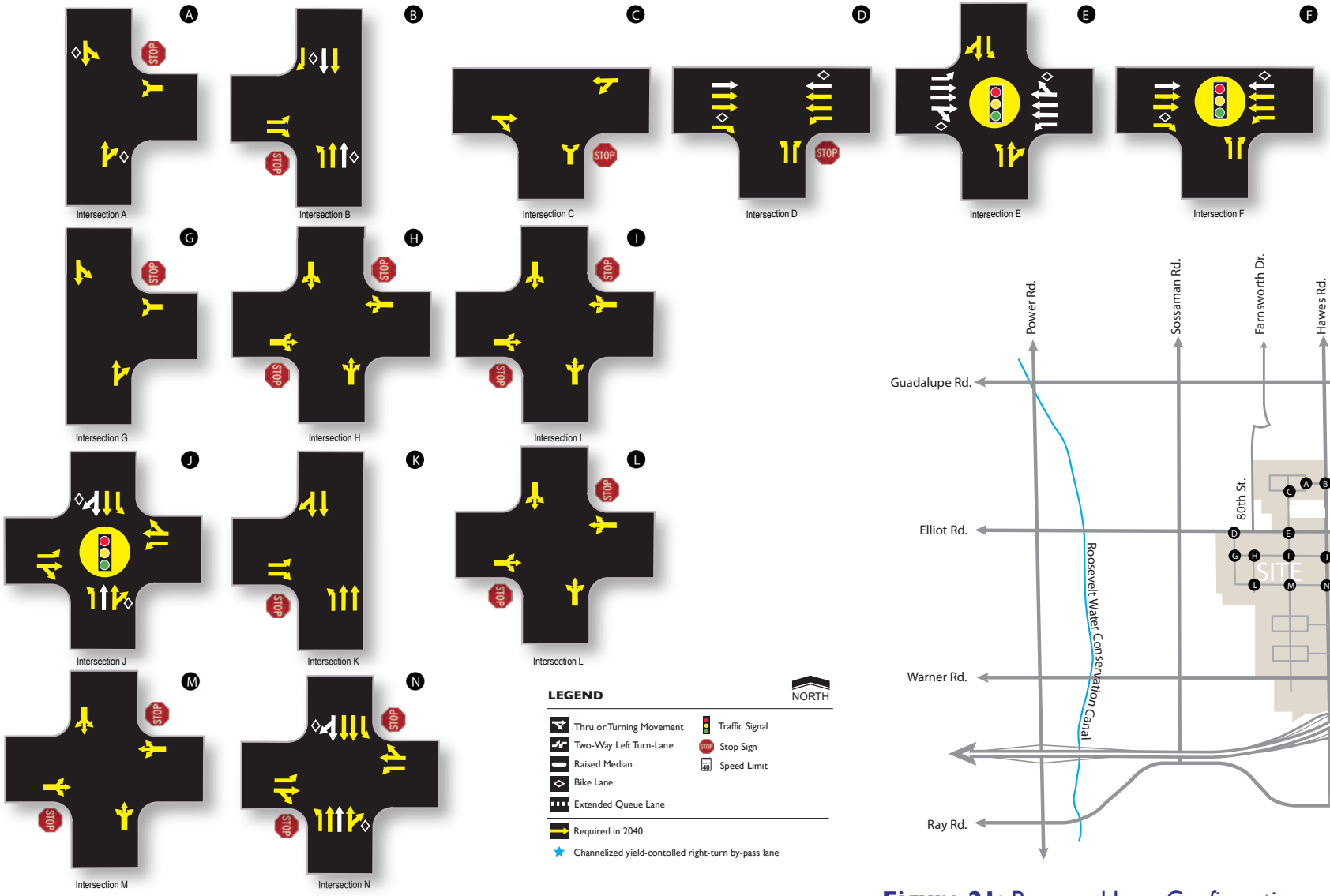
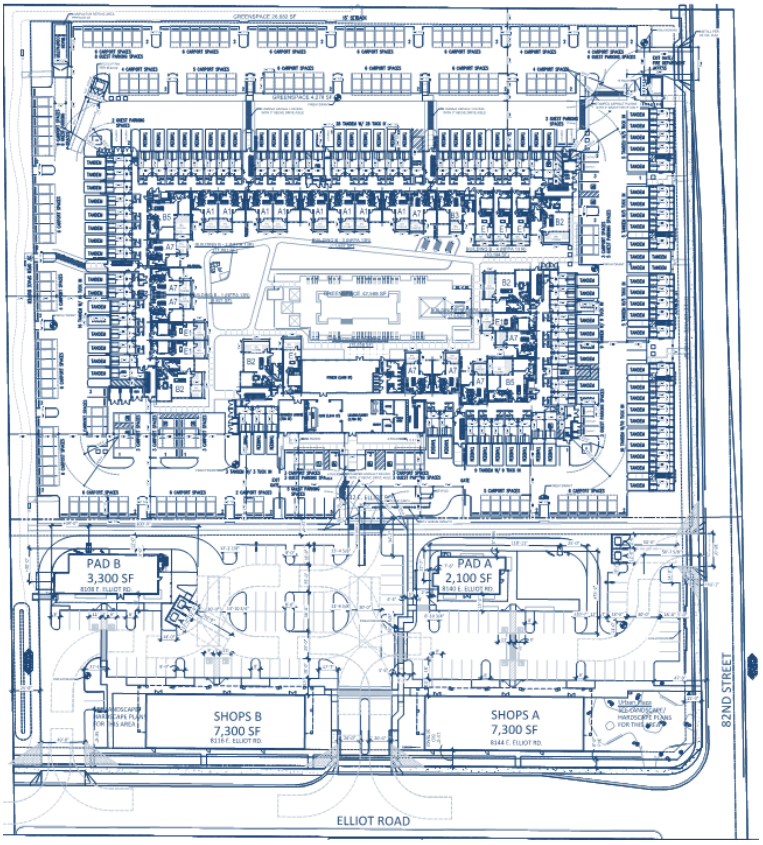


Figure 21: Proposed Lane Configurations and Traffic Controls B

Hawes Crossing

Traffic Impact Study – Category II



Registered Professional Engineer (Civil)
CERTIFICATE NO.
40961
JAMIE ANN K.
BLAKEMAN
Date Signed: 07/12/23
ARIZONA, U.S.A.

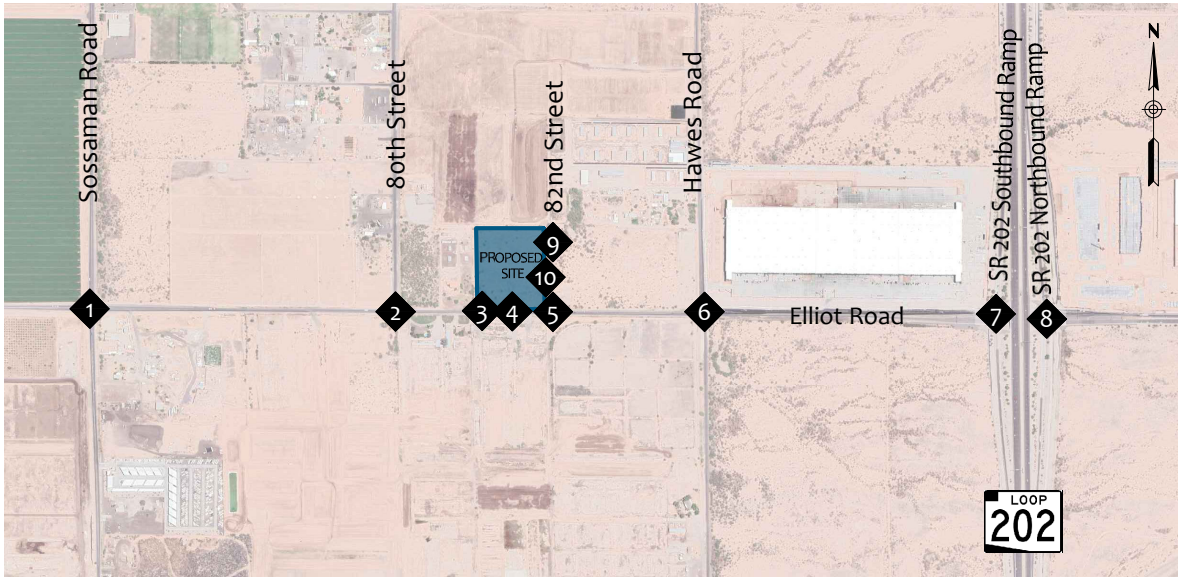
Prepared for:

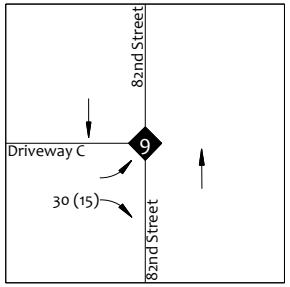
Fore Green Development
16427 N Scottsdale Road, Suite 250
Scottsdale, AZ 85254

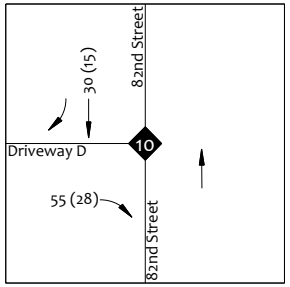
Prepared by:

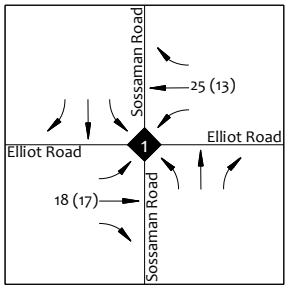
Lōkahi, LLC
10555 N. 114th Street
Suite 105
Scottsdale, AZ 85259

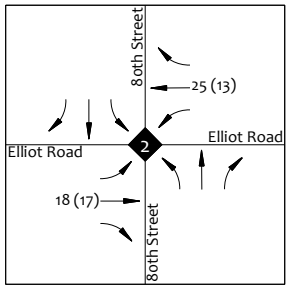
Project Number: 22.5438
July 12, 2023

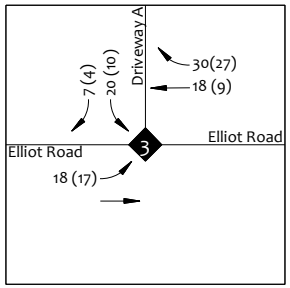


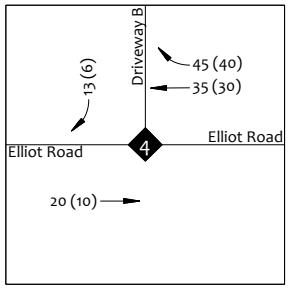


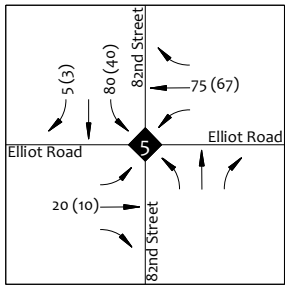


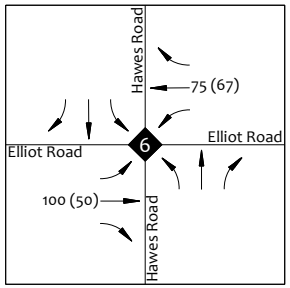








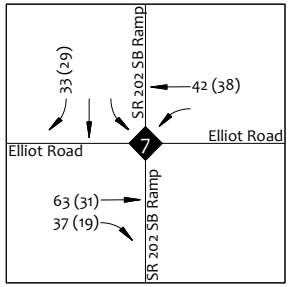




LEGEND

AM (PM) Peak Hour Traffic Volumes

Intersection



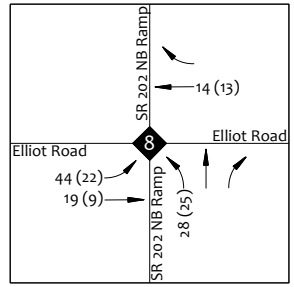


FIGURE 7 | SITE TRAFFIC VOLUMES

APPENDIX E: NCHRP REPORT 684 SPREAD SHEET ESTIMATOR

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Craftsman on Elliot	**Organization:**	Lee Eng
Project Location:	Mesa AZ	**Performed By:**	MAJ
Scenario Description:	Full site build-out	**Date:**	3/12/2024
Analysis Year:		**Checked By:**	MAJ
Analysis Period:	**AM Peak Hour**	**Date:**	3/12/2024

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office	712	15	1,000 SF GFA	26	21	5
Retail	822	16	1,000 SF GFA	40	24	16
Restaurant	932,934	9	1,000 SF GFA	170	89	81
Cinema/Entertainment				0		
Residential	221	386	DU	158	36	122
Hotel				0		
All Other Land Uses[2]				0		
				394	170	224

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00			1.00		
Retail	1.00			1.00		
Restaurant	1.00			1.00		
Cinema/Entertainment	1.00			1.00		
Residential	1.00			1.00		
Hotel	1.00			1.00		
All Other Land Uses[2]	1.00			1.00		

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	3	0	0	0
Retail	1		2	0	1	0
Restaurant	3	2		0	2	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	1	18	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	394	170	224
Internal Capture Percentage	18%	21%	16%
External Vehicle-Trips[5]	324	135	189
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	24%	80%
Retail	17%	25%
Restaurant	26%	9%
Cinema/Entertainment	N/A	N/A
Residential	8%	16%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Craftsman on Elliot	**Organization:**	Lee Eng
Project Location:	Mesa AZ	**Performed By:**	MAJ
Scenario Description:	Full site build-out	**Date:**	3/12/2024
Analysis Year:		**Checked By:**	MAJ
Analysis Period:	**PM Street Peak Hour**	**Date:**	3/12/2024

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office	712	15	1,000 SF GFA	32	11	21
Retail	822	16	1,000 SF GFA	110	55	55
Restaurant	932,934	9	1,000 SF GFA	137	76	61
Cinema/Entertainment				0		
Residential	221	386	DU	151	92	59
Hotel				0		
All Other Land Uses[2]				0		
				430	234	196

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00			1.00		
Retail	1.00			1.00		
Restaurant	1.00			1.00		
Cinema/Entertainment	1.00			1.00		
Residential	1.00			1.00		
Hotel	1.00			1.00		
All Other Land Uses[2]	1.00			1.00		

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		4	1	0	0	0
Retail	1		16	0	14	0
Restaurant	2	25		0	11	0
Cinema/Entertainment	0	0	0		0	0
Residential	2	6	11	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	430	234	196
Internal Capture Percentage	43%	40%	47%
External Vehicle-Trips[5]	244	141	103
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	45%	24%
Retail	64%	56%
Restaurant	37%	62%
Cinema/Entertainment	N/A	N/A
Residential	27%	32%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

APPENDIX F: SYNCHRO OUTPUT SHEETS

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	198	11	29	255	26	9	2	32	39	3	16
Future Vol, veh/h	12	198	11	29	255	26	9	2	32	39	3	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	300	-	-	-	-	-	240
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	215	12	32	277	28	10	2	35	42	3	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	227	0	0	612	616	221	607	594	277
Stage 1	-	-	-	-	-	-	247	247	-	341	341	-
Stage 2	-	-	-	-	-	-	365	369	-	266	253	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1256	-	-	1341	-	-	405	406	819	408	418	762
Stage 1	-	-	-	-	-	-	757	702	-	674	639	-
Stage 2	-	-	-	-	-	-	654	621	-	739	698	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1256	-	-	1341	-	-	381	389	819	377	401	762
Mov Cap-2 Maneuver	-	-	-	-	-	-	381	389	-	377	401	-
Stage 1	-	-	-	-	-	-	748	694	-	666	620	-
Stage 2	-	-	-	-	-	-	617	603	-	697	690	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.7	11.1	14.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	634	1256	-	-	1341	-	-	379	762
HCM Lane V/C Ratio	0.074	0.01	-	-	0.024	-	-	0.12	0.023
HCM Control Delay (s)	11.1	7.9	0	-	7.7	0	-	15.8	9.8
HCM Lane LOS	B	A	A	-	A	A	-	C	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.4	0.1

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↰	↱		↕			↰	↱
Traffic Vol, veh/h	38	279	0	2	224	134	0	2	10	135	1	31
Future Vol, veh/h	38	279	0	2	224	134	0	2	10	135	1	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	300	-	-	-	-	-	240
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	303	0	2	243	146	0	2	11	147	1	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	389	0	0	303	0	0	723	778	303	639	632	243
Stage 1	-	-	-	-	-	-	385	385	-	247	247	-
Stage 2	-	-	-	-	-	-	338	393	-	392	385	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1170	-	-	1258	-	-	342	328	737	389	398	796
Stage 1	-	-	-	-	-	-	638	611	-	757	702	-
Stage 2	-	-	-	-	-	-	676	606	-	633	611	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1170	-	-	1258	-	-	316	314	737	368	380	796
Mov Cap-2 Maneuver	-	-	-	-	-	-	316	314	-	368	380	-
Stage 1	-	-	-	-	-	-	611	585	-	725	701	-
Stage 2	-	-	-	-	-	-	645	605	-	595	585	-

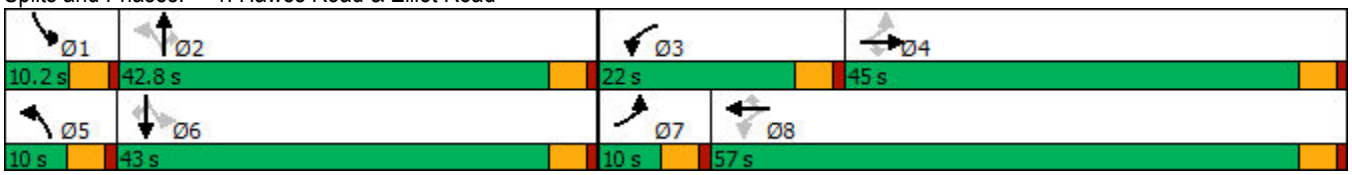
Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0	11.1	19.1
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	602	1170	-	-	1258	-	-	368	796
HCM Lane V/C Ratio	0.022	0.035	-	-	0.002	-	-	0.402	0.042
HCM Control Delay (s)	11.1	8.2	0	-	7.9	0	-	21.2	9.7
HCM Lane LOS	B	A	A	-	A	A	-	C	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	1.9	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	991	89	142	648	37	55	117	313	65	105	24
Future Volume (vph)	18	991	89	142	648	37	55	117	313	65	105	24
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.372			0.160			0.680			0.598		
Satd. Flow (perm)	693	5085	1583	298	5085	1583	2457	3539	1583	1114	3539	1583
Satd. Flow (RTOR)			136			95			321			136
Lane Group Flow (vph)	20	1077	97	154	704	40	60	127	340	71	114	26
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Total Split (s)	10.0	45.0	45.0	22.0	57.0	57.0	10.0	42.8	42.8	10.2	43.0	43.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Act Effct Green (s)	30.2	24.3	24.3	37.4	34.3	34.3	14.6	10.5	10.5	15.9	12.8	12.8
Actuated g/C Ratio	0.46	0.37	0.37	0.57	0.53	0.53	0.22	0.16	0.16	0.24	0.20	0.20
v/c Ratio	0.05	0.57	0.14	0.43	0.26	0.05	0.09	0.22	0.65	0.21	0.16	0.06
Control Delay	7.8	18.1	1.9	11.2	10.5	0.1	19.5	28.3	11.4	21.2	26.6	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.8	18.1	1.9	11.2	10.5	0.1	19.5	28.3	11.4	21.2	26.6	0.3
LOS	A	B	A	B	B	A	B	C	B	C	C	A
Approach Delay		16.6			10.1			16.4			21.6	
Approach LOS		B			B			B			C	
Queue Length 50th (ft)	3	117	0	25	44	0	8	23	7	20	21	0
Queue Length 95th (ft)	14	204	15	65	112	0	26	56	85	60	51	0
Internal Link Dist (ft)		1269			960			1298			1099	
Turn Bay Length (ft)	200		300	200		300	300		250	300		240
Base Capacity (vph)	416	3352	1089	590	4094	1293	637	2206	1107	331	2218	1043
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.32	0.09	0.26	0.17	0.03	0.09	0.06	0.31	0.21	0.05	0.02

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 65.3	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 14.9	Intersection LOS: B
Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Hawes Road & Elliot Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	630	20	109	586	88	35	5	265	277	3	59
Future Volume (vph)	29	630	20	109	586	88	35	5	265	277	3	59
Satd. Flow (prot)	1770	5060	0	1770	4984	0	1770	1589	0	1770	1596	0
Flt Permitted	0.362			0.233			0.713			0.244		
Satd. Flow (perm)	674	5060	0	434	4984	0	1328	1589	0	455	1596	0
Satd. Flow (RTOR)		4			24			288			64	
Lane Group Flow (vph)	32	707	0	118	733	0	38	293	0	301	67	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Total Split (s)	10.0	31.0		19.0	40.0		10.0	37.0		33.0	60.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	21.1	16.9		26.7	23.6		15.3	9.5		29.3	24.0	
Actuated g/C Ratio	0.32	0.26		0.41	0.36		0.23	0.14		0.45	0.37	
v/c Ratio	0.10	0.54		0.34	0.41		0.11	0.62		0.60	0.11	
Control Delay	13.5	24.0		15.3	17.1		15.5	11.1		19.6	6.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	13.5	24.0		15.3	17.1		15.5	11.1		19.6	6.7	
LOS	B	C		B	B		B	B		B	A	
Approach Delay		23.6			16.9			11.6			17.2	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)	7	88		26	63		9	2		80	1	
Queue Length 95th (ft)	26	161		71	147		29	73		173	28	
Internal Link Dist (ft)		885			1269			482			682	
Turn Bay Length (ft)	300			300			200			200		
Base Capacity (vph)	313	2167		496	2867		349	970		829	1346	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.10	0.33		0.24	0.26		0.11	0.30		0.36	0.05	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 65.7	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 18.3	Intersection LOS: B
Intersection Capacity Utilization 65.7%	ICU Level of Service C
Analysis Period (min) 15	

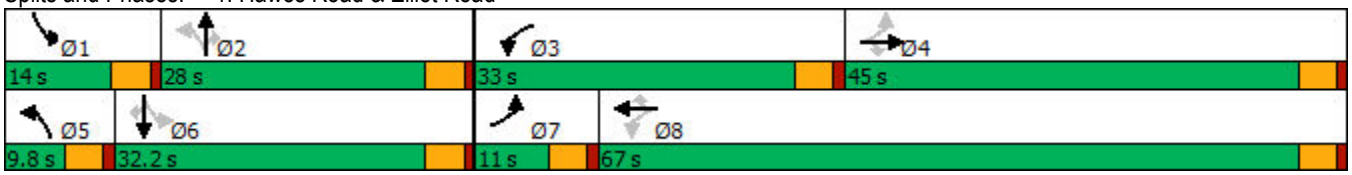
Splits and Phases: 2: 82nd Street & Elliot Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	1348	122	341	1498	173	172	254	318	165	251	47
Future Volume (vph)	55	1348	122	341	1498	173	172	254	318	165	251	47
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.135			0.091			0.584			0.353		
Satd. Flow (perm)	251	5085	1583	170	5085	1583	2110	3539	1583	658	3539	1583
Satd. Flow (RTOR)			136			188			346			136
Lane Group Flow (vph)	60	1465	133	371	1628	188	187	276	346	179	273	51
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Total Split (s)	11.0	45.0	45.0	33.0	67.0	67.0	9.8	28.0	28.0	14.0	32.2	32.2
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Act Effct Green (s)	44.7	38.4	38.4	64.8	56.4	56.4	20.1	14.7	14.7	28.3	18.8	18.8
Actuated g/C Ratio	0.44	0.37	0.37	0.63	0.55	0.55	0.20	0.14	0.14	0.28	0.18	0.18
v/c Ratio	0.30	0.77	0.20	0.83	0.58	0.20	0.39	0.55	0.66	0.63	0.42	0.13
Control Delay	15.6	32.8	5.1	42.8	17.1	2.5	33.3	46.4	11.3	42.7	40.4	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.6	32.8	5.1	42.8	17.1	2.5	33.3	46.4	11.3	42.7	40.4	0.7
LOS	B	C	A	D	B	A	C	D	B	D	D	A
Approach Delay		29.9			20.2			28.4			37.2	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	14	308	0	182	258	0	50	92	0	98	87	0
Queue Length 95th (ft)	33	433	40	318	344	34	84	142	84	170	135	0
Internal Link Dist (ft)		1269			960			1298			1099	
Turn Bay Length (ft)	200		300	200		300	300		250	300		240
Base Capacity (vph)	207	2043	717	559	3153	1053	482	825	634	287	972	533
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.72	0.19	0.66	0.52	0.18	0.39	0.33	0.55	0.62	0.28	0.10

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 102.7	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 26.3	Intersection LOS: C
Intersection Capacity Utilization 76.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Hawes Road & Elliot Road

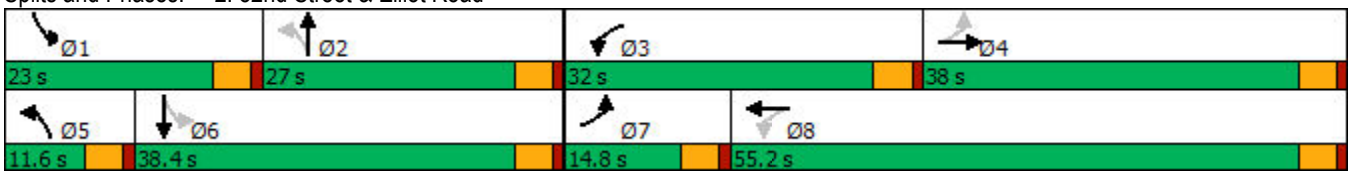


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1071	64	335	1132	269	100	17	229	246	11	79
Future Volume (vph)	90	1071	64	335	1132	269	100	17	229	246	11	79
Satd. Flow (prot)	1770	5040	0	1770	4938	0	1770	1602	0	1770	1617	0
Flt Permitted	0.137			0.109			0.694			0.274		
Satd. Flow (perm)	255	5040	0	203	4938	0	1293	1602	0	510	1617	0
Satd. Flow (RTOR)		8			57			249			86	
Lane Group Flow (vph)	98	1234	0	364	1522	0	109	267	0	267	98	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Total Split (s)	14.8	38.0		32.0	55.2		11.6	27.0		23.0	38.4	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	39.1	31.0		56.0	46.1		17.3	10.1		31.0	19.2	
Actuated g/C Ratio	0.41	0.32		0.58	0.48		0.18	0.10		0.32	0.20	
v/c Ratio	0.43	0.76		0.81	0.64		0.41	0.68		0.71	0.25	
Control Delay	20.2	33.8		38.2	20.6		32.3	17.2		38.7	11.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.2	33.8		38.2	20.6		32.3	17.2		38.7	11.5	
LOS	C	C		D	C		C	B		D	B	
Approach Delay		32.8			24.0			21.6			31.4	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	24	246		161	247		50	11		136	6	
Queue Length 95th (ft)	62	365		300	361		98	92		227	50	
Internal Link Dist (ft)		885			1269			482			682	
Turn Bay Length (ft)	300			300			200			200		
Base Capacity (vph)	276	1805		577	2695		269	573		412	639	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.36	0.68		0.63	0.56		0.41	0.47		0.65	0.15	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 96.2
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 27.4 Intersection LOS: C
Intersection Capacity Utilization 84.4% ICU Level of Service E
Analysis Period (min) 15

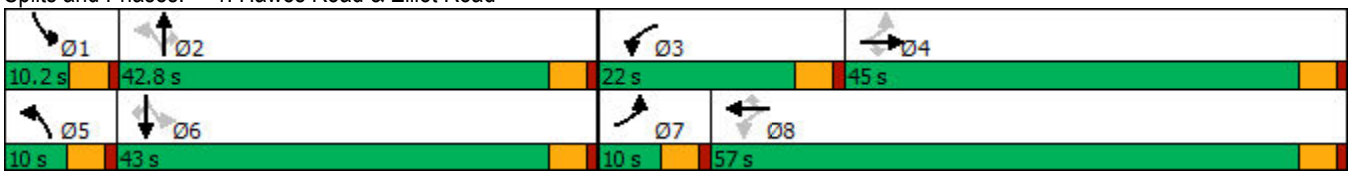
Splits and Phases: 2: 82nd Street & Elliot Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	1013	90	145	676	39	56	117	316	69	105	26
Future Volume (vph)	19	1013	90	145	676	39	56	117	316	69	105	26
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.361			0.157			0.680			0.665		
Satd. Flow (perm)	672	5085	1583	292	5085	1583	2457	3539	1583	1239	3539	1583
Satd. Flow (RTOR)			136			95			320			136
Lane Group Flow (vph)	21	1101	98	158	735	42	61	127	343	75	114	28
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Total Split (s)	10.0	45.0	45.0	22.0	57.0	57.0	10.0	42.8	42.8	10.2	43.0	43.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Act Effct Green (s)	31.4	25.5	25.5	38.9	35.8	35.8	15.0	10.9	10.9	15.3	11.0	11.0
Actuated g/C Ratio	0.47	0.38	0.38	0.58	0.53	0.53	0.22	0.16	0.16	0.23	0.16	0.16
v/c Ratio	0.05	0.57	0.14	0.44	0.27	0.05	0.10	0.22	0.65	0.23	0.20	0.08
Control Delay	7.9	18.3	1.9	11.4	10.5	0.1	20.2	28.9	11.8	22.1	28.6	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.9	18.3	1.9	11.4	10.5	0.1	20.2	28.9	11.8	22.1	28.6	0.4
LOS	A	B	A	B	B	A	C	C	B	C	C	A
Approach Delay		16.8			10.2			16.9			22.7	
Approach LOS		B			B			B			C	
Queue Length 50th (ft)	3	124	0	27	48	0	8	24	8	22	21	0
Queue Length 95th (ft)	14	214	15	67	117	1	27	58	90	66	53	0
Internal Link Dist (ft)		1269			960			1298			1099	
Turn Bay Length (ft)	200		300	200		300	300		250	300		240
Base Capacity (vph)	409	3265	1065	579	4019	1271	633	2149	1087	330	2160	1019
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.34	0.09	0.27	0.18	0.03	0.10	0.06	0.32	0.23	0.05	0.03

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 67.2	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 15.1	Intersection LOS: B
Intersection Capacity Utilization 54.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Hawes Road & Elliot Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	655	20	109	616	88	35	5	265	277	3	59
Future Volume (vph)	29	655	20	109	616	88	35	5	265	277	3	59
Satd. Flow (prot)	1770	5065	0	1770	4989	0	1770	1589	0	1770	1596	0
Flt Permitted	0.349			0.235			0.713			0.320		
Satd. Flow (perm)	650	5065	0	438	4989	0	1328	1589	0	596	1596	0
Satd. Flow (RTOR)		3			22			288			64	
Lane Group Flow (vph)	32	734	0	118	766	0	38	293	0	301	67	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Total Split (s)	10.0	32.0		19.0	41.0		23.0	39.0		30.0	46.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		3.0	4.5	
Act Effct Green (s)	21.4	17.3		26.9	23.8		16.3	9.5		29.0	15.9	
Actuated g/C Ratio	0.33	0.27		0.42	0.37		0.25	0.15		0.45	0.25	
v/c Ratio	0.10	0.54		0.33	0.41		0.10	0.61		0.56	0.15	
Control Delay	12.7	23.0		14.4	16.5		15.0	10.8		17.8	7.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	12.7	23.0		14.4	16.5		15.0	10.8		17.8	7.8	
LOS	B	C		B	B		B	B		B	A	
Approach Delay		22.6			16.2			11.3			16.0	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)	6	88		25	63		9	2		76	1	
Queue Length 95th (ft)	25	162		68	150		30	72		168	30	
Internal Link Dist (ft)		885			1269			482			682	
Turn Bay Length (ft)	300			300			200			200		
Base Capacity (vph)	318	2308		510	3024		680	1031		814	1115	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.10	0.32		0.23	0.25		0.06	0.28		0.37	0.06	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 64.2	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 17.6	Intersection LOS: B
Intersection Capacity Utilization 65.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: 82nd Street & Elliot Road

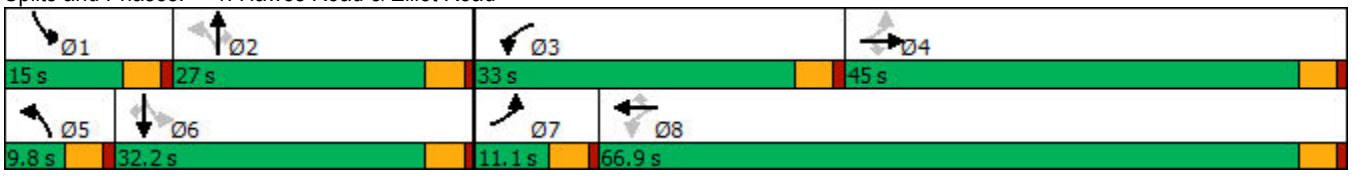


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	1378	122	341	1523	188	172	254	319	180	251	50
Future Volume (vph)	59	1378	122	341	1523	188	172	254	319	180	251	50
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.127			0.090			0.584			0.342		
Satd. Flow (perm)	237	5085	1583	168	5085	1583	2110	3539	1583	637	3539	1583
Satd. Flow (RTOR)			177			204			347			136
Lane Group Flow (vph)	64	1498	133	371	1655	204	187	276	347	196	273	54
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Total Split (s)	11.1	45.0	45.0	33.0	66.9	66.9	9.8	27.0	27.0	15.0	32.2	32.2
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Act Effct Green (s)	45.3	38.9	38.9	65.5	57.1	57.1	20.2	14.8	14.8	29.7	19.8	19.8
Actuated g/C Ratio	0.43	0.37	0.37	0.63	0.55	0.55	0.19	0.14	0.14	0.28	0.19	0.19
v/c Ratio	0.32	0.79	0.19	0.84	0.60	0.21	0.39	0.55	0.66	0.67	0.41	0.13
Control Delay	16.9	34.0	2.1	44.3	17.8	2.5	33.5	47.3	11.4	44.2	40.1	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.9	34.0	2.1	44.3	17.8	2.5	33.5	47.3	11.4	44.2	40.1	0.7
LOS	B	C	A	D	B	A	C	D	B	D	D	A
Approach Delay		30.9			20.8			28.7			37.6	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	15	325	0	186	272	0	50	94	0	109	87	0
Queue Length 95th (ft)	36	452	19	#325	361	36	83	144	85	185	134	0
Internal Link Dist (ft)		1269			960			1298			1099	
Turn Bay Length (ft)	200		300	200		300	300		250	300		240
Base Capacity (vph)	202	2010	732	550	3094	1043	476	776	618	297	955	526
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.75	0.18	0.67	0.53	0.20	0.39	0.36	0.56	0.66	0.29	0.10

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 104.4
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 27.0 Intersection LOS: C
Intersection Capacity Utilization 77.5% ICU Level of Service D
Analysis Period (min) 15
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Hawes Road & Elliot Road

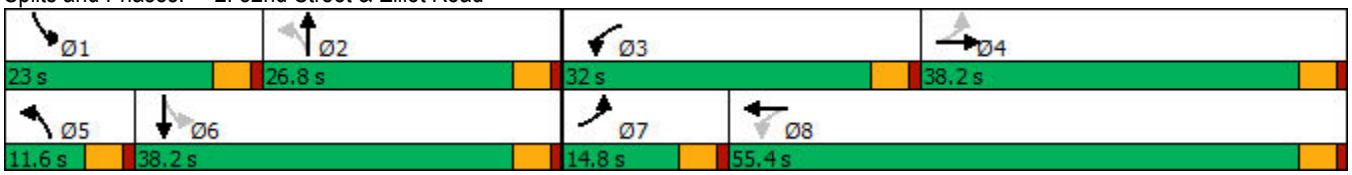


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1106	64	335	1160	269	100	17	229	246	11	79
Future Volume (vph)	90	1106	64	335	1160	269	100	17	229	246	11	79
Satd. Flow (prot)	1770	5045	0	1770	4943	0	1770	1602	0	1770	1617	0
Flt Permitted	0.129			0.107			0.694			0.274		
Satd. Flow (perm)	240	5045	0	199	4943	0	1293	1602	0	510	1617	0
Satd. Flow (RTOR)		7			55			249			86	
Lane Group Flow (vph)	98	1272	0	364	1553	0	109	267	0	267	98	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Total Split (s)	14.8	38.2		32.0	55.4		11.6	26.8		23.0	38.2	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	39.8	31.7		56.7	46.8		17.2	10.1		31.1	19.3	
Actuated g/C Ratio	0.41	0.33		0.58	0.48		0.18	0.10		0.32	0.20	
v/c Ratio	0.44	0.77		0.82	0.64		0.41	0.69		0.71	0.25	
Control Delay	21.3	34.2		39.0	20.8		32.6	17.3		39.1	11.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.3	34.2		39.0	20.8		32.6	17.3		39.1	11.6	
LOS	C	C		D	C		C	B		D	B	
Approach Delay		33.3			24.3			21.7			31.7	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	25	257		163	257		51	11		137	6	
Queue Length 95th (ft)	64	380		302	371		99	92		228	49	
Internal Link Dist (ft)		885			1269			482			682	
Turn Bay Length (ft)	300			300			200			200		
Base Capacity (vph)	270	1796		571	2677		266	566		408	629	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.36	0.71		0.64	0.58		0.41	0.47		0.65	0.16	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 97
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 27.8 Intersection LOS: C
Intersection Capacity Utilization 85.0% ICU Level of Service E
Analysis Period (min) 15

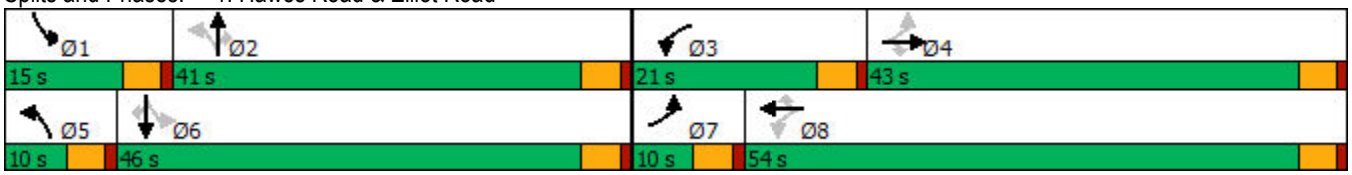
Splits and Phases: 2: 82nd Street & Elliot Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	1000	89	142	705	54	60	122	313	161	121	32
Future Volume (vph)	18	1000	89	142	705	54	60	122	313	161	121	32
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.349			0.147			0.668			0.493		
Satd. Flow (perm)	650	5085	1583	274	5085	1583	2414	3539	1583	918	3539	1583
Satd. Flow (RTOR)			177			136			288			136
Lane Group Flow (vph)	20	1087	97	154	766	59	65	133	340	175	132	35
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Total Split (s)	10.0	43.0	43.0	21.0	54.0	54.0	10.0	41.0	41.0	15.0	46.0	46.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Act Effct Green (s)	32.1	26.4	26.4	40.2	36.9	36.9	17.2	11.5	11.5	26.1	18.4	18.4
Actuated g/C Ratio	0.42	0.35	0.35	0.53	0.49	0.49	0.23	0.15	0.15	0.34	0.24	0.24
v/c Ratio	0.06	0.61	0.15	0.47	0.31	0.07	0.10	0.25	0.70	0.41	0.15	0.07
Control Delay	10.1	22.4	0.5	14.5	13.3	0.2	19.7	31.5	15.8	23.0	26.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.1	22.4	0.5	14.5	13.3	0.2	19.7	31.5	15.8	23.0	26.5	0.3
LOS	B	C	A	B	B	A	B	C	B	C	C	A
Approach Delay		20.4			12.7			20.2			22.0	
Approach LOS		C			B			C			C	
Queue Length 50th (ft)	4	142	0	32	63	0	9	28	21	57	26	0
Queue Length 95th (ft)	16	243	0	78	142	0	28	64	116	134	60	0
Internal Link Dist (ft)		620			960			1298			150	
Turn Bay Length (ft)	200		300	200		300	300		250	300		240
Base Capacity (vph)	360	2684	919	483	3450	1117	624	1771	935	439	2013	959
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.40	0.11	0.32	0.22	0.05	0.10	0.08	0.36	0.40	0.07	0.04

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 75.7	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 18.1	Intersection LOS: B
Intersection Capacity Utilization 58.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Hawes Road & Elliot Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	635	20	112	598	88	35	10	265	301	7	62
Future Volume (vph)	34	635	20	112	598	88	35	10	265	301	7	62
Satd. Flow (prot)	1770	5060	0	1770	4989	0	1770	1595	0	1770	1613	0
Flt Permitted	0.336			0.238			0.708			0.242		
Satd. Flow (perm)	626	5060	0	443	4989	0	1319	1595	0	451	1613	0
Satd. Flow (RTOR)		4			23			288			67	
Lane Group Flow (vph)	37	712	0	122	746	0	38	299	0	327	75	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Total Split (s)	11.0	30.0		19.0	38.0		10.0	37.0		34.0	61.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	22.2	17.5		26.8	21.8		15.5	9.7		30.5	25.2	
Actuated g/C Ratio	0.33	0.26		0.40	0.32		0.23	0.14		0.45	0.37	
v/c Ratio	0.12	0.54		0.35	0.46		0.11	0.63		0.63	0.12	
Control Delay	14.1	24.8		16.1	20.0		15.9	11.9		20.7	7.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.1	24.8		16.1	20.0		15.9	11.9		20.7	7.2	
LOS	B	C		B	C		B	B		C	A	
Approach Delay		24.2			19.5			12.3			18.2	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)	8	91		28	90		9	4		89	2	
Queue Length 95th (ft)	30	168		76	158		30	80		195	32	
Internal Link Dist (ft)		744			569			482			141	
Turn Bay Length (ft)	300			300			200			200		
Base Capacity (vph)	323	2028		488	2635		341	954		835	1347	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.11	0.35		0.25	0.28		0.11	0.31		0.39	0.06	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 67.7	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 19.8	Intersection LOS: B
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: 82nd Street & Elliot Road



Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	0	40	0	0	0	23	172	0	0	199	5
Future Vol, veh/h	16	0	40	0	0	0	23	172	0	0	199	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	0	43	0	0	0	25	187	0	0	216	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	363	456	111	345	458	94	221	0	0	-	-	0
Stage 1	219	219	-	237	237	-	-	-	-	-	-	-
Stage 2	144	237	-	108	221	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	568	499	921	585	498	944	1345	-	-	0	-	-
Stage 1	763	721	-	745	708	-	-	-	-	0	-	-
Stage 2	844	708	-	886	719	-	-	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	559	489	921	549	488	944	1345	-	-	-	-	-
Mov Cap-2 Maneuver	611	545	-	600	539	-	-	-	-	-	-	-
Stage 1	747	721	-	729	693	-	-	-	-	-	-	-
Stage 2	826	693	-	844	719	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	0	1	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1345	-	-	804	-	-	-
HCM Lane V/C Ratio	0.019	-	-	0.076	-	-	-
HCM Control Delay (s)	7.7	0.1	-	9.8	0	-	-
HCM Lane LOS	A	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	79	0	0	0	0	195	0	0	234	5
Future Vol, veh/h	0	0	79	0	0	0	0	195	0	0	234	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	75	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	86	0	0	0	0	212	0	0	254	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	127	-	-	106	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	900	0	0	928	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	900	-	-	928	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	900	-	-	-
HCM Lane V/C Ratio	-	-	0.095	-	-	-
HCM Control Delay (s)	-	-	9.4	0	-	-
HCM Lane LOS	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	0.3	-	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	1181	720	79	0	23
Future Vol, veh/h	21	1181	720	79	0	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	200	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	1284	783	86	0	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	869	0	-	0	-	392
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	-	-	3.92
Pot Cap-1 Maneuver	453	-	-	-	0	519
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	453	-	-	-	-	519
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	453	-	-	-	519
HCM Lane V/C Ratio	0.05	-	-	-	0.048
HCM Control Delay (s)	13.4	-	-	-	12.3
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	0	122	6	0	339
Future Vol, veh/h	9	0	122	6	0	339
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	0	133	7	0	368

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	505	137	0	0	140	0
Stage 1	137	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	527	911	-	-	1443	-
Stage 1	890	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	527	911	-	-	1443	-
Mov Cap-2 Maneuver	527	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	700	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	527	1443	-
HCM Lane V/C Ratio	-	-	0.019	-	-
HCM Control Delay (s)	-	-	12	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	0	128	6	0	347
Future Vol, veh/h	25	0	128	6	0	347
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	0	139	7	0	377

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	520	143	0	0	146	0
Stage 1	143	-	-	-	-	-
Stage 2	377	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	516	905	-	-	1436	-
Stage 1	884	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	516	905	-	-	1436	-
Mov Cap-2 Maneuver	516	-	-	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	694	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

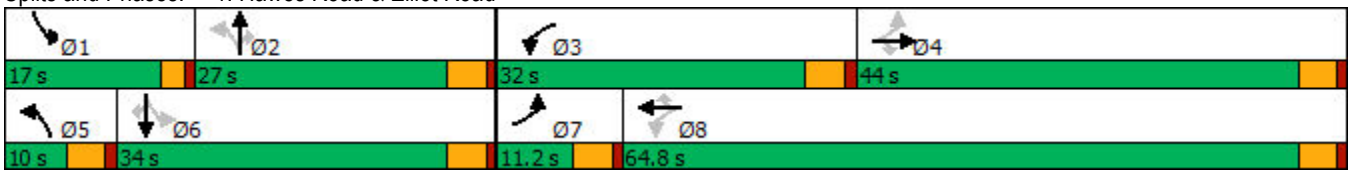
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	516	1436	-
HCM Lane V/C Ratio	-	-	0.053	-	-
HCM Control Delay (s)	-	-	12.4	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	1343	122	341	1574	195	179	261	318	248	263	53
Future Volume (vph)	55	1343	122	341	1574	195	179	261	318	248	263	53
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.112			0.092			0.576			0.362		
Satd. Flow (perm)	209	5085	1583	171	5085	1583	2082	3539	1583	674	3539	1583
Satd. Flow (RTOR)			164			212			346			136
Lane Group Flow (vph)	60	1460	133	371	1711	212	195	284	346	270	286	58
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Total Split (s)	11.2	44.0	44.0	32.0	64.8	64.8	10.0	27.0	27.0	17.0	34.0	34.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.0	4.5	4.5
Act Effct Green (s)	44.5	38.1	38.1	64.7	56.3	56.3	20.8	15.2	15.2	33.4	21.7	21.7
Actuated g/C Ratio	0.42	0.36	0.36	0.61	0.53	0.53	0.20	0.14	0.14	0.32	0.21	0.21
v/c Ratio	0.33	0.80	0.20	0.85	0.63	0.23	0.41	0.56	0.66	0.76	0.39	0.13
Control Delay	18.2	35.6	2.9	45.8	19.7	2.7	32.7	47.7	11.3	46.3	38.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.2	35.6	2.9	45.8	19.7	2.7	32.7	47.7	11.3	46.3	38.8	0.6
LOS	B	D	A	D	B	A	C	D	B	D	D	A
Approach Delay		32.3			22.4			28.9			38.5	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	15	333	0	192	304	0	53	100	0	155	92	0
Queue Length 95th (ft)	36	445	26	#354	397	38	84	147	85	#264	137	0
Internal Link Dist (ft)		620			960			1298			150	
Turn Bay Length (ft)	200		300	200		300	300		250	300		240
Base Capacity (vph)	189	1932	703	527	2947	1006	480	765	613	360	1003	546
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.76	0.19	0.70	0.58	0.21	0.41	0.37	0.56	0.75	0.29	0.11

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 105.8	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 28.3	Intersection LOS: C
Intersection Capacity Utilization 80.4%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Hawes Road & Elliot Road

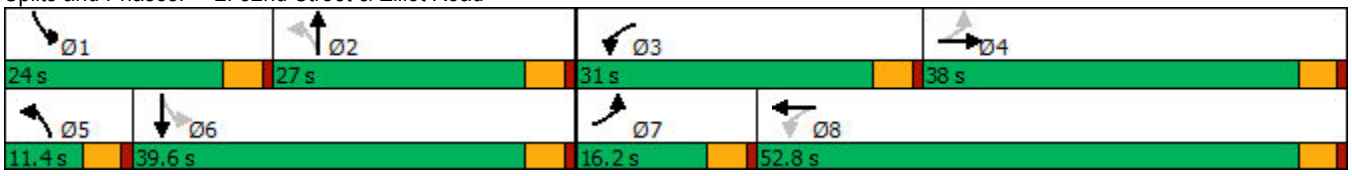


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	1078	64	337	1141	269	100	24	229	264	14	81
Future Volume (vph)	97	1078	64	337	1141	269	100	24	229	264	14	81
Satd. Flow (prot)	1770	5045	0	1770	4938	0	1770	1609	0	1770	1624	0
Flt Permitted	0.128			0.112			0.690			0.270		
Satd. Flow (perm)	238	5045	0	209	4938	0	1285	1609	0	503	1624	0
Satd. Flow (RTOR)		8			55			249			88	
Lane Group Flow (vph)	105	1242	0	366	1532	0	109	275	0	287	103	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Total Split (s)	16.2	38.0		31.0	52.8		11.4	27.0		24.0	39.6	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	39.8	31.3		56.6	43.5		17.3	10.3		32.3	20.7	
Actuated g/C Ratio	0.41	0.32		0.58	0.44		0.18	0.10		0.33	0.21	
v/c Ratio	0.46	0.77		0.82	0.69		0.42	0.70		0.74	0.25	
Control Delay	22.3	35.0		38.9	23.4		32.5	18.6		39.9	11.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	22.3	35.0		38.9	23.4		32.5	18.6		39.9	11.5	
LOS	C	D		D	C		C	B		D	B	
Approach Delay		34.0			26.4			22.6			32.4	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	27	256		164	258		51	16		150	8	
Queue Length 95th (ft)	71	371		#327	385		97	100		#245	52	
Internal Link Dist (ft)		744			569			482			141	
Turn Bay Length (ft)	300			300			200			200		
Base Capacity (vph)	291	1767		551	2536		262	568		423	650	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.36	0.70		0.66	0.60		0.42	0.48		0.68	0.16	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 98.1
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 29.2 Intersection LOS: C
Intersection Capacity Utilization 86.0% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: 82nd Street & Elliot Road



Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	0	30	0	0	0	30	482	0	0	470	7
Future Vol, veh/h	12	0	30	0	0	0	30	482	0	0	470	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	0	33	0	0	0	33	524	0	0	511	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	843	1105	260	846	1109	262	519	0	0	-	-	0
Stage 1	515	515	-	590	590	-	-	-	-	-	-	-
Stage 2	328	590	-	256	519	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	257	209	739	256	208	737	1043	-	-	0	-	-
Stage 1	511	533	-	461	493	-	-	-	-	0	-	-
Stage 2	659	493	-	726	531	-	-	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	248	200	739	236	199	737	1043	-	-	-	-	-
Mov Cap-2 Maneuver	361	319	-	341	312	-	-	-	-	-	-	-
Stage 1	488	533	-	440	471	-	-	-	-	-	-	-
Stage 2	629	471	-	694	531	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.9	0	0.7	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1043	-	-	569	-	-	-
HCM Lane V/C Ratio	0.031	-	-	0.08	-	-	-
HCM Control Delay (s)	8.6	0.2	-	11.9	0	-	-
HCM Lane LOS	A	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	-	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	71	0	0	0	0	512	0	0	493	7
Future Vol, veh/h	0	0	71	0	0	0	0	512	0	0	493	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	75	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	77	0	0	0	0	557	0	0	536	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	268	-	-	279	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	730	0	0	718	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	730	-	-	718	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.5	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	730	-	-	-
HCM Lane V/C Ratio	-	-	0.106	-	-	-
HCM Control Delay (s)	-	-	10.5	0	-	-
HCM Lane LOS	-	-	B	A	-	-
HCM 95th %tile Q(veh)	-	-	0.4	-	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	1541	1700	108	0	29
Future Vol, veh/h	31	1541	1700	108	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	200	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	1675	1848	117	0	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1965	0	-	0	-	924
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	-	-	3.92
Pot Cap-1 Maneuver	130	-	-	-	0	233
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	130	-	-	-	-	233
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	22.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	130	-	-	-	233
HCM Lane V/C Ratio	0.259	-	-	-	0.135
HCM Control Delay (s)	42.1	-	-	-	22.9
HCM Lane LOS	E	-	-	-	C
HCM 95th %tile Q(veh)	1	-	-	-	0.5

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	0	376	8	0	336
Future Vol, veh/h	7	0	376	8	0	336
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	0	409	9	0	365

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	779	414	0	0	418	0
Stage 1	414	-	-	-	-	-
Stage 2	365	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	364	638	-	-	1141	-
Stage 1	667	-	-	-	-	-
Stage 2	702	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	364	638	-	-	1141	-
Mov Cap-2 Maneuver	364	-	-	-	-	-
Stage 1	667	-	-	-	-	-
Stage 2	702	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	364	1141	-
HCM Lane V/C Ratio	-	-	0.021	-	-
HCM Control Delay (s)	-	-	15.1	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	0	384	8	0	342
Future Vol, veh/h	18	0	384	8	0	342
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	0	417	9	0	372

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	794	422	0	0	426	0
Stage 1	422	-	-	-	-	-
Stage 2	372	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	357	632	-	-	1133	-
Stage 1	662	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	357	632	-	-	1133	-
Mov Cap-2 Maneuver	357	-	-	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	697	-	-	-	-	-

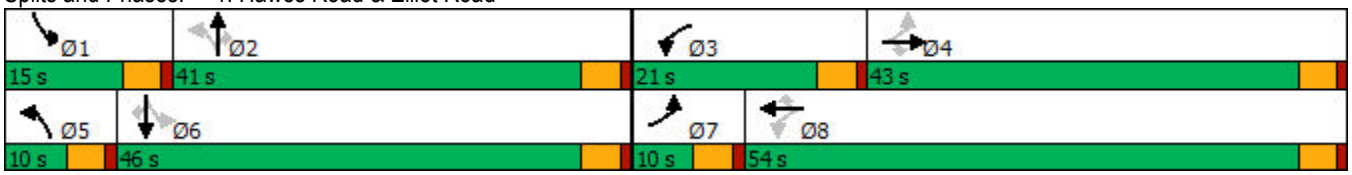
Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	357	1133	-
HCM Lane V/C Ratio	-	-	0.055	-	-
HCM Control Delay (s)	-	-	15.7	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	1022	90	145	733	56	61	122	316	165	121	34
Future Volume (vph)	19	1022	90	145	733	56	61	122	316	165	121	34
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.338			0.141			0.668			0.494		
Satd. Flow (perm)	630	5085	1583	263	5085	1583	2414	3539	1583	920	3539	1583
Satd. Flow (RTOR)			177			136			287			136
Lane Group Flow (vph)	21	1111	98	158	797	61	66	133	343	179	132	37
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Total Split (s)	10.0	43.0	43.0	21.0	54.0	54.0	10.0	41.0	41.0	15.0	46.0	46.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Act Effct Green (s)	33.0	27.3	27.3	41.3	38.0	38.0	17.4	11.7	11.7	26.4	18.7	18.7
Actuated g/C Ratio	0.43	0.35	0.35	0.54	0.49	0.49	0.23	0.15	0.15	0.34	0.24	0.24
v/c Ratio	0.06	0.62	0.15	0.49	0.32	0.07	0.11	0.25	0.71	0.42	0.15	0.08
Control Delay	10.3	22.6	0.5	14.9	13.4	0.2	20.1	31.9	16.4	23.7	26.9	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.3	22.6	0.5	14.9	13.4	0.2	20.1	31.9	16.4	23.7	26.9	0.3
LOS	B	C	A	B	B	A	C	C	B	C	C	A
Approach Delay		20.7			12.8			20.6			22.4	
Approach LOS		C			B			C			C	
Queue Length 50th (ft)	4	147	0	33	66	0	10	29	23	59	26	0
Queue Length 95th (ft)	17	255	0	81	149	0	29	64	121	138	60	0
Internal Link Dist (ft)		620			960			1298			150	
Turn Bay Length (ft)	200		300	200		300	300		250	300		240
Base Capacity (vph)	353	2635	905	475	3389	1100	619	1739	923	435	1977	944
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.42	0.11	0.33	0.24	0.06	0.11	0.08	0.37	0.41	0.07	0.04

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 77.1	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 18.3	Intersection LOS: B
Intersection Capacity Utilization 59.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Hawes Road & Elliot Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	660	20	112	628	88	35	10	265	301	7	62
Future Volume (vph)	34	660	20	112	628	88	35	10	265	301	7	62
Satd. Flow (prot)	1770	5065	0	1770	4994	0	1770	1595	0	1770	1613	0
Flt Permitted	0.345			0.223			0.708			0.284		
Satd. Flow (perm)	643	5065	0	415	4994	0	1319	1595	0	529	1613	0
Satd. Flow (RTOR)		3			21			288			67	
Lane Group Flow (vph)	37	739	0	122	779	0	38	299	0	327	75	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Total Split (s)	11.0	31.0		19.0	39.0		23.0	36.0		34.0	47.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	24.1	17.7		30.1	25.0		16.2	9.5		30.3	19.0	
Actuated g/C Ratio	0.34	0.25		0.43	0.35		0.23	0.13		0.43	0.27	
v/c Ratio	0.12	0.58		0.36	0.44		0.11	0.64		0.64	0.16	
Control Delay	14.1	25.8		16.2	19.7		15.7	12.4		21.3	8.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.1	25.8		16.2	19.7		15.7	12.4		21.3	8.0	
LOS	B	C		B	B		B	B		C	A	
Approach Delay		25.3			19.2			12.7			18.8	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)	8	96		29	95		9	4		91	2	
Queue Length 95th (ft)	30	176		76	167		30	81		196	34	
Internal Link Dist (ft)		744			569			482			141	
Turn Bay Length (ft)	300			300			200			200		
Base Capacity (vph)	329	1969		469	2535		637	891		784	1030	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.11	0.38		0.26	0.31		0.06	0.34		0.42	0.07	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 70.6
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 20.2 Intersection LOS: C
Intersection Capacity Utilization 68.0% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 2: 82nd Street & Elliot Road



Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	0	40	0	0	0	23	175	0	0	205	5
Future Vol, veh/h	16	0	40	0	0	0	23	175	0	0	205	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	0	43	0	0	0	25	190	0	0	223	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	371	466	114	352	468	95	228	0	0	-	-	0
Stage 1	226	226	-	240	240	-	-	-	-	-	-	-
Stage 2	145	240	-	112	228	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	561	493	917	578	491	943	1337	-	-	0	-	-
Stage 1	756	716	-	742	706	-	-	-	-	0	-	-
Stage 2	843	706	-	881	714	-	-	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	552	483	917	542	481	943	1337	-	-	-	-	-
Mov Cap-2 Maneuver	605	541	-	595	534	-	-	-	-	-	-	-
Stage 1	740	716	-	726	691	-	-	-	-	-	-	-
Stage 2	825	691	-	839	714	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	0	1	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1337	-	-	799	-	-	-
HCM Lane V/C Ratio	0.019	-	-	0.076	-	-	-
HCM Control Delay (s)	7.7	0.1	-	9.9	0	-	-
HCM Lane LOS	A	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	79	0	0	0	0	198	0	0	240	5
Future Vol, veh/h	0	0	79	0	0	0	0	198	0	0	240	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	75	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	86	0	0	0	0	215	0	0	261	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	131	-	-	108	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	894	0	0	925	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	894	-	-	925	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	894	-	-	-
HCM Lane V/C Ratio	-	-	0.096	-	-	-
HCM Control Delay (s)	-	-	9.5	0	-	-
HCM Lane LOS	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	0.3	-	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	1206	751	79	0	23
Future Vol, veh/h	21	1206	751	79	0	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	200	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	1311	816	86	0	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	902	0	-	0	-	408
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	-	-	3.92
Pot Cap-1 Maneuver	436	-	-	-	0	506
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	436	-	-	-	-	506
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	436	-	-	-	506
HCM Lane V/C Ratio	0.052	-	-	-	0.049
HCM Control Delay (s)	13.7	-	-	-	12.5
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	0	122	6	0	339
Future Vol, veh/h	9	0	122	6	0	339
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	0	133	7	0	368

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	505	137	0	0	140	0
Stage 1	137	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	527	911	-	-	1443	-
Stage 1	890	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	527	911	-	-	1443	-
Mov Cap-2 Maneuver	527	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	700	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	527	1443	-
HCM Lane V/C Ratio	-	-	0.019	-	-
HCM Control Delay (s)	-	-	12	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	0	128	6	0	347
Future Vol, veh/h	25	0	128	6	0	347
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	0	139	7	0	377

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	520	143	0	0	146	0
Stage 1	143	-	-	-	-	-
Stage 2	377	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	516	905	-	-	1436	-
Stage 1	884	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	516	905	-	-	1436	-
Mov Cap-2 Maneuver	516	-	-	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	694	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

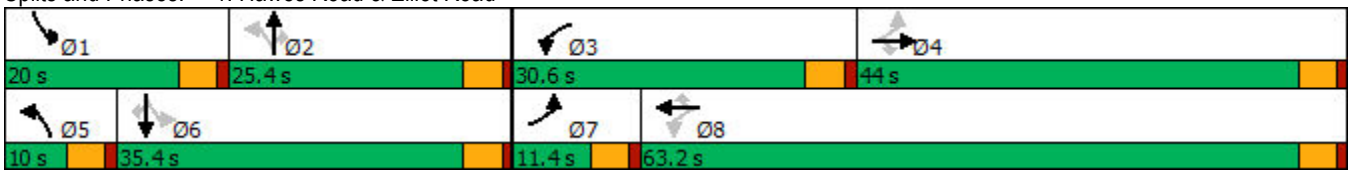
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	516	1436	-
HCM Lane V/C Ratio	-	-	0.053	-	-
HCM Control Delay (s)	-	-	12.4	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	59	1373	122	341	1599	210	179	261	319	263	263	56
Future Volume (vph)	59	1373	122	341	1599	210	179	261	319	263	263	56
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.101			0.090			0.576			0.327		
Satd. Flow (perm)	188	5085	1583	168	5085	1583	2082	3539	1583	609	3539	1583
Satd. Flow (RTOR)			177			228			347			136
Lane Group Flow (vph)	64	1492	133	371	1738	228	195	284	347	286	286	61
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Total Split (s)	11.4	44.0	44.0	30.6	63.2	63.2	10.0	25.4	25.4	20.0	35.4	35.4
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Act Effct Green (s)	45.2	38.6	38.6	65.4	56.7	56.7	20.8	15.3	15.3	34.9	24.8	24.8
Actuated g/C Ratio	0.41	0.35	0.35	0.60	0.52	0.52	0.19	0.14	0.14	0.32	0.23	0.23
v/c Ratio	0.37	0.83	0.20	0.87	0.66	0.25	0.42	0.58	0.67	0.81	0.36	0.13
Control Delay	20.9	38.4	2.2	50.9	21.8	2.8	32.6	49.7	11.6	50.3	37.5	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.9	38.4	2.2	50.9	21.8	2.8	32.6	49.7	11.6	50.3	37.5	0.6
LOS	C	D	A	D	C	A	C	D	B	D	D	A
Approach Delay		34.9			24.6			29.6			39.7	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	18	365	0	205	334	0	54	105	0	173	94	0
Queue Length 95th (ft)	42	465	19	#381	428	41	82	150	86	#294	134	0
Internal Link Dist (ft)		620			960			1298			150	
Turn Bay Length (ft)	200		300	200		300	300		250	300		240
Base Capacity (vph)	179	1866	693	487	2762	963	465	684	586	360	1011	549
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.80	0.19	0.76	0.63	0.24	0.42	0.42	0.59	0.79	0.28	0.11

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 109.4	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 30.3	Intersection LOS: C
Intersection Capacity Utilization 82.2%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Hawes Road & Elliot Road

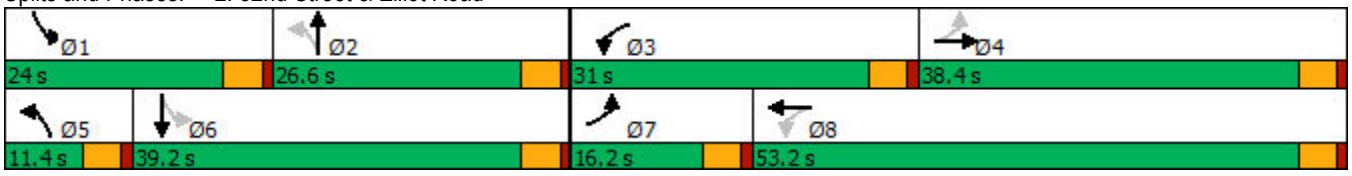


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	1113	64	337	1169	269	100	24	229	264	14	81
Future Volume (vph)	97	1113	64	337	1169	269	100	24	229	264	14	81
Satd. Flow (prot)	1770	5045	0	1770	4943	0	1770	1609	0	1770	1624	0
Flt Permitted	0.123			0.108			0.690			0.270		
Satd. Flow (perm)	229	5045	0	201	4943	0	1285	1609	0	503	1624	0
Satd. Flow (RTOR)		7			52			249			88	
Lane Group Flow (vph)	105	1280	0	366	1563	0	109	275	0	287	103	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Total Split (s)	16.2	38.4		31.0	53.2		11.4	26.6		24.0	39.2	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	40.8	32.3		57.7	44.6		17.3	10.3		32.4	20.8	
Actuated g/C Ratio	0.41	0.33		0.58	0.45		0.17	0.10		0.33	0.21	
v/c Ratio	0.47	0.78		0.82	0.69		0.42	0.71		0.74	0.25	
Control Delay	23.0	35.3		40.4	23.6		33.0	18.7		40.8	11.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	23.0	35.3		40.4	23.6		33.0	18.7		40.8	11.6	
LOS	C	D		D	C		C	B		D	B	
Approach Delay		34.3			26.7			22.8			33.1	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	27	267		168	267		51	16		151	8	
Queue Length 95th (ft)	73	386		#334	397		97	100		#247	51	
Internal Link Dist (ft)		744			569			482			141	
Turn Bay Length (ft)	300			300			200			200		
Base Capacity (vph)	287	1760		543	2520		259	557		417	635	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.37	0.73		0.67	0.62		0.42	0.49		0.69	0.16	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 99.3
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 29.5 Intersection LOS: C
Intersection Capacity Utilization 86.6% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: 82nd Street & Elliot Road



Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	0	30	0	0	0	30	501	0	0	488	7
Future Vol, veh/h	12	0	30	0	0	0	30	501	0	0	488	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	0	33	0	0	0	33	545	0	0	530	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	873	1145	269	876	1149	273	538	0	0	-	-	0
Stage 1	534	534	-	611	611	-	-	-	-	-	-	-
Stage 2	339	611	-	265	538	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	-	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	-	-	-
Pot Cap-1 Maneuver	244	198	729	243	197	725	1026	-	-	0	-	-
Stage 1	498	523	-	448	482	-	-	-	-	0	-	-
Stage 2	649	482	-	717	521	-	-	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	235	189	729	224	188	725	1026	-	-	-	-	-
Mov Cap-2 Maneuver	349	309	-	330	302	-	-	-	-	-	-	-
Stage 1	475	523	-	427	460	-	-	-	-	-	-	-
Stage 2	619	460	-	685	521	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.1	0	0.7	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1026	-	-	556	-	-	-
HCM Lane V/C Ratio	0.032	-	-	0.082	-	-	-
HCM Control Delay (s)	8.6	0.2	-	12.1	0	-	-
HCM Lane LOS	A	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	-	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	71	0	0	0	0	531	0	0	511	7
Future Vol, veh/h	0	0	71	0	0	0	0	531	0	0	511	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	75	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	77	0	0	0	0	577	0	0	555	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	278	-	-	289	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	719	0	0	708	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	719	-	-	708	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.6	0	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	719	-	-	-
HCM Lane V/C Ratio	-	-	0.107	-	-	-
HCM Control Delay (s)	-	-	10.6	0	-	-
HCM Lane LOS	-	-	B	A	-	-
HCM 95th %tile Q(veh)	-	-	0.4	-	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	1576	1728	108	0	29
Future Vol, veh/h	31	1576	1728	108	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	300	-	-	200	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	1713	1878	117	0	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1995	0	-	0	-	939
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	-	-	3.92
Pot Cap-1 Maneuver	126	-	-	-	0	228
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	126	-	-	-	-	228
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	23.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	126	-	-	-	228
HCM Lane V/C Ratio	0.267	-	-	-	0.138
HCM Control Delay (s)	43.7	-	-	-	23.3
HCM Lane LOS	E	-	-	-	C
HCM 95th %tile Q(veh)	1	-	-	-	0.5

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	0	376	8	0	336
Future Vol, veh/h	7	0	376	8	0	336
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	0	409	9	0	365

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	779	414	0	0	418	0
Stage 1	414	-	-	-	-	-
Stage 2	365	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	364	638	-	-	1141	-
Stage 1	667	-	-	-	-	-
Stage 2	702	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	364	638	-	-	1141	-
Mov Cap-2 Maneuver	364	-	-	-	-	-
Stage 1	667	-	-	-	-	-
Stage 2	702	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	364	1141	-
HCM Lane V/C Ratio	-	-	0.021	-	-
HCM Control Delay (s)	-	-	15.1	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	0	384	8	0	342
Future Vol, veh/h	18	0	384	8	0	342
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	0	417	9	0	372

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	794	422	0	0	426	0
Stage 1	422	-	-	-	-	-
Stage 2	372	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	357	632	-	-	1133	-
Stage 1	662	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	357	632	-	-	1133	-
Mov Cap-2 Maneuver	357	-	-	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	697	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	357	1133	-
HCM Lane V/C Ratio	-	-	0.055	-	-
HCM Control Delay (s)	-	-	15.7	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

April 28, 2023

Citizen Participation Plan for "The Craftsman on Elliot" mixed use development

Purpose:

The purpose of this Citizen Participation Plan is to inform citizens, property, owners, neighborhood associations, agencies, schools, and businesses in the vicinity of the site of an application for The Craftsman on Elliot mixed use development. This site is located at 8264 E Elliot Road, in the Northwest corner of Elliot Road and Hawes Road and is an application for Design Review and Site Plan approval of approximately 19 acres of land, including approx. 12.4 acres for a 352 unit Multifamily development and approx. 6.7 acres of Commercial development. This plan will ensure that those affected by this application will have an adequate opportunity to learn about and comment on the proposal.

Contact:

Cory Bruce
Senior Project Manager
D 602.641.7078 P 480.767.1001 x1976
2777 E. Camelback Rd, Suite 325, Phoenix, AZ 85016
cbruce@waremalcomb.com

Pre-Submittal Conference:

The Pre-submittal Conference with City of Mesa Development Services staff was held on March 21, 2023. Staff reviewed the application and recommended that all property owners within 1,000-ft. of the subject site shall be contacted. Also, all registered neighborhood associations within 1 mile of the project and all HOAs within 1/2 mile of the project have to be contacted as a part of the Citizen Participation Process.

Action Plan:

In order to provide effective citizen participation in conjunction with this application, the following actions will be taken to provide opportunities to understand and address any real or perceived impacts that members of the community may have.

1. A contact list will be developed for citizens and agencies in this area including:
    a. All registered neighborhood associations within one mile of the project.
    b. Homeowners Associations within one half mile of the project.
    c. Interested neighbors - focused on 1,000 feet from site but may include more.

2. All persons listed on the contact list will receive a letter describing this project, project schedule, site plan, and invitation to a neighborhood meeting to be held at TBD.

    a. The neighborhood meeting will be an opportunity for the neighbors to ask questions and listen to their concerns. A sign-in list will be used, and comment forms provided. Copies of the sign-in list and any comments will be given to the City of Mesa Planner assigned to this project.

3. Presentations will be made to groups of citizens or neighborhood associations upon request.

[All materials such as sign-in lists, comments, and petitions received shall be uploaded to the record for the case.]

Schedule:

Pre-Submittal Conference – March 21, 2023
1st Review Submittal – May 1, 2023
2nd Review Submittal – June 5, 2023
First neighborhood meeting – TBD
Submittal of Citizen Participation Report and Notification materials – September 21, 2023
Planning and Zoning Board Hearing - October 8, 2023

WARE MALCOMB

ARCHITECTURE | PLANNING
INTERIORS | CIVIL ENGINEERING
BRANDING | BUILDING MEASUREMENT

Date: 11 March, 2024

Citizen Participation Report for The Craftsman on Elliot (ZON23-00343)

Encl (1): Citizen Participation Plan Letter
Encl (2): Neighbor Correspondence
Encl (3): Contact List

Overview: This report provides results of the implementation of the Citizen Participation Plan for The Craftsman on Elliot. This property is located within the 8200 to 8400 blocks of East Elliot Road (north side), within the 3400 to 3500 blocks of South Hawes Road (west side) and within the 3400 to 3600 blocks of the South 82nd Street alignment (east side) and is a request to allow for a mixed-use development. This report provides evidence that citizens, neighbors, public agencies, and interested persons have had adequate opportunity to learn about and comment on the proposed plans and actions addressed in the application. Comments, sign-in lists, petitions, letters, summary sheets, and other materials are attached as appropriate.

Contact: Cory Bruce cbruce@waremalcomb.com 480.767.1001

Neighborhood Meetings: The following are dates and locations of all meetings where citizens were invited to discuss the proposal (comments, sign in lists and other feedback are attached)

1. 6/20/23 – Zoom Video Call 3:00 PM to 4:00 PM – 2 citizens in attendance (to include neighbor's advisor)

Correspondence and Telephone Calls

1. Meeting notification letters mailed to contact list, as provided by the City, including homes, apartments, HOAs, and Neighborhood Associations on 6/7/23. See Encl (1)
2. Email correspondence from Glenda Stechnij (direct neighbor to the north) to Cory Bruce, Ware Malcomb on 6/20/23. See Encl (2)
3. Email correspondence from Glenda Stechnij (direct neighbor to the north) to Sean Pesek, Mesa Planning on 7/25/23. See Encl (2)

Results

There were (17) owners and HOAs on the contact list as of the date of the citizen participation meeting. See Encl (3).

1. Summary of concerns, issues, and problems:
    a. Site boundary clarification between the 21 acres participant understood and the 22.6 shown on plan
    b. Privacy and security of property along the north project boundary
    c. Garbage and recycling enclosure location (NE corner of project) proximity to home
2. How concerns, issues, and problems were addressed:
    a. Confirmation of 22.6 acres made with project engineer and survey
    b. Full 6' solid masonry wall with no openings provided for security and screening.
    c. Garbage enclosure moved to opposite corner of site (NW).

Sincerely,

Cory Bruce, AIA LEED AP BD+C
Senior Project Manager
Ware Malcomb

WARE MALCOMB

ARCHITECTURE | PLANNING
INTERIORS | CIVIL ENGINEERING
BRANDING | BUILDING MEASUREMENT

Date: 7 June, 2023

Notice of Citizen Participation Meeting

Day/Time: **20 June, 2023 / 3:00-4:00pm**
Location: Zoom

Project Name:	**The Craftsman on Elliot**
Address	8264 E Elliot Road, Mesa, AZ 85212
Case Number	ZON23-00343 & DRB23-00342
Parcel Number	APN 304-04-031
Request:	Site Plan Review and Design Review Board
Proposal:	Site Development with (4) four-story Multifamily Residential buildings at (88) dwellings units each and (5) Retail/Commercial buildings along Elliot Road. Residential amenities, urban plazas, and open space are also planned, ensuring the entire Site Development reflects the pedestrian orientation of the zoning district (MX-U).
	Site = 22.46 Ac | Residential Footprint = 115,000 SF | Retail Footprint = 39,223 SF

Contacts:

Cory Bruce
Ware Malcomb
cbruce@waremalcomb.com
480.767.1001

Bo Larson
Martens Development
blarson@martensdev.com
480.556.9984

Sean Pesek
City of Mesa Planning Division
sean.pesek@mesaaz.gov
480-644-6716

Site Location Map:
1,000' buffer extent
(Not to Scale)



An application has been filed with the City of Mesa Development Services Department regarding the request above. As required by the City of Mesa Development Code, you are receiving this notice because property listed in your name is within 1,000 feet of the site noted above, or your neighborhood association is within 1 mile of the project.

This notice also serves to provide you with an opportunity to participate in a neighborhood participation meeting for any questions, concerns, or comments you may have for the contacts listed above. The meeting will be conducted via Zoom, instructions provided below. The Project Site Plan and Building Elevations have been attached for your information and review.

Zoom Meeting Information

Topic: The Craftsman | Neighborhood Participation Meeting
Time: Jun 20, 2023 3:00 PM Arizona

Join Zoom Meeting
https://waremalcomb.zoom.us/j/9520367135

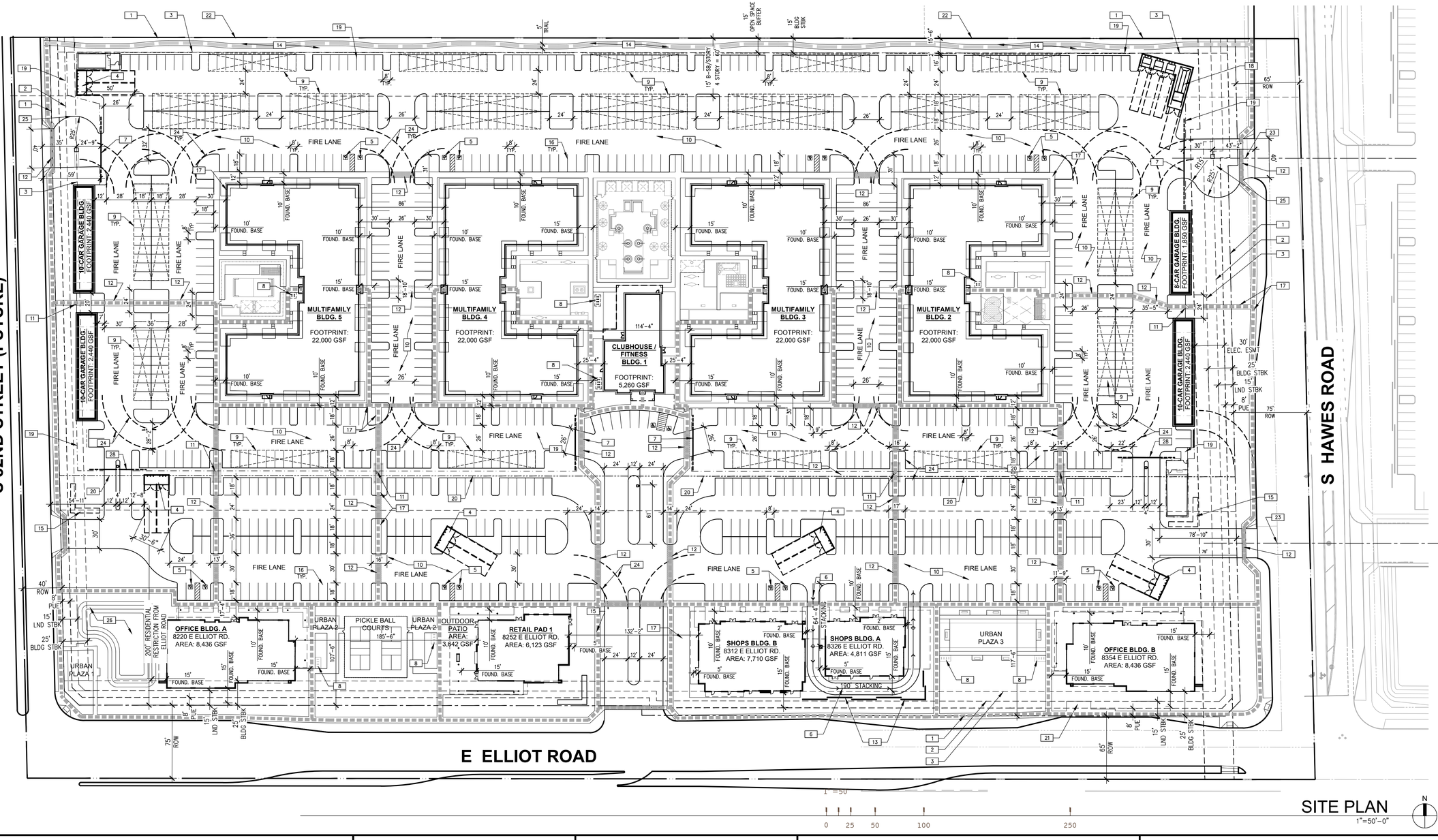
Meeting ID: 952 036 7135
One tap mobile
+12532158782,,9520367135# US (Tacoma)
+13462487799,,9520367135# US (Houston)

Dial by your location
+1 253 215 8782 US (Tacoma)
Meeting ID: 952 036 7135
Find your local number: https://waremalcomb.zoom.us/u/adEnkDb2AQ

Sincerely,

Cory Bruce, AIA LEED AP BD+C
Senior Project Manager
Ware Malcomb

CAUTION: IF THIS SHEET IS NOT 24"x36" IT IS A REDUCED PRINT



SITE PLAN
1"=50'-0"

SITE PLAN KEYNOTES

1. PROPERTY LINE (———————)
2. LANDSCAPE SETBACK LINE
3. 25' MAX. BUILDING SETBACK LINE
4. C.O.M. STANDARD DOUBLE BIN TRASH ENCLOSURE. SEE SITE DETAILS SHEET.
5. C.O.M. STANDARD ACCESSIBLE PARKING STALL. SEE SITE DETAILS SHEET.
6. DRIVE-THRU STACKING PER MZO SECTION 11.31.18(E)
7. ELECTRIC ACCESS GATE; SEE SITE DETAILS SHEET DR056.
8. BIKE RACKS (10 BIKE STALLS PER RACK), TYPICAL.
9. PRE-ENGINEERED PARKING SHADE STRUCTURE; TYPICAL. SEE SITE DETAILS SHEET.
10. FIRE LANE, PAINT CURB PER CITY STANDARDS.
11. SECURED-ACCESS PEDESTRIAN GATE. SEE LANDSCAPE PLANS.
12. 6" WIDE PAVERS FINISH PEDESTRIAN CROSSWALKS AT PAVEMENT, RAISE 3" ABOVE VEHICLE LANE PER MZO SECTION 11-32-4(C)
13. DECORATIVE SCREEN WALL. SEE LANDSCAPE PLANS.
14. 5'-0" STABILIZED D.G. PEDESTRIAN TRAIL FOR HAWES CROSSING PAD (═ ═ ═ ═)
15. PROPOSED FUTURE MONUMENT SIGN LOCATION.
16. CITY OF MESA TYPICAL PARKING STALL LAYOUT. SEE SITE DETAILS SHEET.
17. 6' CONCRETE SIDEWALK, TYPICAL.
18. C.O.M. STANDARD CMU TRASH COMPACTOR ENCLOSURE. SEE SITE DETAILS SHEET.
19. DECORATIVE SECURITY METAL FENCE. SEE LANDSCAPE PLANS FOR FENCE DESIGN
20. SITE USE SEPARATION LINE (- - - - - - - - - - - -)
21. PROPOSED FUTURE BUS PAD. OFF-SITE STREET DESIGN SHOWN FOR REFERENCE ONLY.
22. 6' H SCREENING WALL ALONG NORTH PROPERTY LINE; SEE LANDSCAPE PLANS.
23. SITE ACCESS DRIVEWAY TO ALIGN WITH ADJACENT PROPERTY.
24. FIRE TRUCK MANEUVERING CLEARANCE; 35' INSIDE RADIUS, 55' OUTSIDE RADIUS
25. C.O.M. STANDARD GATE ENTRANCE TURNAROUND PER C.O.M. DETAIL M-42.01
26. RETENTION BASIN; SEE CIVIL PLANS.
27. PEDESTRIAN CIRCULATION PATH (▬ ▬ ▬ ▬), ON 6'-0" WIDE ADA COMPLIANT SIDEWALK.
28. EMERGENCY ACCESS GATE.

TRASH VOLUME CALCULATION

REFERENCE CITY OF MESA STANDARD DETAIL M-62.02.2(2), M-62.02.2(3), AND M-62.02.2(4)

MULTI-FAMILY TRASH CALCULATION:

	NUMBER OF D.U.	CY OF TRASH PER WEEK PER UNIT	TOTAL TRASH PER WEEK	COMPACTOR RATIO	TOTAL TRASH (CU/Y) AFTER COMPACTING PER WEEK
TRASH	32	0.5	176	4:1	44
	CONTAINER TYPE	NUMBER ON SITE	CAPACITY (CU/Y)	NUMBER OF PICKUPS / WEEK	CAPACITY PER WEEK PER CONTAINER
	COMPACTOR	1	25	2	50
	STANDARD BIN	1	6	2	12
			TOTAL CAPACITY PER WEEK		62
RECYCLING	NUMBER OF D.U.	CY OF RECYCLING PER WEEK PER UNIT	TOTAL RECYCLING PER WEEK	RECYCLING RATIO	TOTAL RECYCLING (CU/Y) PER WEEK
	352	0.5	176	4:1	44
	CONTAINER TYPE	NUMBER ON SITE	CAPACITY (CU/Y)	NUMBER OF PICKUPS / WEEK	CAPACITY PER WEEK PER CONTAINER
	STANDARD BIN	4	6	2	48

NOTE:
TRASH FROM UNITS WILL BE COLLECTED BY A PERMANENT CONCIERGE SERVICE, PROVIDED BY THE APARTMENT COMPLEX

COMMERCIAL TRASH CALCULATION:

REFERENCE TO CITY OF MESA STANDARD DETAIL M-62.02.2 (1)	DOUBLE ENCLOSURE
EACH COMMERCIAL BUILDING REQUIRES (1) DOUBLE ENCLOSURE	PROVIDED: 4

DEVELOPMENT DATA

PROJECT DESCRIPTION

THE SCOPE OF THIS PROJECT IS THE MASTER PLANNING OF A MIXED USE DEVELOPMENT THAT INCLUDES 4 NEW MULTI STORY MULTIFAMILY APARTMENT BUILDINGS AND 5 COMMERCIAL USE SINGLE STORY BUILDINGS, BUILT OVER ONE PHASE.

A.P.N.	304-04-031
LOCATION	NWC ELLIOT RD. AND S. HAWES RD., MESA, AZ
GROSS SITE AREA	978,357 SF (22.46 ACRES)
NET SITE AREA	838,780 SF (19.26 ACRES)
CURRENT ZONING	MX-U (MIXED USE URBAN)
PROPOSED USE	COMMERCIAL AND MULTIFAMILY DEVELOPMENT
EXISTING USE:	VACANT LOT / AGRICULTURE
GENERAL PLAN:	MIXED USE / EMPLOYMENT

LOT USE PERCENTAGES (NET AREAS):

RESIDENTIAL	543,101 SF (12.47AC) =	64.7%
COMMERCIAL	295,679 SF (6.79 AC) =	35.3%

MAXIMUM SETBACKS PROVIDED:

	SIDE(E)	REAR(N)	SIDE(W)	FRONT(S)
BUILDING	25'	25'	25'	25'
LANDSCAPE	15'	15'	15'	15'

URBAN PLAZA AREA:

URBAN PLAZA #1	1,810 SF
URBAN PLAZA #2	8,960 SF
URBAN PLAZA #3	11,800 SF
TOTAL URBAN PLAZA AREA:	22,570 SF
TOTAL SITE AREA:	838,780 SF
REQUIRED COVERAGE:	2.0% *(PER HAWES CROSSING PAD)*
AREA REQUIRED (2.0%) =	16,776 SF
AREA PROVIDED (2.6%) =	22,570 SF

RESIDENTIAL PROJECT DATA

VALUES ARE APPROXIMATE FOR INITIAL SITE PLANNING PURPOSES

GROSS AREA	593,460 SF (13.62 AC)
NET AREA	543,101 SF (12.47 AC)
RESIDENTIAL UNITS	
UNITS PER BUILDING	88 D.U.
MULTI-FAMILY BUILDINGS	4
TOTAL UNITS	352 D.U.
DENSITY	
DENSITY ALLOWED	25 D.U. / AC
DENSITY PROVIDED	
GROSS = 352 / 13.62 =	25.84 DU/AC
NET = 352 / 12.47 =	28.22 DU/AC
BUILDINGS COVERAGE	
TOTAL BUILDINGS AREA	102,430 SF
BUILDING COVERAGE	18.8%
LOT COVERAGE	
BUILDINGS AREA	102,430 SF
PARKING CANOPY'S AREA	54,332 SF
LOT COVERAGE	28.8%
SITE OPEN SPACE (5%)	
REQUIRED (543,101*.05) =	27,155 SF
PROVIDED =	34,503 SF

PRIVATE OPEN SPACE

UNIT TYPE	OPEN SPACE AREA (s.f.)		TOTAL UNITS	TOTAL UNITS PATIO AREA (sf)	TOTAL UNITS BALCONY AREA (sf)
	PATIO	BALCONY			
UNIT A1	135	87	34	4,590	2,958
UNIT A2	0	87	6	0	522
UNIT B1	351	202	16	5,616	3,232
UNIT B2	370	215	8	2,960	1,720
UNIT B3	235	174	8	1,880	1,392
UNIT S1	100	64	16	1,600	1,024
			88	24,304	10,848

PARKING
REQUIRED (RATIO 2.1 SP PER UNIT)
352 UNITS = 740 SP

PROVIDED
GARAGE PARKING 38
COVERED PARKING 314
TOTAL COVERED PARKING 352
NON-COVERED PARKING 394
LEASING OFFICE PARKING 8
TOTAL PARKING PROVIDED 754 SP

PARKING RATIO
754 SP / 352 D.U. = 2.14 SP / D.U.

UNIT MIX

UNIT TYPE	GROSS LIVABLE AREA (s.f.)	TOTAL UNITS	TOTAL UNIT LIVABLE AREA (sf)	UNIT MIX %
UNIT A1	1bdr/1 bth	663	34	22,542	45.45%
UNIT A2	1bdr/1bth	754	6	4,524	
UNIT B1	2bdr/2bth	1,037	16	16,592	36.36%
UNIT B2	2bdr/2bth	1,144	8	9,152	
UNIT B3	2 bdr/2bth	1,297	8	10,376	
UNIT S1	0 bdr/1 bth	521	16	8,336	18.18%
			88	71,522	100%

	1ST LEVEL	2ND LEVEL	3RD LEVEL	4 LEVEL	D.U. / LEVEL	NUMBER OF BLDGS.	TOTAL
UNIT A1	10	8	8	8	34	4	136
UNIT A2	0	2	2	2	6	4	24
UNIT B1	4	4	4	4	16	4	64
UNIT B2	2	2	2	2	8	4	32
UNIT B3	2	2	2	2	8	4	32
UNIT S1	4	4	4	4	16	4	64
TOTAL	22	22	22	22			352

COMMERCIAL PROJECT DATA

VALUES ARE APPROXIMATE FOR INITIAL SITE PLANNING PURPOSES

GROSS AREA	384,897 SF (8.84 AC)
NET AREA	395,679 SF (6.79 AC)
BUILDINGS COVERAGE	
TOTAL BUILDINGS AREA	35,516 SF
BUILDING COVERAGE	9.0%
LOT COVERAGE	
BUILDINGS AREA	35,516 SF
CANOPIES AREA	12,564 SF
LOT COVERAGE	12.6%
OPEN SPACE (5%)	
REQUIRED (35,516*.05) =	1,776 SF
PROVIDED =	26,000 SF

PARKING

BUILDING TYPE	BLDG. AREA (s.f.)	PARKING RATIO	UNIT MIX %
OFFICE BLDG A	8,436	1/375	22
OFFICE BLDG B	8,436	1/375	22
RETAIL PAD 1	6,123	1/75	82
RETAIL PAD 1 - PATIO	3,642	1/75	49
SHOPS BLDG. A	4,811	1/275	17
SHOPS BLDG. B	7,710	1/100	77

TOTAL PARKING REQUIRED	270
ACCESSIBLE PARKING REQUIRED	8
TOTAL PARKING PROVIDED	270
ACCESSIBLE PARKING PROVIDED	8

BUILDING AREAS TABLE

BUILDING TYPE	GROSS AREA (s.f.)	TOTAL BUILDING AREA (sf)	UNIT MIX %
OFFICE BLDG A	8,436	8,436	23.75%
OFFICE BLDG B	8,436	8,436	23.75%
RETAIL PAD 1	6,123	6,123	17.24%
SHOPS BLDG. A	4,811	4,811	13.55%
SHOPS BLDG. B	7,710	7,710	21.71%
		35,516	100%

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REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO.
59947
ERIC R. ZITNY
Date Signed 06/05/2023
ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD
MESA, ARIZONA 85212

OVERALL SITE PLAN

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
05/01/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2

PA / PM:	C.BRUCE
DRAWN BY:	Z.F. / R.A.
JOB NO.:	PHX22-0196-00

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1/16"=1'-0"

0 8' 16' 32' 64'

EAST EXTERIOR ELEVATION (1)

SCALE: 1/16" = 1'-0"



SOUTH EXTERIOR ELEVATION (2)

SCALE: 1/16" = 1'-0"



WEST EXTERIOR ELEVATION (3)

SCALE: 1/16" = 1'-0"

LEGEND

GLASS:

- VISION GLASS
- TEMPERED GLASS

FINISH MATERIALS:

- BRICK VENEER - MEDIUM GRAY (STACKED BOND)
- FIBER CEMENT - BOARD & BATTEN
- FIBER CEMENT - SHIPLAP
- FIBER CEMENT - WOOD LOOK
- STUCCO BOARD PANEL - IRON ORE (PAINTED)
- STUCCO BOARD PANEL - SNOWBOUND (PAINTED)
- METAL CANOPY

COLORS:

- BASE COLOR: SHERWIN WILLIAMS SW 7004 SNOWBOUND
- ACCENT COLOR: SHERWIN WILLIAMS SW 7069 IRON ORE

EXTERIOR MATERIAL ANALYSIS

EAST ELEVATION

BRICK VENEER - MEDIUM GRAY	13%
FIBER CEMENT - BOARD & BATTEN	26%
FIBER CEMENT - SHIPLAP	3%
FIBER CEMENT - WOOD LOOK	5%
STUCCO - IRON ORE (PAINTED)	45%
STUCCO - SNOWBOUND (PAINTED)	8%

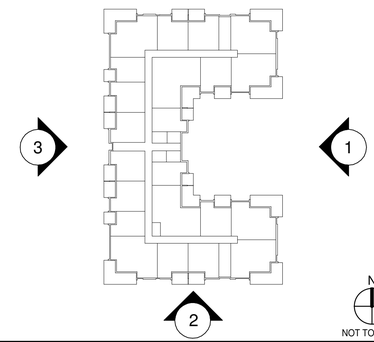
SOUTH ELEVATION

BRICK VENEER - MEDIUM GRAY	11%
FIBER CEMENT - BOARD & BATTEN	16%
FIBER CEMENT - SHIPLAP	3%
FIBER CEMENT - WOOD LOOK	9%
STUCCO - IRON ORE (PAINTED)	44%
STUCCO - SNOWBOUND (PAINTED)	17%

WEST ELEVATION

BRICK VENEER - MEDIUM GRAY	10%
FIBER CEMENT - BOARD & BATTEN	16%
FIBER CEMENT - SHIPLAP	3%
FIBER CEMENT - WOOD LOOK	13%
STUCCO - IRON ORE (PAINTED)	37%
STUCCO - SNOWBOUND (PAINTED)	21%

KEY PLAN



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Date Signed
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THE CRAFTSMAN ON ELLIOT

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MULTIFAMILY - COLOR EXTERIOR ELEVATIONS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
05/01/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2

PA/PM:	C. BRUCE
DRAWN BY.:	E.M./H.A.
JOB NO.:	PHX22-0196-00

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CLUBHOUSE - SOUTH COLOR EXTERIOR ELEVATION (2)

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



1/8"=1'-0"

0 4' 8' 16' 32'

CLUBHOUSE - NORTH COLOR EXTERIOR ELEVATION (1)

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



CLUBHOUSE - EAST COLOR EXTERIOR ELEVATION (3)

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



CLUBHOUSE - WEST COLOR EXTERIOR ELEVATION (4)

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

EXTERIOR MATERIAL ANALYSIS

NORTH EXTERIOR ELEVATION

MEDIUM GRAY BRICK VENEER:	32%
BOARD & BATTEN:	58%
STUCCO - WHITE:	7%
STUCCO - DARK GRAY:	3%

SOUTH EXTERIOR ELEVATION

MEDIUM GRAY BRICK VENEER:	28%
FIBER CEMENT BOARD WOOD LOOK:	17%
BOARD AND BATTEN:	38%
STUCCO - WHITE:	3%
STUCCO - DARK GRAY:	14%

EAST EXTERIOR ELEVATION

MEDIUM GRAY BRICK VENEER:	23%
FIBER CEMENT BOARD WOOD LOOK:	35%
BOARD AND BATTEN:	36%
STUCCO - WHITE:	4%
STUCCO - DARK GRAY:	2%

WEST EXTERIOR ELEVATION

MEDIUM GRAY BRICK VENEER:	22%
BOARD AND BATTEN:	53%
STUCCO - WHITE:	19%
STUCCO - DARK GRAY:	5%

LEGEND

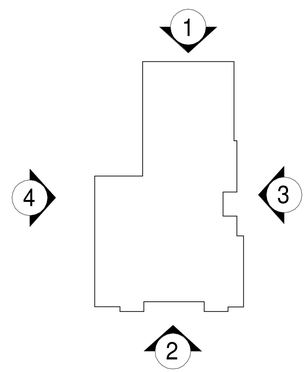
MATERIALS:

- BRICK VENEER - MEDIUM GRAY (STACKED BOND)
- FIBER CEMENT - WOOD LOOK
- BOARD AND BATTEN
- STUCCO - PAINTED (SW 7004 SNOWBOUND)
- STUCCO - PAINTED (SW 7069 IRON ORE)
- METAL CANOPY

GLASS:

- VISION GLASS
- TEMPERED GLASS

KEY PLAN



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ARIZONA, U.S.A.

THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD, MESA, ARIZONA 85212

CLUBHOUSE - COLOR EXTERIOR ELEVATIONS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
05/01/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2

PA/PM:	C. BRUCE
DRAWN BY.:	A.V./H.A.
JOB NO.:	PHX22-0196-00

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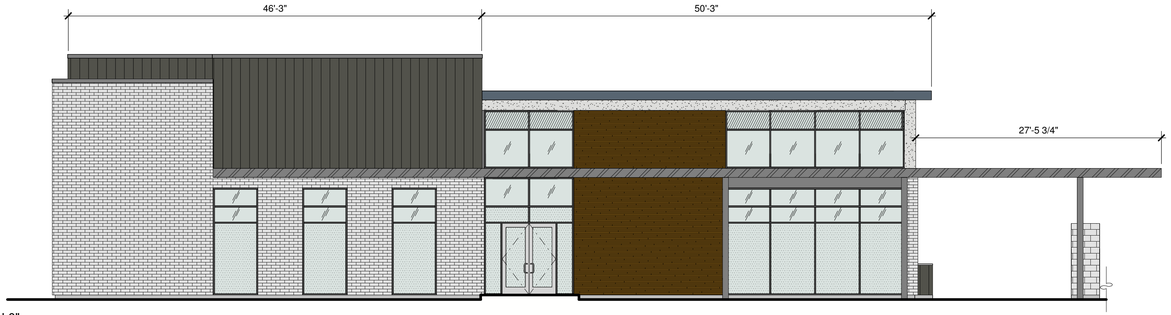
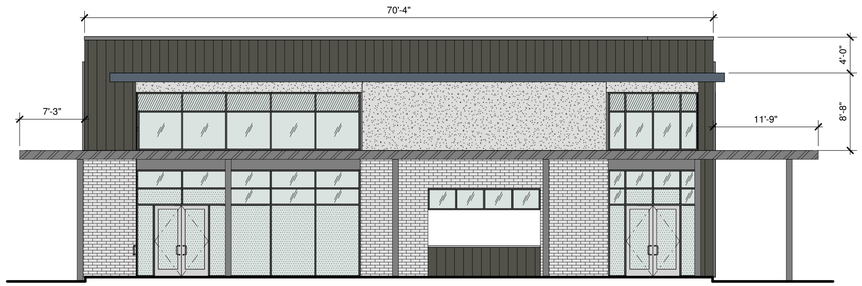


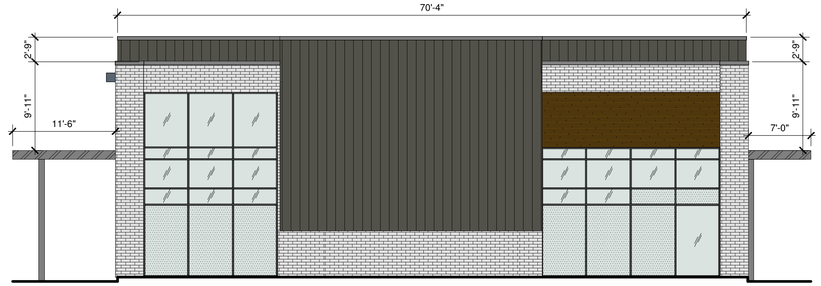
RETAIL BUILDING - NORTH COLOR EXTERIOR ELEVATION (1)

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



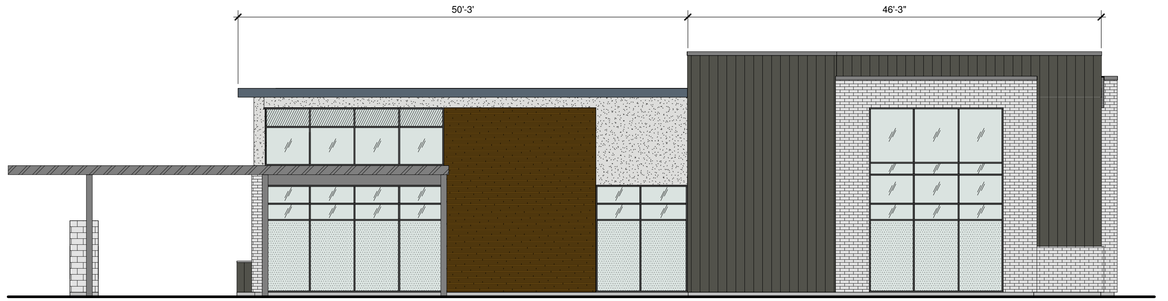
RETAIL BUILDING - WEST COLOR EXTERIOR ELEVATION (4)

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



RETAIL BUILDING - EAST COLOR EXTERIOR ELEVATION (2)

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



RETAIL BUILDING - SOUTH COLOR EXTERIOR ELEVATION (3)

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

EXTERIOR MATERIAL ANALYSIS

NORTH ELEVATION

BRICK VENEER - WHITE WASH	43%
FIBER CEMENT - VERTICAL SIDING	30%
FIBER CEMENT - WOOD LOOK	24%
STUCCO - SNOWBOUND (PAINTED)	4%

EAST ELEVATION

FIBER CEMENT - WOOD LOOK	9%
BRICK VENEER - WHITE WASH	36%
FIBER CEMENT - VERTICAL SIDING	55%

WEST ELEVATION

BRICK VENEER - WHITE WASH	31%
FIBER CEMENT - VERTICAL SIDING	45%
STUCCO - SNOWBOUND (PAINTED)	25%

SOUTH ELEVATION

BRICK VENEER - WHITE WASH	19%
FIBER CEMENT - VERTICAL SIDING	50%
FIBER CEMENT - WOOD LOOK	24%
STUCCO - SNOWBOUND (PAINTED)	7%

LEGEND

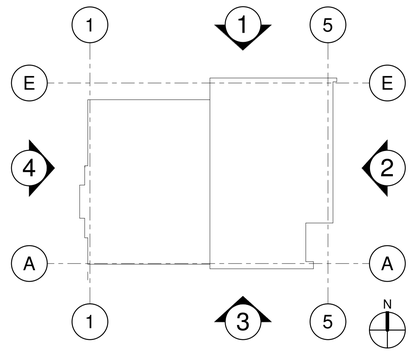
MATERIALS:

- BRICK VENEER - WHITE WASH
- FIBER CEMENT - WOOD LOOK
- FIBER CEMENT - VERTICAL SIDING (SW 7069 IRON ORE)
- STUCCO - PAINTED (SW 7004 SNOWBOUND)
- METAL CANOPY

GLASS:

- VISION GLASS
- TEMPERED GLASS
- SPANDRAL GLASS

KEY PLAN



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THE CRAFTSMAN ON ELLIOT

8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

RETAIL BUILDING - COLOR EXTERIOR ELEVATIONS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
05/01/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2

PA/PM:	C. BRUCE
DRAWN BY.:	A.V./H.A.
JOB NO.:	PHX22-0196-00

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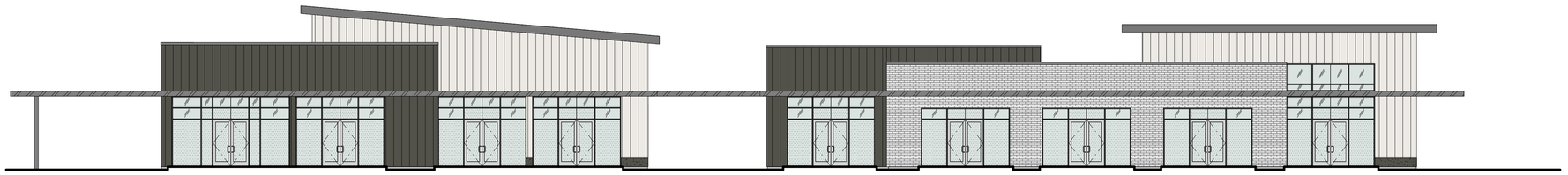


3/32"=1'-0"
0 4' 8' 16' 24' 48'

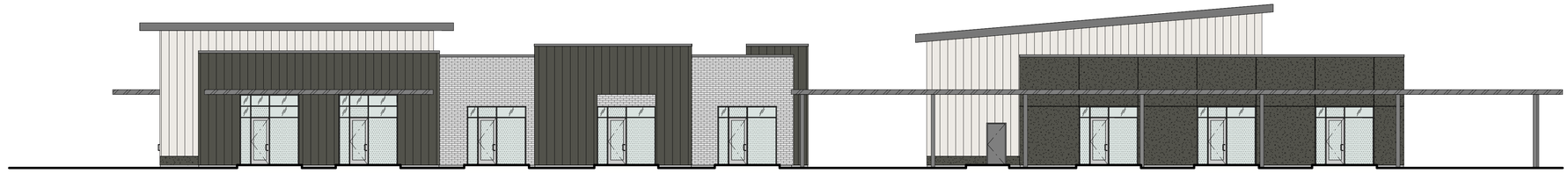
SHOPS A & B - NORTH COLOR EXTERIOR ELEVATION (1)
SCALE: 3/32" = 1'-0"



SHOP A - WEST COLOR EXTERIOR ELEVATION (4)
SCALE: 3/32" = 1'-0"



SHOP B - EAST COLOR EXTERIOR ELEVATION (2)
SCALE: 3/32" = 1'-0"



SHOPS A & B - SOUTH COLOR EXTERIOR ELEVATION (3)
SCALE: 3/32" = 1'-0"

EXTERIOR MATERIAL ANALYSIS

NORTH ELEVATION

BRICK VEENER - WHITE WASHED	28%
FIBER CEMENT - BOARD & BATTEN	36%
FIBER CEMENT - VERTICAL SIDING	36%
STUCCO - IRON ORE (PAINTED)	1%

EAST ELEVATION - SHOPS BLDG A

BRICK VEENER - WHITE WASHED	18%
FIBER CEMENT - BOARD & BATTEN	19%
FIBER CEMENT - VERTICAL SIDING	64%

WEST ELEVATION - SHOPS BLDG A

FIBER CEMENT - BOARD & BATTEN	71%
FIBER CEMENT - VERTICAL SIDING	26%
STUCCO - IRON ORE (PAINTED)	4%

SOUTH ELEVATION

BRICK VEENER - WHITE WASHED	12%
FIBER CEMENT - BOARD & BATTEN	27%
FIBER CEMENT - VERTICAL SIDING	35%
STUCCO - IRON ORE (PAINTED)	26%

EAST ELEVATION - SHOPS BLDG B

FIBER CEMENT - BOARD & BATTEN	45%
FIBER CEMENT - VERTICAL SIDING	33%
STUCCO - IRON ORE (PAINTED)	22%

WEST ELEVATION - SHOPS BLDG B

FIBER CEMENT - BOARD & BATTEN	93%
STUCCO - IRON ORE (PAINTED)	7%

LEGEND

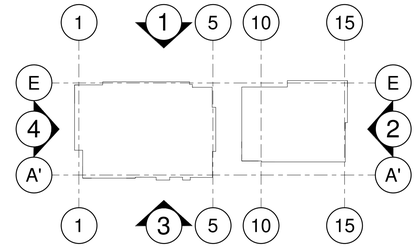
MATERIALS:

- BRICK VENEER - WHITE WASHED
- FIBER CEMENT - BOARD & BATTEN (SW 7004 SNOWBOUND)
- FIBER CEMENT - VERTICAL SIDING (SW 7069 IRON ORE)
- STUCCO - PAINTED (SW 7069 IRON ORE)
- METAL CANOPY

GLASS:

- VISION GLASS
- TEMPERED GLASS

KEY PLAN



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CERTIFICATE NO.
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ERIC R.
ZITNY
Date Signed
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ARIZONA, U.S.A.

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8264 EAST ELLIOT ROAD,
MESA, ARIZONA 85212

SHOPS A & B- COLOR EXTERIOR ELEVATIONS

DATE	REMARKS
02/27/2023	PRE-APPLICATION SUBMITTAL
05/01/2023	SP / DRB SUBMITTAL #1
06/05/2023	SP / DRB SUBMITTAL #2

PA/PM:	C. BRUCE
DRAWN BY.:	A.V./H.A.
JOB NO.:	PHX22-0196-00

SHEET
DR316

6/5/2023 9:27:28 AM

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY

Autodesk Docs://PHX22-0196-00_The Craftsman on Elliot - Mixed Use/0196_SH_ARCH.rvt

Cory Bruce

From: Glenda Stechnij <stechnijg@gmail.com>
Sent: Tuesday, June 20, 2023 3:40 PM
To: Cory Bruce
Subject: Craftsman on Elliot

CAUTION: External Email Alert!

Cory,
It was nice speaking to you today. I appreciate you both listening to my concerns.

Here is my email and phone number.

Glenda Stechnij
602 509 8000

ENCL (2)

Cory Bruce

From: Sean Pesek <sean.pesek@mesaaz.gov>
Sent: Tuesday, July 25, 2023 2:05 PM
To: Glenda Stechnij
Subject: RE: Hawes/Elliot Citizen Meeting

CAUTION: External Email Alert!

Hi Glenda,

Thanks for the call earlier today! As discussed, I will work with the civil designer to relocate the northeastern trash enclosure + compactor and receive confirmation on the property's gross acreage.
You also expressed concerns over the northern perimeter wall. After reviewing the latest set of drawings, the applicant is proposing a 6' **solid masonry** wall with NO openings. Below is a snippet of the wall elevation.



Please let me know if you have any questions!

Best Regards,

Sean Pesek
Planner II, Development Services
480.644.6716
55 North Center Street, Mesa, AZ 85201

ENCL (2)

Office hours are Monday through Thursday 7:00am – 6:00pm

mesa·az

From: Glenda Stechnij <stechnijg@gmail.com>
Sent: Tuesday, July 25, 2023 10:38 AM
To: Sean Pesek <sean.pesek@mesaaz.gov>
Subject: Re: Hawes/Elliot Citizen Meeting

WARNING: This email came from an External Sender – Use caution when clicking links, opening attachments, or responding to requests for information.

Mr. Pesek,

Perhaps you don't answer emails? Could you advise me as to who to speak to about this project?

I did show up at the ZOOM meeting last month. It was just me and the other 2 gentleman involved. They were expecting you also.

I am concerned about this project telling the City that the site includes 22.46 acres. The parcel is not that large. They are also asking me to sign a Quit Claim Deed on property to the north that has access to my farm.

Please advise me.

Glenda Stechnij
602 509 8000

On Sun, Jun 18, 2023, 6:32 PM Glenda Stechnij <stechnijg@gmail.com> wrote:

> Mr. Pesek,
>
> I am Glenda Stechnij. I am 1/3 owner of the subject property that will be addressed at a Citizen Meeting on Tuesday, June 20. I believe the name of the project is Craftsman on Elliot. My home and farm of 45+ years adjoins this 21 acre parcel. I am out of town, but hope to be able to ZOOM in and join you.
>
> I do have a concern and placement of "a screened wall" and walking path along the north end. With this extremely high density project, I would prefer seeing a block wall and no walking path... to protect our privacy here at my home and farm.
>
> I'm also hoping that perhaps the large garbage placement on the NE corner of the project could be moved and not be a stone's throw from my home.
>
> Have you seen a survey report of the property? If you have one, I would love to see it. Is it possible for you to forward it to me? I have seen the development plan...but have not seen the survey.
>
> Sincerely,
> Glenda Stechnij
> 3440 S. Hawes
> Mesa AZ
> 602 509 8000

ENCL (2)

WARE MALCOMB

ARCHITECTURE
INTERIORS
BRANDING

PLANNING
CIVIL ENGINEERING
BUILDING MEASUREMENT

Citizen Participation Contact List

KLLB AIV LLC
111 W 33RD ST. STE 1910
NEW YORK, NY 10001

CHARLES FEENSTRA DAIRY LLC
19711 E ELLIOT RD.
MESA, AZ 85212

VPTM HAWES CROSSING LB LLC
901 MARQUETTE AVE. STE 3300
MINNEAPOLIS, MN 55402

STECHNIJ GLENDA J
PO BOX 52403
MESA, AZ 85208

MCMILLAN ALEX/CHRISINA/ETAL
3291 S THISTLE PL
CHANDLER, AZ 85248

MESA-CASA GRANDE LAND CO LLC
19965 E ELLIOT RD
MESA, AZ 85212

RIJLAARSDAM FAMILY TRUST
3232 S HAWES RD
MESA, AZ 85212

HAWES CROSSING APARTMENTS LLC
7918 E MCCLAIN DR STE 101
SCOTTSDALE, AZ 85260

CSHV ELLIOT 202 LLC
100 WATERFRONT PL FL 15
WEST SACRAMENTO, CA 95605

FEENSTRA CHARLES L/BARBARA M TR
19711 E ELLIOT RD
MESA, AZ 85212

LOOP 202 & ELLIOT ROAD LLC
2201 COOPERATIVE WAY STE 400
HERNDON, VA 20171

ARIZONA SKYLINE COMMUNITY ASSOC
MICHELLE HODGES
9124 E PLATA AVE
MESA, AZ 85212

BOULDER CREEK HOMEOWNERS ASSOC
JANIS BULLOCK
8064 E OLLA
MESA, AZ 85211

EASTRIDGE HOMEOWNERS ASSOC
TOM PIELACH
8529 E PORTBELLO CIR.
MESA, AZ 85212

EASTRIDGE HOMEOWNERS ASSOC
MIKE NIELSON
8737 E OBISPO
MESA, AZ 85212

VILLAGE AT HAWES HOMEOWNERS ASSOCIATION, INC.
JENNIFER KELLER
3132 S EUGENE
MESA, AZ 85212

VILLAGE AT HAWES HOMEOWNERS ASSOCIATION, INC.
DIANA EBERTSHAUSER
1600 W BROADWAY RD 200
MESA, AZ 85282

WARE MALCOMB

ARCHITECTURE
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CIVIL ENGINEERING
BUILDING MEASUREMENT

Notice of Public Planning and Zoning Board Meeting

Dear Neighbor,

We have applied for consideration by the planning and zoning board for Council Use Permit (CUP), Site Plan Review; and Special Use Permit (SUP) approval for the property located within the 8200 to 8400 blocks of East Elliot Road (north side), within the 3400 to 3500 blocks of South Hawes Road (west side) and within the 3400 to 3600 blocks of the South 82nd Street alignment (east side). This request is for development of The Craftsman on Elliot. The case number assigned to this project is ZON23-00343.

This letter is being sent to all property owners within 500 or 1000 feet of the property at the request of the City of Mesa Planning Division. Enclosed for your review is a copy of the site plan and elevations of the proposed development. If you have any questions regarding this proposal, please call me at 602-641-7078 or e-mail me at cbruce@waremalcomb.com.

This application will be scheduled for consideration by the Mesa Planning and Zoning Board at their meeting held on March 27, 2024 in the City Council Chambers located at 57 East First Street. The meeting will begin at 4:00 p.m. You are invited to attend this meeting and provide any input you may have regarding this proposal.

The public can attend the meeting either in-person or electronically and telephonically. The live meeting may be watched on local cable Mesa channel 11, online at **Mesa11.com/live** or **www.youtube.com/user/cityofmesa11/live**, or listened to by **calling 888-788-0099 or 877-853-5247 (toll free) using meeting ID 825 0808 5605 and following the prompts**. If you want to provide a written comment or speak telephonically at the meeting, please submit an online comment card by scanning the QR code below or visiting **https://www.mesaaz.gov/government/advisory-boards-committees/planning-zoning-board/online-meeting-comment-card** at **least 1 hour prior to the start of the meeting.** If you want to speak at the meeting, you will need to indicate on the comment card that you would like to speak during the meeting, and you will need to call **888-788-0099 or 877-853-5247 (toll free) using meeting ID 825 0808 5605 and following the prompts, prior to the start of the meeting.** You will be able to listen to the meeting; and when the item you have indicated that you want to speak on is before the Board, your line will be taken off mute and you will be given an opportunity to speak.

For help with the online comment card, or for any other technical difficulties, please call 480-644-2099.

The City of Mesa has assigned this case to Sean Pesek of their Planning Division staff. He/she can be reached at 480-644-6716 or sean.pesek@mesaaz.gov, should you have any questions regarding the public hearing process. If you have sold this property in the interim, please forward this correspondence to the new owner.

Sincerely,

Cory Bruce, AIA LEED AP BD+C
Senior Project Manager
Ware Malcomb


CITY OF MESA
PUBLIC NOTICE
ZONING HEARING
PLANNING & ZONING BOARD
57 EAST FIRST STREET
MESA, ARIZONA
TIME: 4:00 PM DATE: March 27, 2024
CASE: ZON23-00343
Request: Council Use Permit (CUP), Site Plan Review; and Special Use Permit (SUP). This request will allow for a mixed-use development.
Applicant: Ware Malcomb
Phone: 602-641-7078
Planning Division: 480-644-2385
Posting Date: 3/11/24


ZONING HEARING

City of Mesa Planning Division

AFFIDAVIT OF PUBLIC POSTING

To be submitted to the Planning Division by March 12, 2024

Date: MARCH 11, 2024

I, DAVID MARTENS, being the owner or authorized applicant for the zoning case below, do hereby affirm that I have posted the property related to Case #ZON23-00343 on the 11TH day of MARCH, 2024. At least one notice for each quarter mile of frontage along perimeter right-of-way so that the notices were visible from the nearest public right-of-way.

SUBMIT PHOTOGRAPHS OF THE POSTINGS MOUNTED ON AN 8.5" BY 11" SHEET OF PAPER WITH THIS AFFIDAVIT.

Applicant's/Representative's signature: _____

SUBSCRIBED AND SWORN before me this 11TH day of MARCH, 2024.

_____
Notary Public

ANDREA GARCIA RICHARDSON
Notary Public - Arizona
Maricopa County
My Commission Expires
7/13/2026
Commission # 203398039

Case Number: ZON23-00343

Project Name: The Craftsman on Elliot

THE CRAFTSMAN ON ELLIOT

NW CORNER OF ELLIOT RD AND HAWES ROAD, MESA ARIZONA

WARE MALCOMB

MARTENS
DEVELOPMENT COMPANY

CONCEPT DESIGN

PHX22-0196-00









