Imperial County Planning & Development Services
Planning / Building

Jim Minnick
DIRECTOR

TO: Commissioner Mike Goodsell
Commissioner Tairu Zong
Commissioner Jerry Arguelles
Commissioner Sylvia Chavez

FROM: Jim Minnick, Secretary
Planning & Development Services Director

SUBJECT: **(Continued from April 16, 2025)** Public hearing to consider compatibility of Skyway Towers' requested Conditional Use Permit #24-0026 for a 120-foot monopole telecommunications facility located on a 40' x 40' leased portion of a 2.83 acres residential parcel. The proposed project is within the Imperial County Airport Compatibility Plan C Zone (Common Traffic Pattern). The proposed project site is located at 749 W Worthington Road, Imperial, CA 92251 approximately 1,400 feet west of the intersection of Worthington Road and Austin Road. Parcel coordinates 32° 50' 49.272" N, 115° 35' 58.5162" W; Assessor's Parcel Numbers 062-040-075-000 (Supervisorial District #3) (**ALUC 03-25**) [Luis Valenzuela, Planner II, 442-265-1736, extension 1749 or by email at luisvalenzuela@co.imperial.ca.us].

DATE OF REPORT: May 21, 2025

AGENDA ITEM NO: 1

HEARING DATE: May 21, 2025

HEARING TIME: 6:00 P.M.

HEARING LOCATION: County Administration Center
Board of Supervisors Chambers
940 Main Street
El Centro, CA 92243

STAFF RECOMMENDATION

It is the Secretary's recommendation that the Airport Land Use Commission finds the proposed 120-foot telecommunications tower located at 749 W Worthington Road, Imperial, CA 92251 to be compatible with the 1996 Airport Land Use Compatibility Plan.

SECRETARY'S REPORT

Project Location:

The proposed 120-foot monopole telecommunication facility would be located at 749 W Worthington Road, Imperial, CA 92251; further identified as Assessor's Parcel Number 062-040-075-000 and legally described as PAR 2 PM 926 OF TR 51 15-13 2.89AC.

.

Project Description:

The applicant TEP, on behalf of Skyway Towers, proposes Conditional Use Permit #24-0026 to construct and operate a 120-foot monopole telecommunications tower on a 40' x 40' (1,600 square feet) leased portion of a 2.83 acres parcel with an existing residence onsite and the parcel is in an A-2 zone. Access will be provided via Worthington Road on a proposed 12' wide gravel access drive to the proposed project site. The only utilities required to service the facility will be underground and overhead power route from existing utility pole to compound area. Additionally, there will be no impact on County's water and sanitation (sewer) utilities as they will not be used at the site. The proposed telecommunications tower will be erected, owned, and operated by Skyway Towers.

In accordance with Federal Communications Commission (FCC) regulations, the proposed wireless telecommunications facility will be designed and constructed to meet and/or exceed all applicable government and industry safety standards. Specially, Skyway Towers will comply with all Federal Communications Commission (FCC) and Federal Aviation Agency (FAA) rules and regulations regarding construction requirements and technical standards. The proposed wireless communication facility's Radio Frequency (RF) emissions will comply with the federal Communications Commission's (FCC) Radio Frequency emission standards. Additionally, the proposed wireless communication facility will comply with the Federal Aviation Agency's (FAA) height, lighting, and marking requirements.

The project is being presented for the Imperial County Airport Land Use Commission (ALUC)'s review and determination of consistency with its 1996 Compatibility Plan. The project falls within the Imperial County Airport Land Use Compatibility Map Zone "C".

General Plan/ALUCP Analysis:

The proposed wireless communication facility is located within a vacant portion of the parcel and is not located near any County Public Airport or airstrip. The nearest airport is the Imperial County Airport located approximately 1.5 miles southeast of the proposed project site.

The project site is zoned A-2 (General Agriculture) per Zoning Map #5 of the Imperial County Title 9 Land Use Ordinance.

The Airport Land Use Compatibility Plan (ALUCP), Chapter 2, Policies, Section 2.3, provides "Types of Actions Reviewed" by the Commission, which shall include:

"Any other proposed land use action, as determined by the local planning agency, involving a question of compatibility with airport activities" (Section 2.3.3(h), pg. 2-2, 2-3, 2-4 & 2-17)

The proposed Conditional Use Permit (CUP#24-0026) have been submitted for the Airport Land Use Commission's review and determination of consistency with the 1996 Airport Land Use

Compatibility Plan (ALUCP) due to the nature of the application (a 120-foot wireless communication facility).

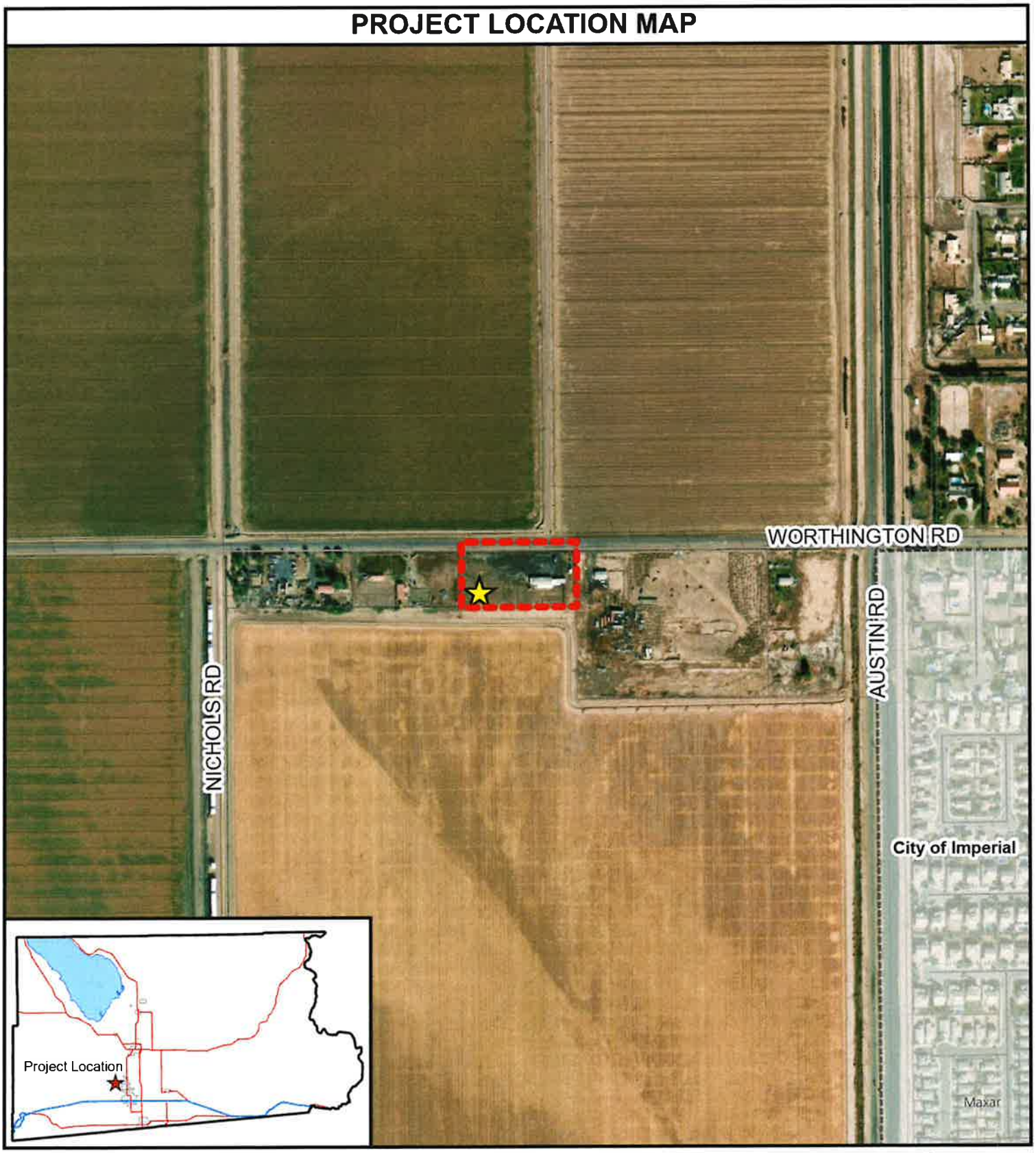
Attachments

A – Vicinity Map
B – ALUC Map
C – Assessor's Plat Map
D – Site Plan
E – ALUCP Zone Map
F – FAA Determination
G – Application & Supporting Documents
H – ALUCP Chapter 2 Pages 2-2, 2-3, 2-4 and 2-17

LV\OL\S:\AllUsers\APN\062\040\075\CUP24-0026_IS24-0039\ALUC\ALUC Skyway Towers CUP24-0026 Staff Report 05 21 25.doc

ATTACHMENT "A" VICINITY MAP

PROJECT LOCATION MAP



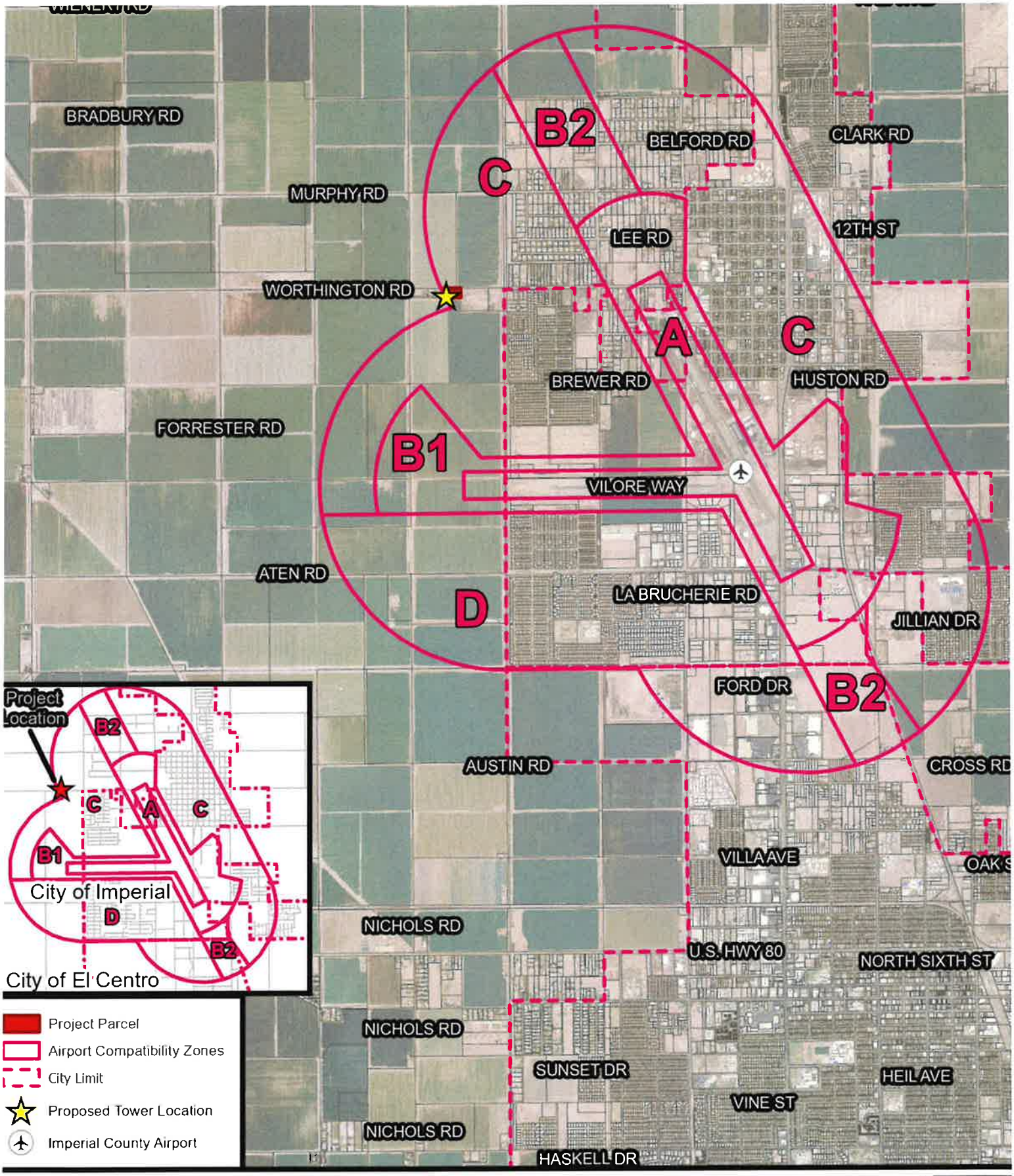
IMPERIAL COUNTY CALIFORNIA

SKYWAY TOWERS
CUP #24-0026 / IS #24-0039
APN 062-040-075-000

- Proposed Tower Location
- Centerline
- City of Imperial
- Parcels
- Parcels selection

N

ATTACHMENT "B" ALUC MAP



IMPERIAL COUNTY AIRPORT LAND USE COMMISSION

ALUC #03-25

SKYWAY TOWERS

APN #062-040-075-000

N

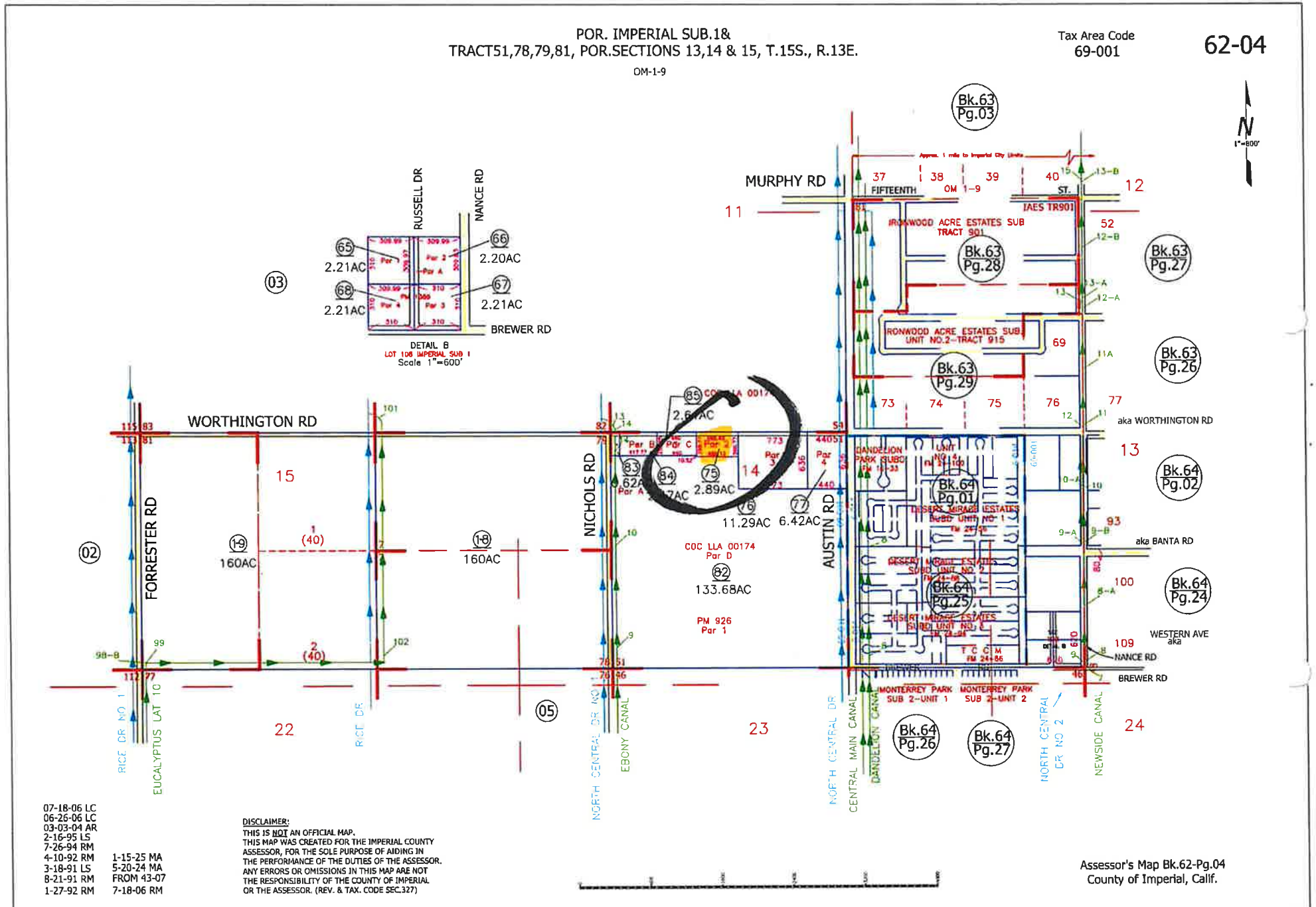
ATTACHMENT "C" ASSESSOR'S PLAT MAP

POR. IMPERIAL SUB.1&
TRACT51,78,79,81, POR.SECTIONS 13,14 & 15, T.15S., R.13E.

OM-1-9

Tax Area Code
69-001

62-04



07-18-06 LC
06-26-06 LC
03-03-04 AR
2-16-95 LS
7-26-94 RM
4-10-92 RM
3-18-91 LS
8-21-91 RM
1-27-92 RM

1-15-25 MA
5-20-24 MA
FROM 43-07
7-18-06 RM

DISCLAIMER:
THIS IS NOT AN OFFICIAL MAP.
THIS MAP WAS CREATED FOR THE IMPERIAL COUNTY ASSESSOR, FOR THE SOLE PURPOSE OF AIDING IN THE PERFORMANCE OF THE DUTIES OF THE ASSESSOR. ANY ERRORS OR OMISSIONS IN THIS MAP ARE NOT THE RESPONSIBILITY OF THE COUNTY OF IMPERIAL OR THE ASSESSOR. (REV. & TAX. CODE SEC.327)

Assessor's Map Bk.62-Pg.04
County of Imperial, Calif.

ATTACHMENT "D" SITE PLAN

LEGEND

- PARENT PROPERTY LINE
- ADJACENT PROPERTY LINE
- X EXISTING FENCE
- 5280 EXIST. CONTOUR LINE
- EDGE OF PAVEMENT
- PROPERTY CORNER
- LEASE/EASEMENT CORNER
- R/W EXISTING RIGHT OF WAY
- OHW OVERHEAD WIRE
- BT BURIED TELCO
- EXISTING UTILITY POLE
- T TELCO PEDESTAL
- F FIBER VAULT

1-A CERTIFICATION

LATITUDE:	N 32.846758° (NAD '83)
LONGITUDE:	W 115.600128° (NAD '83)
ELEVATION:	-58.65' (NAVD '88)

TOWER SETBACKS

PROPERTY LINE	PROPOSED SETBACK
NORTH	228'-1"±
SOUTH	37'-7"±
EAST	398'-2"±
WEST	73'-4"±

NOTES:

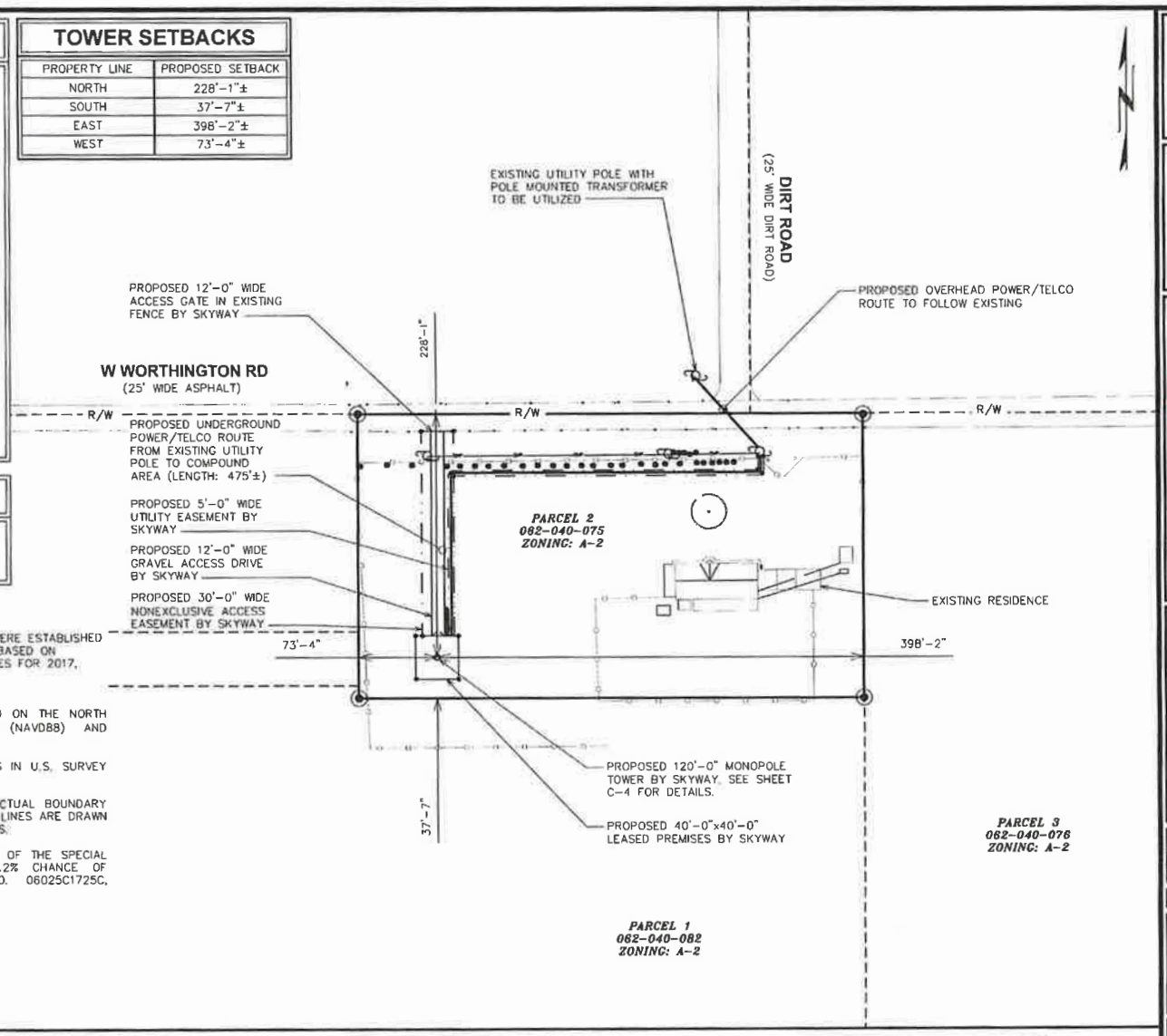
1. GEODETIC COORDINATES AND ELEVATIONS WERE ESTABLISHED USING G.P.S. AND SURVEY GRADE PRECISION BASED ON CALVRS G.P.S. BROADCAST COORDINATE VALUES FOR 2017, NAVD 88.
BENCHMARK REFERENCE: CRTN.

2. VERTICAL INFORMATION SHOWN IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND EXPRESSED IN INTERNATIONAL FEET.

3. ALL DISTANCES ARE 'GROUND' DISTANCES IN U.S. SURVEY FEET, UNLESS OTHERWISE NOTED.

4. THIS PLAN DOES NOT REPRESENT AN ACTUAL BOUNDARY SURVEY OF THE PARENT PARCEL. BOUNDARY LINES ARE DRAWN FROM FIELD LOCATIONS OF FOUND MONUMENTS.

5. THE PROPERTY IS LOCATED IN ZONE 'X' OF THE SPECIAL FLOOD HAZARD AREA, AN AREA OF 0.2% CHANCE OF FLOODING; FEMA COMMUNITY PANEL NO. 06025C1725C, EFFECTIVE DATE: SEPTEMBER 26, 2008.



EXTENDED SITE PLAN

SCALE: 1" = 100'

0 100 200

SCALE IN FEET

PLANS PREPARED FOR:

SKYWAY TOWERS
3637 MADACA LN.
TAMPA, FL 33618
OFFICE: (813) 960-6217

PROJECT INFORMATION:

IMPERIAL
SKYWAY SITE#: CA-00435

749 WEST WORTHINGTON RD.
IMPERIAL, CA 92251
(IMPERIAL COUNTY)

PLANS PREPARED BY:

TEP

326 TYRON RD
RALEIGH, NC 27603
OFFICE: (919) 661-6531
www.tepgroup.net

SEAL:

REGISTERED PROFESSIONAL ENGINEER
STEPHEN E. BUNTING
91898
CIVIL
STATE OF CALIFORNIA

September 27, 2024

REV	DATE	ISSUED FOR:
0	09-27-24	ZONING

DRAWN BY: ASD | CHECKED BY: ARB

SHEET TITLE:

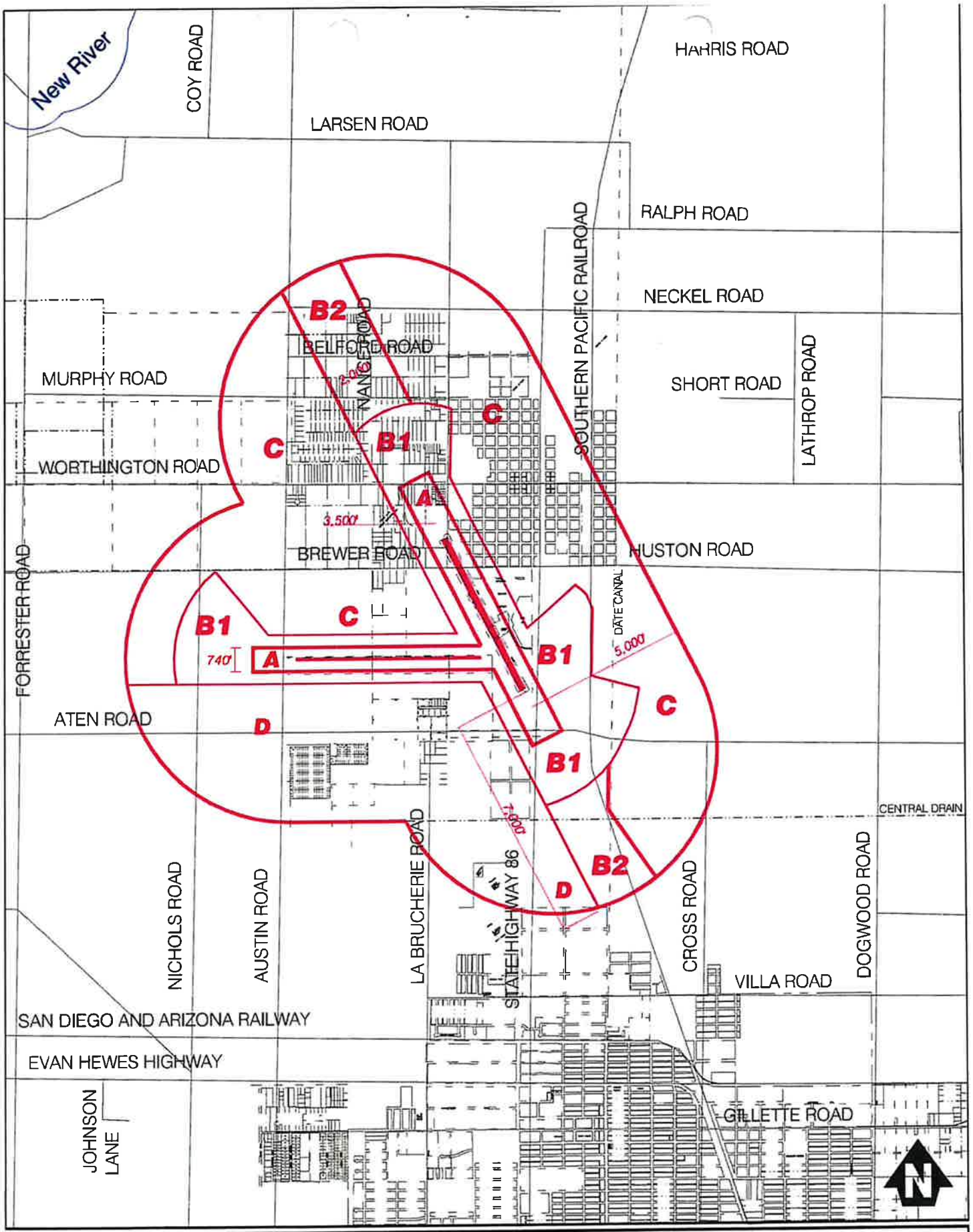
EXTENDED SITE PLAN

SHEET NUMBER: **C-1**

REVISION: **0**

TEP #341053.432429

ATTACHMENT "E" ALUCP ZONE MAP



Compatibility Map

Imperial County Airport

FIGURE 3E

airport land use compatibility plan

K:\ALUC\3E-CORRE.DWG

UPDATED: September 15 2004 - Map Correction on compatibility outlines

ATTACHMENT "F" FAA DETERMINATION

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-AWP-10636-OE

Issued Date: 09/06/2024

Operations
Skyway Towers, LLC
3637 Madaca Lane
Tampa, FL 33618

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower CA-00435 Imperial
Location:	Imperial, CA
Latitude:	32-50-48.33N NAD 83
Longitude:	115-36-00.46W
Heights:	-59 feet site elevation (SE)
	124 feet above ground level (AGL)
	65 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 03/06/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination of No Hazard is granted provided the following conditional statement is included in the proponent's construction permit or license to radiate:

Upon receipt of notification from the Federal Communications Commission that harmful interference is being caused by the licencee's (permittee's) transmitter, the licensee (permittee) shall either immediately reduce the power to the point of no interference, cease operation, or take such immediate corrective action as is necessary to eliminate the harmful interference. This condition expires after 1 year of interference-free operation.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (206) 231-2877, or Nicholas.Sanders@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-AWP-10636-OE.

Signature Control No: 630370075-632314934 (DNE)
Nicholas Sanders
Technician

Attachment(s)
Frequency Data

cc: FCC

Frequency Data for ASN 2024-AWP-10636-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
6	7	GHz	55	dBW
6	7	GHz	42	dBW
10	11.7	GHz	55	dBW
10	11.7	GHz	42	dBW
17.7	19.7	GHz	55	dBW
17.7	19.7	GHz	42	dBW
21.2	23.6	GHz	55	dBW
21.2	23.6	GHz	42	dBW
614	698	MHz	1000	W
614	698	MHz	2000	W
698	806	MHz	1000	W
806	901	MHz	500	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
929	932	MHz	3500	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1670	1675	MHz	500	W
1710	1755	MHz	500	W
1850	1910	MHz	1640	W
1850	1990	MHz	1640	W
1930	1990	MHz	1640	W
1990	2025	MHz	500	W
2110	2200	MHz	500	W
2305	2360	MHz	2000	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W
2496	2690	MHz	500	W

ATTACHMENT "G" APPLICATION & SUPPORTING DOCUMENTS

CONDITIONAL USE PERMIT

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.
801 Main Street, El Centro, CA 92243 (442) 265-1736

- APPLICANT MUST COMPLETE ALL NUMBERED (black) SPACES – Please type or print -

1	PROPERTY OWNER'S NAME Henry/Sara Calderon	EMAIL ADDRESS	
2.	MAILING ADDRESS (Street / P O Box, City, State) 749 W. Worthington Rd. Imperial, CA 92251	ZIP CODE	PHONE NUMBER
3.	APPLICANT'S NAME Tom Wilkerson with TEP for Skyway Towers	EMAIL ADDRESS twilkerson@tepgroup.net	
4.	MAILING ADDRESS (Street / P O Box, City, State) 4710 E Elwood St. Suite 9 Phoenix, AZ	ZIP CODE 85040	PHONE NUMBER (602) 860-3348
4.	ENGINEER'S NAME CA. LICENSE NO.	EMAIL ADDRESS	
5.	MAILING ADDRESS (Street / P O Box, City, State)	ZIP CODE	PHONE NUMBER

6. ASSESSOR'S PARCEL NO. 062-040-075-000	SIZE OF PROPERTY (in acres or square foot) 2,830 Acres	ZONING (existing) A-2
7. PROPERTY (site) ADDRESS 749 W Worthington Rd.		
8. GENERAL LOCATION (i.e. city, town, cross street) Imperial, CA 92251		
9. LEGAL DESCRIPTION PAR 2 PM 926 OF TR 51 15-13 2.89AC		

PLEASE PROVIDE CLEAR & CONCISE INFORMATION (ATTACH SEPARATE SHEET IF NEEDED)

10. DESCRIBE PROPOSED USE OF PROPERTY (list and describe in detail) To install a new 120' telecommunication facility in order to supply coverage for both 911 services and telecommunication services for the public.

11. DESCRIBE CURRENT USE OF PROPERTY

12 DESCRIBE PROPOSED SEWER SYSTEM

13. DESCRIBE PROPOSED WATER SYSTEM

14. DESCRIBE PROPOSED FIRE PROTECTION SYSTEM

15. IS PROPOSED USE A BUSINESS? ☐ Yes ☒ No — IF YES, HOW MANY EMPLOYEES WILL BE AT THIS SITE?

I / WE THE LEGAL OWNER (S) OF THE ABOVE PROPERTY CERTIFY THAT THE INFORMATION SHOWN OR STATED HEREIN IS TRUE AND CORRECT

Henry Calderon — Print Name — 09-19-2024 — Date

Signature

Sara Calderón — Print Name — 09-19-2024 — Date

Sara Calderón — Signature

REQUIRED SUPPORT DOCUMENTS

A. SITE PLAN
B. FEE
C. OTHER
D. OTHER

APPLICATION RECEIVED BY:		DATE	
APPLICATION DEEMED COMPLETE BY:		DATE	
APPLICATION REJECTED BY		DATE	
TENTATIVE HEARING BY:		DATE	
FINAL ACTION: ☐ APPROVED ☐ DENIED		DATE	

REVIEW / APPROVAL BY OTHER DEPT'S required
☐ P W
☐ E. H. S.
☐ A P C. D
☐ O E S
☐ _____
☐ _____

CUP # 24-0026

IS24-0039

CONDITIONAL USE PERMIT

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.
801 Main Street, El Centro, CA 92243 (442) 265-1736

- APPLICANT MUST COMPLETE ALL NUMBERED (black) SPACES – Please type or print -

ASSESSOR'S PARCEL NO: 062-40-075-000

PROPERTY ADDRESS: 749 W WORTHINGTON RD, IMPERIAL, CA 92251

APPLICANT

Tom Wilkerson with TEP for Skyway Towers

Print Name/Company

Signature

09/09/2024

Date

TOWER OWNER

Justin Sones Skyway Towers

Print Name/Company

Signature

9/20/24

Date

Imperial County Planning & Development Services
Planning / Building / Parks & Recreation

Jim Minnick
DIRECTOR

NOTICE TO APPLICANT

SUBJECT: PAYMENT OF FEES

Dear Applicant:

Pursuant to County Codified Ordinance Division 9, Chapter 1, Section 90901.02, all Land Use Applications must be submitted with their appropriate application fee. Failure to comply will cause application to be rejected.

Please note that once the Department application is received and accepted, a "time track" billing will commence immediately. Therefore, should you decide to cancel or withdraw your project at any time, the amount of time incurred against your project will be billed and deducted from your payment. As a consequence, if you request a refund pursuant to County Ordinance, your refund, if any, will be the actual amount paid minus all costs incurred against the project.

Please note there will be no exceptions to this policy. Thank you for your attention.

Sincerely yours,

Jim Minnick, Director
Planning & Development Services

RECEIVED BY: _____ DATE: 9/30/24

801 Main St. El Centro, CA 92243 442.265.1736 Fax 442.265.1735 planninginfo@co.imperial.ca.us www.icpds.com

TEP PHOENIX OFFICE
4710 E. ELWOOD, SUITE 9
PHOENIX, AZ 85040
(602) 860-3348
WWW.TEPGROUP.NET

January 8, 2025

RE: New Wireless Telecommunication Facility by Skyway Towers

City of Imperial

Please accept this Conditional Use Permit Application for a new 120 foot monopole telecommunication tower with antennas, ground equipment, and ancillary equipment for a proposed carrier, T-Mobile, to collocate onto at 116 feet. Facility is being proposed at 749 West Worthington Rd., Imperial, CA 92251 (APN: 062-040-075). Parcel is located in zoning district A-2.

The scope of working includes the following:

- Proposed 120' monopole telecommunication tower
- Proposed 8' tall, 40' x 40' CMU wall compound by Skyway
- Proposed 12' wide gravel access drive
- Proposed 30' wide non-exclusive access easement
- Proposed underground power/telco route from existing utility pole to compound area
- Proposed 12' wide access gate in existing fence
- Proposed 5' wide utility easement
- Proposed overhead power/telco route to follow existing
- Proposed 5' wide H-Frame by T-Mobile
- Proposed 6160 Equipment cabinet by T-Mobile
- Proposed B160 Battery cabinet by T-Mobile
- Proposed 38' x 38' CMU walled compound by Skyway
- Proposed 6' x 10' concrete pad by T-Mobile
- Proposed H-Frame with Multi-Gang meter by Skyway
- Proposed antennas by T-Mobile

Per Imperial County zoning code Chapter 8, Section 90508.02r, new telecommunication towers are allowed in the proposed zoning district, A-2, with a Conditional Use Permit.

This project meets all telecommunication requirements laid out in Division 24 under Section 92401.04 (General Requirements).

1. It is allowed in the A-2 District with a Conditional Use Permit.
2. Design is consistent with the surrounding area as the monopole will be painted to match the environment.
3. The height of the tower is 120' which meets the height requirement set forth by Division 24 and the zoning district.
4. RF emission meets all FCC requirements.
5. Facility will produce minimal noise.
6. All accessory structures meet setback and height requirements.
7. No additional roads will be required.
8. Tower will allow for future collocation by other providers.
9. Lighting will meet FAA standards.

In addition, a soils and geo report is provided to show that the site is capable of supporting such a facility.

Your assistance with this project is greatly appreciated and we look forward to working with you on this.

Regards,
Tom Wilkerson

Tom Wilkerson

TEP
Site Acquisition Agent
twilkerson@tepgroup.net
(602) 860-3348

Date: **January 7, 2025**

Justin Jones
Skyway Towers
3637 Madaca Lane
Tampa, FL 33618
(813) 960-6200

326 Tryon Road
Raleigh, NC 27603
(919) 661-6351
Geotech@tepgroup.net

Subject: Subsurface Exploration Report

Skyway Towers Designation:	***Site Number:***	*CA-00435*
	Site Name:	*Imperial*
Engineering Firm Designation:	***TEP Project Number:***	*341053.1032886*
Site Data:	***749 W Worthington Road, Imperial, CA 92251 (Imperial County)***	
	Latitude N32° 50' 48.3", Longitude W115° 36' 0.5"	
	120 Foot – Proposed Monopole Tower	

Justin Jones,

TEP is pleased to submit this **"Subsurface Exploration Report"** to evaluate subsurface conditions in the tower area as they pertain to providing support for the tower foundation.

This report has been prepared in accordance with generally accepted geotechnical engineering practice for specific application to this project. The conclusions in this report are based on the applicable standards of TEP's practice in this geographic area at the time this report was prepared. No other warranty, expressed or implied, is made.

TEP assumes the current ground surface elevation, tower location and subsequent centerline provided are correct and are consistent with the elevation and centerline to be used for construction of the structure. Should the ground surface elevation be altered and/or the tower location be moved or shifted TEP should be contacted to determine if additional borings are necessary.

The analyses and recommendations submitted herein are based, in part, upon the data obtained from the subsurface exploration. The soil conditions may vary from what is represented in the boring log. While some transitions may be gradual, subsurface conditions in other areas may be quite different. Should actual site conditions vary from those presented in this report, TEP should be provided the opportunity to amend its recommendations, as necessary.

We at TEP appreciate the opportunity of providing our continuing professional services to you and Skyway Towers. If you have any questions or need further assistance on this or any other project, please give us a call.

Report Prepared/Reviewed by: Zeke A. Buchta, G.I.T. / John D. Longest, P.E.

Respectfully submitted by:

John D. Longest, P.E.

TABLE OF CONTENTS

1) PROJECT DESCRIPTION

It is understood a monopole communications tower is being planned for construction at the above referenced site. The structure loads can be obtained from the tower manufacturer.

2) SITE EXPLORATION

The field exploration included the performance of one soil test boring (B-1). The boring was advanced to the planned depth of 50 feet below ground surface (bgs) at the approximate location of the proposed monopole tower. The boring was performed by a truck mounted drill rig using continuous flight hollow stem augers to advance the hole. Split-spoon samples and Standard Penetration Test (SPT) resistance values (N-values) were obtained in accordance with ASTM D1586 at a frequency of four samples in the top 10 feet and two samples in every 10 feet thereafter.

The Split-spoon samples were transported to the TEP laboratory where they were classified by a qualified representative of the Geotechnical Engineer in general accordance with the Unified Soil Classification System (USCS), using visual-manual identification procedures (ASTM D2488).

A boring location plan showing the approximate boring location and the boring log presenting the subsurface information obtained, accompanied with a brief guide to interpreting the boring log, are included in Appendix A and C, respectively.

3) SITE CONDITIONS

The site is located at 749 W Worthington Road in Imperial, Imperial County, California. The proposed tower and compound are to be located in a dirt lot. The ground topography is relatively level.

4) SUBSURFACE CONDITIONS

The following description of subsurface conditions is brief and general. For more detailed information, the individual boring log contained in Appendix C may be consulted.

4.1) Soil

The USCS classification of the soils encountered in the boring include CL, SM, CH, and ML. The Standard Penetration Resistance ("N" Values) recorded in the subsurface materials range from 4 to 18 blows per foot of penetration.

4.2) Rock

Rock was not encountered n the boring. Refusal of auger advancement was not encountered in the boring.

4.3) Subsurface Water

Subsurface water was encountered at a depth of 8.5 feet (bgs) in the boring at the time of drilling. It should be noted the subsurface water level will fluctuate during the year due to seasonal variations, precipitation events and construction activity in the area.

4.4) Frost

The Telecommunications Industry Association (TIA) frost depth for Imperial County, California is 5 inches.

5) TOWER FOUNDATION ANALYSIS

Due to site characteristics and the presence of loose, submerged soils, the site is likely to be subject to liquefaction during a design-level seismic event. Liquefaction is the loss of a soil's shear strength due to the increase in pore water pressure resulting from seismic cyclic loading. Liquefaction at the site was evaluated using NovoLIQ software, the estimated subsurface water level and the site's peak ground acceleration (PGA). Based on the analysis, there are several distinguishable layers susceptible to liquefaction located between the depths of 38.5 and 50 feet (bgs). The total dynamic and liquefaction-induced settlements were calculated to be about 1.88 inches. Additional discussion on the evaluation for liquefaction, dynamic and liquefaction-induced settlements can be found in Section 7.2 of this report. The different tower elements should be evaluated to ensure that the monopole tower and its foundation can withstand independent movements caused by seismic settlements.

Based on the boring data, it is the opinion of TEP that a pier extending to a single large mat foundation or a single drilled shaft can be used to support the new tower. The following presents TEP's conclusions and recommendations regarding the foundation types.

5.1) Shallow Foundation

Based on preliminary site information, the site is located on relatively level ground. It is recommended that foundation designs account for site grades being raised with excavation spoils or that foundation drawings specify minimum embedment depths based on existing site elevations and factor in ground slopes.

The following values may be used for design of the monopole shallow foundation. The foundation should bear a minimum of 5 inches below the ground surface to penetrate the frost depth and with sufficient depth to withstand overturning of the tower. To resist the overturning moment, the weight of the concrete and any soil directly above the foundation can be used. The values provided in Table 1 consider ground surface elevation at the time of the subsurface exploration and undisturbed, native materials. Due to the construction process disturbing the in-situ soils and reducing the soil densities above the new foundation from those provided in Table 1, TEP recommends that the foundation designer specify a minimum depth and unit weight for compacted backfill to resist overturning of the new shallow foundation.

Table 1 – Shallow Foundation Design Parameters

Depth (feet)		Subsurface Material	Gross Ultimate Bearing[1,2] (psf)	Cohesion[1] (psf)	Friction Angle[1] (degrees)	Effective Unit Weight (pcf)	Friction Factor
Top	Bottom						
0	3.5	CL	8525	-	-	111	0.30
3.5	6	CL	7925	-	-	111	0.30
6	8.5	CL	7325	1125	-	111	0.30
8.5	13.5	SM	6200	-	30	45	0.36

Notes:
1) These values should be considered ultimate soil parameters.
2) Bearing values consider a foundation width ranging from 12 to 30 feet and less than 1 inch of total settlement.

Shallow foundations should be designed to withstand site deformations as a result of a design-level seismic event. Total dynamic seismic-induced settlement for the site as a result of a design-level seismic event has been evaluated to be about 1.88 inches. Differential settlements can be estimated as half the total settlement for any singular location over a distance of 30 horizontal feet. For this site, the estimated differential settlement is 1.88 inches. Lateral deformation was evaluated at the site with an estimated average lateral spread, based on a 0.5% slope, of 9 inches.

5.2) Drilled Shaft Foundation

Based on the results of the preliminary liquefaction analysis, there is potential for 1.88 inches of liquefaction-induced settlement at this site, with about 1.88 inches occurring between 38.5 feet and 50 feet (bgs). Subsidence of soils overlying these potentially liquefiable layers may generate downdrag forces via negative side friction on the drilled shaft foundation. TEP anticipates that drilled shaft foundations will likely bear well above 38.5 feet (bgs), so it is assumed that the planned foundation will settle with surrounding soils, and no downdrag forces need be considered. It should be verified that the planned tower and foundation may withstand the calculated settlements.

The following values may be used for design of the monopole drilled shaft foundation. The embedment depth for the proposed tower shall be above the depth of 35 feet (bgs). TEP recommends the side frictional and lateral resistance values developed in the top section of the caisson for a depth equal to the half the diameter of the caisson be neglected in design calculations. The drilled shaft foundation should be designed to terminate within a known material, CL, SM, CH, or ML, as presented in Table 2, with sufficient bearing to support the structural loading of the tower. The values presented in Table 2 are based on the ground surface elevation at the time of the subsurface exploration.

Table 2 – Drilled Shaft Foundation Design Parameters

Depth (feet)		Subsurface Material	Gross Ultimate Bearing[1] (psf)	Ultimate Side Frictional Resistance[1] (psf)	Cohesion[1] (psf)	Friction Angle[1] (degrees)	Effective Unit Weight (pcf)
Top	Bottom						
0	3.5	CL	12725	1140	2075	-	111
3.5	6	CL	10675	850	1550	-	111
6	8.5	CL	8900	610	1125	-	111
8.5	13.5	SM	8500	430	-	30	45
13.5	18.5	CH	6850	450	825	-	48
18.5	23.5	ML	5700	350	650	-	45
23.5	28.5	ML	7550	460	850	-	45
28.5	33.5	ML	6500	390	725	-	45
33.5	38.5	ML	6975	420	775	-	49
38.5	43.5	ML[2]	5875	350	650	-	49
43.5	48.5	ML[2]	7725	460	850	-	49
48.5	50	ML[2]	6825	410	750	-	49

Notes:
1) These values should be considered ultimate soil parameters.
2) The identified layer may be subject to liquefaction. During a seismic event this layer may lose shear strength and subsidence of overlying layers may generate negative skin friction on deep foundations. Post-liquefaction residual shear strengths have been provided for this layer.

Relying on soil strengths above the seasonal frost depth may lead to settlement and rotation, and settlement of the base. Where analysis of foundations relies on strengths of soils above the frost depth, more frequent maintenance visits should be made to check plumb and verify vertical movements of the foundation have not occurred.

5.3) Modulus of Subgrade Reaction

A vertical modulus of subgrade reaction and a horizontal modulus of subgrade reaction may be derived using the following equations and soil parameters for analysis of foundations.

$$k_{s-v} = 12 \cdot SF \cdot q_a$$

$$k_{s-h} = k_{s-v} \cdot B$$

Where;

q_a = Allowable Bearing Capacity (ksf)
SF = Factor of Safety
B = Base width (ft), use 1 if B < 1ft.
k_{s-v} = Vertical Modulus of Subgrade Reaction (kcf)
k_{s-h} = Horizontal Modulus of Subgrade Reaction (ksf)

6) SOIL RESISTIVITY

Soil resistivity testing was performed at the TEP laboratory in accordance with ASTM G57 (Standard Test Method for Measurement of Soil Resistivity Using the Four Electrode Soil Box Method). The test results indicate the resistivity of 280 ohm-cm in the near-surface soils. It should be noted that soil resistivity will fluctuate during the year due to seasonal variations, precipitation events and depth below surface.

7) SEISMIC DESIGN CONSIDERATIONS AND GEOLOGIC HAZARDS

The following sections were assembled to provide site-specific seismic design parameters and address any potential site seismic hazards and/or geologic hazards identified. Estimating potential seismic hazards utilizes many variables including the distance of the site to known faults, the expected magnitude of an earthquake and the rate of recurrence for this magnitude, source-to-site ground motion attenuation characteristics, and the site's soil stratigraphy. In accordance with Section 1613.2.2 of the 2022 California Building Code (2022 CBC), a site's seismic Site Class can be determined by the average soil properties in the upper 100 feet (Table 20.3-1 Site Classification) and all structures and portions of structures should be designed to resist the effects of seismic loadings caused by earthquake ground motions in accordance with ASCE 7-16.

7.1) Seismic Design Parameters

Based on the average site soil properties, a seismic Site Class E – Soft Clay Soil can be used in the analysis of this site. The seismic design parameters presented in Table 3 were obtained from the OSHPD Seismic Hazard Design Maps available through the USGS and in accordance with ASCE 7-16.

Table 3 – Seismic Design Parameters

Site Class	E – Soft Clay Soil
Site Specific MCE Peak Ground Acceleration, PGA	0.891g
Short Period Spectral Response Acceleration period, S_S	2.155
Long Period Spectral Response Acceleration period, S_1	0.731
Short Period Site Amplification Factor, F_a	See Section 11.4.8 of ASCE 7-16
Long Period Site Amplification Factor, F_v	See Section 11.4.8 of ASCE 7-16
Short-Period Design Spectral Response Acceleration, S_{DS}	See Section 11.4.8 of ASCE 7-16
1-Second Period Design Spectral Response Acceleration, S_{D1}	See Section 11.4.8 of ASCE 7-16

A site response analysis may be required. Section 11.4.8 of ASCE 7-16 should be reviewed to determine if an exception applies to this site. A site-specific ground motion hazard analysis is outside the scope of work associated with this report.

7.2) Seismic Hazard Review

Seismic hazards were reviewed in accordance with California Geological Survey's Special Publication 117A Guidelines for Evaluating and Mitigating Seismic Hazards in California (2008). Based on available information, faults were mapped in the vicinity of the project site. The 5 closest faults are identified:

Fault Name	Distance (miles)
San Jacinto fault (Superstition Hills section)	1.3
Imperial fault	4.3
Brawley Seismic Zone	5.6
San Jacinto fault (Superstition Mountain section)	9.3
San Felipe fault zone	11.8

Due to the presence of submerged sands at the site, a liquefaction analysis was conducted for this project location. The ground surrounding the tower site can be described as being relatively level to very gently sloping. Considering the site topography, it is not likely that the site should be considered susceptible to landslides or flows. However, lateral displacement was considered and is discussed below.

A liquefaction analysis was performed for this location using CLiq software (GeoLogismiki, 2007). No soil layers were omitted from evaluation based on plasticity or otherwise. The parameters for the analysis of the top 50 feet (bgs) included an earthquake magnitude of 6.93, based on the USGS Unified Hazard Tool, a peak ground acceleration (PGA) of 0.891g, in accordance with ASCE 7-16 from the OSHPD website (http://seismicmaps.org), and a subsurface water level of 8.5 feet (bgs). The maximum earthquake magnitude was based on a 2-percent probability of exceedance in 50 years or an average return period of 2475 years. Several layers are likely to be susceptible to earthquake-induced liquefaction with a factor of safety (FOS) below 1. Total cumulative liquefaction-induced settlement is estimated to be 1.88 inches. Differential settlements can be estimated as half the total settlement for any singular location over a distance of 30 horizontal feet (0.94 inches). However, differential settlements need not be considered for drilled shafts due to the relatively small footprint.

Due to the relatively level grade of this site, the analysis for lateral spread was performed considering gentle slope conditions from the north to the south side of the site. Based on elevations from Google Earth the site was evaluated with a very gentle grade of 0.5% slope. The calculated lateral spread for the boring is calculated to be between 9 and 10 inches.

The detailed NovoLIQ analysis report is included in Appendix B and the summarized settlement analysis is provided in Table 4.

Table 4 – Seismic-Induced Total Settlement

Depth (feet)		Subsurface Material	Average Factor of Safety (FOS)	Total Seismic-Induced Settlement (inches)	Cumulative Total Seismic-Induced Settlement (inches)
Top	Bottom				
0	3.5	CL	-	-	-
3.5	6	CL	-	-	-
6	8.5	CL	-	-	-
8.5	13.5	SM	-	-	-
13.5	18.5	CH	1.59	0	1.88
18.5	23.5	ML	1.63	0	1.88
23.5	28.5	ML	1.54	0	1.88
28.5	33.5	ML	1.48	0	1.88
33.5	38.5	ML	1.47	0	1.88
38.5	43.5	ML	0.74	0.92	1.88
43.5	48.5	ML	0.78	0.63	0.96
48.5	50	ML	0.77	0.33	0.33
				Total Cumulative Settlement[2]	**1.88 inches**

Based on our evaluation, the proposed tower and associated lightly loaded structures are acceptable from a geotechnical engineering standpoint, provided the foundation design takes into account the estimated seismic-induced settlements and potential downdrag forces noted in Section 5.2 and follows the recommendations within this report. Minimal grading is expected at the site. Grading should not be considered susceptible to landslide, settlement, and slippage under the anticipated design loadings and conditions; the proposed tower and associated lightly loaded structures should not impose any adverse effect on existing adjacent land or structures.

7.3) Geologic Hazard Review

Based on the subsurface exploration, site specific geologic hazards including, but not limited to, shrink/swell soils, collapsible soils, problematic shales, karst, and indicators of potential slope failures were not encountered in the sounding. As is customary, any known geologic hazards identified during exploration and subsequent analysis have been noted in the report. Potentially liquefiable soils and differential settlements were addressed in Sections 5.2 and 7.2 of this report.

8) CONSTRUCTION CONSIDERATIONS - SHALLOW FOUNDATION

The following recommendations pertain to the newly proposed tower foundation only. Should additional recommendations be required for lightly loaded support structures, such as the equipment shelter, TEP can provide these, at the client's request, for an additional fee.

8.1) Excavation

The boring data indicates excavation to the expected subgrade level for the shallow foundation will extend through clay and sand. A large, tracked excavator should be able to remove the materials with moderate difficulty.

Excavations should be sloped or shored in accordance with local, state and federal regulations, including OSHA (29 CFR Part 1926) excavation trench safety standards. It is the responsibility of the contractor for site safety. This information is provided as a service and under no circumstance should TEP be assumed responsible for construction site safety.

8.2) Dewatering/Foundation Evaluation/Subgrade Preparation

As subsurface water was encountered at a depth of 8.5 feet (bgs) during the subsurface exploration, dewatering may or may not be required. Subsurface water can likely be controlled with the use of a sump and pump system and/or trenches. Dewatering components should be placed to not interfere with the placement of backfill materials and/or concrete foundations and should be utilized to keep the localized water table below the bottom of any excavation.

After dewatering and excavation to the design elevation for the footing, the materials should be evaluated by a Geotechnical Engineer or a representative of the Geotechnical Engineer prior to reinforcement and concrete placement. This evaluation should include probing, shallow hand auger borings and dynamic cone penetrometer testing (ASTM STP 399) to help verify that suitable residual material lies directly under the foundation and to determine the need for any undercut and replacement of unsuitable materials. Loose surficial material should be compacted in the excavation prior to reinforcement and concrete placement to stabilize surface soil that may have become loose during the excavation process. TEP recommends a 6-inch layer of compacted dense-graded stone be placed just after excavation to aid in surface stability.

8.3) Fill Placement and Compaction

Backfill materials placed above the shallow foundation to the design subgrade elevation should not contain more than 5 percent by weight of organic matter, waste, debris or any otherwise deleterious materials. To be considered for use, backfill materials should have a maximum dry density of at least 100 pounds per cubic foot as determined by modified Proctor (ASTM D1557), a Liquid Limit no greater than 40, a Plasticity Index no greater than 20, a maximum particle size of 4 inches, and 20 percent or less of the material having a particle size between 2 and 4 inches. Because small handheld or walk-behind compaction equipment will most likely be used, backfill should be placed in thin horizontal lifts not exceeding 6 inches (loose).

Fill placement should be monitored by a qualified Materials Technician working under the direction of a Geotechnical Engineer. In addition to the visual evaluation, a sufficient amount of in-place field density tests should be conducted to confirm the required compaction is being attained.

8.4) Reuse of Excavated Soil

The clay and sand that meets the above referenced criteria can be utilized as backfill based on dry soil and site conditions at the time of construction.

9) CONSTRUCTION CONSIDERATIONS - DRILLED SHAFTS

Based on TEP's experience, a conventional drilled shaft rig (Hughes Tool LDH, or equivalent) can be used to excavate to the termination depth of TEP's boring. An earth auger can typically penetrate the materials encountered to the termination depth of the boring with moderate difficulty. Special excavation equipment may be necessary for a shaft greater that 60-inches in diameter.

Due to the subsurface water and the sandy soil, the contractor should utilize the "slurry" method for shaft construction. The following are general procedure recommendations in drilled shaft construction using the "slurry" method:

1) Slurry drilled shafts are constructed by conventional caisson drill rigs excavating beneath a drilling mud slurry. Typically, the slurry is introduced into the excavation after the water table has been penetrated and/or the soils on the sides of the excavation are observed to be caving-in. When the design shaft depth is reached, fluid concrete is placed through a tremie pipe at the bottom of the excavation.

2) The slurry level should be maintained at a minimum of 5 feet or one shaft diameter, whichever is greater, above the subsurface water level.

3) Inspection during excavation should include verification of plumbness, maintenance of sufficient slurry head, monitoring the specific gravity, pH and sand content of the drilling slurry, and monitoring any changes in the depth of the excavation between initial approval and prior to concreting.

4) A removable steel casing should be installed in the shaft to prevent caving of the excavation sides due to excavation disturbance and soil relaxation. Loose soils in the bottom of the shaft should be removed.

5) The specific gravity or relative density of the drilling mud slurry should be monitored from the initial mixing to the completion of the excavation. An increase in the specific gravity or density of the drilling slurry by as much as 10 percent is indicative of soil particles settling out of the slurry onto the bottom of the excavation. This settling will result in a reduction of the allowable bearing capacity of the bottom of the drilled shaft.

6) After approval, the drilled shaft should be concreted as soon as practical using a tremie pipe.

7) For slurry drilled shafts, the concrete should have a 6- to 8-inch slump prior to discharge into the tremie. The bottom of the tremie should be set at about one tremie pipe diameter above the excavation. A closure flap at the bottom of the tremie should be used, or a sliding plug introduced into the tremie before the concrete, to reduce the potential for the concrete being contaminated by the slurry. The bottom of the tremie must be maintained in concrete during placement, which should be continuous.

8) The protective steel casing should be extracted as concrete is placed. A head of concrete should be maintained above the bottom of the casing to prevent soil and water intrusion into the concrete below the casing.

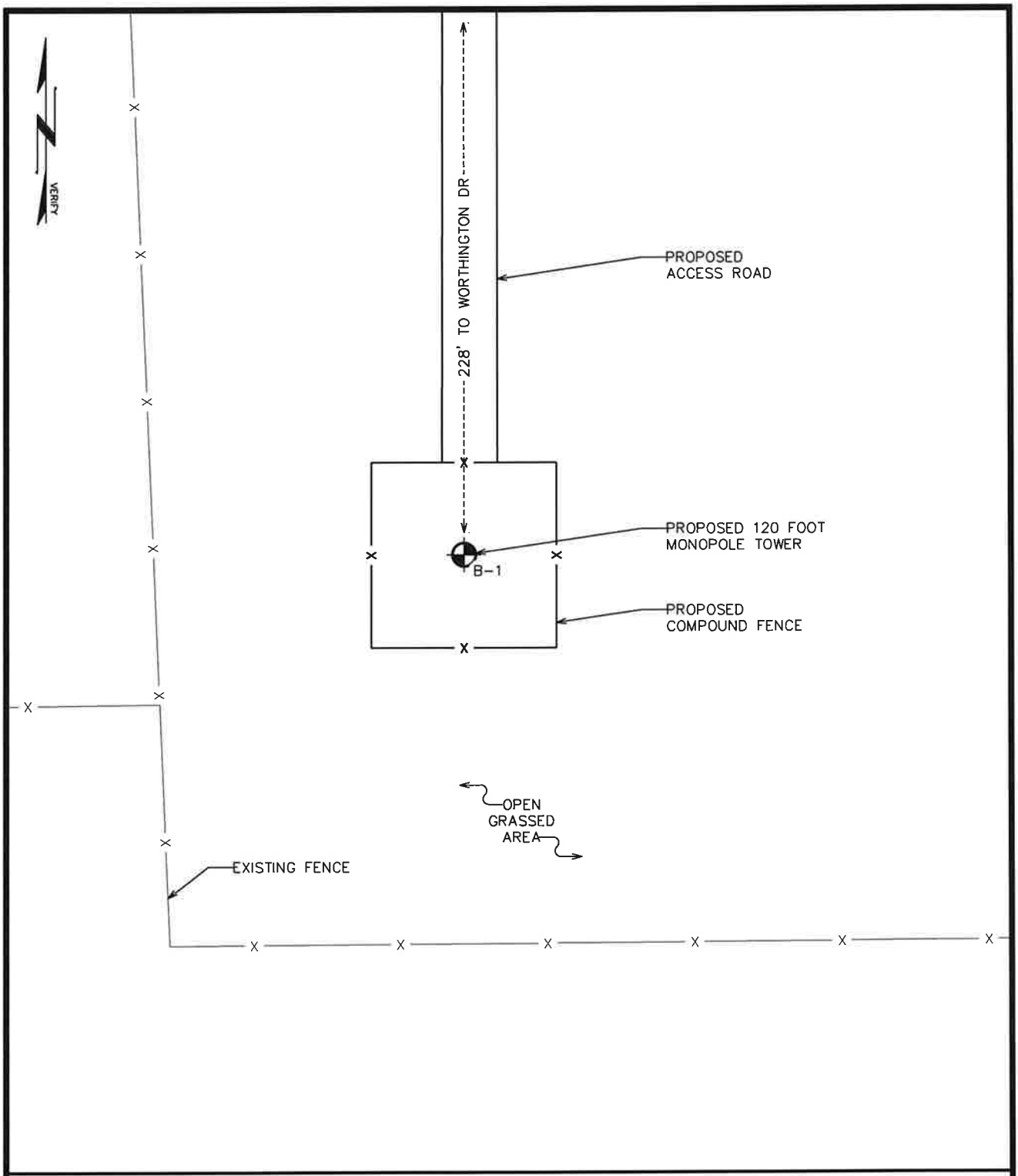
If variability in the subsurface materials is encountered, a representative of the Geotechnical Engineer should verify that the design parameters are valid during construction. Modification to the design values presented above may be required in the field.

10) SITE PHOTOGRAPHS

	Boring Location During Drilling Activities
	Boring Location Following Drilling Activities

APPENDIX A

BORING LAYOUT



BORING LAYOUT

SCALE: N.T.S.

PREPARED BY:	PREPARED FOR:	PROJECT INFORMATION:	
TEP 326 TRYON ROAD RALEIGH, NC 27603 (919) 661-6351	SKYWAY TOWERS 3637 MADACA LANE TAMPA, FL 33618 (813) 960-6200	**IMPERIAL** **SITE #: CA-00435** 749 WEST WORTHINGTON ROAD IMPERIAL, CA 92251 (IMPERIAL COUNTY)	REVISION: 0 TEP JOB #: 341053.103288G SHEET NUMBER: **C-1**

APPENDIX B

NOVOLIQ REPORT

Soil Liquefaction Analysis Report

Tower Engineering Professionals, Inc.

Project : Imperial
Project No. : 341053
Client : TEP
Site Address : Imperial, CA

Borehole : BH-1
Total Depth : 0 ft
Water Level : 8.5 ft
Calculated By : Reviewed By : JDL

Table i : Input Data and Assumptions

Input Assumption	Setting
Field Test Type :	Standard Penetration Test (SPT)
Apply All Corrections to SPT?	True
Groundwater Level (ft) =	8.5
Earthquake Magnitude M =	6.9
Magnitude Scaling Factor (MSF) :	1.24 (Idriss, 1997 -NCEER)
Fines Content Correction :	(according to user settings)
Depth Reduction Factor (Rd) :	NCEER, 1997
Relative Density (Dr) Estimation :	Idriss & Boulanger, 2003
Site Topography :	Gently Sloped : 0.5 %
Ground Improvement Feature :	None
Peak Ground Acceleration PGA (g) =	0.891

Table ii : CRR Calculation Methods

CRR Formula	Selected?
NCEER Workshop (1997)	False
Boulanger & Idriss (2014)	True
Vancouver Task Force (2007)	False
Cetin et al. (2004)	True
Chinese Code	False
Seed et al. (1983)	False
Japanese Highway Bridge Code	False
Tokimatsu and Yoshimi (1983)	False
Shibata (1981)	False
Kokusho et al. (1983)	False

Table iv : Field Tests

Depth (ft)	SPT Blow Counts(N)
1	7
3.5	6
6	6
8.5	6
13.5	4
18.5	7
23.5	9
28.5	9
33.5	10
38.5	16
43.5	18
48.5	18

Table iii : Subsurface Soil Layers

Layer Thickness (ft)	Soil Type	Unit Weight (lb/ft3)	Fines Content (%)	D50 (mm)	Check Liquefaction	Su (ksf)
8.5	Clay	111	60	0.002	False	0
5	Sand	108	12	2	True	0
5	Clay	111	90	0.002	True	0.8
15	Silt	108	90	0.02	True	0.75
15	Silt	112	90	0.02	True	1.1

Table v : Post-Liquefaction Displacements

Type	Method	Movement (inch)
Lateral Spreading	Zhang & Robertson, 2004	7
Lateral Spreading	Faris, 2006	0 (M<8)
Lateral Spreading	Youd et al., 2002	0
Lateral Spreading	Barlett & Youd, 1992	0 (M<8)
Lateral Spreading	Hamada et al., 1986	58
Lateral Spreading	Youd & Perkins, 1987	LSI ~26 see details for LSI=30
Vertical Settlement	Ishihara & Yoshimine, 1992	2

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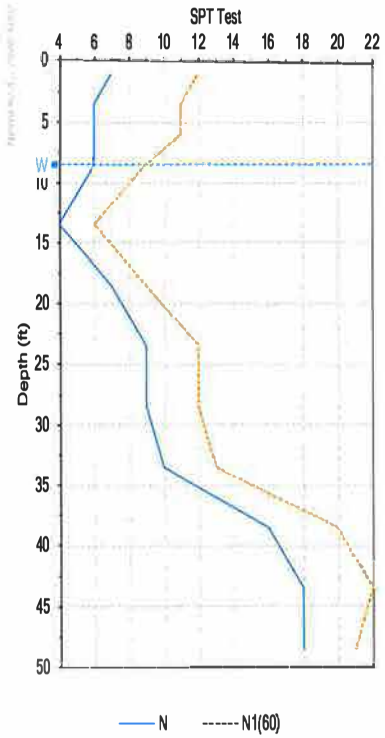

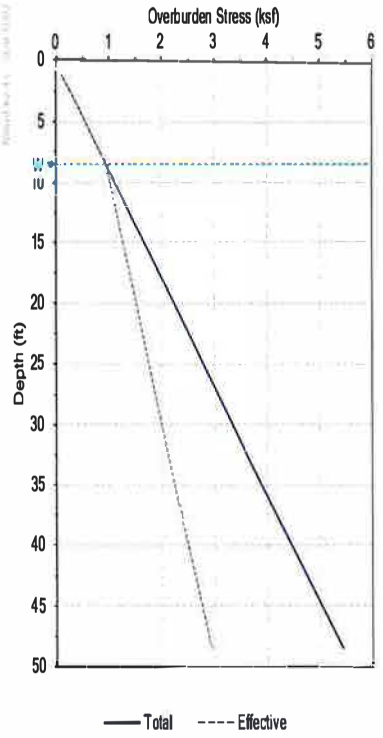

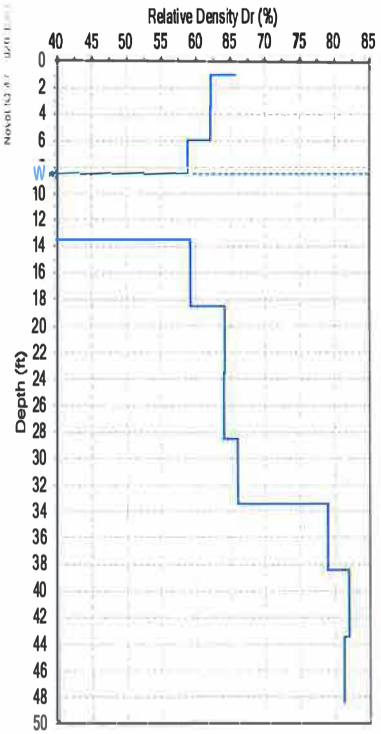

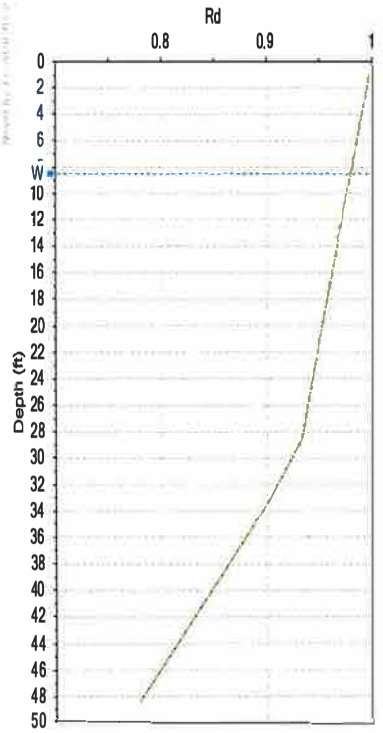

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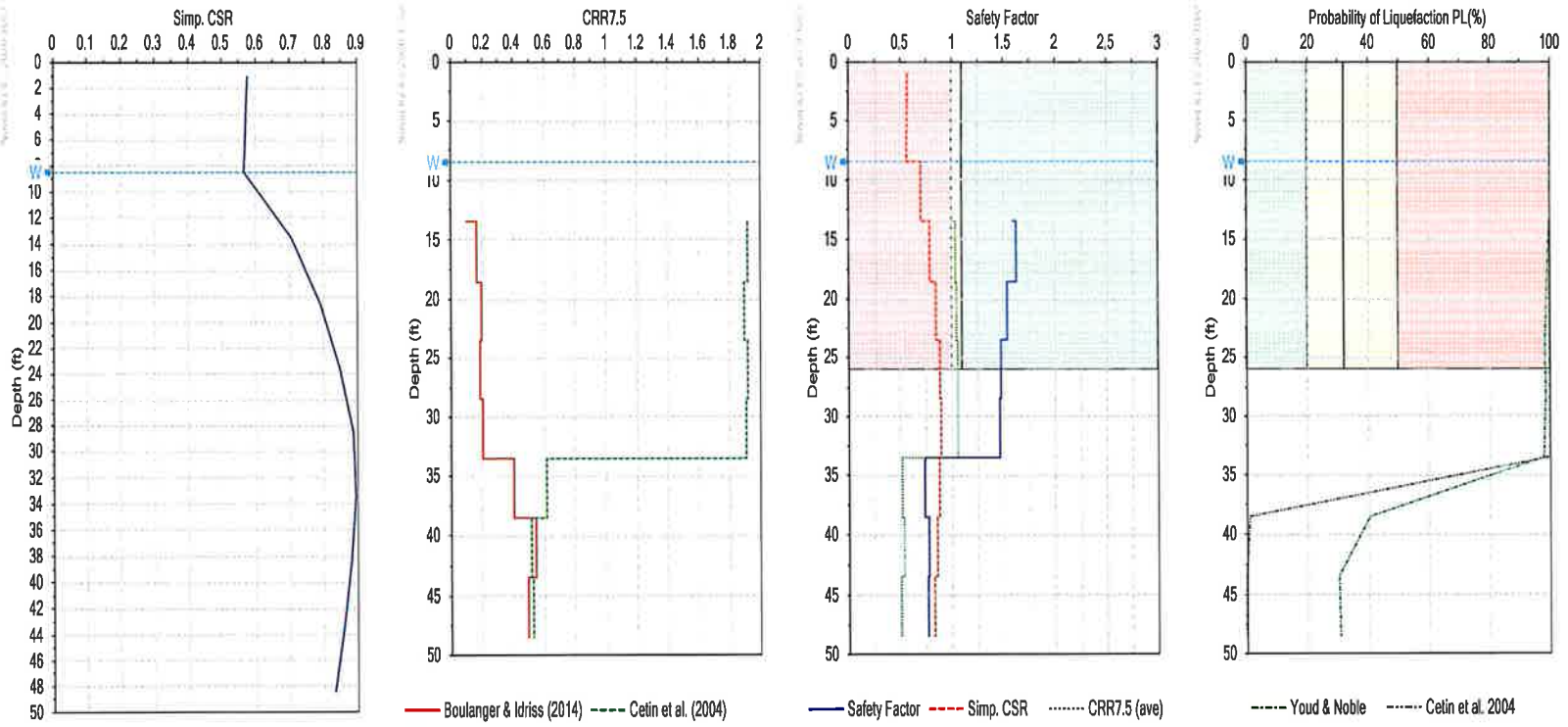

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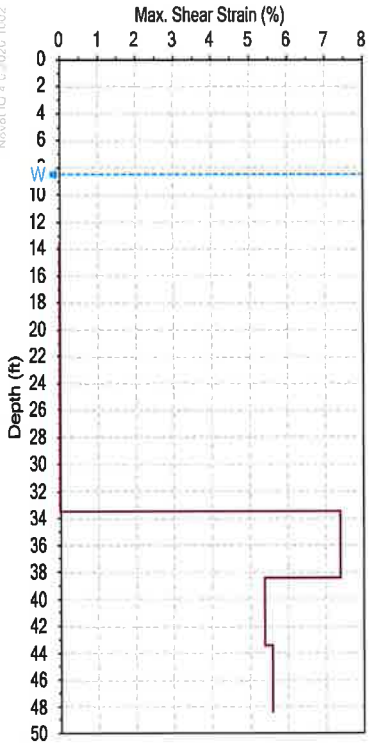
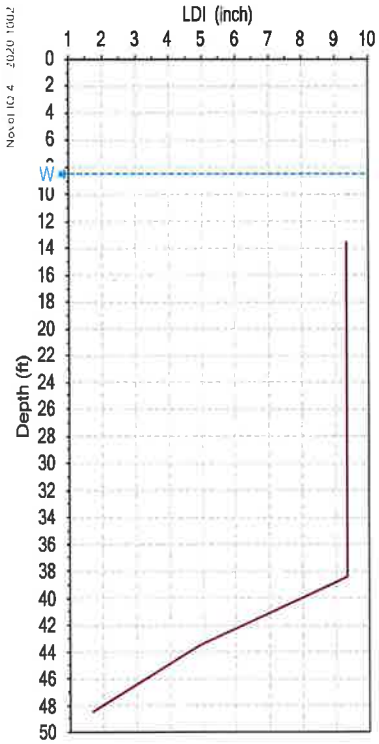
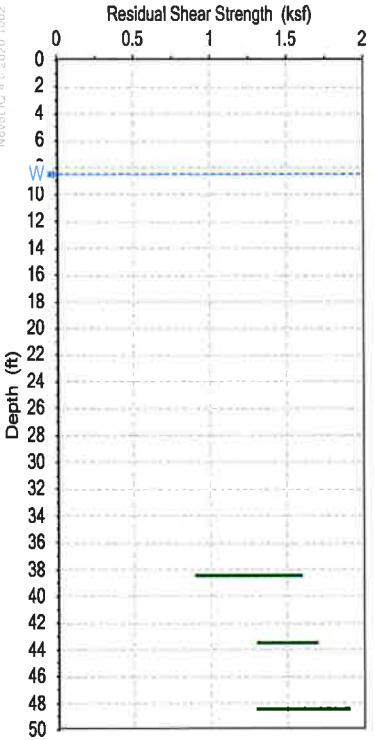
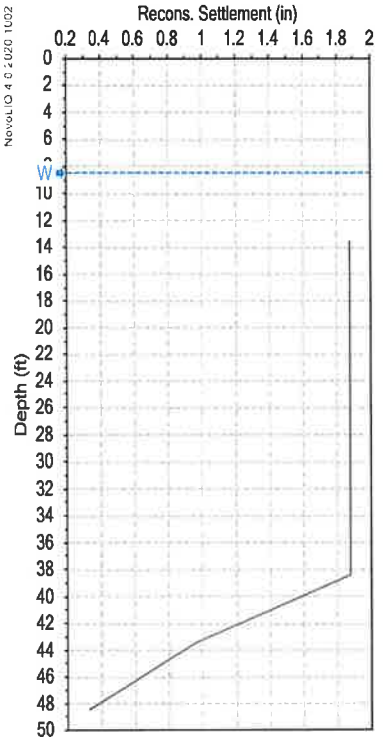
Calculated By :

Reviewed By : JDL









APPENDIX C

BORING LOG

TEP
326 Tryon Road
Raleigh, NC 27603
919.661.6351
geotech@tepgroup.net

LOG OF BORING B-1

PROJECT	SITE ID:	TEP NO.:
Imperial	CA-00435	341053

DATE STARTED	DRILLING METHOD	HOLE SIZE	CITY, STATE
12/17/2024	Hollow Stem Auger	3.25 in	Imperial, California

DATE COMPLETE	HAMMER WEIGHT/FALL	HAMMER TYPE	TOTAL DEPTH	DRILL RIG TYPE
12/17/2024	140lbs / 30in	Auto Hammer	50.0 FT	Fraste PL-G

GROUND EL.	LOGGED BY	CHECKED BY	BACKFILL	DEPTH/EL. GROUNDWATER
	KWG	JDL	Cuttings	▽ 8.5/ ATD

BORING LOCATION: At the approximate location of the proposed tower

SAMPLE NUMBER	SAMPLE LENGTH (INCHES)	BLOW COUNTS (N) / REC% / RQD%	ELEVATION (FEET)	DEPTH (FEET)	SAMPLE GRAPHIC	USCS GRAPHIC	DESCRIPTION AND CLASSIFICATION	REMARKS	POCKET PEN TSF	UNCONFINED STRENGTH, PSF	UNIT WEIGHT PCF
S1	18	4-3-4 (7)					0.0-3.5: Medium stiff, brown, lean CLAY (CL), moist		3.8		
S2	18	3-2-4 (6)		5			3.5-6.0: to sandy		2.4		
S3	18	2-2-4 (6)					6.0-8.5: to trace sand		1.3		
S4	18	4-2-4 (6)		10			8.5-13.5: Loose, brown, fine to medium, silty SAND (SM), wet				
S5	18	2-1-3 (4)		15			13.5-18.5: Soft, dark brown, fat CLAY (CH), with sand, wet		1.2		
S6	18	3-3-4 (7)		20			18.5-23.5: Medium stiff, dark brown, sandy SILT (ML), wet		0.8		
S7	18	3-4-5 (9)		25			23.5-28.5: to stiff, with sand		1.2		
S8	18	4-4-5 (9)		30			28.5-38.5: to no sand		0.9		
S9	18	4-4-6 (10)		35					1		
S10	18	6-8-8 (16)		40			38.5-48.5: to very stiff, trace sand		1.5		
S11	18	7-8-10 (18)		45					1.4		
S12	18	7-8-9 (17)		50			48.5-50.0: to with sand		1.5		
							50.0: Boring Terminated				

TEP
326 Tryon Road
Raleigh, NC 27603
919-661-6351
Geotech@tepgroup.net

Key to Soil Symbols and Terms

TERMS DESCRIBING CONSISTENCY OR CONDITION

COARSE-GRAINED SOILS (major portions retained on No. 200 sieve): includes (1) clean gravel and sands and (2) silty or clayey gravels and sands. Condition is rated according to relative density as determined by laboratory tests or standard penetration resistance tests.

Descriptive Terms	SPT Blow Count
Very Loose	< 4
Loose	4 to 10
Medium Dense	11 to 30
Dense	31 to 50
Very Dense	> 50

FINE-GRAINED SOILS (major portions passing on No. 200 sieve): includes (1) inorganic and organic silts and clays (2) gravelly, sandy, or silty clays, and (3) clayey silts. Consistency is rated according to shearing strength, as indicated by penetrometer readings, SPT blow count, or unconfined compression tests.

Descriptive Terms	SPT Blow Count
Very Soft	< 2
Soft	2 to 4
Medium Stiff	5 to 8
Stiff	9 to 15
Very Stiff	16 to 30
Hard	> 30

GENERAL NOTES

1. Classifications are bases on the Unified Soil Classification System and include consistency, moisture, and color. Field descriptions have been modified to reflect results of laboratory tests where deemed appropriate.

2. Surface elevations are based on topographic maps and estimated locations and should be considered approximate.

3. Descriptions on these boring logs apply only at the specific boring locations and at the time the borings were made. They are not guaranteed to be representative of subsurface condition at other locations or times.

	Group Symbols	Typical Names
	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
	GP	Poorly-graded gravels, little or no fines/sands
	GM	Silty gravels, gravel-sand-silt mixtures
	GC	Clayey gravels, gravel-sand-silt mixtures
	SW	Well-graded sands, gravelly sands, little or no fines
	SP	Poorly-graded sands, little or no fines/sands/gravels
	SM	Silty sands, sand-silt mixtures
	SC	Clayey sands, sand-clay mixtures
	ML	Inorganic silts and very fine sands, rock floor, silty or clayey fine sands or clayey silts with slight plasticity
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
	OL	Organic silts and organic silty clays of low plasticity
	MH	Inorganic silts, micaceous or distomaceous fine sandy or silty soils, elastic silts
	CH	Inorganic clays of high plasticity, fat clays
	OH	Organic clays of medium to high plasticity, organic silts
	PT	Peat and other highly organic soils

Sampler Symbols

- Split Spoon
- Standard Penetration Test (SPT)
- Pushed Shelby Tube
- Auger Cuttings
- Grab Sample
- Dynamic Cone Penetrometer
- Hand Auger
- Rock Core

Log Abbreviations

ATD - At Time of Drilling
AD - After Drilling
EOD - End of Drilling
RMR - Rock Mass Rating
WOH - Weight of Hammer
WOR - Weight of Rod
REC - Rock Core Recovery
RQD - Rock Quality Designation

Information Regarding This Subsurface Exploration Report

The information contained in this report has been specifically tailored to the needs of the client at the time the report was provided, for the specific purpose of the project named in this report. The attached report may not address the needs of contractors, civil engineers, or structural engineers. Anyone other than the named client should consult with the geotechnical engineer prior to utilizing the information contained in the report.

It is always recommended that the full report be read. While certain aspects of the report may seem unnecessary or irrelevant; just as each project and site are unique, so are the subsurface investigation reports and the information contained in them. Several factors can influence the contents of these reports, and the geotechnical engineer has taken into consideration the specific project, the project location, the client's objectives, potential future improvements, etc. If there is any question about whether the attached report pertains to your specific project or if you would like to verify that certain factors were considered in the preparation of this report, it is recommended that you contact the geotechnical engineer.

Geotechnical subsurface investigations often are prepared during the preliminary stages of a project and aspects of the project may change later on. Some changes may require a report revision or additional exploration. Some changes that often need to be brought to the attention of the geotechnical engineer include changes in location, size and/or type of structure, modifications to existing structures, grading around the project site, etc. Some naturally occurring changes can also develop that impact the information contained in this geotechnical report such as earthquakes, landslides, floods, subsurface water levels changing, etc. It is always recommended that the geotechnical be informed of known changes at the project site.

Subsurface exploration reports are generated based on the analysis and professional opinions of a geotechnical engineer based on the results of field and laboratory data. Often subsurface conditions can vary – sometimes significantly – across a site and over short distances. It often is helpful to retain the geotechnical engineer's services during the construction process. Otherwise, the geotechnical cannot assume responsibility or liability for report recommendations which may have needed to change based on changing site conditions or misinterpretation of recommendations.

Geotechnical engineers assemble testing and/or boring logs based on their interpretation of field and laboratory data. Testing and/or boring logs should always be coupled with the subsurface exploration report. The geotechnical engineer and Tower Engineering Professionals cannot be held reliable for interpretations, analyses, or recommendations based solely on the testing and/or boring log if it is independent of the prepared report.

The scope of the subsurface exploration report does not include an assessment or analysis of environmental conditions, determination of the presence or absence of wetlands or hazardous or toxic materials on or below the ground surface. Any notes regarding odors, fill, debris, or anything of that nature are offered as general information for the client, often to help identify or delineate natural soil boundaries.

TEP

For additional information, please contact the geotechnical engineer named in the attached report.

SKYWAY SITE #:	CA-00435
SITE NAME:	IMPERIAL
PROJECT DESCRIPTION:	PROPOSED WIRELESS TELECOMMUNICATION FACILITY
TOWER TYPE:	120' MONOPOLE
SITE ADDRESS:	749 WEST WORTHINGTON RD. IMPERIAL, CA 00435 (IMPERIAL COUNTY)
JURISDICTION:	IMPERIAL COUNTY
LEGAL DESCRIPTION:	PAR 2 PM 926 OF TR 51 15-13 2.89AC
LEASE AREA:	1,600 ± S.F. (0.0367 AC.)
ANTICIPATED CONSTRUCTION COST :	T.B.D.
PROPERTY CATEGORY:	RP - REAL PROPERTY
PROPERTY TYPE:	A-2 - AGRICULTURE
PARCEL #:	062-040-075

PROJECT INFORMATION

LATITUDE N 32.846758° (NAD '83)
LONGITUDE W 115.600128° (NAD'83)
GROUND ELEV. (AMSL) -58.65' (NAVD '88)
*INFORMATION PROVIDED IN THE FORM OF A 1-A CERTIFICATION PROVIDED BY CELL SITE CONCEPTS ON JUNE 5, 2024.

1-A CERTIFICATION

PLANS PREPARED FOR:

SKYWAY TOWERS
3637 MADACA LANE
TAMPA, FL 33618

SITE NAME: CA-00435 IMPERIAL
749 WEST WORTHINGTON RD.
IMPERIAL, CA 92251
(IMPERIAL COUNTY)

N 32.846758° W 115.600128°

PLANS PREPARED BY:

TEP
326 TYRON RD
RALEIGH, NC 27603
OFFICE: (919) 661-6531
www.tepgroup.net

REV	DATE	ISSUED FOR:
0	09-27-24	ZONING

DRAWN BY: ASD | CHECKED BY: ARB

SEAL:

REGISTERED PROFESSIONAL ENGINEER STEPHEN BUNTING 91898 CIVIL STATE OF CALIFORNIA

Stephen E. Bunting

September 27, 2024

SEAL:

SHEET NUMBER: T-1

REVISION: 0

TEP#: 341053.968640

LOCATION MAP

FROM IMPERIAL COUNTY AIRPORT: HEAD SOUTHEAST TOWARD N IMPERIAL AVE, TURN LEFT TOWARD AIRPORT RD, TURN RIGHT ONTO AIRPORT RD, TURN RIGHT ONTO N IMPERIAL AVE, TURN RIGHT AT THE 1ST CROSS STREET ONTO W ATEN RD, TURN RIGHT ONTO AUSTIN RD, TURN LEFT ONTO W WORTHINGTON RD.

DRIVING DIRECTIONS

TOWER OWNER:
NAME: SKYWAY TOWERS
ADDRESS: 3637 MADACA LANE
CITY, STATE, ZIP: TAMPA, FL 33618
CONTACT: JUSTIN JONES
PHONE: (813) 960-6217

SITE ACQUISITION:
NAME: TEP OPCO, LLC
ADDRESS: 4710 E ELWOOD ST, STE 9
CITY, STATE, ZIP: PHOENIX, AZ 85040
CONTACT: JEN KELLY
PHONE: (480) 220-6022

SURVEYOR:
NAME: CELL SITE CONCEPTS
ADDRESS: 16885 VIA DEL CAMPO CT, STE 318
CITY, STATE, ZIP: SAN DIEGO, CA 92127
CONTACT: RAFI HANNA
PHONE: (858) 432-4112

CIVIL ENGINEER:
NAME: TEP
ADDRESS: 326 TRYON RD
CITY, STATE, ZIP: RALEIGH, NC 27603
CONTACT: STEPHEN BUNTING, PE
PHONE: (919) 661-6351

PROPERTY OWNER:
NAME: CALDERON HENRY F & SARA JT
ADDRESS: 749 W WORTHINGTON RD,
CITY, STATE, ZIP: IMPERIAL, CA 92251
CONTACT: UNKNOWN
PHONE: UNKNOWN

CONTACT INFORMATION

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING:

1. CALIFORNIA BUILDING CODE (2022 EDITION)
2. LOCAL BUILDING CODE
3. CITY/COUNTY ORDINANCES
4. ANSI/TIA/EIA-222-H
5. CALIFORNIA ELECTRIC CODE (2022 EDITION)
6. CALIFORNIA FIRE CODE (2022 EDITION)

CODE COMPLIANCE

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

Know what's below. Call before you dig.

THE UTILITIES SHOWN HEREON ARE FOR THE CONTRACTORS CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER/ SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

UTILITY STATEMENT

UTILITIES:
POWER COMPANY: IMPERIAL IRRIGATION DISTRICT
CONTACT: CUSTOMER SERVICE
PHONE: (800) 303-7755

TELEPHONE COMPANY: SPECTRUM
CONTACT: CUSTOMER SERVICE
PHONE: (888) 389-2498

SHEET	DESCRIPTION	REV
T1	TITLE SHEET	0
N1	GENERAL NOTES	0
C1	EXTENDED SITE PLAN	0
C2	SITE PLAN	0
C3	COMPOUND DETAIL	0
C4	NORTH & SOUTH TOWER ELEVATIONS	0
C5	FENCE DETAILS	0

INDEX OF SHEETS

1. ALL REFERENCES MADE TO OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED SKYWAY TOWERS OR IT'S DESIGNATED REPRESENTATIVE.
2. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE OF CALIFORNIA.
3. THE STRUCTURE SHALL BE DESIGNED IN ACCORDANCE WITH ANSI/TIA-222-H. THIS CONFORMS TO THE REQUIREMENTS OF THE CALIFORNIA BUILDING CODE, 2022 EDITION.
4. WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE CALIFORNIA BUILDING CODE, 2022 EDITION.
5. UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
6. ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
7. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE STRUCTURE AND IT'S COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
8. ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATION. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE PROCEDURES.
9. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
RENTAL CHARGES, SAFETY, PROTECTION AND MAINTENANCE OF RENTED EQUIPMENT SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
11. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE LESSEE PROJECT MANAGER.
12. BILL OF MATERIALS AND PART NUMBERS LISTED ON CONSTRUCTION DRAWINGS ARE INTENDED TO AID CONTRACTOR/OWNER. CONTRACTOR/OWNER SHALL VERIFY PARTS AND QUANTITIES WITH MANUFACTURER PRIOR TO BIDDING AND/OR ORDERING MATERIALS.
13. ALL PERMITS THAT MUST BE OBTAINED ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
14. 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY OR CITY) ENGINEER.
15. THE CONTRACTOR SHALL REWORK (DRY, SCARIFY, ETC.) ALL MATERIAL NOT SUITABLE FOR SUBGRADE IN ITS PRESENT STATE. AFTER REWORKING, IF THE MATERIAL REMAINS UNSUITABLE, THE CONTRACTOR SHALL UNDERCUT THIS MATERIAL AND REPLACE WITH APPROVED MATERIAL. ALL SUBGRADES SHALL BE PROOFROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PRIOR TO PAVING. ANY SOFT MATERIAL SHALL BE REWORKED OR REPLACED.
16. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL PIPES, DITCHES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTED BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURE IN OPERABLE CONDITION.
17. THE OWNER SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.
18. ANY BUILDINGS ON THIS SITE ARE INTENDED TO SHELTER EQUIPMENT WHICH WILL ONLY BE PERIODICALLY MAINTAINED AND ARE NOT INTENDED FOR HUMAN OCCUPANCY.
19. TEMPORARY FACILITIES FOR PROTECTION OF TOOLS AND EQUIPMENT SHALL CONFORM TO LOCAL REGULATIONS AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
20. THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL CARRY LIABILITY INSURANCE IN THE AMOUNTS AND FORM IN ACCORDANCE WITH THE LESSEE SPECIFICATIONS. CERTIFICATES DEMONSTRATING PROOF OF COVERAGE SHALL BE PROVIDED TO THE LESSEE PRIOR TO THE START OF THE WORK ON THE PROJECT.
21. THE CONTRACTOR SHALL CONTACT ALL APPLICABLE UTILITY SERVICES TO VERIFY LOCATIONS OF EXISTING UTILITIES AND REQUIREMENTS FOR NEW UTILITY CONNECTIONS PRIOR TO EXCAVATING.
22. THE CONTRACTOR SHALL MAINTAIN THE JOB CLEAR OF TRASH AND DEBRIS. ALL WASTE MATERIALS SHALL BE REMOVED FROM THE SITE PRIOR TO SUBSTANTIAL COMPLETION AND PRIOR TO FINAL ACCEPTANCE. THE CONTRACTOR SHALL FURNISH ONE 55 GALLON BARREL, AND TRASH BAGS, AND SHALL REMOVE TRASH, DEBRIS, ETC., ON A DAILY BASIS.
23. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL CONDITIONS PRIOR TO SUBMITTING HIS PROPOSAL. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS WITH THOSE AT THE SITE. ANY VARIATION WHICH REQUIRES PHYSICAL CHANGE SHALL BE BROUGHT TO THE ATTENTION OF THE SKYWAY TOWERS PROJECT ENGINEER FOR FACILITIES/CONSTRUCTION.
24. THE CONTRACTOR SHALL GUARANTEE THE WORK PERFORMED ON THE PROJECT BY THE CONTRACTOR AND ANY OR ALL OF THE SUBCONTRACTORS WHO PERFORMED WORK FOR THE CONTRACTOR ON THIS PROJECT. THE GUARANTEE SHALL BE FOR A FULL YEAR FOLLOWING ISSUANCE OF THE FINAL PAYMENT OF RETAINAGE. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.

UTILITY NOTES

1. APPLY FOR THE UTILITY SERVICE (ELECTRIC) NO LATER THAN THE NEXT BUSINESS DAY FOLLOWING AWARD OF CONTRACT. COORDINATE WITH THE ELECTRIC UTILITY COMPANY FOR EXACT TRANSFORMER LOCATION, METERING REQUIREMENTS, AND THE SERVICE ROUTING. COORDINATE WITH THE TELEPHONE UTILITY COMPANY FOR EXACT TELEPHONE REQUIREMENTS AND ROUTING OF SERVICE.
2. ALL UTILITY RELATED WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE UTILITY REQUIREMENTS. FIELD VERIFY EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL CONTACT UTILITIES AND LOCATOR SERVICE A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION. (CA ONE-CALL 800-642-2444).
4. CONTRACTOR SHALL PROVIDE TRENCHING AND CONDUITS AS SHOWN OR AS REQUIRED BY LOCAL UTILITY.
5. NO PENETRATIONS TO THE TOWER FOUNDATION OF ANY KIND.

GENERAL NOTES

PLANS PREPARED FOR:

SKYWAY TOWERS
3637 MADACA LN.
TAMPA, FL 33618
OFFICE: (813) 960-6217

PROJECT INFORMATION:

IMPERIAL
SKYWAY SITE#: CA-00435

749 WEST WORTHINGTON RD.
IMPERIAL, CA 92251
(IMPERIAL COUNTY)

PLANS PREPARED BY:

TEP
326 TYRON RD
RALEIGH, NC 27603
OFFICE: (919) 661-6531
www.tepgroup.net

SEAL:

REGISTERED PROFESSIONAL ENGINEER
STEPHEN E. BARTENS
91898
CIVIL
STATE OF CALIFORNIA

September 27, 2024

REV	DATE	ISSUED FOR:
0	09-27-24	ZONING

DRAWN BY: ASD | CHECKED BY: ARB

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER: **N-1**

REVISION: 0

TEP 84108.432429

LEGEND

- PARENT PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING FENCE
- EXIST. CONTOUR LINE
- EDGE OF PAVEMENT
- PROPERTY CORNER
- LEASE/EASEMENT CORNER
- EXISTING RIGHT OF WAY
- OVERHEAD WIRE
- BURIED TELCO
- EXISTING UTILITY POLE
- TELCO PEDESTAL
- FIBER VAULT

TOWER SETBACKS

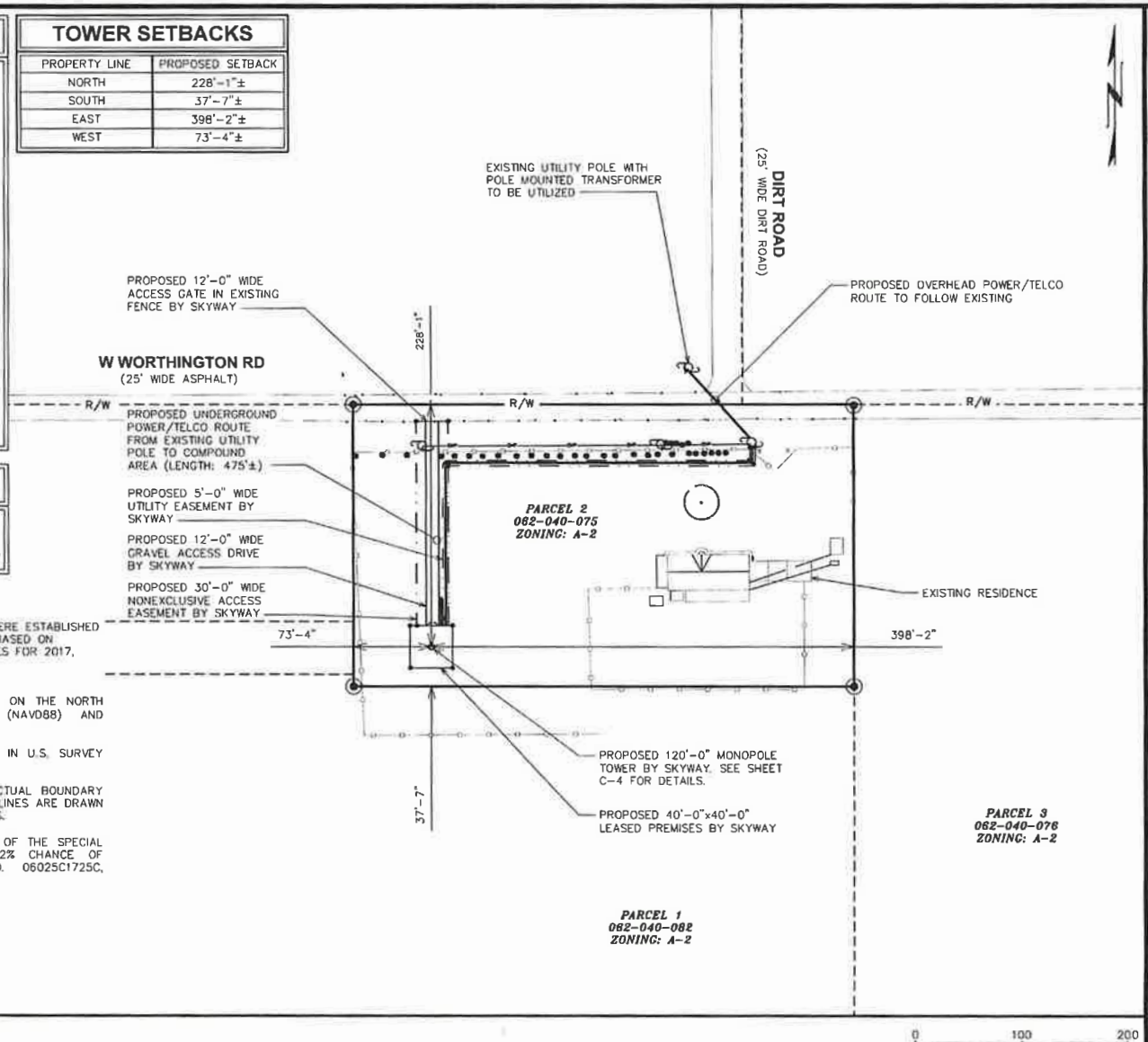
PROPERTY LINE	PROPOSED SETBACK
NORTH	228'-1"±
SOUTH	37'-7"±
EAST	398'-2"±
WEST	73'-4"±

1-A CERTIFICATION

LATITUDE:	N 32.846758° (NAD '83)
LONGITUDE:	W 115.600128° (NAD '83)
ELEVATION:	-58.65' (NAVD '88)

NOTES:

1. GEODETIC COORDINATES AND ELEVATIONS WERE ESTABLISHED USING G.P.S. AND SURVEY GRADE PRECISION BASED ON CALVRS G.P.S. BROADCAST COORDINATE VALUES FOR 2017, NAVD 88. BENCHMARK REFERENCE: CRTN.
2. VERTICAL INFORMATION SHOWN IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND EXPRESSED IN INTERNATIONAL FEET.
3. ALL DISTANCES ARE 'GROUND' DISTANCES IN U.S. SURVEY FEET, UNLESS OTHERWISE NOTED.
4. THIS PLAN DOES NOT REPRESENT AN ACTUAL BOUNDARY SURVEY OF THE PARENT PARCEL. BOUNDARY LINES ARE DRAWN FROM FIELD LOCATIONS OF FOUND MONUMENTS.
5. THE PROPERTY IS LOCATED IN ZONE 'X' OF THE SPECIAL FLOOD HAZARD AREA, AN AREA OF 0.2% CHANCE OF FLOODING; FEMA COMMUNITY PANEL NO. 06025C1725C, EFFECTIVE DATE: SEPTEMBER 26, 2008.



EXTENDED SITE PLAN

SCALE: 1" = 100'

0 100 200

SCALE IN FEET

PLANS PREPARED FOR:

SKYWAY TOWERS
3637 MADACA LN.
TAMPA, FL 33618
OFFICE: (813) 960-6217

PROJECT INFORMATION:

IMPERIAL
SKYWAY SITE#: CA-00435

749 WEST WORTHINGTON RD.
IMPERIAL, CA 92251
(IMPERIAL COUNTY)

PLANS PREPARED BY:

TEP

326 TYRON RD
RALEIGH, NC 27603
OFFICE: (919) 661-6531
www.tepgroup.net

SEAL:

REGISTERED PROFESSIONAL ENGINEER
STEPHEN E. BUTLER
91898
CIVIL
STATE OF CALIFORNIA

September 27, 2024

REV	DATE	ISSUED FOR:
0	09-27-24	ZONING

DRAWN BY: ASD | CHECKED BY: ARB

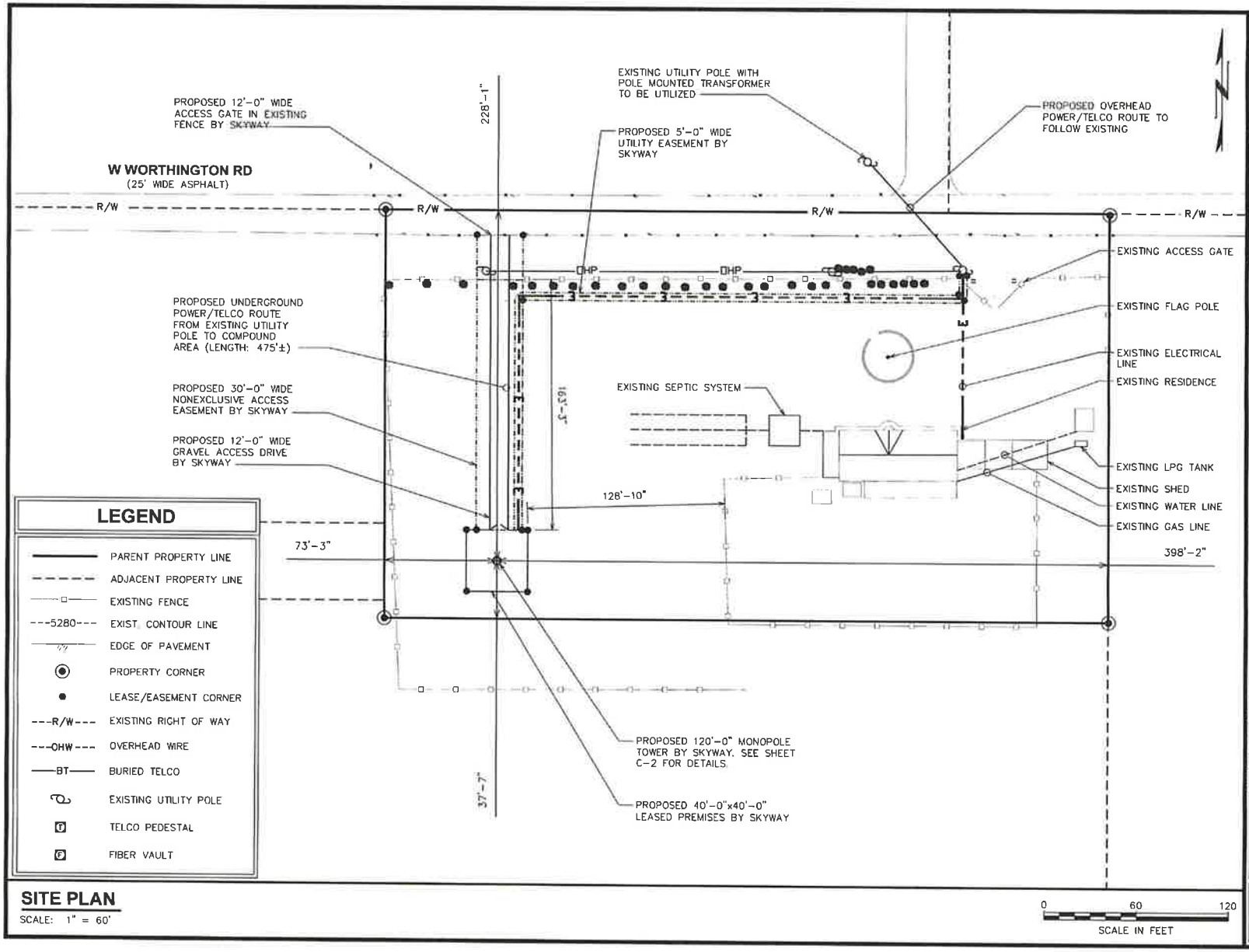
SHEET TITLE:

EXTENDED SITE PLAN

SHEET NUMBER: **C-1**

REVISION: 0

TEP # 841053.432429



SITE PLAN

SCALE: 1" = 60'

PLANS PREPARED FOR:

SKYWAY TOWERS
3637 MADACA LN.
TAMPA, FL 33618
OFFICE: (813) 960-6217

PROJECT INFORMATION:

IMPERIAL
SKYWAY SITE#: CA-00435

749 WEST WORTHINGTON RD.
IMPERIAL, CA 92251
(IMPERIAL COUNTY)

PLANS PREPARED BY:

TEP

326 TYRON RD
RALEIGH, NC 27603
OFFICE: (919) 661-6531
www.tepgroup.net

SEAL:

REGISTERED PROFESSIONAL ENGINEER
STEPHEN E. BUNTING
91898
CIVIL
STATE OF CALIFORNIA

September 27, 2024

REV	DATE	ISSUED FOR:
0	09-27-24	ZONING

DRAWN BY: ASD | CHECKED BY: ARB

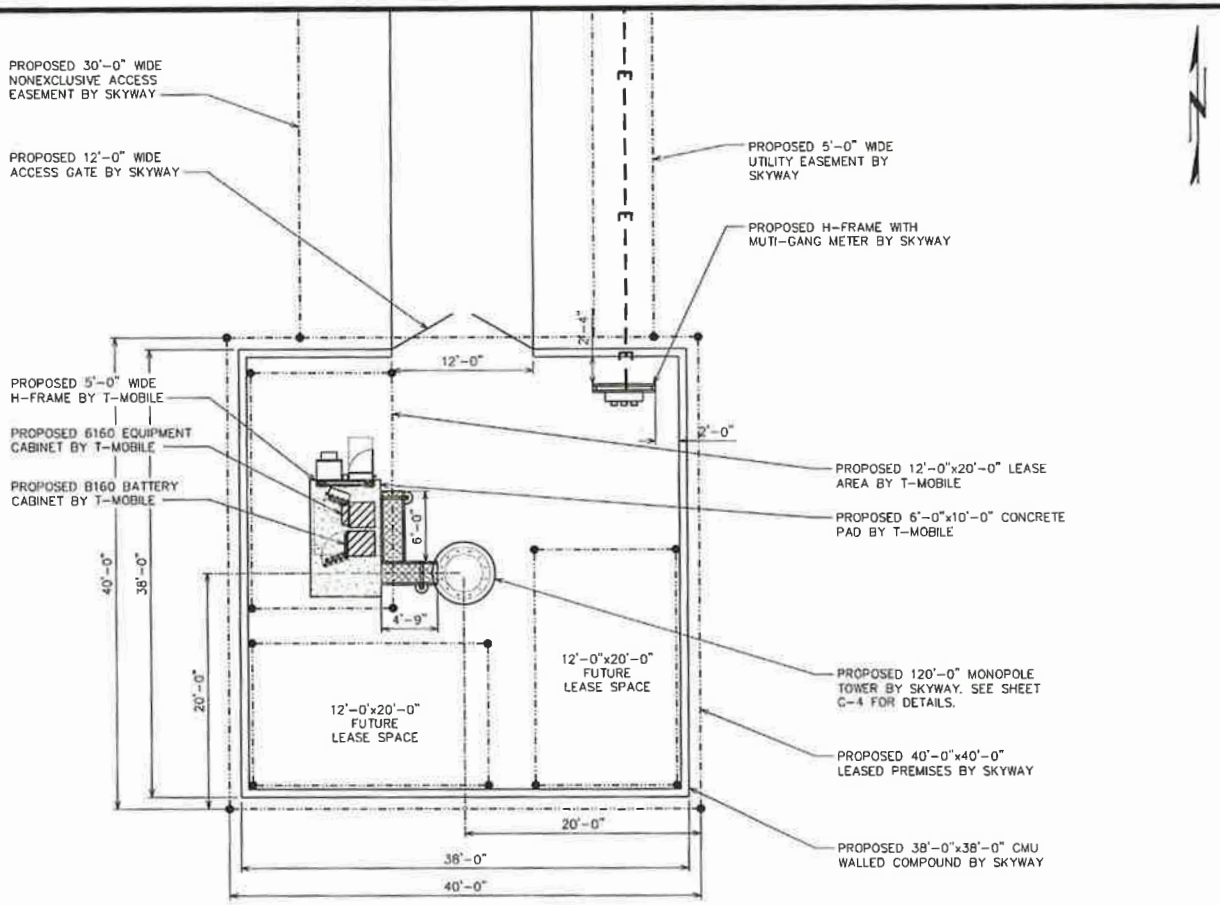
SHEET TITLE:

SITE PLAN

SHEET NUMBER: **C-2**

REVISION: **0**

TEP #841053.432429



COMPOUND DETAIL

SCALE: 1" = 10'

0 10 20

SCALE IN FEET

PLANS PREPARED FOR:

SKYWAY TOWERS
3637 MADACA LN
TAMPA, FL 33618
OFFICE: (813) 960-6217

PROJECT INFORMATION:

IMPERIAL
SKYWAY SITE#: CA-00435

749 WEST WORTHINGTON RD.
IMPERIAL, CA 92251
(IMPERIAL COUNTY)

PLANS PREPARED BY:

TEP

326 TYRON RD
RALEIGH, NC 27603
OFFICE: (919) 661-6531
www.tepgroup.net

SEAL:

September 27, 2024

REV	DATE	ISSUED FOR:
0	09-27-24	ZONING

DRAWN BY: ASD CHECKED BY: ARB

SHEET TITLE:

COMPOUND DETAIL

SHEET NUMBER: **C-3**

REVISION: **0**

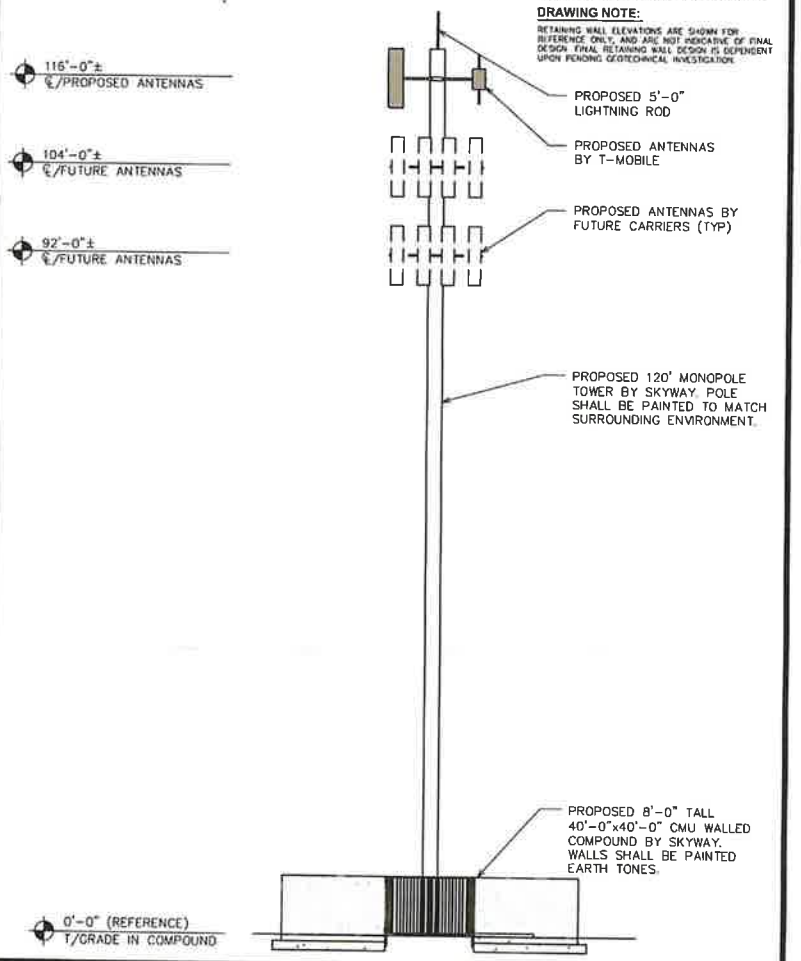
TEP #341093.433429

TOWER NOTES:

1. TOWER SHALL BE LIT ONLY IF REQUIRED BY THE FCC OR FAA.
2. PROPOSED COAX TO BE RUN UP THE INSIDE OF PROPOSED POLE USING HOISTING GRIPS.
3. TOWER TO INCLUDE SAFETY CABLE. DO NOT INCLUDE SAFETY CLIMB MECHANISM.
4. ALIGN ENTRY PORTS WITH SHELTERS AND ANTENNAS.
5. ALL TOWER MEMBERS SHALL BE CONSTRUCTED OUT OF GALVANIZED STEEL.
6. PAINT POLE TO MATCH SURROUNDING ENVIRONMENT.

DRAWING NOTE:

RETAINING WALL ELEVATIONS ARE SHOWN FOR REFERENCE ONLY, AND ARE NOT INDICATIVE OF FINAL DESIGN. FINAL RETAINING WALL DESIGN IS DEPENDENT UPON PENDING GEOTECHNICAL INVESTIGATION.



NORTH TOWER ELEVATION

SCALE: 1/16" = 1'-0"

0 16 32

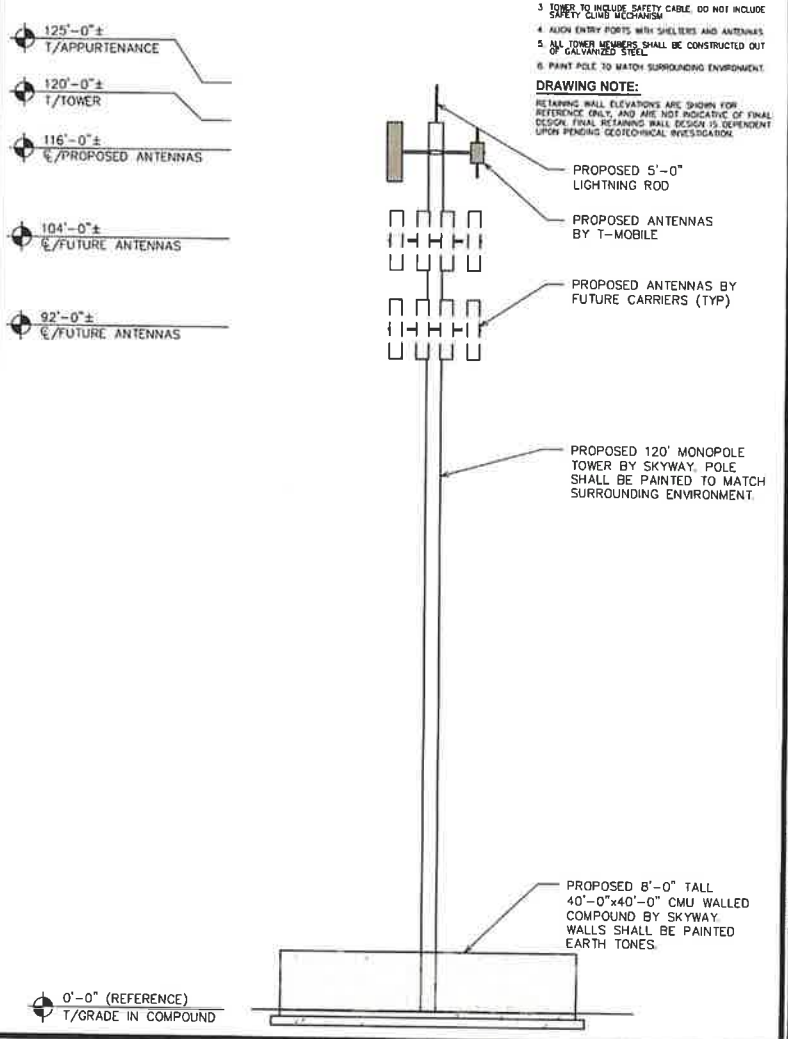
SCALE IN FEET

TOWER NOTES:

1. TOWER SHALL BE LIT ONLY IF REQUIRED BY THE FCC OR FAA.
2. PROPOSED COAX TO BE RUN UP THE INSIDE OF PROPOSED POLE USING HOISTING GRIPS.
3. TOWER TO INCLUDE SAFETY CABLE. DO NOT INCLUDE SAFETY CLIMB MECHANISM.
4. ALIGN ENTRY PORTS WITH SHELTERS AND ANTENNAS.
5. ALL TOWER MEMBERS SHALL BE CONSTRUCTED OUT OF GALVANIZED STEEL.
6. PAINT POLE TO MATCH SURROUNDING ENVIRONMENT.

DRAWING NOTE:

RETAINING WALL ELEVATIONS ARE SHOWN FOR REFERENCE ONLY, AND ARE NOT INDICATIVE OF FINAL DESIGN. FINAL RETAINING WALL DESIGN IS DEPENDENT UPON PENDING GEOTECHNICAL INVESTIGATION.



SOUTH TOWER ELEVATION

SCALE: 1/16" = 1'-0"

0 16 32

SCALE IN FEET

PLANS PREPARED FOR:

SKYWAY TOWERS
3637 MADACA LN.
TAMPA, FL 33618
OFFICE: (813) 960-6217

PROJECT INFORMATION:

IMPERIAL
SKYWAY SITE#: CA-00435

749 WEST WORTHINGTON RD.
IMPERIAL, CA 92251
(IMPERIAL COUNTY)

PLANS PREPARED BY:

TEP

326 TYRON RD
RALEIGH, NC 27603
OFFICE: (919) 661-6531
www.tepgroup.net

SEAL:

September 27, 2024

REV	DATE	ISSUED FOR:
0	09-27-24	ZONING

DRAWN BY: ASD | CHECKED BY: ARD

SHEET TITLE:

NORTH & SOUTH TOWER ELEVATIONS

SHEET NUMBER: **C-4**

REVISION: **0**

TEP #341053.432429

TOWER NOTES:

1. TOWER SHALL BE LIT ONLY IF REQUIRED BY THE FCC OR FAA.
2. PROPOSED COAX TO BE RUN UP THE INSIDE OF PROPOSED POLE USING HOISTING GRIPS.
3. TOWER TO INCLUDE SAFETY CABLE. DO NOT INCLUDE SAFETY CLIMB MECHANISM.
4. ALIGN ENTRY PORTS WITH SHELTERS AND ANTENNAS.
5. ALL TOWER MEMBERS SHALL BE CONSTRUCTED OUT OF GALVANIZED STEEL.
6. TOWER TO BE DISGUISED AS A PINE TREE.

DRAWING NOTE:

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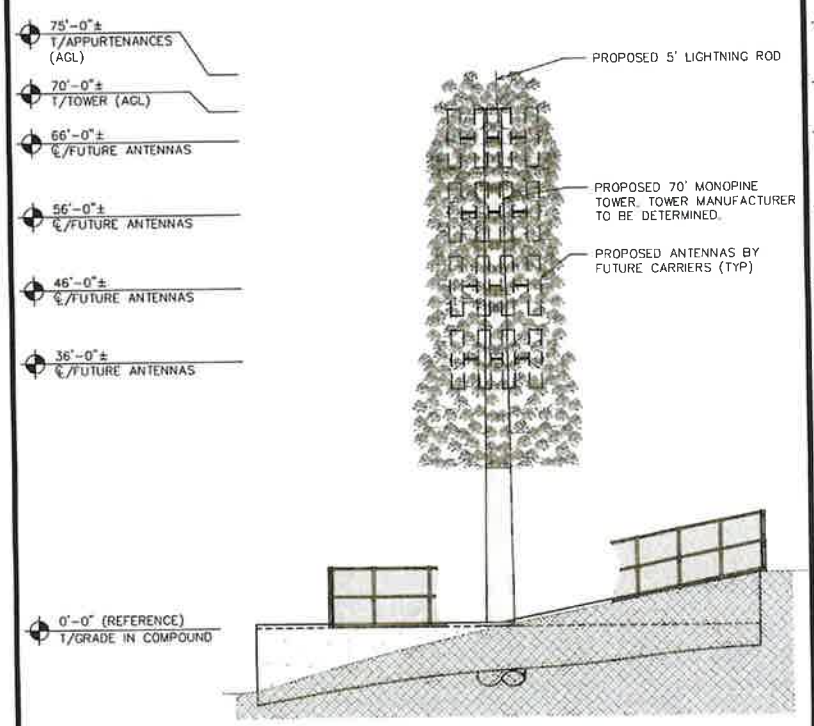

EAST TOWER ELEVATION

SCALE: 1/16" = 1'-0"

0 16 32

SCALE IN FEET

TOWER NOTES:

1. TOWER SHALL BE LIT ONLY IF REQUIRED BY THE FCC OR FAA.
2. PROPOSED COAX TO BE RUN UP THE INSIDE OF PROPOSED POLE USING HOISTING GRIPS.
3. TOWER TO INCLUDE SAFETY CABLE. DO NOT INCLUDE SAFETY CLIMB MECHANISM.
4. ALIGN ENTRY PORTS WITH SHELTERS AND ANTENNAS.
5. ALL TOWER MEMBERS SHALL BE CONSTRUCTED OUT OF GALVANIZED STEEL.
6. TOWER TO BE DISGUISED AS A PINE TREE.

DRAWING NOTE:

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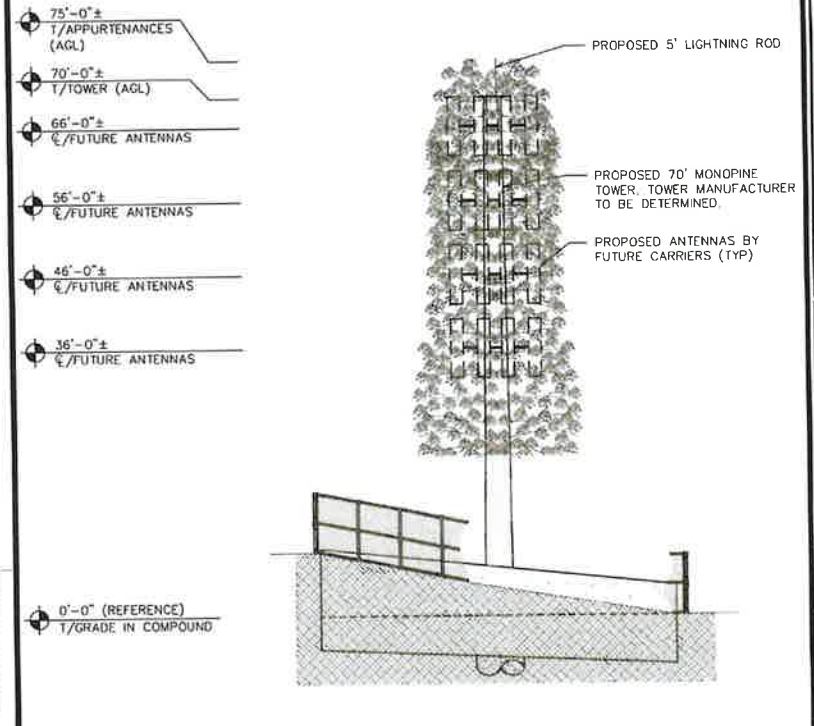


WEST TOWER ELEVATION

SCALE: 1/16" = 1'-0"

0 16 32

SCALE IN FEET

PLANS PREPARED FOR:

SKYWAY TOWERS
3637 MADACA LN.
TAMPA, FL 33618
OFFICE: (813) 960-6217

PROJECT INFORMATION:

IMPERIAL
SKYWAY SITE#: CA-00435

749 WEST WORTHINGTON RD.
IMPERIAL, CA 92251
(IMPERIAL COUNTY)

PLANS PREPARED BY:

TEP

326 TYRON RD
RALEIGH, NC 27603
OFFICE: (919) 661-6531
www.tepgroup.net

SEAL:

REGISTERED PROFESSIONAL ENGINEER * STEPHEN BUTLER * 91898 * CIVIL * STATE OF CALIFORNIA *

September 27, 2024

REV	DATE	ISSUED FOR:
0	09-27-24	ZONING

DRAWN BY: JDS | CHECKED BY: ARB

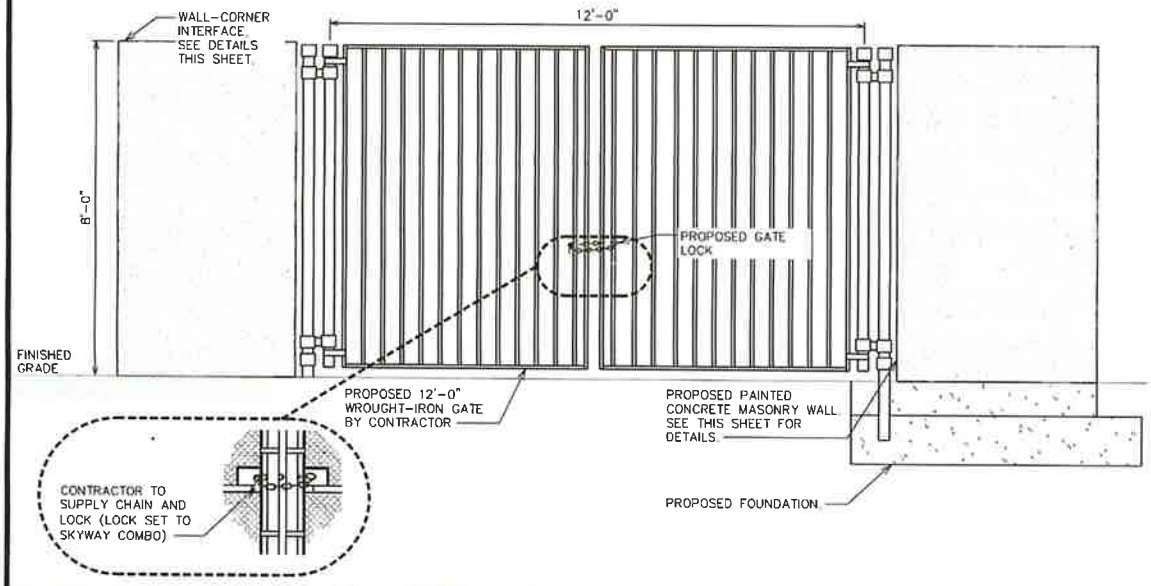
SHEET TITLE:

EAST & WEST TOWER ELEVATIONS

SHEET NUMBER: **C-5**

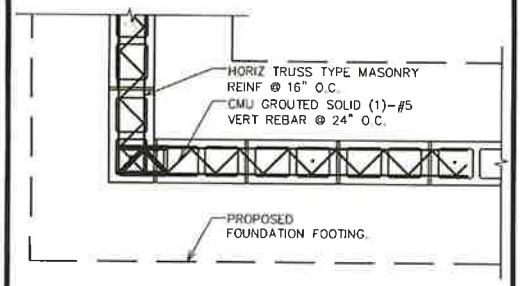
REVISION: 0

TEP #341053.432423



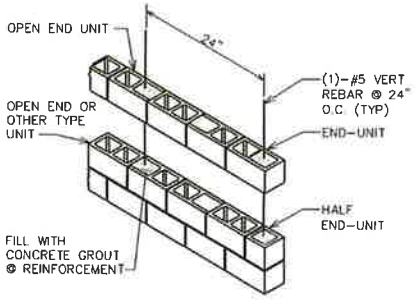
TYPICAL WALL ELEVATION

SCALE: N.T.S.



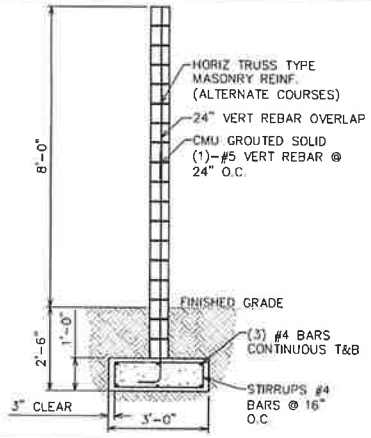
CMU WALL-CORNER INTERFACE DETAIL

SCALE: N.T.S.



CMU GROUTING & REINFORCEMENT DETAIL

SCALE: N.T.S.



CMU WALL CROSS SECTION DETAIL

SCALE: N.T.S.

PLANS PREPARED FOR:

SKYWAY TOWERS
3637 MADACA LN.
TAMPA, FL 33618
OFFICE: (813) 960-6217

PROJECT INFORMATION:

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STEPHEN E. BUSTOS
91898
CIVIL
STATE OF CALIFORNIA

September 27, 2024

REV	DATE	ISSUED FOR:
0	09-27-24	ZONING

DRAWN BY:	CHECKED BY:

SHEET TITLE:

CMU WALL DETAIL

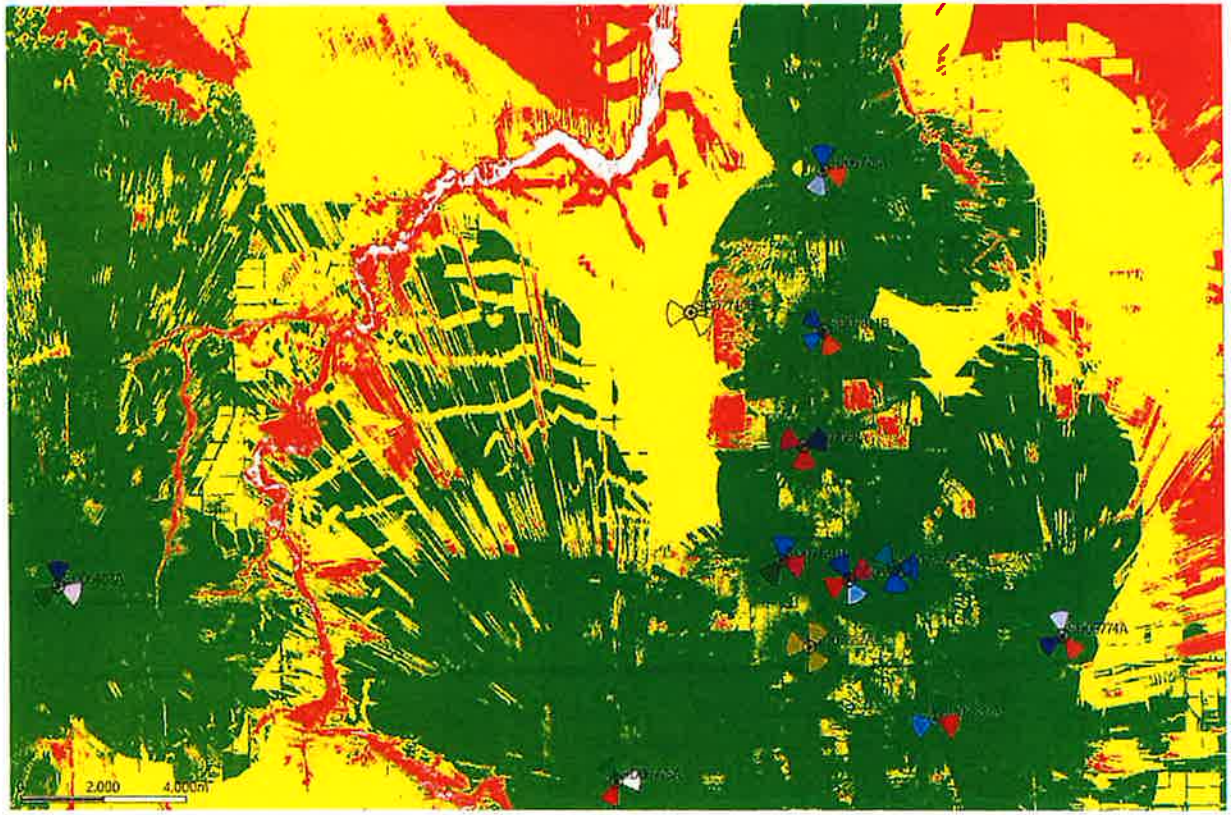
SHEET NUMBER:	REVISION:
C-5	0

TEP #541053 432429

PREDICTIVE MAP REQUEST

T··Mobile·

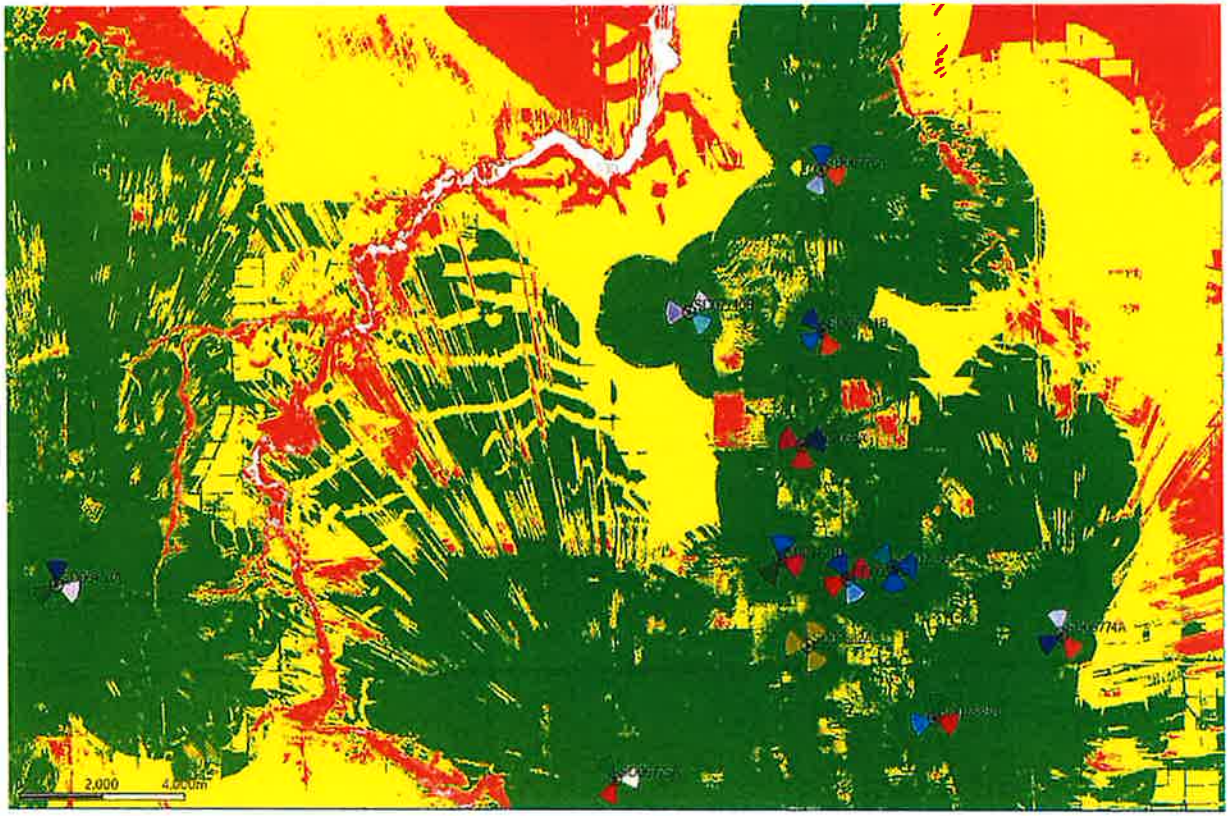
Prediction of Existing Coverage without SD07740B



Legend

- Good
- Fair
- Poor

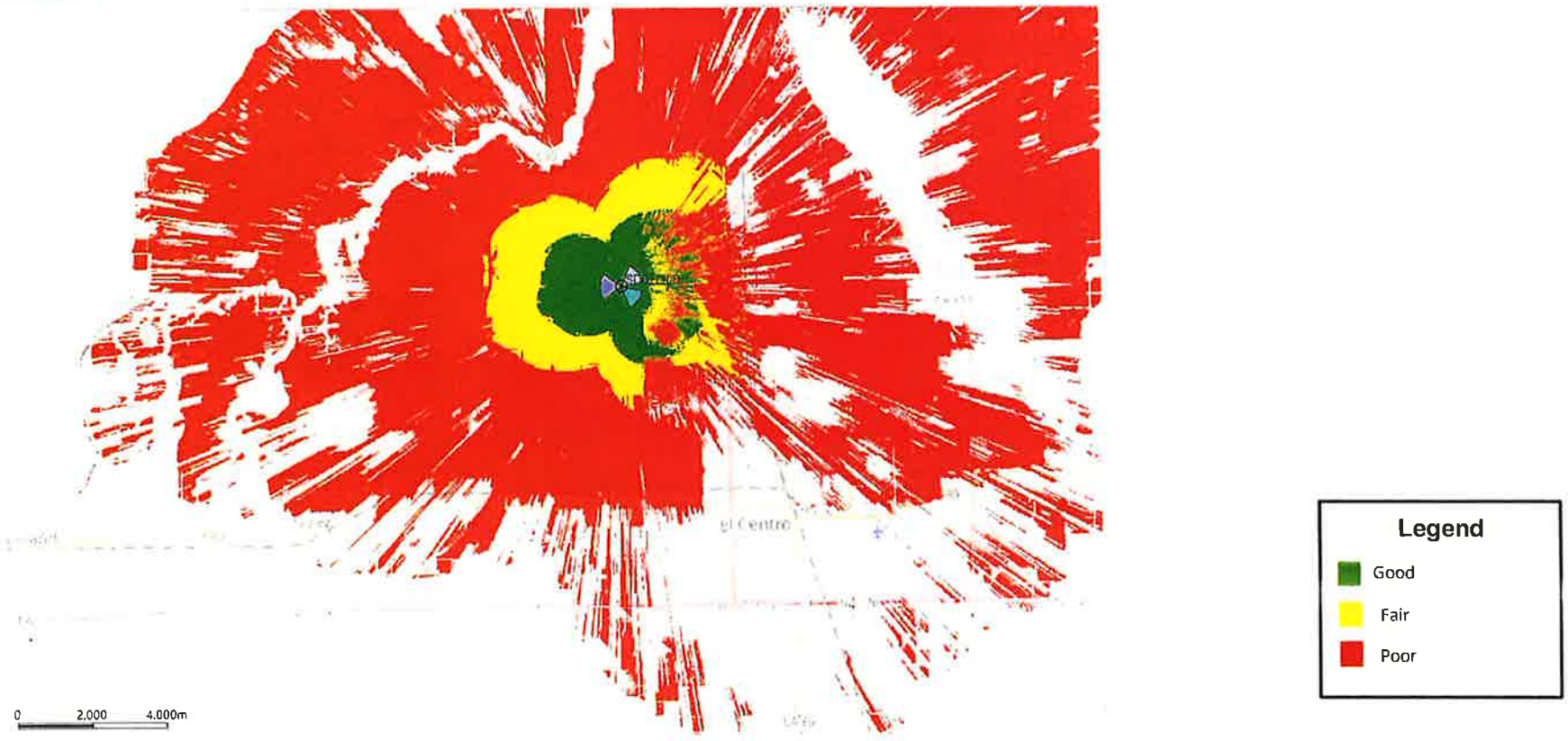
Prediction of Existing Coverage with SD07740B



Legend

- Good
- Fair
- Poor

Prediction of Existing Coverage only for SD07740B



ATTACHMENT "H" ALUCP
CHAPTER 2 PAGES 2-2, 2-3, 2-4 AND 2-17

2. *Countywide Impacts on Flight Safety* - Those lands, regardless of their location in the County, on which the uses could adversely affect the safety of flight in the County. The specific uses of concern are identified in Paragraph 2.

3. *New Airports and Heliports* - The site and environs of any proposed new airport or heliport anywhere in the County. The Brawley Pioneers Memorial Hospital has a heliport area on-site.

2. Types of Airport Impacts

The Commission is concerned only with the potential impacts related to aircraft noise, land use safety (with respect both to people on the ground and the occupants of aircraft), airspace protection, and aircraft overflights. Other impacts sometimes created by airports (e.g., air pollution, automobile traffic, etc.) are beyond the scope of this plan. These impacts are within the authority of other local, state, and federal agencies and are addressed within the environmental review procedures for airport development.

3. Types of Actions Reviewed

1. *General Plan Consistency Review* - Within 180 days of adoption of the *Airport Land Use Compatibility Plan*, the Commission shall review the general plans and specific plans of affected local jurisdictions to determine their consistency with the Commission's policies. Until such time as (1) the Commission finds that the local general plan or specific plan is consistent with the *Airport Land Use Compatibility Plan*, or (2) the local agency has overruled the Commission's determination of inconsistency, the local jurisdiction shall refer all actions, regulations, and permits (as specified in Paragraph 3) involving the airport area of influence to the Commission for review (Section 21676.5 (a)).

2. *Statutory Requirements* -As required by state law, the following types of actions shall be referred to the Airport Land Use Commission for determination of consistency with the Commission's plan *prior to their approval* by the local jurisdiction:

(a) The adoption or approval of any amendment to a general or specific plan affecting the Commission's geographic area of concern as indicated in Paragraph 1 (Section 21676 (b)).

(b) The adoption or approval of a zoning ordinance or building regulation which (1) affects the Commission's geographic area of concern as indicated in Paragraph 1 and (2) involves the types of airport impact concerns listed in Paragraph 2 (Section 21676 (b)).

(c) Adoption or modification of the master plan for an existing public-use airport (Section 21676 (c)).

(d) Any proposal for a new airport or heliport whether for public use or private use (Section 21661.5).

3. *Other Project Review* - State law empowers the Commission to review additional types of land use "actions, regulations, and permits" involving a question of airport/land use compatibility if either: (1) the Commission and the local agency agree that these types of individual projects shall be reviewed by the Commission (Section 21676.5 (b)); or (2) the Commission finds that a local agency has not revised its general plan or specific plan or overruled the Commission and the Commission requires that the individual projects be submitted for review (Section 21676.5 (a)). For the purposes of this plan, the specific types of "actions, regulations, and permits" which the Commission shall review include:

a) Any proposed expansion of a city's sphere of influence within an airport's planning area.

b) Any proposed residential planned unit development consisting of five or more dwelling units within an airport's planning area.

c) Any request for variance from a local agency's height limitation ordinance.

d) Any proposal for construction or alteration of a structure (including antennas) taller than 150 feet above the ground anywhere within the County.

e) Any major capital improvements (e.g., water, sewer, or roads) that would promote urban development.

f) Proposed land acquisition by a government entity (especially, acquisition of a school site).

g) Building permit applications for projects having a valuation greater than $500,000.

h) Any other proposed land use action, as determined by the local planning agency, involving a question of compatibility with airport activities.

4. Review Process

1. *Timing of Project Submittal* - Proposed actions listed in Paragraph 3.1 must be submitted to the Commission for review prior to approval by the local government entity. All projects shall be referred to the Commission at the earliest reasonable point in time so that the Commission's review can be duly considered by the local jurisdiction prior to formalizing its actions. At the local government's discretion, submittal of a project for Airport Land Use Commission review can be done before, after, or concurrently with review by the local planning commission or other local advisory bodies.

2. *Commission Action Choices* - When reviewing a land use project proposal, the Airport Land Use Commission has a choice of either of two actions: (1) find the project *consistent* with the *Airport Land Use Compatibility Plan*; or, (2) find the project *inconsistent* with the Plan. In making a finding of inconsistency, the Commission may note the conditions under which the project would be consistent with the Plan. The Commission cannot, however, find a project consistent with the Plan subject to the inclusion of certain conditions in the project.

Table 2A

Compatibility Criteria

Imperial County Airport Land Use Compatibility Plan

Zone	Location	Impact Elements	Maximum Densities		Required Open Land[3]
			Residential (du/ac)[1][4]	Other Uses (people/ac)[2]	
A	Runway Protection Zone or within Building Restriction Line	· High risk · High noise levels	0	10	All Remaining
B1	Approach/Departure Zone and Adjacent to Runway	· Substantial risk - aircraft commonly below 400 ft. AGL or within 1,000 ft. of runway · Substantial noise	0.1	100	30%
B2	Extended Approach/Departure Zone	· Significant risk – aircraft commonly below 800 ft. AGL · Significant noise	1	100	30%
C	Common Traffic Pattern	· Limited risk – aircraft at or below 1,000 ft. AGL · Frequent noise intrusion	6	200	15%
D	Other Airport Environs	· Negligible risk · Potential for annoyance from overflights	No Limit	No Limit	No Requirement

Zone	Additional Criteria		Examples	
	Prohibited Uses	Other Development Conditions	Normally Acceptable Uses[4]	Uses Not Normally Acceptable[4]
A	· All structures except ones with location set by aeronautical function · Assemblages of people · Objects exceeding FAR Part 77 height limits · Hazards to flight[8]	· Dedication of avigation easement	· Aircraft tiedown apron · Pastures, field crops, vineyards · Automobile parking	· Heavy poles, signs, large trees, etc.
B1 and B2	· Schools, day care centers, libraries · Hospitals, nursing homes · Highly noise-sensitive uses · Above ground storage · Storage of highly flammable materials · Hazards to flight[8]	· Locate structures maximum distance from extended runway centerline · Minimum NLR[7] of 25 dBA in residential and office buildings · Dedication of avigation easement	· Uses in Zone A · Any agricultural use except ones attracting bird flocks · Warehousing, truck terminals · Single-story offices	· Residential subdivisions · Intensive retail uses · Intensive manufacturing or food processing uses · Multiple story offices · Hotels and motels
C	· Schools · Hospitals, nursing homes · Hazards to flight[8]	· Dedication of overflight easement for residential uses	· Uses in Zone B · Parks, playgrounds · Low-intensity retail, offices, etc. · Low-intensity manufacturing, food processing · Two-story motels	· Large shopping malls · Theaters, auditoriums · Large sports stadiums · Hi-rise office buildings
D	· Hazards to flight[8]	· Deed notice required for residential development	· All except ones hazardous to flight	