PLANNING DIVISION

2600 Hollywood Boulevard Room 315
Hollywood, FL 33022

File No. (internal use only): _____

GENERAL APPLICATION

CITY OF Hollywood FLORIDA

Tel: (954) 921-3471
Fax: (954) 921-3347

This application must be completed in full and submitted with all documents to be placed on a Board or Committee's agenda.

The applicant is responsible for obtaining the appropriate checklist for each type of application.

Applicant(s) or their authorized legal agent must be present at all Board or Committee meetings.

At least one set of the submitted plans for each application must be signed and sealed (i.e. Architect or Engineer).

Documents and forms can be accessed on the City's website at

http://www.hollywoodfl.org/DocumentCenter/Home/View/21

APPLICATION TYPE (CHECK ONE):

☒ Technical Advisory Committee ☐ Historic Preservation Board
☐ City Commission ☐ Planning and Development Board

Date of Application: 4/17/2023

Location Address: 3090 Sherman Street, Hollywood, FL
Lot(s): See attached Legal Block(s): _____ Subdivision: _____
Folio Number(s): 514208160010
Zoning Classification: IM-1 Land Use Classification: Industrial
Existing Property Use: Self-storage facility Sq Ft/Number of Units: 166,322 S.F.
Is the request the result of a violation notice? ( ) Yes (X) No If yes, attach a copy of violation.
Has this property been presented to the City before? If yes, check al that apply and provide File Number(s) and Resolution(s): TAC (Preliminary) 22-DP-74

☐ Economic Roundtable ☒ Technical Advisory Committee ☐ Historic Preservation Board
☐ City Commission ☐ Planning and Development

Explanation of Request: Site Plan approval for removal of Buildings D, R, and T for 9,410 Square feet.
New construction of three-story climate controlled self-storage building of 91,485 Square feet.

Number of units/rooms: _____ Sq Ft: 91,485 SF
Value of Improvement: $9,000,000 Estimated Date of Completion: 2024
Will Project be Phased? ( ) Yes (x)No If Phased, Estimated Completion of Each Phase

Name of Current Property Owner: PPF SS 3090 Sheridan Street LLC
Address of Property Owner: 3384 Peachtree Road NE, Suite 400, Atlanta, GA 30326
Telephone: 631-539-0200 Fax: 631-539-0206 Email Address: sbonilla@safeguardit.com
Name of Consultant/Representative/Tenant (circle one): Julian Bobilev, AICP
Address: 200 E Broward Blvd, Suite 1800, Ft Lauderdale, FL 33301 Telephone: 954-527-2485
Fax: _____ Email Address: julian.bobilev@gmlaw.com
Date of Purchase: June 22, 2015 Is there an option to purchase the Property? Yes ( ) No (x)
If Yes, Attach Copy of the Contract.
List Anyone Else Who Should Receive Notice of the Hearing: Melissa Ross
Ross Engineering, Inc. Address: 3325 S. University Dr, Suite 111, Davie, FL 33328
Email Address: mross@rossengineers.com

PLANNING DIVISION

2600 Hollywood Boulevard Room 315
Hollywood, FL 33022

File No. (internal use only): _____

GENERAL APPLICATION

CERTIFICATION OF COMPLIANCE WITH APPLICABLE REGULATIONS

The applicant/owner(s) signature certifies that he/she has been made aware of the criteria, regulations and guidelines applicable to the request. This information can be obtained in Room 315 of City Hall or on our website at www.hollywoodfl.org. The owner(s) further certifies that when required by applicable law, including but not limited to the City's Zoning and Land Development Regulations, they will post the site with a sign provided by the Office of Planning and Development Services. The owner(s) will photograph the sign the day of posting and submit photographs to the Office of Planning and Development Services as required by applicable law. Failure to post the sign will result in violation of State and Municipal Notification Requirements and Laws.

(I)(We) certify that (I) (we) understand and will comply with the provisions and regulations of the City's Zoning and Land Development Regulations, Design Guidelines, Design Guidelines for Historic Properties and City's Comprehensive Plan as they apply to this project. (I)(We) further certify that the above statements and drawings made on any paper or plans submitted herewith are true to the best of (my)(our) knowledge. (I)(We) understand that the application and attachments become part of the official public records of the City and are not returnable.

Signature of Current Owner: _____ Date: 4/13/2023

PRINT NAME: James Goonan, PPF SS 3090 Sheridan Street LLC Date: 4/13/2023

Signature of Consultant/Representative: Julian Bobilev Date: 4/14/2023

PRINT NAME: Julian Bobilev, Greenspoon Marder Date: 4/14/2023

Signature of Tenant: N/A Date: _____

PRINT NAME: _____ Date: _____

Current Owner Power of Attorney

I am the current owner of the described real property and that I am aware of the nature and effect the request for Site Plan Approval to my property, which is hereby made by me or I am hereby authorizing Julian Bobilev, AICP to be my legal representative before the Technical Advisory Committee (Board and/or Committee) relative to all matters concerning this application.

Sworn to and subscribed before me
this 13th day of April 2023

Notary Public
State of Florida
My Commission Expires: 5/5/23 (Check One) ✓ Personally known to me; OR ___ Produced Identification _____

KRISTEN A. MERRITT
Notary Public - State of Florida
Commission # GG 320253
My Comm. Expires May 5, 2023
Bonded through National Notary Assn.

Signature of Current Owner

James Goonan
Print Name

Julian Bobilev, AICP
PNC Building
200 East Broward Boulevard, Suite 1800
Fort Lauderdale, Florida 33301
Direct Phone: 954.527.2485
Email: julian.bobilev@gmlaw.com

April 17, 2023

City of Hollywood Government
Development Services Planning Division
2600 Hollywood Boulevard, Room 315
Hollywood FL 33022
Attn: Tasheema Lewis

Re:	***Technical Advisory Committee Report***
Project:	***Safeguard Hollywood***
Folio Number:	***514208160010***
File #:	***22-DP-74***
Address:	***3090 Sherman Street Hollywood FL, 33021***

Dear Ms. Lewis:

On behalf of the Applicant, PPF SS 3090 Sheridan Street, we are respectfully submitting the response to comments issued on February 17, 2023, for the Technical Advisory Committee Application. Please see the comments from the Planning Services Department in *italics* and their respective responses below in **bold**.

Application Submittal:

1. *Provide plat determination letter from the County. Should platting be necessary, prior to Final TAC submittal County Plat comments are required. Plat shall be submitted for recordation prior to submitting for Planning and Development Board. Include several copies of plat documents in future submittals.*
   RESPONSE: The site has already been platted and thus does not need to be replatted. A copy of the Taft Street Industrial Park plat (PB 122-25) has been included with this application.

   Separately, we submitted a plat note amendment application to the Engineering Dept. on 3/16. Per our discussion at the DRC, in case the plat note amendment lags behind the site plan, City can approve the site plan with a condition that the plat note amendment be recorded prior to building permit issuance.

2. *Application has incorrect folio number for 3090 Sherman Street. Update application to reflect the correct folio number.*
   RESPONSE: Please find the Final Technical Advisory Committee application attached with 3090 Sherman Street and Folio Number 514208160010.

3. *Ownership & Encumbrance Report (O&E):*
   a. O&E Report does not indicate time of platting. Need to indicate it was searched from 1953 or time of platting (earliest of the two).
   b. Must be dated within 30 days of submittal packet.
   c. Work with Engineering Division to ensure the O&E is accurate and all easements and dedications are indicated.
   RESPONSE: O&E Report was searched from earliest possible records, which is <u>earlier</u> than either 1953 or time of platting and thus meets the City's requirement. The O&E report was also dated within 30 days of submittal.

4. *Alta Survey:*
   a. Shall be based on and dated after O&E. Ensure that O&E report is specifically referenced.
   b. Work with the Engineering Division to ensure the survey includes the appropriate elements such as all easements and dedications are indicated.
   RESPONSE: The ALTA Survey is based on and dated after O&E Report.

5. *Site Plan:*
   a. Cover Sheet including the name of development, page index, Preliminary meeting date, title block and location map needed for site plans.
   b. Label property lines.
   c. Provide dimensions of existing parking stalls and new parking stalls.
   d. Ensure that all plumbing, mechanical and electrical fixtures, and equipment are indicated on Site Plan and Elevations.
   e. It appears the West elevation is the entrance to the building. Indicate walkway areas on the site plan.
   RESPONSE:
   a. The Cover Sheet includes the name of development, page index, preliminary meeting dates, title block and location maps.
   b. The property lines have been labeled on the engineering and architectural site plans.
   c. The dimensions of existing and new parking stalls have been added to the plans.
   d. The architectural site plan includes Note 1 for the plumbing, mechanical, and electrical fixtures, and equipment.
   e. The walkway has been indicated on the site plans.

6. *Site Data:*
   a. 20' setback required for IM-1 districts that abuts a residential area.
   RESPONSE: Both the engineering and architectural site plans show the 20' setback for the west property line.

7. *Complete and submit to Broward County School Board an impact fee application prior to submitting for Board consideration. Ensure that the application has not expired at the time of Board Consideration Website: https://www.browardschools.com/cms/lib/FL01803656/Centricity/Domain/13479/PublicSchoolImpactApplication1.pdf.*
   RESPONSE: The project does not propose dwelling units and thus a public school impact application is not needed.

8. *Indicate past, current and future meeting dates as they happen (not submittal dates) on Cover Sheet. Indicate specific Board/Committee (i.e. TAC, PDB, etc.) For future Board/Committee dates not known, leave blank until staff has advised of next meeting date.*
   RESPONSE: Please see the Cover Sheet prepared by Ross Engineering for current and future meetings dates.

9. *A public participation outreach meeting shall be required for Land Use, Rezoning, Special Exception, and Site Plan requests. Applicants shall conduct at least one public participation outreach meeting and provide mailed written notice to all property owners and certified/registered civic and neighborhood association(s) within 500 feet of the proposed project. Fifteen days prior to the meeting, the applicant shall mail such notice and post a sign on the property, including the date, time, and place of the public participation outreach meeting. Such meeting shall occur prior to the applicable Committee, Board or City Commission submittal and the Applicant shall include in its application packet a letter certifying the date(s), time(s), location(s), a copy of the sign-in sheet, presentation material and general summary of the discussion, including comments expressed during the meeting(s).*

   The following Civic Association are located within 500 feet project site.
   a. Liberia
   b. North Central Civic Association
   Visit http://www.hollywoodfl.org/204/Neighborhood-Association-Contact-List for Contact Information.
   RESPONSE: We will hold a public participation meeting prior to Planning and Zoning Board.

10. *Additional comments may be forthcoming.*
    RESPONSE: Acknowledged.

11. *Provide written responses to all comments with next submittal.*
    RESPONSE: Acknowledged.

Zoning:

1. *Landscaped buffer (measured from building base) along street frontages required. It shall be equal to 5 percent of lot depth, with a minimum depth of 5 feet from the base building line, and a maximum required depth of 15 feet.*

RESPONSE: Please refer to the planting plan for the area 10' adjacent to the eastern and northern property line for the required buffers.

Architecture and Urban Design:

1. *Provide renderings with next submittal.*
   RESPONSE: Please find the attached rendering.

Signage:

1. *For review, full signage package shall be provided.*
   RESPONSE: No new signage proposed.

Lighting:

1. *Provide note on site plan indicating maximum foot-candle level.*
   RESPONSE: Please see the architectural site plan for Note 5 for the maximum foot candle level.

Green Building & Environmental Sustainability:

1. *Indicate on the site plan where the infrastructure necessary for future installation of electric vehicle-charging equipment will be located. (See 151.154, Ordinance O-2016-02).*
   RESPONSE: Please see the architectural site plan for Note 4 indicating the electric vehicle charging equipment infrastructure.

2. *Work with Building Department to ensure compliance with Green Building Ordinance. Review and adjust drawings as necessary. Indicate on drawings Green Building certification to be achieved.*
   RESPONSE: Please see the architectural site plan for Note 6 outlining the items included for the Green Building Ordinance.

Engineering:

Revision Procedure:
-Any revisions applied to the plans shall be numbered and bubbled/clouded.
-In an 8.5"x11" revision summary, identify each revision by providing the plan sheet number, bubble/cloud number and a narrative describing each change or how a comment is being addressed.

1. *Provide plat determination letter from the Broward County Planning Council.*
   RESPONSE: Site has already been platted. A plat note amendment has been submitted to Engineering on 3/16.

2. *On the floor plan sheets, the north arrow direction is incorrect.*
   RESPONSE: The floor plan sheets have corrected the north arrow.
3. *Sheet C-5.1, minimum parking stall depth is 19', not 18'.*
   RESPONSE: Please see Sheet C-5.1 parking and handicap parking stall depth has been updated to 19'.

4. *Indicate location of easements on the Site Plan and the Partial Site Plan.*
   RESPONSE: Easements are called out on Civil plans, Architectural plans to update site plan with easement locations

5. *Update the TAC submittal date on the civil cover sheet.*
   RESPONSE: TAC submittal date has been updated on the civil cover sheet. April 17,2023.

6. *A lift gate is being proposed at the entrance to the parcel south of Sherman Street. Provide a vehicular queueing analysis and provide the queueing spaces required. All vehicular queueing shall be within provide property.*
   RESPONSE: Please find the Traffic Analysis attached to include the queueing analysis and response to City comments.

7. *Please clearly should have ADA accessibility from the ADA parking stall to the building entrance. Identify any change in elevation or slopes. If there is no change in elevation, indicate on plans the transition is flush. Please add a note on the site plan stating any lip from 1/4" but not greater than ½" will be beveled to meet ADA requirements.*
   RESPONSE: ADA accessibility from ADA parking stall to building entrance is present on civil plans sheet C-3, note has been added to "Notes" list as item #6.

8. *Show sight visibility triangle on plans as per Chapter 155.12 of the City Code. Be sure to show distance between property line and the edge of pavement on plan.*
   RESPONSE: Visibility triangle is present on Civil plans sheet C-3, distance between property line and EOP on Sherman Street have been labeled, also present on sheet C-3.4 in cross sections "A-A" and "C-C".

9. *FDOT cursory review, provide FDOT pre-application letter.*
   RESPONSE: FDOT Pre-Application Letter has been provided.

10. *Coordination with off-site improvements on North 31st Avenue / Sherman Street by the Yellow Green Farmers Market may be required.*
    RESPONSE: Acknowledged. The Applicant will coordinate as necessary.

11. *Provide traffic impact study for the site with the proposed expansion of addition storage units to the existing storage facility that is currently under operation. Please contact Rick Mitinger or Clarissa Ip at Engineering, Transportation & Mobility to*

coordinate methodology review. Traffic study related reviews are done on a cost recovery basis by a City's consultant.
RESPONSE: Traffic study was submitted to City on 3/9/2023. A revised Traffic Analysis is attached addressing City comments issued.

CONSULTANT COST RECOVERY FEE TABLE

Traffic Transportation Related Cost Recovery Fees Table			
a) Administrative Processing Fee: 5% of Initial Deposit			
b) Initial Deposit and Minimum Balance:			
Project Size	Initial Deposit	Minimum Account Balance	Administrative Fee
Less than 10 Acres	$5,000	$1,000	$250
10 Acres to Less than 30 Acres	$8,000	$1,600	$400
30 Acres & Over	$12,000	$2,400	$600

12. **RESPONSE: A deposit of $2,600 has been paid to the City of Hollywood.**

13. *MOT plans will be required at the time of City Building Permit review.*
RESPONSE: Acknowledged.

14. *All outside agency permits must be obtained prior to issuance of City building permit.*
RESPONSE: Acknowledged. Broward County SWM license in permitting process.

15. *This project will be subject to the impact fees (inclusive of park impact fee) under the new City Ordinance PO-2022-17, effective September 21, 2022.*
RESPONSE: Acknowledged. Impact fees to be paid by owner.

16. *More comments may follow upon review of the requested information.*
RESPONSE: Acknowledged.

Landscaping:

1. *Provide official tree survey signed and sealed by surveyor not older than 6 months for existing trees on site on a separate table include: location, species, estimated ht./spread, and /DBH diameter of trunks in inches. For sites with existing trees/palms, superimpose tree survey over proposed site for Tree Disposition plan. Tree disposition to follow same numbering as survey.*
RESPONSE: Please find attached the updated survey to include trees. The landscape plan includes the Tree Disposition Plan with numbering to match the survey.

2. *Provide a Tree disposition plan and landscape plan on separate sheets by a registered professional licensed Landscape Architect in the State of Florida that compliments the*

building architecture and uses, provides for shade, beautifies the site, accentuates site features, and serves as a buffer where appropriate. Provide tabular data chart on plan that identifies City of Hollywood landscape requirements and how they are being met for Perimeter landscape, Species diversity requirements, Interior landscape for at grade parking lots and vehicular use areas, open space, view triangle, overhead and underground utilities, Center line , monument line, lot dimensions, and adjacent street names and shall comply with all planning and development board and historic preservation board individual requirements when applicable. Landscape plan should comply with all the requirements according to City of Hollywood Landscape manual, chapter 155.52, Article 9 LDR. Landscape plan set to include and clarify what is been provided as per city code requirements for landscape for project type. Landscape plans submitted shall clearly define which trees have been provided as required in terms of amount of inches of DBH for trees proposed to be removed and trees required to be planted per landscape code per zoning district. All trees and palms provided should meet City of Hollywood minimum height and DBH requirements at planting. If any trees are to remain in close proximity to construction activities, it must be clearly shown on plans with tree protection barriers with standard CRZ protection of a minimum of one (1) foot of radius per inch of tree trunk diameter.
RESPONSE: Tree Disposition Plan provided. Refer to landscape plans sheets LA1-01 and LA1-02.

3. *Irrigation: Provide a note on the landscape plan indicating 100% irrigation coverage will be provided.*
RESPONSE: Irrigation Plans provided with 100% coverage note added on plans. Refer to sheets IR1-01, IR1-02 and IR5-01.

4. *According to Chapter 155.52 of the Code of Ordinances and the City of Hollywood Landscape Manual, Shade trees to be installed at a minimum size of 2" DBH/ 12' height. Existing trees meeting this criteria may be used as credit toward total requirement. Palm trees count toward tree requirements on a 3:1 basis, meaning 3 palms equal 1 broadleaf tree. The following palm species should be used for mitigation or code: Royal Palm, Phoenix sylvestris/Medjool/canariensis, Bismarkia, Foxtail and Coconut. Minimum height requirements for all palms at planting is 8' of CT.*
Tree/Palm mitigation requirements: Trees are mitigated on an inch per inch basis, trees to be 12' ht with 2" dbh min. Palms are mitigated on a 1:1 ratio with a palm from the following list, palms to be 8' CT minimum (Royal Palm, Phoenix sylvestris/Medjool/canariensis, Bismarkia, Foxtail and Coconut).
RESPONSE: Site tree and tree mitigation requirements met. Refer to plant list on sheet LA2-03.

Utilities:

1. *Alta Survey - Revise Surveyor's note #6 - Flood Zone is X only. Not AE(7). Also add note: Elevations, if shown, shall reference NAVD88.*
RESPONSE: On Civil plans sheet C-3 "Notes 2 and 10" item #5 elevations shown reference NAVD 88.

2. *This site resides currently within FEMA Flood Zone X. The proposed FFE = 6.95′ NAVD88 to be floodproofed to 7.5′ NAVD88. This is acceptable upon approval from Broward County Surface Water Management License reviewer.*
   RESPONSE: Noted. Approval with BC SWM is in process.

3. *The 8″ DIP WM connecting to the existing 8″DIP WM within the property requires a DDCV since the line is service an existing fire hydrant.*
   RESPONSE: Proposed 8" DIP WM relocation and removal will no longer be proposed. Existing 8" DIP WM and DDCV will remain.

4. *Additional perimeter cross sections across west and north property limits through driveway and retention area including transition areas meeting adjacent property grades.*
   RESPONSE: Grades will not be affected along the west property line, please see additional cross section "C-C" along the north property line on sheet . Grades through the driveway will remain at existing elevations, no cross section to be provided.

5. *Sheet C-3.4 – Identify fence on Cross Section A-A.*
   RESPONSE: Fence, EOP, and CL have been identified on Cross Section A-A.

6. *Ensure all stormwater is retained onsite.*
   RESPONSE: Noted. Stormwater to be retained onsite.

7. *Provide preliminary drainage calculations.*
   RESPONSE: Preliminary drainage calculations are included.

8. *Permit approval from outside agencies will be required.*
   RESPONSE: BC SWM permit approval is in process.

9. *Landscape plans to be submitted shall coordinate with civil plans to accommodate drainage features.*
   RESPONSE: Acknowledged. Please find landscape plans included.

10. *NPDES – Over 1 acre*
    RESPONSE: Acknowledged.

11. *The construction activity on this site is regulated and required to obtain the NPDES Construction Generic Permit (CGP) from DEP. Failure to obtain permit coverage and/or maintain job site erosion and sedimentation control in accordance with permit conditions and applicable regulations may result in fines up to $27,500.00 per day.*
    RESPONSE: Acknowledged.

12. *Prior to issuance of building permit a Stormwater Pollution Prevention Plan (SWPPP) shall be required and CGP Notice of Intent (NOI) must be submitted to DEP. SWPPP must be maintained at the job site at all times until the project is terminated and Notice of Termination (NOT) filed with DEP. The SWPPP shall contain detailed*

descriptions of structures, procedures, contact names and/or control measures designed to reduce sediment and stormwater runoff.
RESPONSE: Acknowledged.

13. *Construction sites and operations shall be required to maintain during and after all construction, development, excavation, dewatering, and/or alteration operations, structural and non-structural Best Management Practices (BMP's) with the intent to reduce pollutants and sediment in stormwater runoff.*
RESPONSE: Acknowledged.

14. *For additional information regarding NPDES regulations please contact:*
Florida Department of Environmental Protection
2600 Blair Stone Road, MS #2500
Tallahassee, FL 32399-2400
(850) 245-7522
Visit DEP's Web site at: www.dep.state.fl.us/water/stormwater/npdes
RESPONSE: Acknowledged.

Fire:

1. *Provide a note on civil drawing all underground fire main work must be completed by fire protection contractor holding a Class I, II, or V license per FS 633.102.*
RESPONSE: Please see sheet C-4, "Notes" item #8 for location of note.

2. *The job address shall be clarified and corrected on all documents within this submission as the TAC application states the job address as 3090 Sherman Street, but the architectural pages show 3090 Sheridan Street in the title blocks. --- The civil pages show 3090 Sherman Street in the title blocks. --- The folio number given on the TAC application (514208150010) shows as 3090 Sheridan Street in BCPA.*
RESPONSE: The documents and plans have been corrected to reflect 3090 Sherman Street with Folio Number 514208160010.

3. *At time of submittal, water supply must meet NFPA 1 (2018 Ed.) Section 18.4.5.3. --- In order to determine the minimum fire flow for firefighting purposes, a hydrant flow test will need to be scheduled through our underground utilities dept., 954-921- 3046. --- After the results are completed, the civil engineer shall show on civil drawings the calculations using table 18.4.5.2.1 showing that the project meets the minimum fire flow requirements for the building.*
RESPONSE: Fire flow test has been completed by the City of Hollywood in April of 2022, those results and fire flow building requirements can be seen on Sheet C-4.2

4. Water supply and any new hydrants shall be in place prior to accumulation of combustible materials per NFPA 1 (2018 Ed.) Section 16.4.3.1.1.
RESPONSE: Please see sheet C-4, "Notes" item #9 for location of note.

5. Provide a note on civil drawing all underground fire main work must be completed by fire protection contractor holding a Class I, II, or V license per FS 633.102.
   RESPONSE: Please see sheet C-4, "Notes" item #8 for location of required note.

6. The proposed FDC and new fire hydrant location for Building U is on the east side of the structure which itself is acceptable, but the complete FD Access pathway is not depicted on the plans. --- An aerial view from Google Maps shows this road ending at the entrance of a parking lot as one goes south on Sherman Road. --- Provide a complete FD Access route which is compliant with NFPA 1 (2018 Ed.) Chapter 18 in its entirety.
   RESPONSE: FDC and new fire hydrant for building U have been relocated to the Southeast corner of Building "U" on Sheet C-4. Fire Truck Analysis "Exhibit 1" has been added to the end of the submittal package.

7. Be advised that NFPA 1 (2018 edition) Section 11.10.1 requires that minimum radio signal strength for fire department communications shall be maintained at a level determined by the AHJ for all new and existing buildings. --- If at any time (including the construction phase), Fire Department personnel determine that the minimum radio signal strength is not being met, a Two-Way Radio Communication Enhancement system may be required to be installed.
   RESPONSE: Acknowledged.

Please do not hesitate to contact me at 954-527-2485 or julian.bobilev@gmlaw.com with any questions regarding the project.

Respectfully submitted,
Greenspoon Marder

Julian Bobilev, AICP
Enclosures
cc: Stanley Bonilla, Safeguard Properties, LLC
Mike Adams, Mike Carter Construction, Inc.
Melissa Ross, Ross Engineering

SAFEGUARD SELF STORAGE
3090 SHERIDAN STREET, HOLLYWOOD, FL
ALTA SURVEY

LOCATION MAP
Not To Scale

SURVEYOR'S NOTES:

1. Not valid without the signature and original raised seal of a Florida licensed Surveyor and Mapper.
2. Elevations shown hereon are based on the NAVD88
3. Benchmark reference: BCBM 1800 Elevation 7.034 NGVD29 (5.433 NAVD88).
4. Set IR w/cap (LB# 6727) at property corners unless otherwise noted
5. There are no trees on this property other than shown hereon
6. Expected use of property is Commercial. The minimum relative distance accuracy for this type of Boundary Survey is 1 ft. in 10,000 ft. The accuracy obtained by measurement & calculations was found to exceed this requirement.
7. Unless otherwise noted, this firm has not attempted to locate underground utilities, footings and/or foundations.
8. This survey was prepared with the benefit o First American Title Insurance Company Commitment for Title Insurance, FATIC File Number: 1062-6313898, Customer File Number: FLTSS-514994a, Through Date: January 17, 2023 at 8:00 AM.
9. Bearings shown hereon are based on the West line of Parcel 'A' of "TAFT STREET INDUSTRIAL PARK" according to the Plat thereof as recorded in Plat Book 122, Page 25, of the Public Records of Broward County, Florida having a bearing of South 01°08'48"East.
10. FLOOD ZONE INFORMATION
    Community Name: City of Hollywood
    Community Number: 125113
    County Name: Broward
    State: Florida
    Map & Panel Number: 12011C0566 & 12011C0568
    Suffix: H
    F.I.R.M. Index Date: 08-18-2014
    F.I.R.M. Panel Effective Date: 08-18-2014
    Flood Zones: AH(7) & X
11. Property Address: 3090 Sheridan Street, Hollywood, Florida, 33021
12. Also, this certifies that there are 95 regular parking spaces on said property, and 7 handicapped spaces.
13. There is no observed evidence of: current earth moving work, building construction or building additions.
14. Property has a Zoning Classification of IM-1 Low Intensity Industrial and Manufacturing District as per the City of Hollywood's Zoning and Land Use Map, dated April 11, 2011 (latest update available).

    Setback and Height Requirements copied verbatim from the City of

    Hollywood's Land Development code

    Front or street side – Pursuant to the performance standards of the industrial street landscape buffers (§ 4.4.E).

    Side interior and Rear – 0 feet.

    Whenever the IM-1 District abuts a residential district, 20 ft setback +1 additional ft per 1 ft increase over 15 ft of height. A 5 ft. wide approved landscaped buffer must be included and maintained pursuant to the industrial landscape buffers (§ 4.4.E).

    Maximum Building Height 35 feet.
16. Access to the subject property is provided by Sheridan Street a publicly dedicated street and by O.R.B. 3357, Pg. 82, Public Records of Broward County, Florida, right-of-way deeded to City of Hollywood for street purposes.

LEGAL DESCRIPTION:

PARCEL 1 (Fee Estate):
The North 985.83 feet of Parcel "A", TAFT STREET INDUSTRIAL PARK, according to the Plat thereof, as recorded in Plat Book 122, Page 25, of the Public Records of Broward County, Florida.

PARCEL 2 (Fee Estate):
Parcel "A" of SHERIDAN INDUSTRIAL PARK SOUTH, according to the Plat thereof, as recorded in Plat Book 114, Page 18, of the Public Records of Broward County, Florida.

PARCEL 3 (Easement Estate):
Non-exclusive easement for ingress and egress for the benefit of Parcel 1, set forth in that Special Warranty Deed from Rinker Materials Corporation to Sheridan Extra Closet, Ltd., dated March 29, 1996, recorded April 8, 1996 in Official Records Book 24717, Page 372 over and across the following described land:

A portion of Tract "A", CENTRAL GOLF SECTION OF HOLLYWOOD, according to the Plat thereof, as recorded in Plat Book 9, Page 44, of the Public Records of Broward County, Florida, and being more particularly described as follows:

Beginning at the Northerly most Northeast corner of TAFT STREET INDUSTRIAL PARK, according to the Plat thereof, as recorded in Plat Book 122, Page 25, of the Public Records of Broward County, Florida; thence North 01°08'48" West, radial to the next described curve concave to the Southwest, a distance of 40.00 feet to the Southeast corner of SHERIDAN INDUSTRIAL PARK SOUTH, according to the Plat thereof, as recorded in Plat Book 144, Page 18, of the Public Records of Broward County, Florida; thence Southerly along the arc of said curve having a radius of 45.00 feet, a delta of 90°00'00" and an arc distance of 70.69 feet to the Point of Tangency; thence South 01°08'48" East, a distance of 157.87 feet; thence South 88°54'12" West, a distance of 45.00 feet to the intersection with the East line of said TAFT STREET INDUSTRIAL PARK; thence North 01°08'48" West, along said East line, a distance of 162.83 feet to the POINT OF BEGINNING.

Said lands lying in the City of Hollywood, Broward County, Florida and containing net total of 329,896 square feet (7.574 acres) more or less.

EXCEPTIONS:

FIRT AMERICANL TITLE INSURANCE COMPANY
TITLE SEARCH REPORT

CUSTOMER NUMBER: FLTSS-514994a
FATIC FILE NUMBER 1062-6313898

THROUGH DATE: JANUARY 17, 2023 AT 8:00 AM

1. *DECLARATION OF RESTRICTIVE CONENANT ORB 16545 PAGE 138 BCR. (BLANKET IN NATURE PARCEL 2)*
2. *GRANT OF EASEMENT ORB 25417 PAGE 237 BCR. (AS SHOWN)*
3. *GRANT OF EASEMENT ORB 25417 PAGE 242 BCR. (AS SHOWN)*
4. *EASEMENT AGREEMENT ORB 49769 PAGE 292 BCR. (AS SHOWN)*
5. *PARCEL A TAFT STREET INDUSTRIAL PARK PLAT BOOK 122 PAGE 25 BCR. (AS SHOWN)*
6. *PARCEL A SHERIDAN INDUSTRIAL PARK SOUTH PLAT BOOK 114 PAGE 18 BCR. (AS SHOWN)*

CERTIFY TO:
FIRST AMERICAN TITLE INSURANCE COMPANY,
FREEDOM LAND TITLE AGENCY LIMITED, LIABILITY COMPANY
PPF SS 3090 SHERIDAN STREET, LLC

CERTIFICATE:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS STANDARDS. THE FIELD WORK WAS COMPLETED ON JANUARY 05, 2023.

SCOTT J DOUGLASS CERTIFICATE No. 4532 STATE OF FLORIDA REGISTERED LAND SURVEYOR

PREPARED BY:
DOUGLASS, LEAVY & ASSOCIATES INC.
PROFESSIONAL SURVEYORS & MAPPERS
7914 WILES ROAD
CORAL SPRINGS, FLORIDA 33067
OFFICE: (954) 344-7994 FAX: (954) 344-2636
LICENSED BUSINESS No. 6727

PREPARED FOR:
MIKE CARTER CONSTRUCTION INC
435 12TH STREET WEST
BRADENTON, FL. 34205

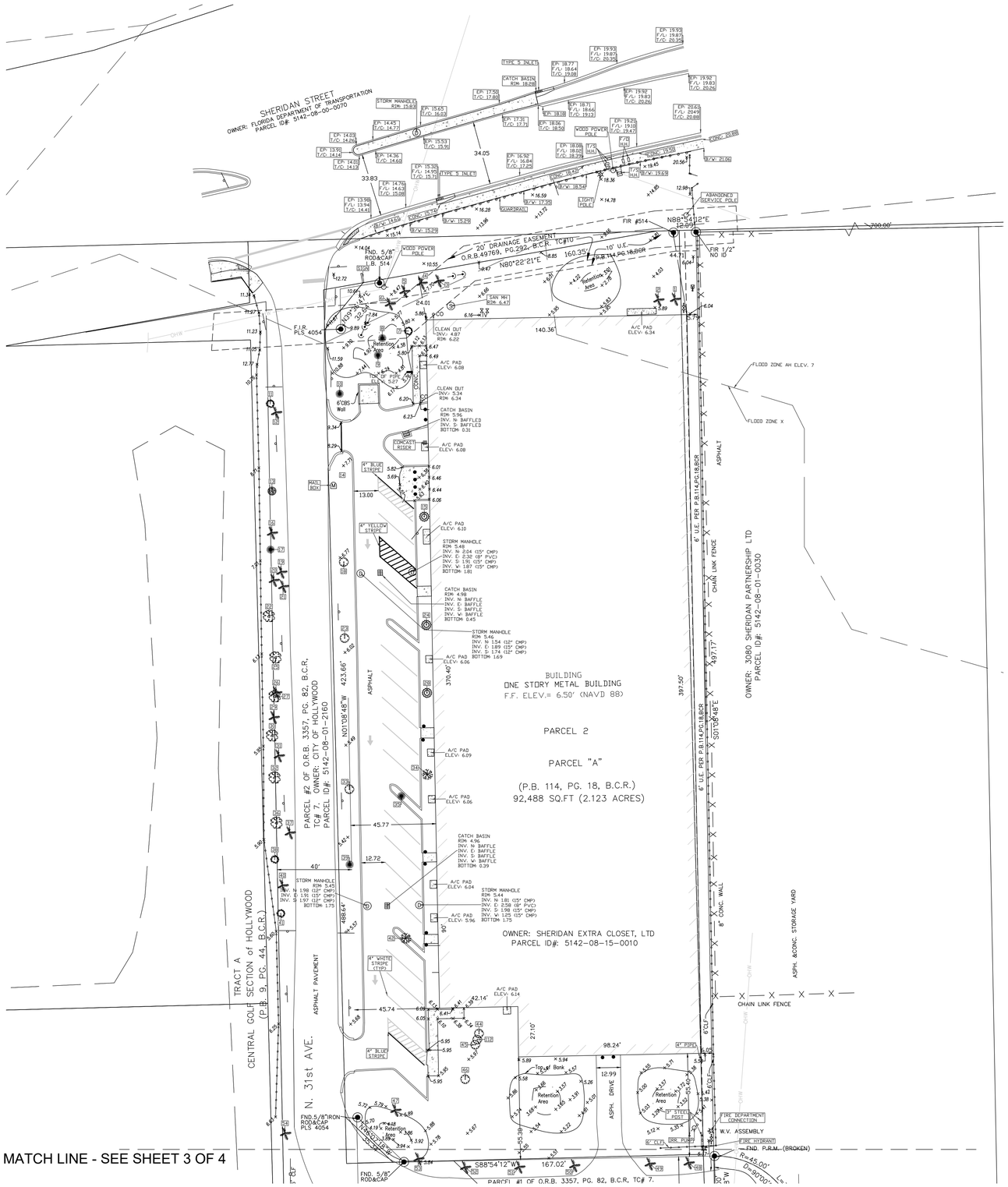
PROJECT:
3090 SHERIDAN STREET
SHERIDAN EXTRA STORAGE
3090 SHERIDAN STREET, HOLLYWOOD, FL. 33021
ALTA SURVEY

REVISIONS:

Date	Description	By
04/07/22	UPDATE SURVEY	SJD
01/05/23	UPDATE SURVEY	WHP
01/31/23	UPDATE SURVEY	SJD
03/15/23	UPDATE SURVEY	WHP

DRAWING DATA:
Drawing date: 01/12/2022
fb/pg source: FIELDBOOK
Drafter: WHP
Checked: SJD
CADD dwg no: 22001ALTA 2023
SHEET: 1/4

SEAL:
For the Firm_____
Scott J. Douglass
Professional Surveyor & Mapper
Florida Registration No 4532



LEGEND:

B/W	BACK OF WALK
CONC	CONCRETE
CATV	CABLE TELEVISION
C.L.F.	CHAIN LINK FENCE
D.B.	DEED BOOK
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
FH	FIRE HYDRANT
F/L	FLOWLINE
F/O	FIBER OPTIC
FP&L	FLORIDA POWER & LIGHT
H.H.	HANDHOLE
LB	LICENSED BUSINESS
MON	MONUMENT
O.R.B.	OFFICIAL RECORDS BOOK
OHW	OVERHEAD WIRES
P.R.C.R.	PALM BEACH COUNTY RECORDS
P.B.	PLAT BOOK
PG.	PAGE
RES.	RESIDENT
RCP	REINFORCE CONCRETE PIPE
R/W	RIGHT-OF-WAY
S.R.	STATE ROAD
T/C	TOP OF CURB
T/S	TRAFFIC SIGNAL
(Typ.)	TYPICAL
—OHW—	ELECTRIC OVERHEAD WIRES
(P)	PLAT RECORDS

SYMBOL LEGEND			
	MISCELLANEOUS SIGN		WOOD POWER POLE
	WATER VALVE		CONCRETE LIGHT POLE
	FIRE HYDRANT		CONCRETE POWER POLE
	CLEAN-OUT		Ground Light Post ★/ Water&Elect. for Campers
	ANCHOR		IRRIGATION VALVE
	CURB INLET		GROUND LIGHT
	STORM MANHOLE		CABLE TV RISER
	CATCH BASIN		YARD DRAIN
	ELECTRIC HANDHOLE		ELECTRIC METER
	METAL LIGHT POLE		BELL SOUTH MANHOLE
	CONCRETE LIGHT POLE		WELL CHECK VALVE

TREE CHART					
LETTER	CIRCUMFERENCE	DIAMETER	TYPE	CANOPY	HIGHT
1	2.8'	0.9'	SABLE PALM	4'	12'
2	2.8'	0.9'	SABLE PALM	4'	12'
3	3.2'	1.0'	SABLE PALM	6'	20'
4	3.2'	1.0'	SABLE PALM	6'	20'
5	3.2'	1.0'	SABLE PALM	6'	20'
6	3.2'	1.0'	SABLE PALM	6'	20'
7	2.7'	0.9'	DEAD TREE	--	--
8	3.7'	1.2'	SILVER BUTTONWOOD	8'	10'
9	3.2'	1.0'	SILVER BUTTONWOOD	8'	12'
10	3.65'	1.2'	YELLOW TRUMPET	8'	12'
11	--	--	DEAD TREE	--	--
12	5.0'	1.6'	SABLE PALM	6'	12'
13	10.0'	3.2'	STRANGLER FIG	8'	30'
14	--	--	REMOVED TREE	--	--
15	1.9'	0.6'	DAHOON HOLLY	8'	15'
16	5.5'	1.8'	SABLE PALM	6'	15'
17	12.0'	3.8'	STRANGLER FIG	15'	35'
18	2.6'	0.8'	LIVE OAK	6'	15'
19	4.3'	1.4'	CABBAGE PALM	5'	10'
20	4.5'	1.4'	CABBAGE PALM	5'	10'
21	3.3'	1.1'	CABBAGE PALM	5'	6'
22	15.0'	4.8'	STRANGLER FIG	20'	30'
23	2.6'	0.8'	LIVE OAK	6'	15'
24	1.6'	0.5'	DAHOON HOLLY	8'	15'
25	5.3'	1.7'	STRANGLER FIG	15'	25'
26	3.7'	1.2'	CABBAGE PALM	3'	5'
27	10.0'	3.2'	STRANGLER FIG	8'	12'
28	1.6'	0.5'	DAHOON HOLLY	6'	10'
29	4.5'	1.4'	CABBAGE PALM	8'	12'
30	9.67' X 2.5'	--	STRANGLER FIG	15'	30'
31	3.8'	1.2'	CABBAGE PALM	8'	20'
32	4.4'	1.4'	STRANGLER FIG	10'	25'
33	2.6'	0.8'	LIVE OAK	6'	15'
34	1.3'	0.4'	SILVER BUTTONWOOD	5'	10'
35	0.9'	0.3'	SILVER BUTTONWOOD	4'	12'
36	4.2'	1.3'	STRANGLER FIG	15'	20'
37	3.7'	1.2'	CABBAGE PALM	8'	20'
38	--	--	DEAD TREE	--	--
39	2.5'	0.8'	YELLOW TRUMPET	5'	15'
40	5.3'	1.7'	CABBAGE PALM	6'	10'
41	--	--	DEAD TREE	--	--
42	1.5'	0.5'	SILVER BUTTONWOOD	6'	12'
43	0.9'	0.3'	DAHOON HOLLY	3'	12'
44	4.8'	1.5'	LIVE OAK	6'	35'
45	7.5'	2.4'	LIVE OAK	10'	35'
46	6.8'	2.2'	LIVE OAK	12'	40'
47	3.3'	1.1'	PALM	5'	20'
48	2.9'	0.9'	PALM	4'	15'
49	2.8'	0.9'	PALM	4'	15'
50	2.7'	0.9'	PALM	5'	20'
51	3.1'	1.0'	PALM	4'	12'
52	2.8'	0.9'	PALM	4'	12'
53	2.5'	0.8'	PALM	4'	15'

TREE CHART					
LETTER	CIRCUMFERENCE	DIAMETER	TYPE	CANOPY	HIGHT
54	4.4'	1.4'	CABBAGE PALM	6'	15'
55	1.9'	0.6'	STRANGLER FIG	3'	15'
56	2.4'	0.8'	SABLE PALM	5'	25'
57	3.3'	1.0'	PALM	5'	25'
58	3.0'	1.0'	PALM	5'	25'
59	3.1'	1.0'	PALM	5'	25'
60	3.7'	1.2'	LIVE OAK	15'	35'
61	3.0'	1.0'	PALM	5'	25'
62	3.0'	1.0'	LIVE OAK	15'	35'
63	4.6'	1.5'	LIVE OAK	15'	35'
64	10.6'	3.4'	LIVE OAK	25'	45'
65	5.1'	1.6'	LIVE OAK	12'	35'
66	6.2' (X2)	2.0'	LIVE OAK	12'	35'
67	5.7'	1.8'	LIVE OAK	15'	55'
68	7.0'	2.2'	LIVE OAK	12'	45'
69	8.0'	2.5'	LIVE OAK	20'	45'
70	4.0'	1.3'	LIVE OAK	10'	50'
71	4.0'	1.3'	LIVE OAK	10'	50'
72	3.1'	1.0'	PALM	5'	20'
73	7.2'	2.3'	LIVE OAK	20'	40'
74	5.0'	1.8'	LIVE OAK	25'	35'
75	3.7'	1.2'	LIVE OAK	20'	25'
76	4.7'	1.5'	PALM	5'	20'
77	--	--	DEAD TREE	--	--
78	4.1'	1.3'	DAHOON HOLLY	6'	15'
79	3.8'	1.2'	LIVE OAK	15'	30'
80	3.4'	1.1'	LIVE OAK	10'	20'
81	8.3'	2.6'	LIVE OAK	25'	40'
82	13.1'	4.2'	LIVE OAK	35'	50'
83	9.2'	2.9'	LIVE OAK	15'	45'
84	8.2'	2.6'	LIVE OAK	25'	45'
85	5.8'	1.8'	LIVE OAK	35'	45'
86	4.6'	1.5'	GREEN BUTTONWOOD	20'	25'
87	6.8'	2.2'	LIVE OAK	20'	45'
88	9.8'	2.5'	LIVE OAK	25'	40'
89	7.5' (X2)	2.4'	LIVE OAK	25'	45'
90	8.0'	2.5'	LIVE OAK	45'	15'
91	4.2'	1.3'	LIVE OAK	20'	45'
92	7.9'	2.5'	LIVE OAK	25'	45'
93	3.9'	1.3'	BLACK OLIVE	35'	15'
94	5.0'	1.6'	SLASH PINE	20'	65'
95	5.7'	1.8'	LIVE OAK	30'	45'
96	6.3'	2.0'	LIVE OAK	35'	40'
97	4.2'	1.3'	LIVE OAK	35'	45'
98	4.0'	1.3'	LIVE OAK	15'	50'
99	11.2'	3.6'	LIVE OAK	60'	50'
100	4.0'	1.3'	SLASH PINE	4'	40'
101	3.0'	1.0'	LIVE OAK	10'	45'
102	3.9'	1.3'	LIVE OAK	15'	45'
103	5.0'	1.6'	LIVE OAK	20'	40'
104	4.1'	1.3'	LIVE OAK	15'	35'
105	4.4'	1.4'	LIVE OAK	20'	40'
106	4.4'	1.4'	BLACK OLIVE	45'	20'
107	3.5'	1.1'	PALM	5'	25'
108	4.7'	1.5'	LIVE OAK	15'	45'
109	4.7'	1.5'	LIVE OAK	15'	45'
110	7.9'	2.5'	LIVE OAK	35'	40'
111	7.8'	2.5'	LIVE OAK	20'	40'
112	7.5'	2.4'	LIVE OAK	10'	35'

PREPARED FOR:
MIKE CARTER CONSTRUCTION INC
435 12TH STREET WEST
BRADENTON, FL. 34205

SCOTT J DOUGLASS ★ No. 4532 ★ STATE OF FLORIDA REGISTERED LAND SURVEYOR

SEAL:
For the Firm
Scott J. Douglass
Professional Surveyor & Mapper
Florida Registration No 4532

DRAWING DATA:
Drawing date: 03/11/2022
By/pg source: FIELD BOOK
Drawn: WMP
Checked: SDJ
CADD dwg no: 22001ALTA 2023
SHEET: 2/4

HORIZONTAL SCALE (FT)
0 15 30 60
NORTH

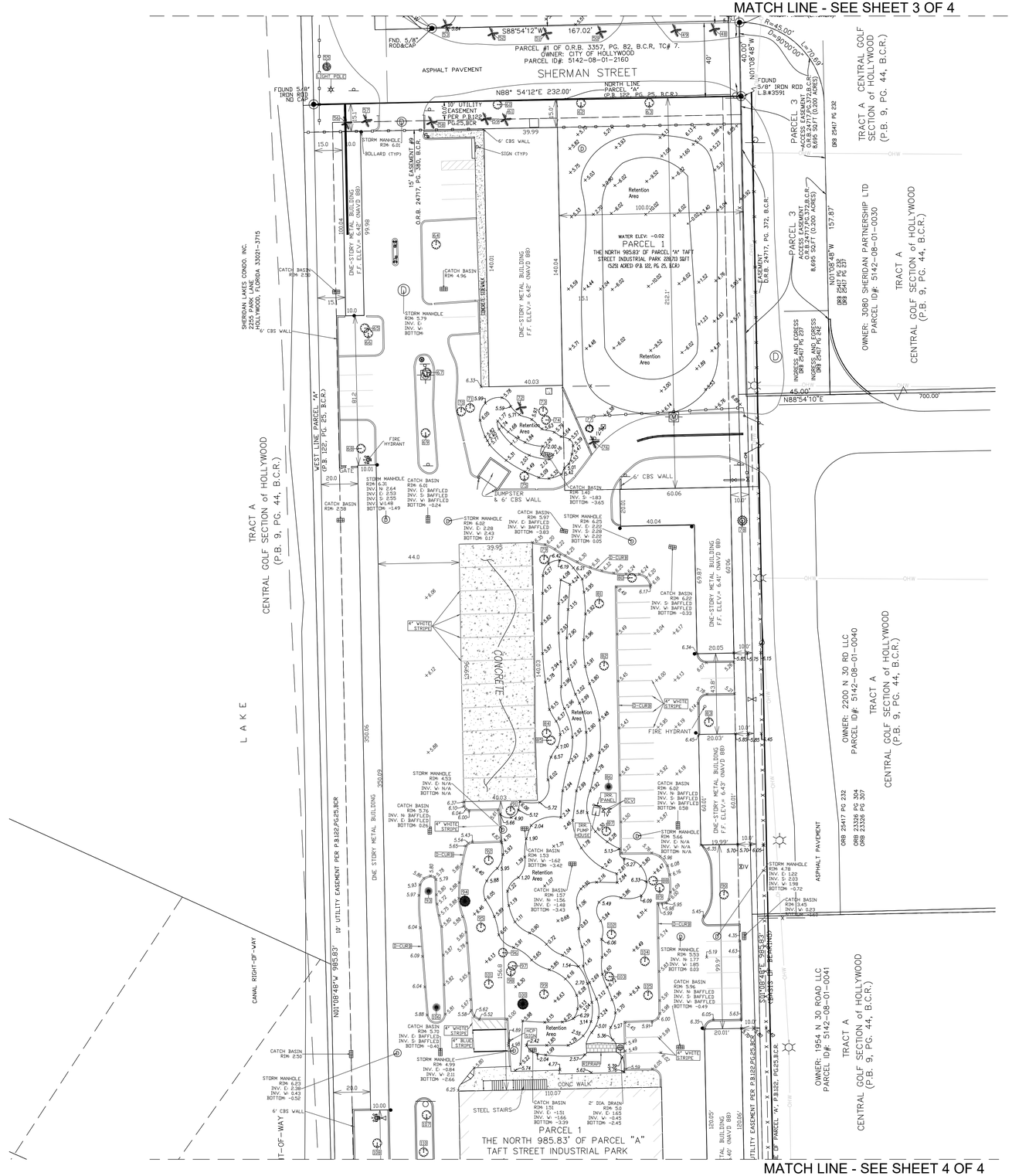
REVISIONS:

Date	Description	By
04/07/22	UPDATE SURVEY	SJD
07/05/23	UPDATE SURVEY	WMP
07/31/23	UPDATE SURVEY	SJD
03/15/23	UPDATE SURVEY	WMP

PROJECT:
3090 SHERIDAN STREET
SHERIDAN EXTRA STORAGE
3090 SHERIDAN STREET, HOLLYWOOD, FL. 33021
ALTA SURVEY

PREPARED BY:
DOUGLASS, LEAVY & ASSOCIATES INC.
PROFESSIONAL SURVEYORS & MAPPERS
7914 WILES ROAD
CORAL SPRINGS, FLORIDA 33067
OFFICE: (954) 344-7994 FAX: (954) 344-2836
LICENSED BUSINESS No. 6727

MATCH LINE - SEE SHEET 3 OF 4



MATCH LINE - SEE SHEET 4 OF 4

LEGEND:

B/W	BACK OF WALK
CONC	CONCRETE
CATV	CABLE TELEVISION
C.L.F.	CHAIN LINK FENCE
D.B.	DEED BOOK
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
FH	FIRE HYDRANT
F/L	FLOWLINE
F/O	FIBER OPTIC
FP&L	FLORIDA POWER & LIGHT
H.H.	HANDHOLE
LB	LICENSED BUSINESS
MON	MONUMENT
O.R.B.	OFFICIAL RECORDS BOOK
OHW	OVERHEAD WIRES
P.R.C.R.	PALM BEACH COUNTY RECORDS
P.B.	PLAT BOOK
PG.	PAGE
RES	RESIDENT
RCP	REINFORCE CONCRETE PIPE
R/W	RIGHT-OF-WAY
S.R.	STATE ROAD
T/C	TOP OF CURB
T/S	TRAFFIC SIGNAL
(Typ.)	TYPICAL
—OHW—	ELECTRIC OVERHEAD WIRES
(P)	PLAT RECORDS

SYMBOL LEGEND			
	MISCELLANEOUS SIGN		WOOD POWER POLE
	WATER VALVE		CONCRETE LIGHT POLE
	FIRE HYDRANT		CONCRETE POWER POLE
	CLEAN-OUT		Ground Light Post w/ WaterMeDect for Corners
	ANCHOR		IRRIGATION VALVE
	CURB INLET		GROUND LIGHT
	STORM MANHOLE		CABLE TV RISER
	CATCH BASIN		YARD DRAIN
	ELECTRIC HANDHOLE		ELECTRIC METER
	METAL LIGHT POLE		BELL SOUTH MANHOLE
	CONCRETE LIGHT POLE		WELL CKECK VALVE

TREE CHART					
LETTER	CIRCUMFERENCE	DIAMETER	TYPE	CANOPY	HIGHT
1	2.8'	0.9'	SABLE PALM	4'	12'
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6	3.2'	1.0'	SABLE PALM	6'	20'
7	2.7'	0.9'	DEAD TREE	--	--
8	3.7'	1.2'	SILVER BUTTONWOOD	8'	10'
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48	2.9'	0.9'	PALM	4'	15'
49	2.8'	0.9'	PALM	4'	15'
50	2.7'	0.9'	PALM	5'	20'
51	3.1'	1.0'	PALM	4'	12'
52	2.8'	0.9'	PALM	4'	12'
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TREE CHART					
LETTER	CIRCUMFERENCE	DIAMETER	TYPE	CANOPY	HIGHT
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59	3.1'	1.0'	PALM	5'	25'
60	3.7'	1.2'	LIVE OAK	15'	35'
61	3.0'	1.0'	PALM	5'	25'
62	3.0'	1.0'	LIVE OAK	15'	35'
63	4.6'	1.5'	LIVE OAK	15'	35'
64	10.6'	3.4'	LIVE OAK	25'	45'
65	5.1'	1.6'	LIVE OAK	12'	35'
66	6.2' (X2)	2.0'	LIVE OAK	12'	35'
67	5.7'	1.8'	LIVE OAK	15'	55'
68	7.0'	2.2'	LIVE OAK	12'	45'
69	8.0'	2.5'	LIVE OAK	20'	45'
70	4.0'	1.3'	LIVE OAK	10'	50'
71	4.0'	1.3'	LIVE OAK	10'	50'
72	3.1'	1.0'	PALM	5'	20'
73	7.2'	2.3'	LIVE OAK	20'	40'
74	5.0'	1.8'	LIVE OAK	25'	35'
75	3.7'	1.2'	LIVE OAK	20'	25'
76	4.7'	1.5'	PALM	5'	20'
77	--	--	DEAD TREE	--	--
78	4.1'	1.3'	DAHOON HOLLY	6'	15'
79	3.8'	1.2'	LIVE OAK	15'	30'
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87	6.8'	2.2'	LIVE OAK	20'	45'
88	9.8'	2.5'	LIVE OAK	25'	40'
89	7.5' (X2)	2.4'	LIVE OAK	25'	45'
90	8.0'	2.5'	LIVE OAK	45'	15'
91	4.2'	1.3'	LIVE OAK	20'	45'
92	7.9'	2.5'	LIVE OAK	25'	45'
93	3.9'	1.3'	BLACK OLIVE	35'	15'
94	5.0'	1.6'	SLASH PINE	20'	65'
95	5.7'	1.8'	LIVE OAK	30'	45'
96	6.3'	2.0'	LIVE OAK	35'	40'
97	4.2'	1.3'	LIVE OAK	35'	45'
98	4.0'	1.3'	LIVE OAK	15'	50'
99	11.2'	3.6'	LIVE OAK	60'	50'
100	4.0'	1.3'	SLASH PINE	4'	40'
101	3.0'	1.0'	LIVE OAK	10'	45'
102	3.9'	1.3'	LIVE OAK	15'	45'
103	5.0'	1.6'	LIVE OAK	20'	40'
104	4.1'	1.3'	LIVE OAK	15'	35'
105	4.4'	1.4'	LIVE OAK	20'	40'
106	4.4'	1.4'	BLACK OLIVE	45'	20'
107	3.5'	1.1'	PALM	5'	25'
108	4.7'	1.5'	LIVE OAK	15'	45'
109	4.7'	1.5'	LIVE OAK	15'	45'
110	7.9'	2.5'	LIVE OAK	35'	40'
111	7.8'	2.5'	LIVE OAK	20'	40'
112	7.5'	2.4'	LIVE OAK	10'	35'

PREPARED FOR:

MIKE CARTER CONSTRUCTION INC
435 12TH STREET WEST
BRADENTON, FL. 34205

SCOTT J DOUGLASS ★ No. 4532 ★ STATE OF FLORIDA REGISTERED LAND SURVEYOR

SEAL:
For the Firm
Scott J. Douglass
Professional Surveyor & Mapper
Florida Registration No 4532

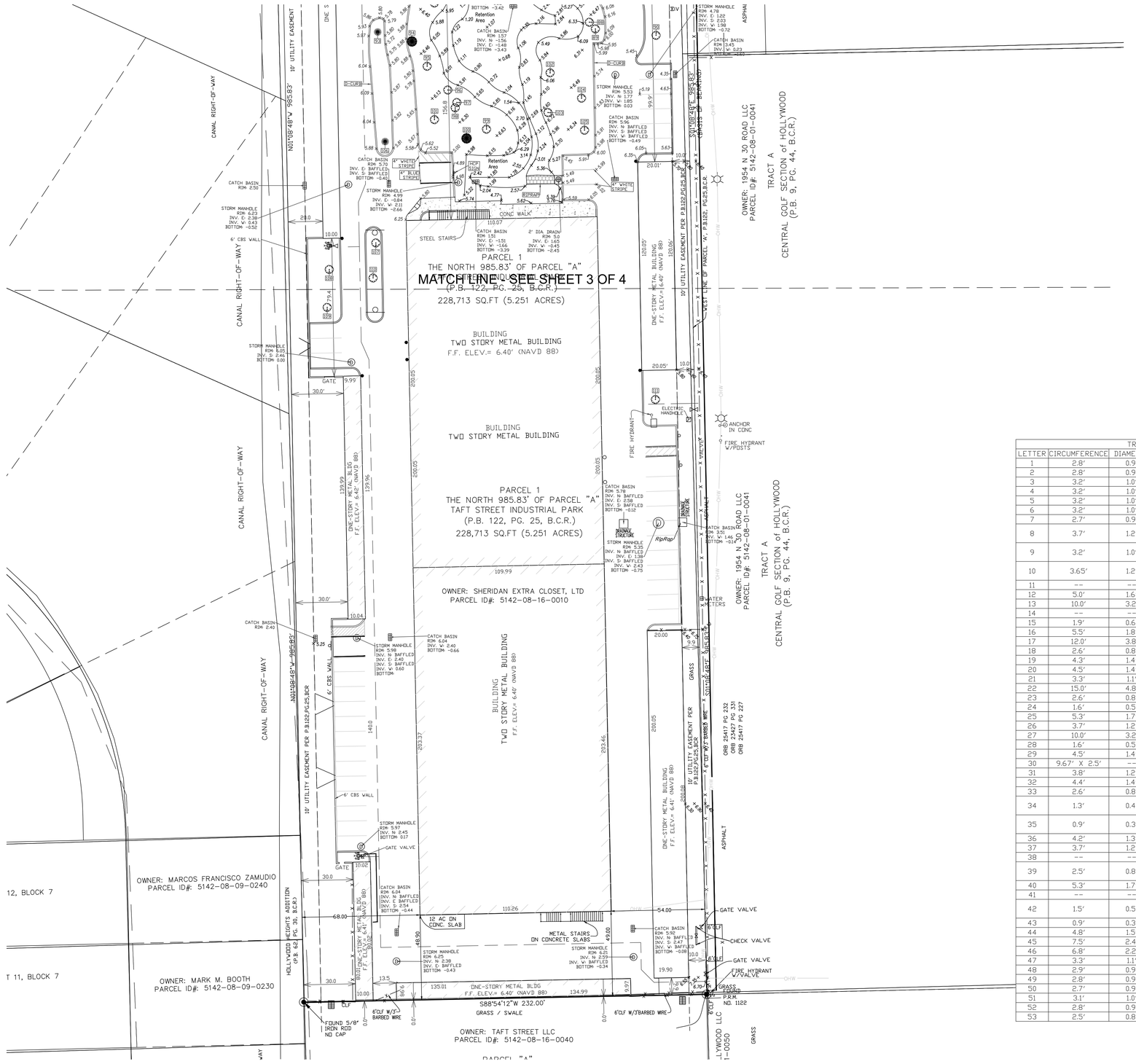
DRAWING DATA:
Drawing date: 03/11/2022
By/pg source: FIELD BOOK
Drawn: HMR
Checked: SDJ
CADD dwg no: 22001ALTA
HORIZONTAL SCALE (FT) 0 15 30 60
2023
SHEET: 3/4

REVISIONS:

Date	Description	By
04/07/22	UPDATE SURVEY	SJD
07/05/23	UPDATE SURVEY	WHP
07/31/23	UPDATE SURVEY	SJD
03/15/23	UPDATE SURVEY	WHP

PROJECT:
3090 SHERIDAN STREET
SHERIDAN EXTRA STORAGE
3090 SHERIDAN STREET, HOLLYWOOD, FL. 33021
ALTA SURVEY

PREPARED BY:
DOUGLASS, LEAVY & ASSOCIATES INC.
PROFESSIONAL SURVEYORS & MAPPERS
7914 WILES ROAD
CORAL SPRINGS, FLORIDA 33067
OFFICE: (954) 344-7994 FAX: (954) 344-8638
LICENSED BUSINESS No. 6727



LEGEND:

B/W	BACK OF WALK
CONC	CONCRETE
CATV	CABLE TELEVISION
C.L.F.	CHAIN LINK FENCE
D.B.	DEED BOOK
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
FH	FIRE HYDRANT
F/L	FLOWLINE
F/O	FIBER OPTIC
FP&L	FLORIDA POWER & LIGHT
H.H.	HANDHOLE
LB	LICENSED BUSINESS
MON	MONUMENT
O.R.B.	OFFICIAL RECORDS BOOK
OHW	OVERHEAD WIRES
P.R.C.R.	PALM BEACH COUNTY RECORDS
P.B.	PLAT BOOK
PG.	PAGE
RES	RESIDENT
RCP	REINFORCE CONCRETE PIPE
R/W	RIGHT-OF-WAY
S.R.	STATE ROAD
T/C	TOP OF CURB
T/S	TRAFFIC SIGNAL
(typ.)	TYPICAL
—OHW—	ELECTRIC OVERHEAD WIRES
(P)	PLAT RECORDS

SYMBOL LEGEND			
	MISCELLANEOUS SIGN		WOOD POWER POLE
	WATER VALVE		CONCRETE LIGHT POLE
	FIRE HYDRANT		CONCRETE POWER POLE
	CLEAN-OUT		Ground Light Post w/ Water&Dist for Campers
	ANCHOR		IRRIGATION VALVE
	CURB INLET		GROUND LIGHT
	STORM MANHOLE		CABLE TV RISER
	CATCH BASIN		YARD DRAIN
	ELECTRIC HANDHOLE		ELECTRIC METER
	METAL LIGHT POLE		BELL SOUTH MANHOLE
	CONCRETE LIGHT POLE		WELL CKECK VALVE

TREE CHART					
LETTER	CIRCUMFERENCE	DIAMETER	TYPE	CANOPY	HIGHT
1	2.8'	0.9'	SABLE PALM	4'	12'
2	2.8'	0.9'	SABLE PALM	4'	12'
3	3.2'	1.0'	SABLE PALM	6'	20'
4	3.2'	1.0'	SABLE PALM	6'	20'
5	3.2'	1.0'	SABLE PALM	6'	20'
6	3.2'	1.0'	SABLE PALM	6'	20'
7	2.7'	0.9'	DEAD TREE	--	--
8	3.7'	1.2'	SILVER BUTTONWOOD	8'	10'
9	3.2'	1.0'	SILVER BUTTONWOOD	8'	12'
10	3.65'	1.2'	YELLOW TRUMPET	8'	12'
11	--	--	DEAD TREE	--	--
12	5.0'	1.6'	SABLE PALM	6'	12'
13	10.0'	3.2'	STRANGLER FIG	8'	30'
14	--	--	REMOVED TREE	--	--
15	1.9'	0.6'	DAHOON HOLLY	8'	15'
16	5.5'	1.8'	SABLE PALM	6'	15'
17	12.0'	3.8'	STRANGLER FIG	15'	35'
18	2.6'	0.8'	LIVE OAK	6'	15'
19	4.3'	1.4'	CABBAGE PALM	5'	10'
20	4.5'	1.4'	CABBAGE PALM	5'	10'
21	3.3'	1.1'	CABBAGE PALM	5'	6'
22	15.0'	4.8'	STRANGLER FIG	20'	30'
23	2.6'	0.8'	LIVE OAK	6'	15'
24	1.6'	0.5'	DAHOON HOLLY	8'	15'
25	5.3'	1.7'	STRANGLER FIG	15'	25'
26	3.7'	1.2'	CABBAGE PALM	3'	5'
27	10.0'	3.2'	STRANGLER FIG	8'	12'
28	1.6'	0.5'	DAHOON HOLLY	6'	10'
29	4.5'	1.4'	CABBAGE PALM	8'	12'
30	9.67' X 2.5'	--	STRANGLER FIG	15'	30'
31	3.8'	1.2'	CABBAGE PALM	8'	20'
32	4.4'	1.4'	STRANGLER FIG	10'	25'
33	2.6'	0.8'	LIVE OAK	6'	15'
34	1.3'	0.4'	SILVER BUTTONWOOD	5'	10'
35	0.9'	0.3'	SILVER BUTTONWOOD	4'	12'
36	4.2'	1.3'	STRANGLER FIG	15'	20'
37	3.7'	1.2'	CABBAGE PALM	8'	20'
38	--	--	DEAD TREE	--	--
39	2.5'	0.8'	YELLOW TRUMPET	5'	15'
40	5.3'	1.7'	CABBAGE PALM	6'	10'
41	--	--	DEAD TREE	--	--
42	1.5'	0.5'	SILVER BUTTONWOOD	6'	12'
43	0.9'	0.3'	DAHOON HOLLY	3'	12'
44	4.8'	1.5'	LIVE OAK	6'	35'
45	7.5'	2.4'	LIVE OAK	10'	35'
46	6.8'	2.2'	LIVE OAK	12'	40'
47	3.3'	1.1'	PALM	5'	20'
48	2.9'	0.9'	PALM	4'	15'
49	2.8'	0.9'	PALM	4'	15'
50	2.7'	0.9'	PALM	5'	20'
51	3.1'	1.0'	PALM	4'	12'
52	2.8'	0.9'	PALM	4'	12'
53	2.5'	0.8'	PALM	4'	15'

TREE CHART					
LETTER	CIRCUMFERENCE	DIAMETER	TYPE	CANOPY	HIGHT
54	4.4'	1.4'	CABBAGE PALM	6'	15'
55	1.9'	0.6'	STRANGLER FIG	3'	15'
56	2.4'	0.8'	SABLE PALM	5'	25'
57	3.3'	1.0'	PALM	5'	25'
58	3.0'	1.0'	PALM	5'	25'
59	3.1'	1.0'	PALM	5'	25'
60	3.7'	1.2'	LIVE OAK	15'	35'
61	3.0'	1.0'	PALM	5'	25'
62	3.0'	1.0'	LIVE OAK	15'	35'
63	4.6'	1.5'	LIVE OAK	15'	35'
64	10.6'	3.4'	LIVE OAK	25'	45'
65	5.1'	1.6'	LIVE OAK	12'	35'
66	6.2' (X2)	2.0'	LIVE OAK	12'	35'
67	5.7'	1.8'	LIVE OAK	15'	55'
68	7.0'	2.2'	LIVE OAK	12'	45'
69	8.0'	2.5'	LIVE OAK	20'	45'
70	4.0'	1.3'	LIVE OAK	10'	50'
71	4.0'	1.3'	LIVE OAK	10'	50'
72	3.1'	1.0'	PALM	5'	20'
73	7.2'	2.3'	LIVE OAK	20'	40'
74	5.0'	1.8'	LIVE OAK	25'	35'
75	3.7'	1.2'	LIVE OAK	20'	25'
76	4.7'	1.5'	PALM	5'	20'
77	--	--	DEAD TREE	--	--
78	4.1'	1.3'	DAHOON HOLLY	6'	15'
79	3.8'	1.2'	LIVE OAK	15'	30'
80	3.4'	1.1'	LIVE OAK	10'	20'
81	8.3'	2.6'	LIVE OAK	25'	40'
82	13.1'	4.2'	LIVE OAK	35'	50'
83	9.2'	2.9'	LIVE OAK	15'	45'
84	8.2'	2.6'	LIVE OAK	25'	45'
85	5.8'	1.8'	LIVE OAK	35'	45'
86	4.6'	1.5'	GREEN BUTTONWOOD	20'	25'
87	6.8'	2.2'	LIVE OAK	20'	45'
88	9.8'	2.5'	LIVE OAK	25'	40'
89	7.5' (X2)	2.4'	LIVE OAK	25'	45'
90	8.0'	2.5'	LIVE OAK	45'	15'
91	4.2'	1.3'	LIVE OAK	20'	45'
92	7.9'	2.5'	LIVE OAK	25'	45'
93	3.9'	1.3'	BLACK OLIVE	35'	15'
94	5.0'	1.6'	SLASH PINE	20'	65'
95	5.7'	1.8'	LIVE OAK	30'	45'
96	6.3'	2.0'	LIVE OAK	35'	40'
97	4.2'	1.3'	LIVE OAK	35'	45'
98	4.0'	1.3'	LIVE OAK	15'	50'
99	11.2'	3.6'	LIVE OAK	60'	50'
100	4.0'	1.3'	SLASH PINE	4'	40'
101	3.0'	1.0'	LIVE OAK	10'	45'
102	3.9'	1.3'	LIVE OAK	15'	45'
103	5.0'	1.6'	LIVE OAK	20'	40'
104	4.1'	1.3'	LIVE OAK	15'	35'
105	4.4'	1.4'	LIVE OAK	20'	40'
106	4.4'	1.4'	BLACK OLIVE	45'	20'
107	3.5'	1.1'	PALM	5'	25'
108	4.7'	1.5'	LIVE OAK	15'	45'
109	4.7'	1.5'	LIVE OAK	15'	45'
110	7.9'	2.5'	LIVE OAK	35'	40'
111	7.8'	2.5'	LIVE OAK	20'	40'
112	7.5'	2.4'	LIVE OAK	10'	35'

PREPARED FOR:

MIKE CARTER CONSTRUCTION INC
435 12TH STREET WEST
BRADENTON, FL. 34205

SCOTT J DOUGLASS ★ No. 4532 ★ STATE OF FLORIDA REGISTERED LAND SURVEYOR

SEAL:
For the Firm
Scott J. Douglass
Professional Surveyor & Mapper
Florida Registration No 4532

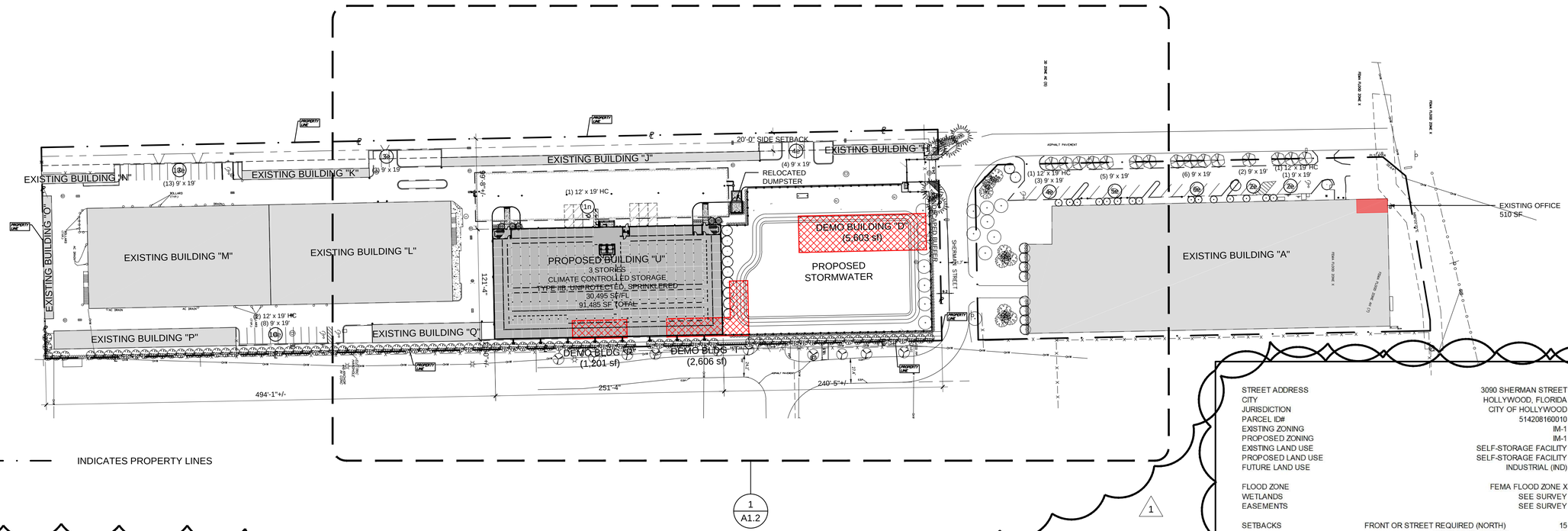
DRAWING DATA:
Drawing date: 03/11/2022
By/pg source: FIELD BOOK
Drawn: HORIZONTAL SCALE (FT)
Checked: SDJ
CADD dwg no: 22001ALTA 0 15 30 60
SHEET: 4/4
2023

REVISIONS:

Date	Description	By
04/07/22	UPDATE SURVEY	SJD
07/05/23	UPDATE SURVEY	WHP
07/31/23	UPDATE SURVEY	SJD
03/15/23	UPDATE SURVEY	WHP

PROJECT:
3090 SHERIDAN STREET
SHERIDAN EXTRA STORAGE
3090 SHERIDAN STREET, HOLLYWOOD, FL. 33021
ALTA SURVEY

PREPARED BY:
DOUGLASS, LEAVY & ASSOCIATES INC.
PROFESSIONAL SURVEYORS & MAPPERS
7914 WILES ROAD
CORAL SPRINGS, FLORIDA 33067
OFFICE (954) 344-7994 FAX: (954) 344-2636
LICENSED BUSINESS No. 6727



1
A1.2

1

NOTES:

1. ALL PLUMBING, MECHANICAL AND ELECTRICAL FIXTURES AND EQUIPMENT WILL MEET THE STATE OF FLORIDA BUILDING CODE.
2. NO BUILDING SIGNAGE IS PROPOSED.
3. BUILDING TO BE FLOOD PROOFED TO A MINIMUM ELEVATION OF 7.50'
4. INFRASTRUCTURE TO BE INSTALLED FOR A FUTURE ELECTRIC VEHICLE CHARGING STATION.
5. SITE LIGHTING. PARKING LOT MINIMUM HORIZONTAL ILLUMINANCE LEVEL SHALL BE 0.2 fc minimum WITH NO LIGHT TRESPASS ONTO ADJACENT PROPERTIES.
6. GREEN BUILDING COMPLIANCE: THE STRUCTURE WILL INCORPORATE THE FOLLOWING GREEN BUILDING PRACTICES:
   (A) Central air conditioner of 18 SEER or higher.
   (E) Energy efficient doors. All doors shall conform to the Energy Star rating criteria for South Florida.
   (G) Energy Star approved roofing materials.
   (H) Programmable thermostats.
   (I) Occupancy/vacancy sensors.
   (N) Dual flush toilets. These toilets when flushed use less than one gallon to flush liquid and 1.6 gallons or less for solids (USGBC). Plans shall indicate dual flush toilet. System must be verified by plumbing inspector at final inspection.
   (Q) All energy-efficient outdoor lighting. Suggested lights for outdoor spaces include fluorescent bulbs and fixtures with electronic ballasts (more efficient than magnetic types), low pressure sodium or mercury vapor, photovoltaic systems, LED lighting and low voltage landscape lights that run on a timer. All energy-efficient outdoor lighting shall be verified by electrical inspector at final inspection.
   (R) Energy performance at least 10% more efficient then standard established by ASHRAE (latest edition). Calculations shall be submitted with permit application.
   (V) Tankless water heater in lieu of a standard tank water heater. Documentation of energy savings must be provided. Product approvals should be provided with plans and shall indicate total energy demand. Tankless water heater shall be shown on plans and shall pass all required inspections.
   (W) Electric vehicle-charging-station infrastructure.

1

STREET ADDRESS		3090 SHERMAN STREET
CITY		HOLLYWOOD, FLORIDA
JURISDICTION		CITY OF HOLLYWOOD
PARCEL ID#		514208160010
EXISTING ZONING		IM-1
PROPOSED ZONING		IM-1
EXISTING LAND USE		SELF-STORAGE FACILITY
PROPOSED LAND USE		SELF-STORAGE FACILITY
FUTURE LAND USE		INDUSTRIAL (IND)
FLOOD ZONE		FEMA FLOOD ZONE X
WETLANDS		SEE SURVEY
EASEMENTS		SEE SURVEY
SETBACKS	FRONT OR STREET REQUIRED (NORTH)	15 FT
	PROPOSED (NORTH)	240 FT
	SIDE REQUIRED (EAST)	0 FT
	PROPOSED (EAST)	11 FT
	SIDE REQUIRED (WEST)	20 FT
	PROPOSED (WEST)	99 FT
	REAR REQUIRED (SOUTH)	0 FT
	PROPOSED (SOUTH)	494 FT
EXISTING LOT AREA	NORTH	92,490 SF
	SOUTH	228,712 SF
	TOTAL	321,202 SF
		7.37 ACRES
FLOOR AREAS	BUILDING A - EXISTING OFFICE	510 SF
	BUILDING A - EXISTING STORAGE	53,776 SF
	BUILDING D - DEMOLISH	- SF
	BUILDING H - EXISTING STORAGE	999 SF
	BUILDING J - EXISTING STORAGE	3,502 SF
	BUILDING K - EXISTING STORAGE	1,402 SF
	BUILDING L 1st FLOOR - EXISTING STORAGE	22,027 SF
	BUILDING L 2nd FLOOR - EXISTING STORAGE	22,027 SF
	BUILDING M 1st FLOOR - EXISTING STORAGE	22,059 SF
	BUILDING M 2nd FLOOR - EXISTING STORAGE	22,059 SF
	BUILDING N - EXISTING STORAGE	803 SF
	BUILDING O - EXISTING STORAGE	1,347 SF
	BUILDING P - EXISTING STORAGE	3,996 SF
	BUILDING Q - EXISTING STORAGE	2,405 SF
	BUILDING R - DEMOLISH	- SF
	BUILDING T - DEMOLISH	- SF
	BUILDING U 1st FLOOR - PROPOSED STORAGE	30,495 SF
	BUILDING U 2nd FLOOR - PROPOSED STORAGE	30,495 SF
	BUILDING U 3rd FLOOR - PROPOSED STORAGE	30,495 SF
	TOTAL BUILDING FLOOR AREA	248,397 SF
	TOTAL BUILDING COVERAGE AREA	142,811 SF
MAXIMUM LOT COVERAGE		0.90
	ALLOWED	289,082 SF
	PROPOSED	142,811 SF
MAXIMUM FLOOR AREA RATIO		3.00
	ALLOWED	963,606 SF
	PROPOSED	248,397 SF
MAXIMUM BUILDING HEIGHT	ALLOWED	35 FT
	PROPOSED	34 FT
	ALLOWED	3 STORIES
	PROPOSED	3 STORIES
PARKING REQUIRED	OFFICE 1 PER 250 SF	3.00
	SELF-STORAGE FACILITY 1 PER 10,000 SF	25.00
	TOTAL REQUIRED	28.00
PARKING PROVIDED	EXISTING ACCESSIBLE PROVIDED	5.00
	NEW ACCESSIBLE PROVIDED	1.00
	EXISTING STANDARD PROVIDED	44.00
	NEW STANDARD PROVIDED	0.00
	TOTAL PROVIDED	50.00
LOADING REQUIRED		5
LOADING PROVIDED		5

1 **ARCHITECTURAL SITE PLAN**
SCALE: 1" = 60'-0"

0 30' 60' 120'

2 **SITE DATA**
SCALE:

1

REVISIONS
1 04/17/2023

DRAWN BY CS3

CHESTER C SCOTT III AR11553
STATE OF FLORIDA SEAL REGISTERED ARCHITECT 11553 04.14.2023
TINA RUBEL LONG-FORGUND ART5445

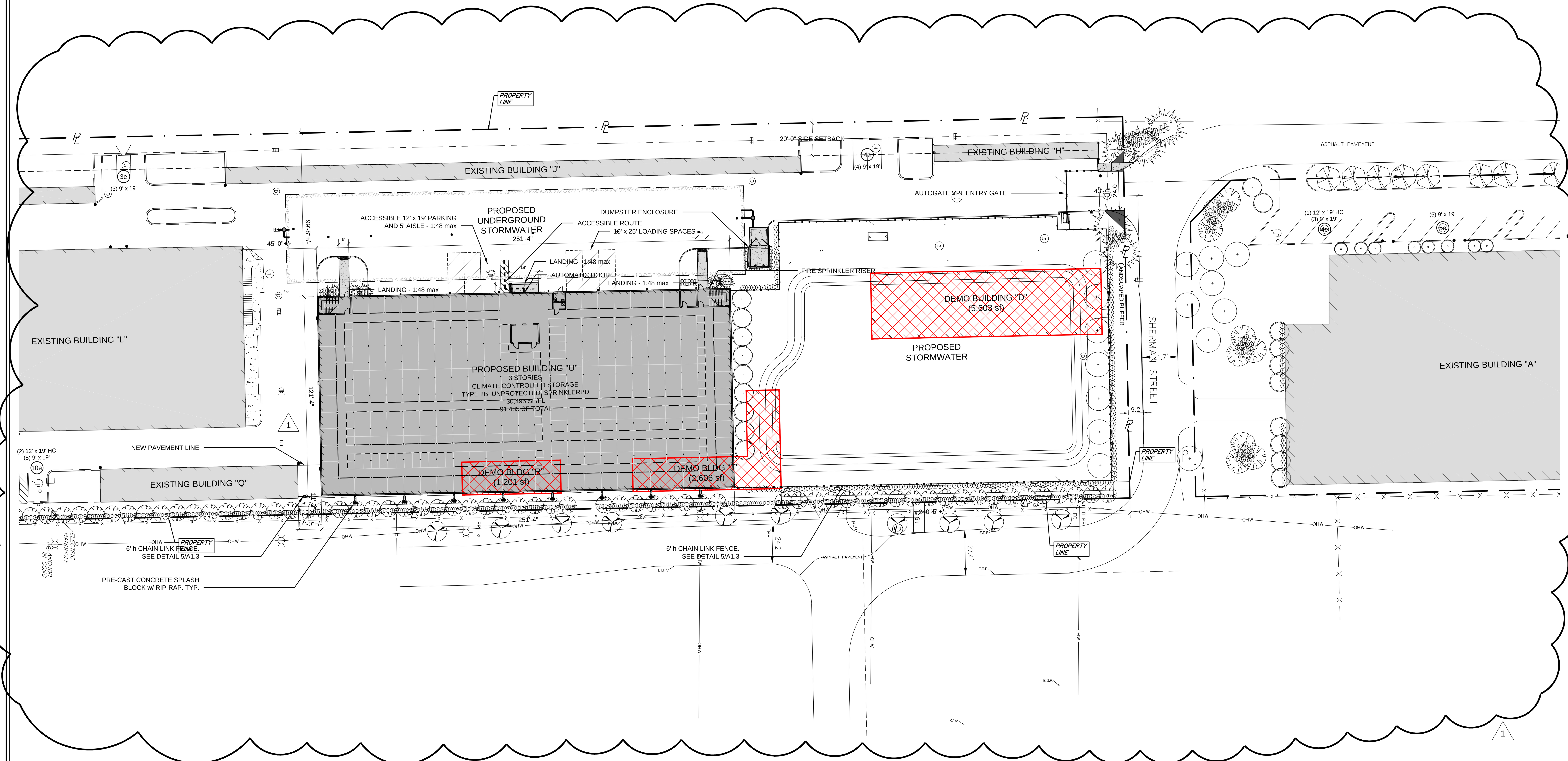
This item has been electronically signed and sealed by Chester C. Scott, III using a Digital Signature and Date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any printed copies.

Studio x 2 architects, pa
510 7th Street East
Bradenton . Florida . 34208
941 . 747 . 0220

Studio x 2 architects.pa

safeguard self storage
Sheridan Street Storage Addition
Architectural Site Plan
3090 Sherman Street , Hollywood, Florida 33021

JOB NO 2021047 TAC
A1.1
of 8
DATE 08/05/2022



1 **PARTIAL SITE PLAN**
SCALE: 1" = 30'-0"

0 15' 30' 60'

REVISIONS
1 04/17/2023

DRAWN BY
CS3

SEAL
CHESTER C SCOTT III AR11553
STATE OF FLORIDA
REGISTERED ARCHITECT
11553
04.14.2023

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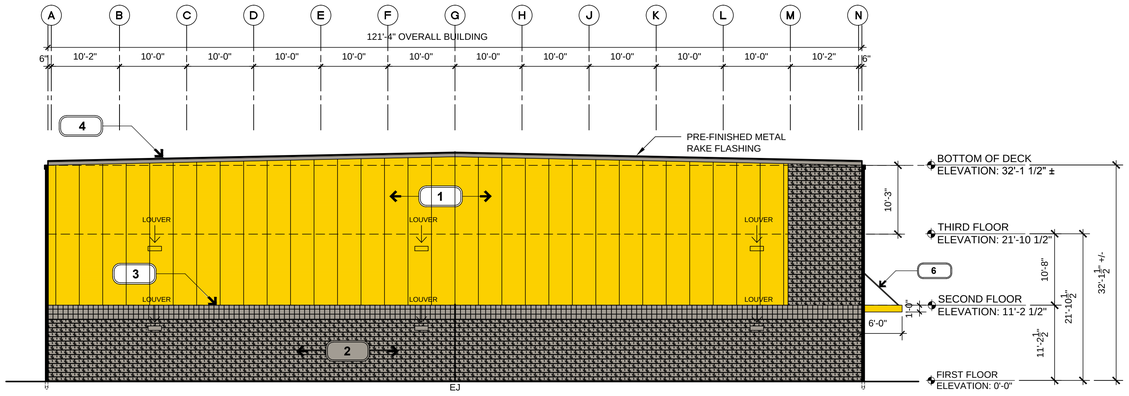
safeguard self storage
Sheridan Street Storage Addition
Partial Site Plan
3090 Sherman Street, Hollywood, Florida 33021

JOB NO 2021047 TAC

A1.2
of 8

DATE 08/05/2022



Notes:

1. 2 1/2' THICK X 42" WIDE INSULATED METAL WALL PANEL. COLOR 'YELLOW'
2. 8" SPLIT FACE CMU BLOCK . PAINT SHERWIN WILLIAMS 'PAVERSTONE' SW7642
3. 8" SMOOTH SCORED BLOCK . PAINT SHERWIN WILLIAMS 'PAVERSTONE' SW7642
4. METAL COPING BY PAC-CLAD OR APPROVED EQUAL. COLOR: GRANITE STEEL OR EQUAL TO MATCH SHERWIN WILLIAMS "PAVERSTONE" SW7642
5. CANOPY COLOR SAFEGUARD YELLOW
6. CANOPY ARMS SEE STRUCTURAL DRAWINGS. COLOR SHERWIN WILLIAMS SW3124 PAVERSTONE
7. PRE-FINISHED ALUMINUM GUTTER AND DOWNSPOUT SYSTEM. COLOR 'BLACK'
8. EXTERIOR DOOR: COLOR: BENJAMIN MOORE GULLWING GRAY #2134-50

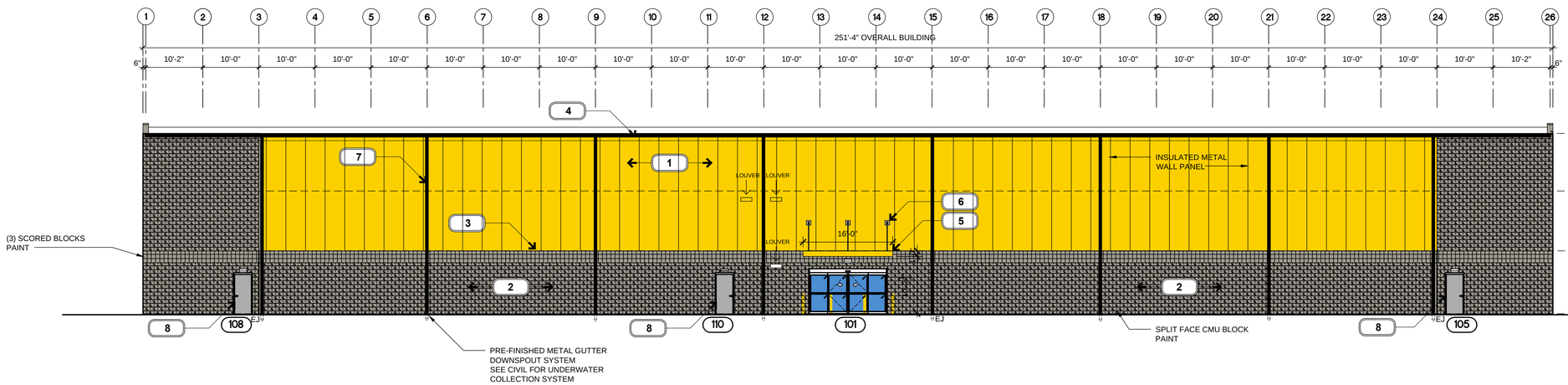
NOTE:
PREFINISHED METAL GUTTER AND DOWNSPOUT MATCH BUILDING COLOR.

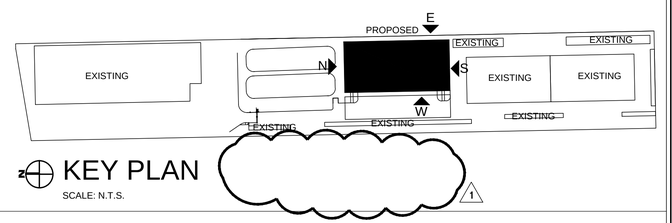
DESIGNED OF GUTTER AND DOWNSPOUT TO ACCOMMODATE 100 YEAR FLOOD.

NOTE: 'SAFEGUARD YELLOW' PAINT COLOR: SHERWIN WILLIAMS NATIONAL ACCOUNT REP. ED STEIN (509-994-6394) IN PAINT B44 ONLY #SM 9500 SAF YELLOW B56 Y300 YO-60/32, RO-3/32 MY-35/32 BU-1/32, UO-2/32

2 North Exterior Elevation

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





KEY PLAN

SCALE: N.T.S.

1 West Exterior Elevation

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

REVISIONS

1 04/17/2023

DRAWN BY

CHESTER C SCOTT III #11553 STATE OF FLORIDA CHESTER C. SCOTT III LICENSED REGISTERED ARCHITECT 11553 04/17/2023 SEAL TINA RUE, LONG-FORSLUND #ART1448

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safeguard self storage
Sheridan Street Storage Addition
Exterior Elevations
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JOB NO 2021047 TAC

A5.1

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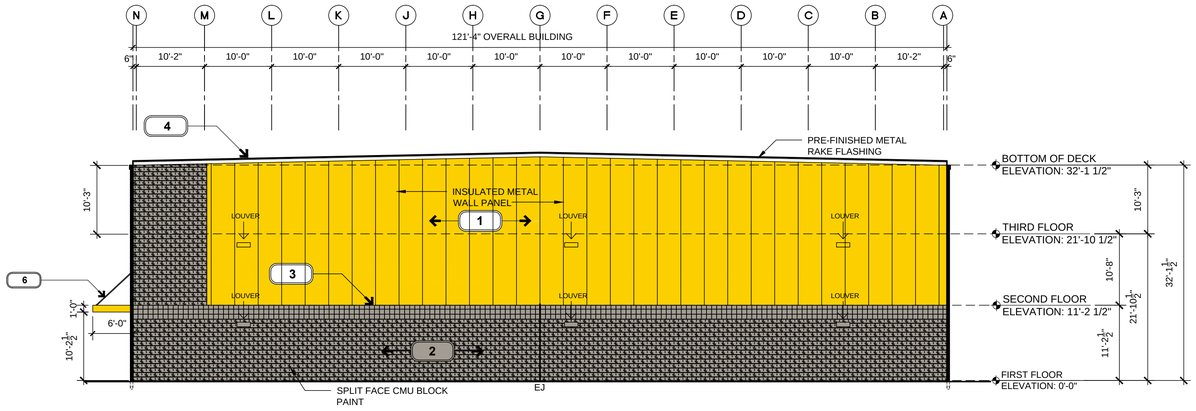
DATE 08/05/2022



4 South Exterior Elevation

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

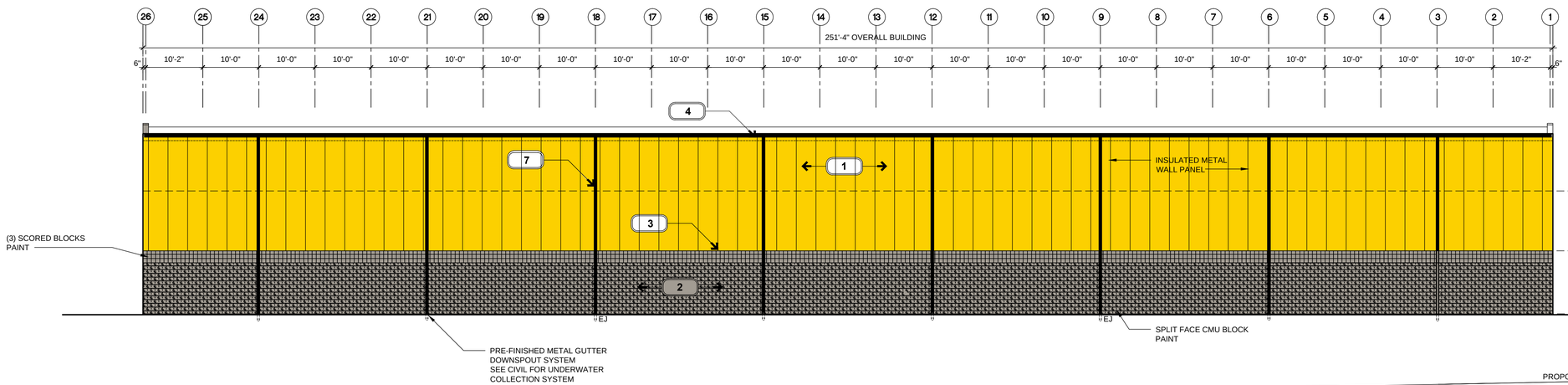
Notes:

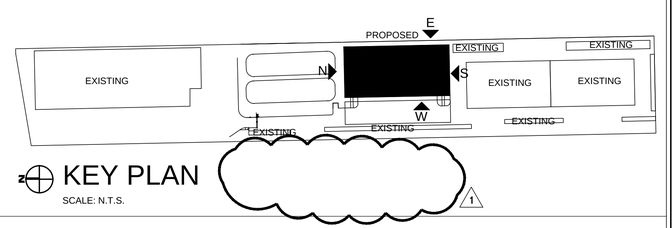
1. 2 1/2' THICK X 42" WIDE INSULATED METAL WALL PANEL. COLOR 'YELLOW'
2. 8" SPLIT FACE CMU BLOCK . PAINT SHERWIN WILLIAMS 'PAVERSTONE' SW7642
3. 8" SMOOTH SCORED BLOCK . PAINT SHERWIN WILLIAMS 'PAVERSTONE' SW7642
4. METAL COPING BY PAC-CLAD OR APPROVED EQUAL. COLOR: GRANITE STEEL OR EQUAL TO MATCH SHERWIN WILLIAMS "PAVERSTONE" SW7642
5. CANOPY COLOR SAFEGUARD YELLOW
6. CANOPY ARMS SEE STRUCTURAL DRAWINGS. COLOR SHERWIN WILLIAMS SW3124 PAVERSTONE
7. PRE-FINISHED ALUMINUM GUTTER AND DOWNSPOUT SYSTEM. COLOR 'BLACK'
8. EXTERIOR DOOR: COLOR: BENJAMIN MOORE GULLWING GRAY #2134-50

NOTE:
PREFINISHED METAL GUTTER AND DOWNSPOUT MATCH BUILDING COLOR.

DESIGNED OF GUTTER AND DOWNSPOUT TO ACCOMMODATE 100 YEAR FLOOD.

NOTE: 'SAFEGUARD YELLOW' PAINT COLOR: SHERWIN WILLIAMS NATIONAL ACCOUNT REP. ED STEIN (509-994-6394) IN PAINT B44 ONLY #SM 9500 SAF YELLOW B56 Y300 YO-60/32, RO-3/32 MY-35/32 BU-1/32, UO-2/32





KEY PLAN

SCALE: N.T.S.

3 East Exterior Elevation

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

REVISIONS
1 04/17/2023

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CHESTER C SCOTT III 11553 STATE OF FLORIDA REGISTERED ARCHITECT SEAL 11553 04/14/2023 TINA RUIZ LONG-FORSLUND 6447

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safeguard self storage
Sheridan Street Storage Addition
Exterior Elevations
3090 Sherman Street , Hollywood, Florida 33021

JOB NO 2021047 TAC

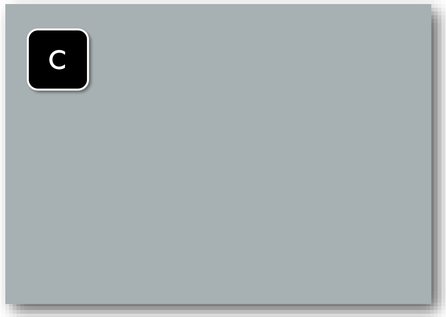
A5.2

of 8

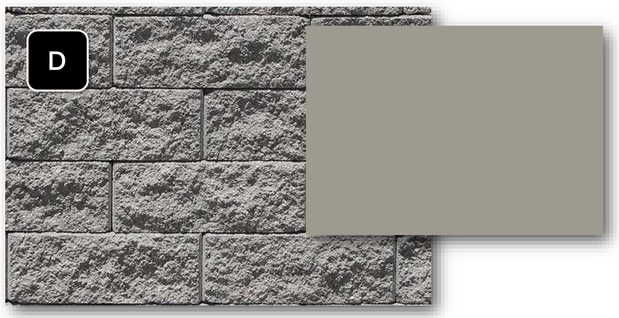
DATE 08/05/2022

METAL PANELS + CANOPIES
COLOR: SAFEGUARD YELLOW

METAL FABRICATIONS
COLOR: SHERWIN WILLIAMS
SW7642 PAVERSTONE



EXTERIOR DOORS
COLOR: BENJAMIN MOORE
2134-50 GULLWING GRAY



SPLIT FACE 8" CMU BLOCK
PAINT: SHERWIN WILLIAMS
SW7642 PAVERSTONE

SMOOTH SCORED 8" x 8" CMU BLOCK
PAINT: SHERWIN WILLIAMS
SW7642 PAVERSTONE

COLOR & MATERIALS KEY

MATERIALS PALETTE

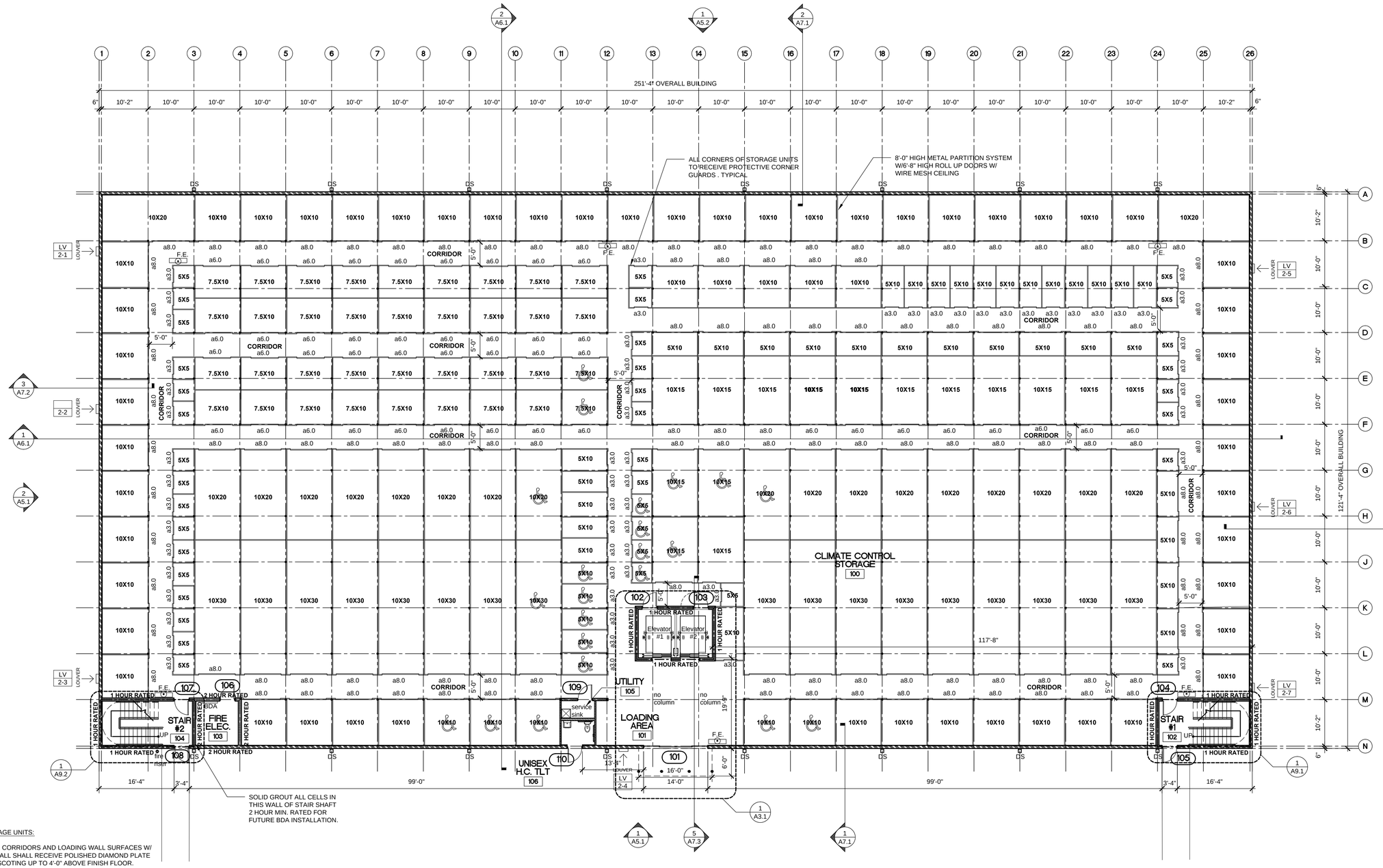
Studio x 2
architects.pa
AA26002289

SAFEGUARD STORAGE

CONCEPTUAL DESIGN

3090 SHERIDAN STREET
HOLLYWOOD, FLORIDA 33021

APRIL 14, 2023



STORAGE UNITS:

1. ALL CORRIDORS AND LOADING WALL SURFACES W/ DRYWALL SHALL RECEIVE POLISHED DIAMOND PLATE WAINSCOTING UP TO 4'-0" ABOVE FINISH FLOOR.

2. MID-SPAN SUPPORT TO BE INSTALLED IN ALL CORRIDOR AND UNIT PARTITION.

3. JANUS PRE-FINISHED GLOSSY WHITE CORRUGATE PARTITION SYSTEM.

TOP OF UNIT PARTITIONS TO BE COVERED W/ 2 X 2 MESH @ 8'-0" H.

PROVIDE LINER PANEL ON GYPSUM BOARD INTERIOR WALL WITHIN STORAGE UNITS

MAINTAIN 5'-0" CORRIDOR WIDTH

1. STORAGE UNITS BEARING THE ACCESSIBILITY SYMBOL INDICATES PROPOSED ACCESSIBLE UNIT LOCATIONS.

2. ALL ARE TO BE PROVIDED WITH 'ADA ACCESSIBLE' WALL MOUNTED SIGN DIRECTLY ADJACENT TO THE UNIT DOOR COMPLYING W/FBC-A 703 SIGNS.

3. ACCESSIBLE UNITS W/OVERHEAD DOORS SHALL BE OUTFITTED W/ ADA COMPLIANT OPENING AND CLOSING STRAPS. LOOP OF STRAP SHALL BE AT 15" MIN. AND 48" MAX.

4. DOOR TENSION TO BE ADJUSTED TO REQUIRE LESS THAN 5 LBS OF PRESSURE TO OPERATE.

Wall Types

BLOCK

- 8" SPLIT FACE CMU WALL . CORE FOAM FILLED . R-14.2
- 8" CMU WALL . CORE FOAM FILLED . R-14.2
- 8" CMU WALL - 1 HOUR RATED - FULLY GROUTED
- 8" CMU WALL - 2 HOUR RATED - FULLY GROUTED

DRYWALL

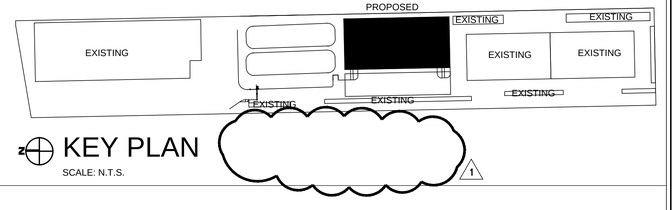
- 3 5/8" METAL STUDS @ 16" O.C. W/ 5/8" THICK GYPSUM BOARD EACH SIDE. FULL HEIGHT.
- 6" METAL STUDS @ 16" O.C. W/ 5/8" THICK GYPSUM BOARD EACH SIDE. FULL HEIGHT.

METAL PARTITION

- 8'-0" HIGH METAL PARTITION SYSTEM W/6'-8" HIGH ROLL UP DOORS W/ WIRE MESH CEILING

EXTERIOR WALL PANEL

- 2 1/2" EXTERIOR INSULATED METAL WALL PANEL



KEY PLAN

SCALE: N.T.S.

First Floor Plan

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

REVISIONS

1 04/17/2023

DRAWN BY

CHESTER C SCOTT III LIC# 11553

STATE OF FLORIDA — CHESTER C. SCOTT III — 11553 — REGISTERED ARCHITECT

SEAL

04.14.2023

TINA RUHL LONG-FORSLUND LIC# 15448

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Studio x 2 architects.pa

safeguard self storage
Sheridan Street Storage Addition
First Floor Plan

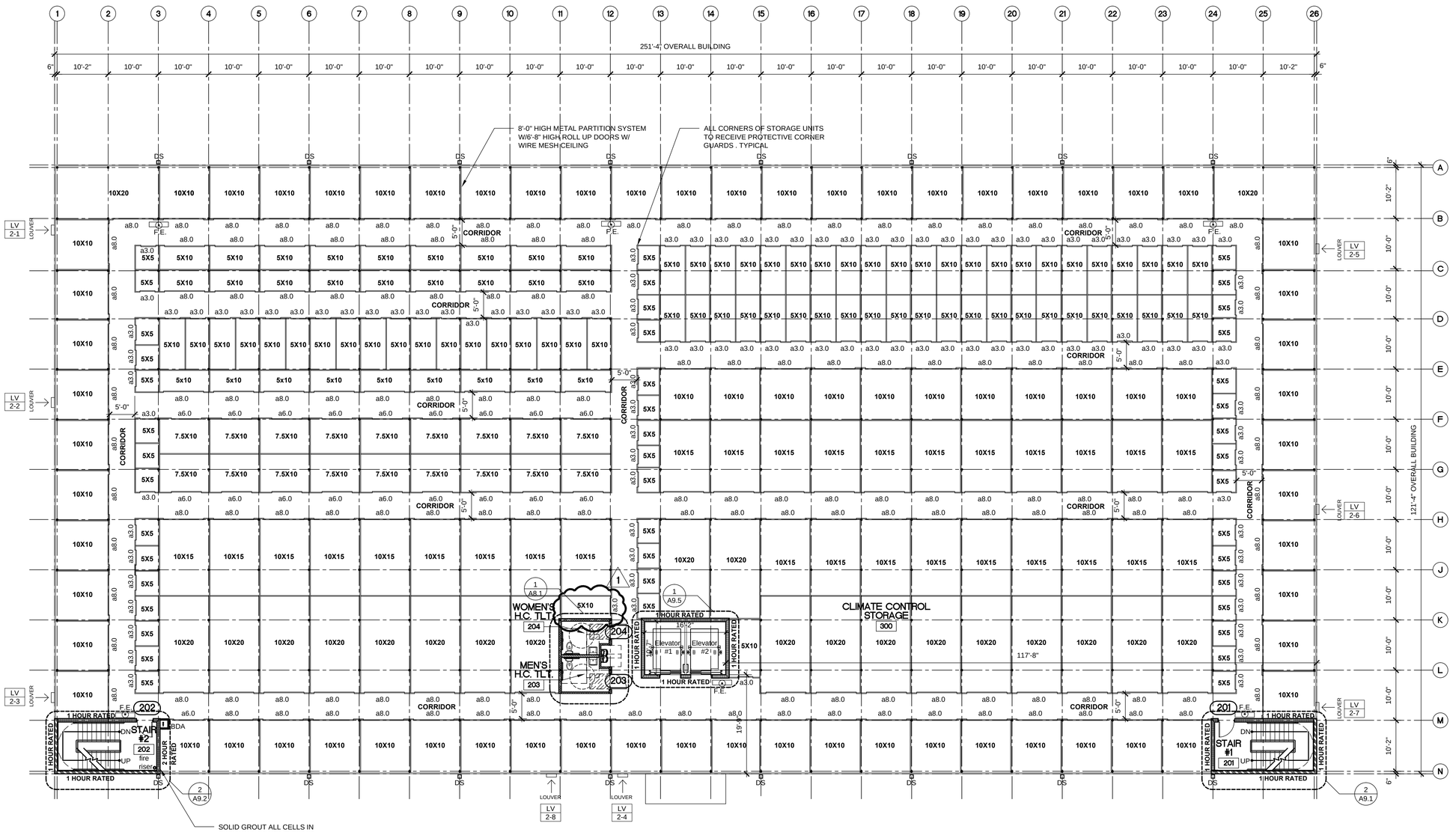
3090 Sherman Street , Hollywood, Florida 33021

JOB NO 2021047 TAC

A2.2

of 8

DATE 08/05/2022



TOP OF UNIT PARTITIONS TO BE COVERED W/ 2 X 2 MESH @ 8'-0" H.

PROVIDE LINER PANEL ON GYPSUM BOARD INTERIOR WALL WITHIN STORAGE UNITS

MAINTAIN 5'-0" CORRIDOR WIDTH

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- 8" CMU WALL - 1 HOUR RATED - FULLY GROUTED
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DRYWALL

- 3 5/8" METAL STUDS @ 16" O.C. W/ 5/8" THICK GYPSUM BOARD EACH SIDE. FULL HEIGHT.
- 6" METAL STUDS @ 16" O.C. W/ 5/8" THICK GYPSUM BOARD EACH SIDE. FULL HEIGHT.

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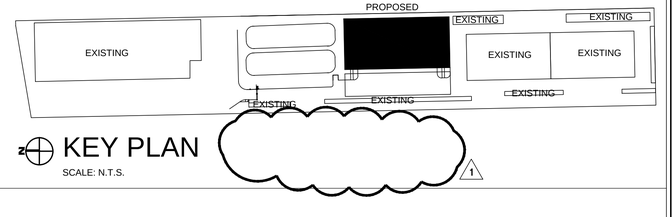

KEY PLAN

SCALE: N.T.S.

1 Second Floor Plan

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

REVISIONS

1 04/17/2023

DRAWN BY

CHESTER C SCOTT III NO. 11553 STATE OF FLORIDA REGISTERED ARCHITECT SEAL 11553 04.14.2023 TINA RUIZ LONG-FORSLUND ART 1448

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safeguard self storage
Sheridan Street Storage Addition
Second Floor Plan

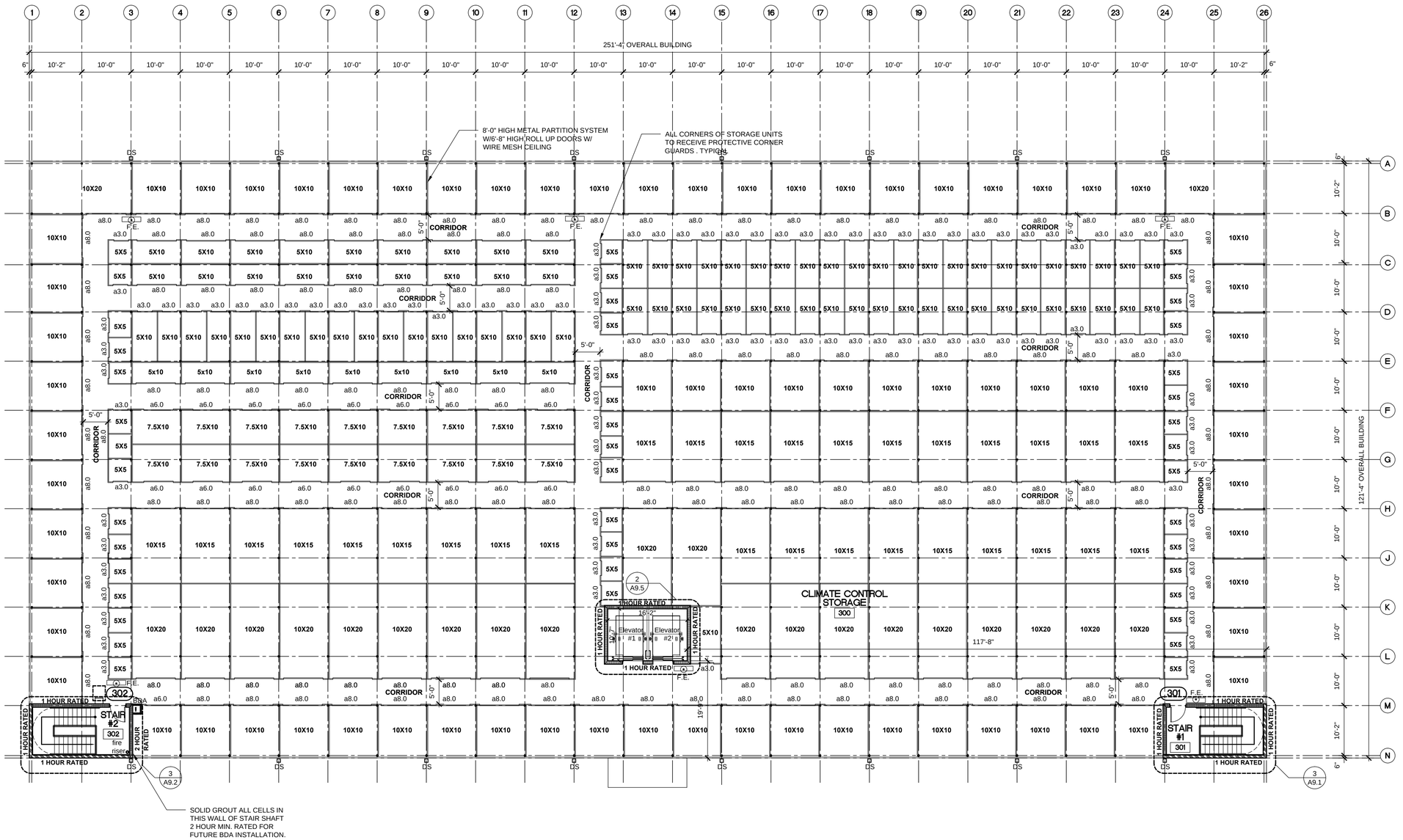
3090 Sherman Street , Hollywood, Florida 33021

JOB NO 2021047 TAC

A2.3

of 8

DATE 08/05/2022



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- 8" CMU WALL - 1 HOUR RATED - FULLY GROUTED
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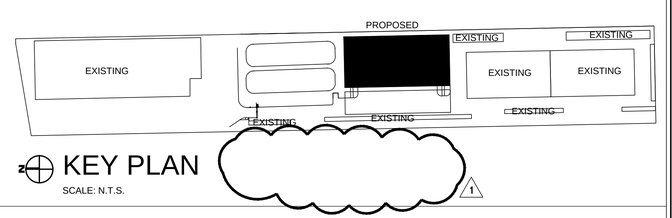

KEY PLAN

SCALE: N.T.S.

1 Third Floor Plan

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

REVISIONS

1 04/17/2023

DRAWN BY

CHESTER C SCOTT III LIC# 11553 STATE OF FLORIDA REGISTERED ARCHITECT SEAL 11553 04.14.2023 TINA RUIZ LONG-FORSLUND LIC# 15468

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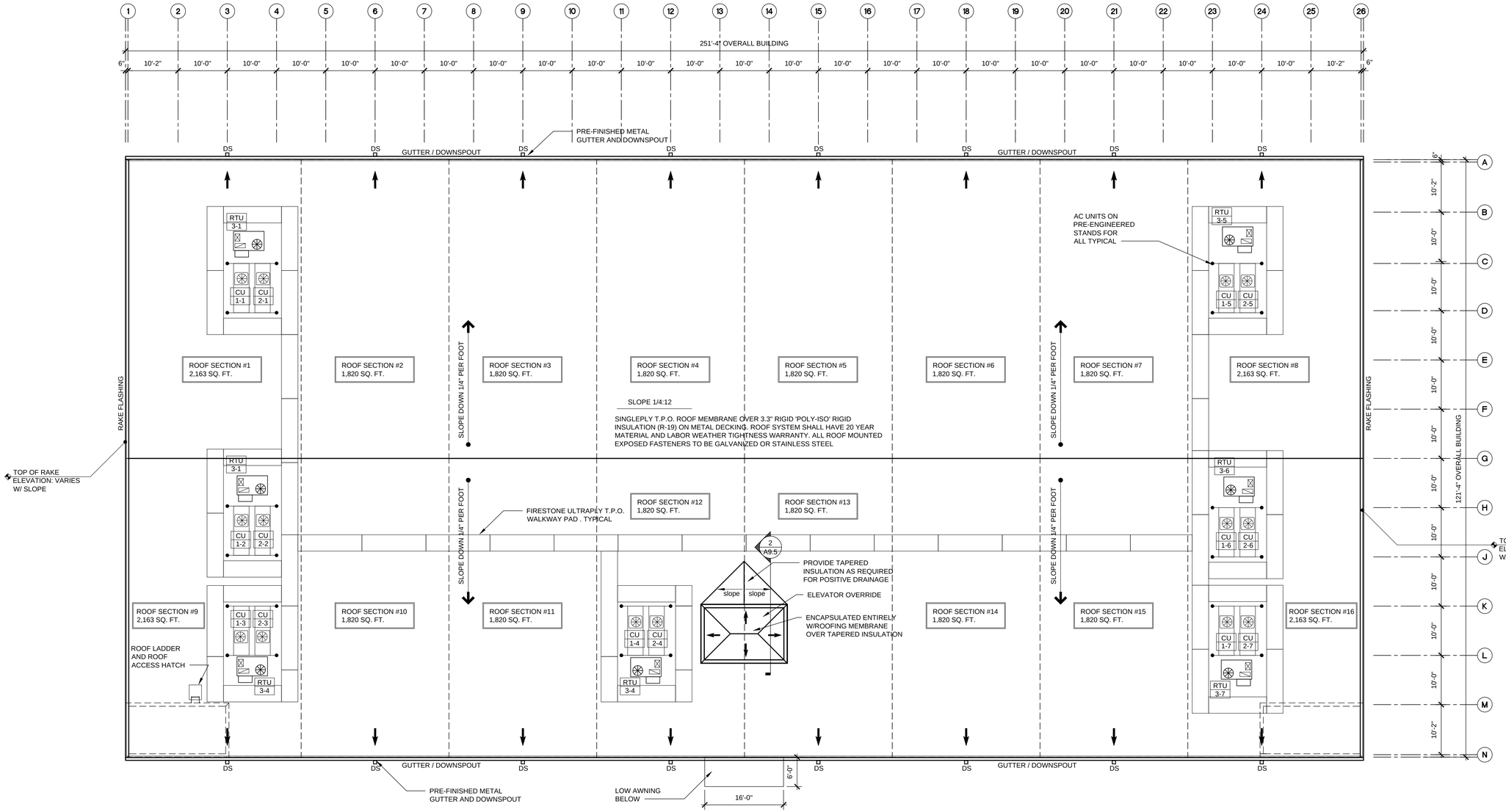
safeguard self storage
Sheridan Street Storage Addition
Third Floor Plan
3090 Sherman Street , Hollywood, Florida 33021

JOB NO 2021047 TAC

A2.4

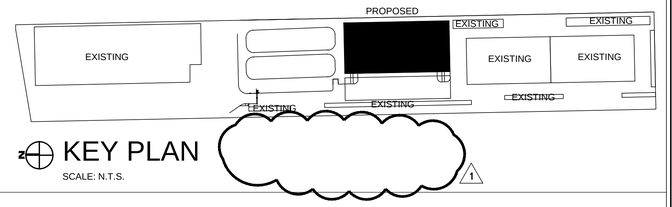
of 8

DATE 08/05/2022



RAINFALL INTENSITY	4.7	INCHES PER HR - FBC-P FIGURE 1106.1 and APPENDIX B
	0.0104	GPM/1 SF @ 1" PER HR
	0.04888	GPM/1 SF @ RAINFALL INTENSITY

ROOF SECTION	ROOF AREA SF	GPM	GUTTER SIZE w X h INCHES	GUTTER CAPACITY IN GPM	DOWNSPOUT SIZE INCHES	DOWNSPOUT CAPACITY IN GPM
1	2163	105.73	5 X 8	651.00	5 X 6	563.00
2	1820	88.96	5 X 8	651.00	5 X 6	563.00
3	1820	88.96	5 X 8	651.00	5 X 6	563.00
4	1820	88.96	5 X 8	651.00	5 X 6	563.00
5	1820	88.96	5 X 8	651.00	5 X 6	563.00
6	1820	88.96	5 X 8	651.00	5 X 6	563.00
7	1820	88.96	5 X 8	651.00	5 X 6	563.00
8	2163	105.73	5 X 8	651.00	5 X 6	563.00
9	2163	105.73	5 X 8	651.00	5 X 6	563.00
10	1820	88.96	5 X 8	651.00	5 X 6	563.00
11	1820	88.96	5 X 8	651.00	5 X 6	563.00
12	1820	88.96	5 X 8	651.00	5 X 6	563.00
13	1820	88.96	5 X 8	651.00	5 X 6	563.00
14	1820	88.96	5 X 8	651.00	5 X 6	563.00
15	1820	88.96	5 X 8	651.00	5 X 6	563.00
16	2163	105.73	5 X 8	651.00	5 X 6	563.00



KEY PLAN
SCALE: N.T.S.

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

REVISIONS
1 04/17/2023

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CHESTER C SCOTT III LIC. NO. AR 11553 STATE OF FLORIDA REGISTERED ARCHITECT SEAL 11553 04/14/2023 TINA RUE, LONG FORSLUND ART 5448

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Sheridan Street Storage Addition
Roof Plan
3090 Sherman Street , Hollywood, Florida 33021

JOB NO 2021047 TAC

A2.5

of 8

DATE 08/05/2022

AERIAL VIEW FROM NORTHEAST

Studio x 2
architects. pa
AA26002289

SAFEGUARD STORAGE

CONCEPTUAL DESIGN

3090 SHERIDAN STREET
HOLLYWOOD, FLORIDA 33021

APRIL 14, 2023

AERIAL VIEW FROM SOUTHWEST

Studio x 2
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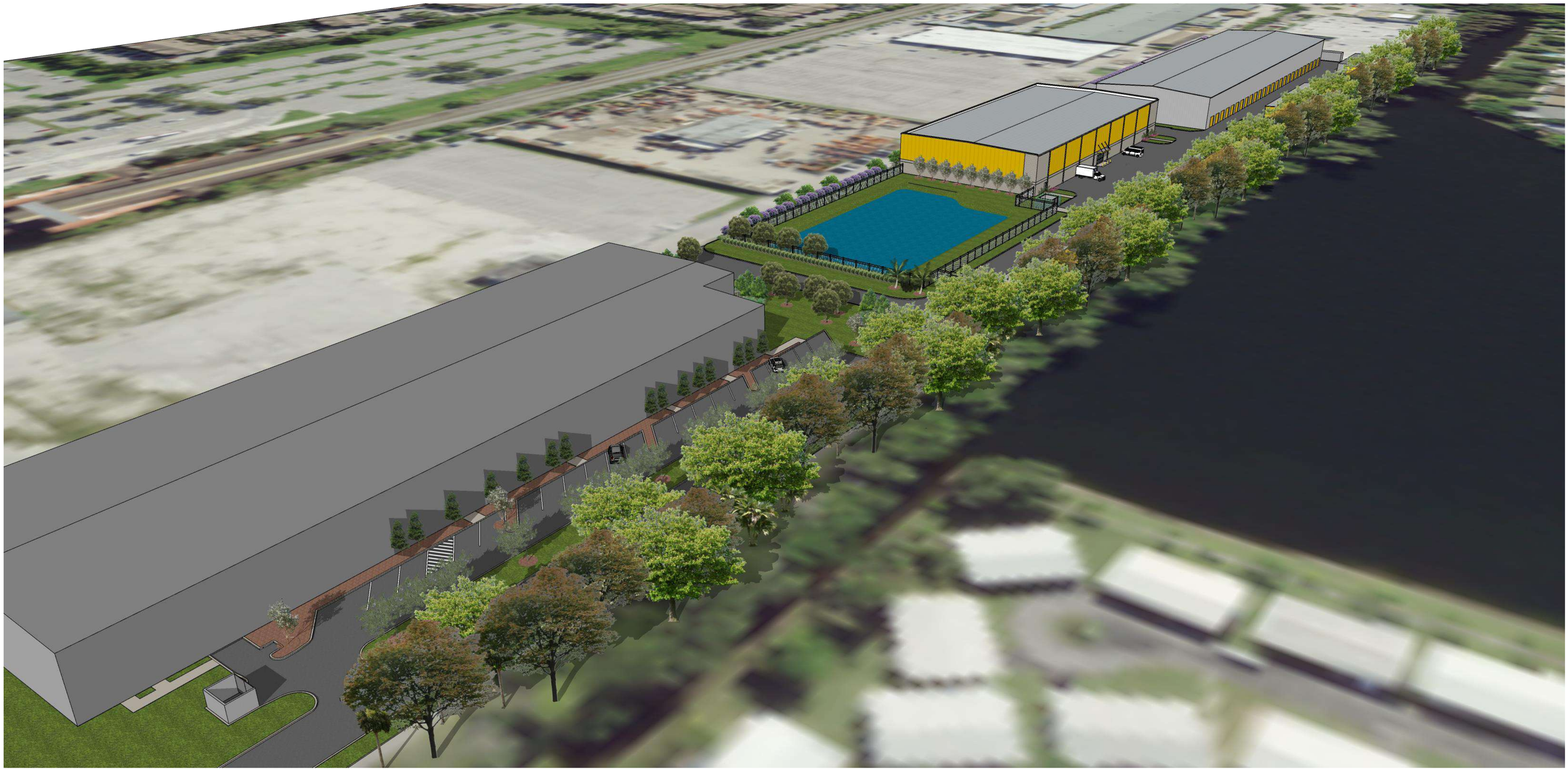
SAFEGUARD STORAGE

CONCEPTUAL DESIGN

3090 SHERIDAN STREET
HOLLYWOOD, FLORIDA 33021

APRIL 14, 2023



AERIAL VIEW FROM NORTHWEST

Studio x 2
architects. pa
AA26002289

SAFEGUARD STORAGE

CONCEPTUAL DESIGN

3090 SHERIDAN STREET
HOLLYWOOD, FLORIDA 33021

APRIL 14, 2023

AERIAL VIEW FROM WEST

Studio x 2
architects. pa
AA26002289

SAFEGUARD STORAGE

CONCEPTUAL DESIGN

3090 SHERIDAN STREET
HOLLYWOOD, FLORIDA 33021

APRIL 14, 2023

EYE LEVEL VIEW FROM NORTHWEST

Studio x 2
architects.pa
AA26002289

SAFEGUARD STORAGE

CONCEPTUAL DESIGN

3090 SHERIDAN STREET
HOLLYWOOD, FLORIDA 33021

APRIL 14, 2023

Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JARED W. PERDUE, P.E.
SECRETARY

February 21, 2023

THIS PRE-APPLICATION LETTER IS VALID UNTIL – February 21, 2024
THIS LETTER IS NOT A PERMIT APPROVAL

Julian Bobilev, AICP
Greenspoon Marder LLP
200 East Broward Boulevard, Suite 1800
Fort Lauderdale, FL 33301

Dear Julian Bobilev, AICP:
RE: Pre-application Review for **Category B Driveway,** Pre-application Meeting Date: **January 19, 2023**
Broward County - Hollywood; SR 822; Sec. # 86230000; MP: 2.40; Access Class - 5;
Posted Speed - 35; SIS - Influence Area; FDOT Ref. Project: FM 439170.1-Leslie Wetherell-INTERCHANGE JUSTIFICA/MODIFICA

Request: Access the site through 31st Pl

SITE SPECIFIC INFORMATION
Project Name & Address: **Safeguard Self Storage Expansion – 3090 Sherman St., Hollywood, FL, 33021**
Property Owner: **PPF SS 3090 SHERIDAN STREET LLC**; Parcel Size: **5.25 Acres**
Development Size: **Existing: 112,036 SF Self-storage, Proposed: 194,111 SF.**

NO OBJECTION

This decision is based on your presentation of the facts, site plan and survey - please see the conditions and comments below. You may choose to review this concept further with the District Access Management Review Committee (AMRC).

Conditions:
- **A minimum driveway length of 100 feet, as measured from the ultimate right-of-way line to the first conflict point shall be provided.**
- **If a gate is proposed, a minimum driveway length of 200 feet to the call box and/or gate house, and a turnaround area before the gate are required.**

Comments:
- All driveways not approved in this letter must be fully removed and the area restored.
- A Drainage Permit is required for any stormwater impacts within FDOT right-of-way (i.e. increased runoff or reduction of existing storage).
- The applicant shall donate property to the Department if right-of-way dedication is required to implement the improvements.
- Dimensions between driveways are measured from the near edge of pavement to near edge of pavement and for median openings are measured from centerline to centerline unless otherwise indicated.

The purpose of this Pre-Application letter is to document the conceptual review of the approximate location of driveway(s) to the State Highway System and to note required improvements, if any. This letter shall be submitted with any further reviews and for permitting. The Department's personnel shall review permit plans for compliance with this letter as well as current Department standards and/or specifications. Final design must consider the existing roadway profile and any impacts to the existing drainage system. **Note, this letter does not guarantee permit approval**. The permit may be denied based on the review of the submitted engineering plans. Be aware that any approved median openings may be modified (or closed) in the future, at the sole discretion of the Department. For right-of-way dedication requirements go to: https://osp.fdot.gov; click on Statewide Permit News; Scroll down to District 4; Scroll down to Additional Information and Examples and choose Right-of-way Donations/Dedications.
Please contact the Access Management Manager - Tel. # 954-777-4363 or e-mail: D4AccessManagement@dot.state.fl.us with any questions regarding the Pre-Approval Letter.

Sincerely,

Kollol Shams, P.E.
District Access Management Manager

cc: Anthony Beecher
File: S:\Transportation Operations\Traffic Operations\Access Management\1. Pre-Apps and Variance\2023-01-19\7. 86230000 MP 2.4 SR 822_Safeguard Self Storage Expansion\86230 MP 2.4 SR 822_Safeguard Self Storage.docx

McMAHON
a Bowman company

April 13, 2023

Ms. Azita Behmardi, P.E.
City Engineer
City of Hollywood
2600 Hollywood Boulevard, Suite 308
Hollywood, FL 33022-9045

RE: Safeguard Self Storage Traffic Analysis and Site Plan Review Comment Response Letter
McMahon Project No. L23118.01

Dear Ms. Behmardi:

Please accept this letter as our response to the traffic study review comments, prepared by Lisa S. Bernstein, P.E., dated March 28, 2023, for the Safeguard Self Storage Traffic Analysis. The comments are provided below. For your convenience we have prepared our responses in bold italics.

Traffic Circulation Analysis

Comment 1: Please include the entire property in the site location map, as it is an expansion of an existing site.

Response: ***We updated the site location map to include the entire property.***

Comment 2: The trip generation square footage (SF) does not match the site data on the site plan. The site data states there is 156,912 SF of existing warehouse (after demolition), 91,485 SF of proposed warehouse for a total of 248,397 SF. Please revise accordingly.

Response: ***The trip generation table was updated to match the correct intensity. The existing Taft Industrial intensity is 112,036 square feet. In the proposed conditions, 9,410 square feet of buildings will be demolished, and 91,485 square feet of new building will be added. Therefore, the proposed intensity of the Taft Industrial will be 194,111 square feet. The existing intensity for Sheridan Industrial is 54,286 square feet, which will remain same in proposed conditions.***

Comment 3: The driveway volumes need to be the total site volumes.

Response: ***We updated the driveway volumes to reflect the total site volumes.***

Comment 4: Please use the revised trip generation for the queuing analysis.

Response: ***Gate queuing analysis was performed only for the Taft Industrial site. The Sheridan Industrial site access is separate from the access to the Taft Industrial site and is not being modified for proposed conditions.***

2090 Palm Beach Lakes Boulevard, Suite 400, West Palm Beach, FL 33409
P: 561.840.8650
mcmahonassociates.com | bowman.com

Comment 5: In the queuing analysis, "N" is labeled as number of elevators. Please revise to lanes.
Response: ***We corrected the labeling of "N" as number of lanes in the queuing analysis.***

Comment 6: Please show the gate distance from the right-of-way on the site plan. It does not appear to be 43 feet.
Response: ***The gate distance from the right-of-way is 35 feet, which is shown on the site plan.***

Site Plan Comments

Comment 1: Please include the entire site plan, one sheet should show the signing and marking for traffic circulation review of the site and access.
Response: ***The entire site plan is included in Appendix A.***

Should you have any questions regarding the information contained herein, please do not hesitate to contact me.

Sincerely,

Natalia T. Lercari, P.E.
Senior Project Manager

NTL/cec – Attachment

\FL\23118L_MikeCarter_SafeguardHollywoodTA\L23118_01\Correspondence\Letters\CR_Letter_041323.docx

2090 Palm Beach Lakes Boulevard, Suite 400, West Palm Beach, FL 33409
P: 561.840.8650
mcmahonassociates.com | bowman.com

April 13, 2023

VIA E-MAIL

Rachel Whitcomb Layton, AICP
Mike Carter Construction, Inc.
435 12th Street West
Bradenton, FL 34205

RE: Safeguard Hollywood Traffic Analysis
McMahon Project No. L23118.01

McMahon, a Bowman company (McMahon) has completed a traffic analysis associated with the proposed redevelopment of a site located between Sheridan Street and Taft Street, just east of N 31 Avenue, in the City of Hollywood, Florida. The site currently includes the Sheridan Industrial site and the Taft Industrial site. The Sheridan Industrial site currently includes 54,286 square feet of self storage. No change in density is proposed on this site. The Taft Industrial site currently includes 112,036 square feet of self storage. The Taft Industrial site redevelopment will include the demolition of 9,410 square feet and the addition of 91,485 square feet of self storage, for a total proposed self storage density of 194,000 square feet. **Figure 1** graphically depicts the site location. The site plan for the self-storage is attached in **Appendix A**.

Figure 1 Site Location

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Trip Generation Analysis

Using trip generation information obtained from the Institute of Transportation Engineers (ITE), *Trip Generation Manual,* 11th Edition, trip generation estimates were developed for the existing and proposed development. The trip generation analysis for daily, AM peak hour, and PM peak hour conditions are summarized in **Table 1**. The proposed self-storage is expected to generate an increase of 119 daily, seven (7) AM and 12 PM peak hour trips. **Appendix B** contains the ITE trip generation information.

Table 1 Trip Generation Analysis

DAILY

LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE (1)	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
Taft Industrial								
Self-Storage - Existing	151	112,036 SF	T= 1.45 (X)	50%	50%	81	81	162
Self-Storage - Proposed	151	194,111 SF	T= 1.45 (X)	50%	50%	141	140	281
NET DIFFERENCE						**60**	**59**	**119**
Sheridan Industrial								
Self Storage - Existing	151	54,286 SF	T= 1.45 (X)	50%	50%	40	39	79
Self Storage - Proposed	151	54,286 SF	T= 1.45 (X)	50%	50%	40	39	79
NET DIFFERENCE						**0**	**0**	**0**
Total Proposed						**181**	**179**	**360**

AM PEAK HOUR

LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE (1)	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
Taft Industrial								
Self-Storage - Existing	151	112,036 SF	T= 0.09 (X)	59%	41%	6	4	10
Self-Storage - Proposed	151	194,111 SF	T= 0.09 (X)	59%	41%	10	7	17
NET DIFFERENCE						**4**	**3**	**7**
Sheridan Industrial								
Self Storage - Existing	151	54,286 SF	T= 0.09 (X)	81%	19%	4	1	5
Self Storage - Proposed	151	54,286 SF	T= 0.09 (X)	81%	19%	4	1	5
NET DIFFERENCE						**0**	**0**	**0**
Total Proposed						**14**	**8**	**22**

PM PEAK HOUR

LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE (1)	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
Taft Industrial								
Self-Storage - Existing	151	112,036 SF	T= 0.15 (X)	47%	53%	8	9	17
Self-Storage - Proposed	151	194,111 SF	T= 0.15 (X)	47%	53%	14	15	29
NET DIFFERENCE						**6**	**6**	**12**
Sheridan Industrial								
Self Storage - Existing	151	54,286 SF	T= 0.15 (X)	22%	78%	2	6	8
Self Storage - Proposed	151	54,286 SF	T= 0.15 (X)	22%	78%	2	6	8
NET DIFFERENCE						**0**	**0**	**0**
Total Proposed						**16**	**21**	**37**

(1) ITE Trip Generation Manual, 11th Edition.

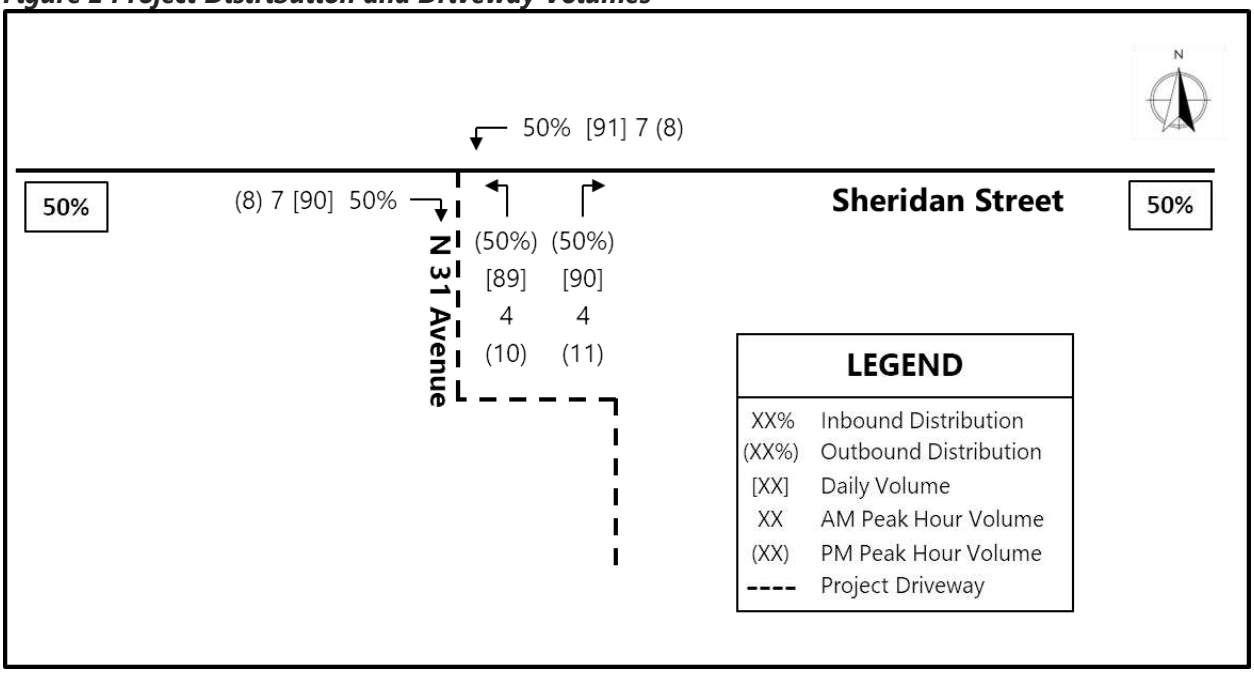
Project Access

The self-storage site will be served by one (1) existing, full-access driveway connection to Sheridan Street via N 31 Avenue. The driveway connection includes an exclusive westbound left turn lane.

Project Distribution and Driveway Volumes

The distribution of project traffic onto the surrounding roadways was based on a review of the surrounding area land uses, existing travel patterns, and the characteristics and connectivity of the roadways near the project site. **Figure 2** graphically depicts the project distribution and driveway volumes.

Figure 2 Project Distribution and Driveway Volumes



Sheridan Street Turn Lane Analysis

The Florida Department of Transportation (FDOT) criteria for exclusive turn lanes at unsignalized driveways was reviewed for Sheridan Street, which has a posted speed limit of 40 miles per hour (MPH). According to the FDOT 2019 *Access Management Guidebook*, for state roads with posted speed limits of 45 MPH or less, it is recommended to have an exclusive right-turn lane when the driveway generates 80 to 125 right-turning vehicles per hour. The highest number of peak-hour right-turns into the site is expected to be eight (8) vehicles, which will not warrant an exclusive eastbound right-turn lane.

Gate Queueing Analysis

The Taft Industrial facility is currently gated and will continue to be gated with the additional development. Therefore, gate queuing analysis was performed only for the Taft Industrial facility. With the proposed redevelopment, access to the site will be controlled by a lift gate located approximately 35 feet from

N 31 Avenue/Sherman Road. This will allow stacking for approximately one (1) vehicle. A queuing analysis was performed for the gate operations. The analysis was based on the peak hour time period for vehicles entering the site.

Trip generation analysis was performed for the peak hour of the generator during weekday AM, weekday PM, Saturday peak and Sunday peak of the generator to determine the peak period for the site, based on the ITE, *Trip Generation Manual*, 11th Edition. Results of the analysis, summarized in **Table 2**, indicate that the peak period for traffic entering the site will occur during a Saturday, where 20 vehicles will be expected to enter the site. Excerpts from ITE are attached in **Appendix C**.

Table 2 Trip Generation Analysis – Peak of the Generator (Queueing Analysis)

LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE (1)	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
AM PEAK GENERATOR								
Self-Storage	151	194,111 SF	T= 0.18 (X)	51%	49%	18	17	35
PM PEAK GENERATOR								
Self-Storage	151	194,111 SF	T= 0.18 (X)	51%	49%	18	17	35
SATURDAY GENERATOR								
Self-Storage	151	194,111 SF	T= 0.17 (X)	62%	38%	20	13	33
SUNDAY GENERATOR								
Self-Storage	151	194,111 SF	T= 0.2 (X)	45%	55%	18	21	39

(1) Source: ITE Trip Generation Manual, 11th Edition.

The queue analysis was performed based on the methodology outlined in the *Transportation and Land Development,* 1988, published by ITE, excerpts of which are attached in Appendix C. The gate queueing analysis worksheet is attached in Appendix C. The required storage (M) in vehicles is determined by the following equation:

$$M = \frac{[\ln P(x > M) - \ln Q_{M}]}{\ln \rho} - 1$$

- ρ = q/NQ. ρ is the coefficient of utilization, which is the ratio of the demand rate to the service rate.
- q is the demand rate and is the peak vehicles per hour based on the trip generation analysis. For this analysis q = 20 vehicles per hour.
- N is the number of lanes to enter the site. For this analysis, N = 1 lane.
- Q is the processing rate per hour for each lane. The gate is anticipated to be a lift gate. Patrons will be required to stop at the gate and use a fob or card reader to access the stie. The assumed processing time is approximately 15 seconds (0.25 minutes).

Results of the analysis indicate that no queueing is expected at the gate. The required storage would, therefore, be one (1) vehicle to accommodate the vehicle being serviced at the gate entrance. As previously mentioned, the site will provide storage for approximately one (1) vehicle. Therefore, the site will provide sufficient storage without extending onto N 31 Avenue/Sherman Road.

Conclusion

Based on the analysis contained herein, the following can be concluded:

- The proposed self-storage is expected to generate an increase of 119 daily, seven (7) AM and 12 PM peak hour trips.
- All project traffic entering and exiting the self-storage site is expected to use the driveway connection to Sheridan Street. At the Sheridan Street driveway, an exclusive westbound left turn lane currently exists. The maximum eastbound right turn volume is expected to be eight (8) vehicles; therefore, per FDOT guidelines, an eastbound right turn lane is not required.
- The gate queueing analysis for the self-storage facility indicates that sufficient stacking is provided onsite to accommodate the expected demand without stacking onto N 31 Avenue/Sherman Road.

Should you have any questions or comments regarding these findings, please do not hesitate to call me.

Sincerely,

NATALIA THAIS LERCARI LICENSE No. 68205 STATE OF FLORIDA PROFESSIONAL ENGINEER

Natalia Thais Lercari, P.E.
Professional Engineer
License No. 68205
State of Florida, Board of Professional Engineers
Certificate of Authorization No. 4908

NTL/cec

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Appendix A

Site Plan

LEGEND

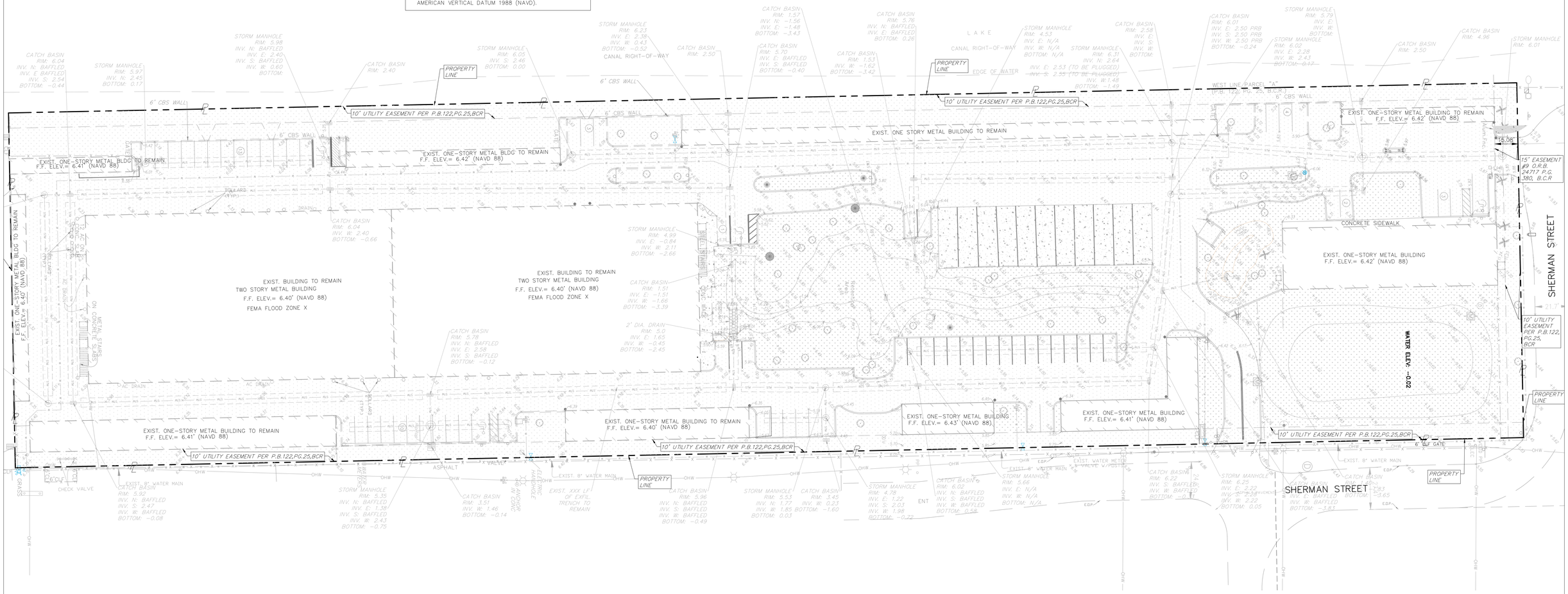
— — — —	PROPERTY LINE
—— STM ——	EXISTING DRAINAGE
—— W ——	EXISTING WATER
	EXISTING SODD TO BE REMOVED
	EXISTING SODD TO REMAIN

NOTES:

1. EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE LOCATIONS AND HAVE BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. CONTRACTOR TO FIELD VERIFY ANY CONFLICTS WITH TREES AND/OR UTILITIES AND DRAINAGE. CONTRACTOR TO NOTIFY ENGINEER OF ANY CONFLICTS BEFORE PROCEEDING WITH ANY SOLUTION TO THE CONFLICT.
3. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO SAFEGUARD ALL EXISTING STRUCTURES AND UTILITIES, ANY DAMAGE DONE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NOT EXPENSE TO THE SUBJECT UTILITY. CALL "SUNSHINE" 48 HOURS BEFORE DIGGING.
4. CONTRACTOR IS TO RESTORE ANY CURB, LANDSCAPE, ASPHALT, ETC. (NOT SCHEDULED FOR DEMOLITION) DAMAGED DURING CONSTRUCTION TO A CONDITION EQUAL TO WHAT IS EXISTING.
5. ALL EXISTING AND PROPOSED ELEVATIONS SHOWN ON THE CONSTRUCTION DOCUMENTS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD).

SCALE: 1"=30'

Sunshine 811
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!



100% CONSTRUCTION DOCUMENTS

ZT 4/13/23	3	3/27/23	CITY OF HOLLYWOOD – TAC SUBMITTAL COMMENTS
DESIGNED BY DATE			
ZT 4/13/23			
DRAWN BY DATE			
RR 4/13/23			
CHECKED BY DATE			
RR 4/13/23			
APPROVED BY DATE	No.	DATE	REVISIONS

SAFEGUARD STORAGE
3090 SHERMAN STREET
HOLLYWOOD, FL 33021

ROSS ENGINEERING, INC.
3325 S. UNIVERSITY DRIVE, SUITE 111
DAVIE, FLORIDA 33328
(954)318-0624 (954)358-0190 FAX
CERTIFICATE OF AUTHORIZATION No. 9808

ROBERT J. ROSS LICENSE No. 59485 STATE OF FLORIDA PROFESSIONAL ENGINEER
Date:4/13/2023

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY ROBERT J. ROSS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

EXISTING SITE PLAN

SCALE: 1" = 30' | SHEET No. C-1.2

SCALE: 1"=30'

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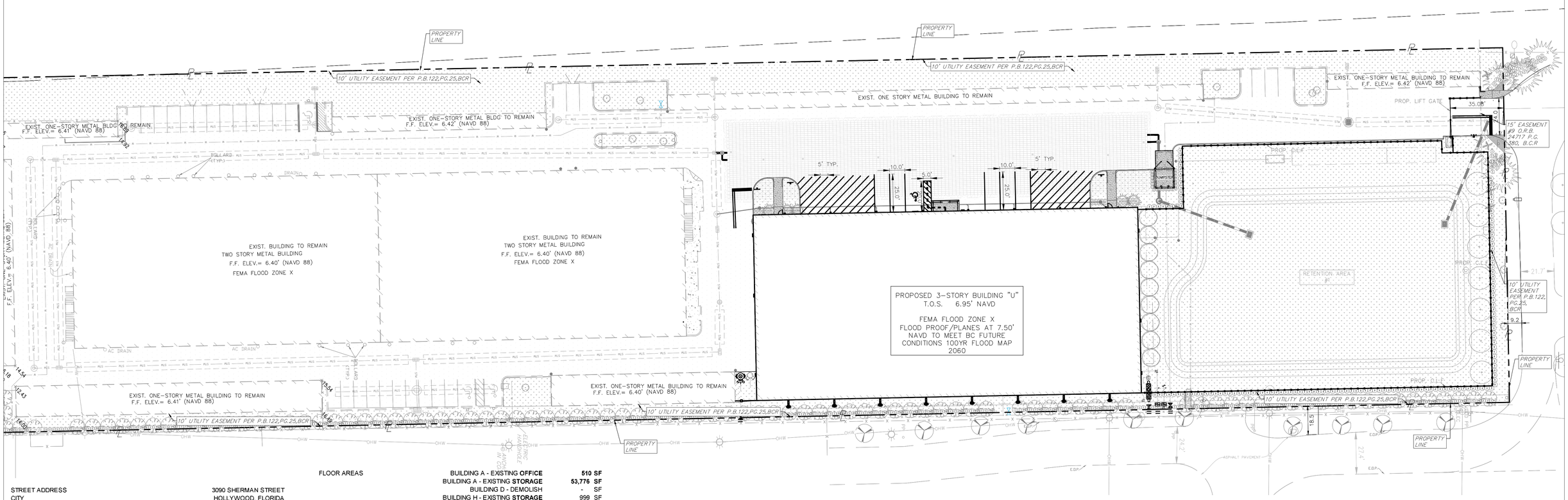
Call 811 or visit sunshine811.com two full business days before digging to have buried facilities located and marked.
Check positive response codes before you dig!



STREET ADDRESS		3090 SHERMAN STREET	
CITY		HOLLYWOOD, FLORIDA	
JURISDICTION		CITY OF HOLLYWOOD	
PARCEL ID#		NORTH PARCEL 514208150010	
		SOUTH PARCEL 514208160010	
EXISTING ZONING		IM-1	
PROPOSED ZONING		IM-1	
EXISTING LAND USE		SELF-STORAGE FACILITY	
PROPOSED LAND USE		SELF-STORAGE FACILITY	
FUTURE LAND USE		INDUSTRIAL (IND)	
FLOOD ZONE		FEMA FLOOD ZONE X	
WETLANDS		SEE SURVEY	
EASEMENTS		SEE SURVEY	
SETBACKS	FRONT OR STREET REQUIRED	15	FT
	PROPOSED (NORTH)	240	FT
	SIDE REQUIRED	0	FT
	PROPOSED (EAST)	11	FT
	PROPOSED (WEST)	99	FT
	REAR SETBACK	0	FT
	PROPOSED (SOUTH)	494	FT
EXISTING LOT AREA	NORTH	92,490	SF
	SOUTH	228,712	SF
	TOTAL	321,202	SF
		7.37	ACRES

FLOOR AREAS	BUILDING A - EXISTING **OFFICE**	**510**	SF
	BUILDING A - EXISTING **STORAGE**	**53,776**	SF
	BUILDING D - DEMOLISH	-	SF
	BUILDING H - EXISTING **STORAGE**	999	SF
	BUILDING J - EXISTING **STORAGE**	3,502	SF
	BUILDING K - EXISTING **STORAGE**	1,402	SF
	BUILDING L 1st FLOOR - EXISTING **STORAGE**	22,027	SF
	BUILDING L 2nd FLOOR - EXISTING **STORAGE**	22,027	SF
	BUILDING M 1st FLOOR - EXISTING **STORAGE**	22,059	SF
	BUILDING M 2nd FLOOR - EXISTING **STORAGE**	22,059	SF
	BUILDING N - EXISTING **STORAGE**	803	SF
	BUILDING O - EXISTING **STORAGE**	1,347	SF
	BUILDING P - EXISTING **STORAGE**	3,996	SF
	BUILDING Q - EXISTING **STORAGE**	2,405	SF
	BUILDING R - DEMOLISH	-	SF
	BUILDING T - DEMOLISH	-	SF
	BUILDING U 1st FLOOR - PROPOSED **STORAGE**	30,495	SF
	BUILDING U 2nd FLOOR - PROPOSED **STORAGE**	30,495	SF
	BUILDING U 3rd FLOOR - PROPOSED **STORAGE**	30,495	SF
	TOTAL BUILDING FLOOR AREA	248,397	SF
	TOTAL BUILDING COVERAGE AREA	142,811	SF
MAXIMUM LOT COVERAGE		0.90	
	ALLOWED	289,082	SF
	PROPOSED	142,811	SF
MAXIMUM FLOOR AREA RATIO		3.00	
	ALLOWED	963,606	
	PROPOSED	248,397	

MAXIMUM BUILDING HEIGHT	ALLOWED	35	FT
	PROPOSED	34	FT
	ALLOWED	3	STORIES
	PROPOSED	3	STORIES
PARKING REQUIRED	**OFFICE 1 PER 250 SF**	**3.00**	
	SELF-STORAGE FACILITY 1 PER 10,000 SF	**25.00**	
	TOTAL REQUIRED	**28.00**	
PARKING PROVIDED	EXISTING ACCESSIBLE PROVIDED	**5.00**	
	NEW ACCESSIBLE PROVIDED	**1.00**	
	EXISTING STANDARD PROVIDED	44.00	
	NEW STANDARD PROVIDED	**-**	
	TOTAL PROVIDED	50.00	
LOADING REQUIRED		5	
LOADING PROVIDED		5	

100% CONSTRUCTION DOCUMENTS

ZT	4/13/23	3	3/27/23	CITY OF HOLLYWOOD – TAC SUBMITTAL COMMENTS
DESIGNED BY	DATE			
ZT	4/13/23			
DRAWN BY	DATE			
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CIVIL SITE PLAN

SCALE: 1"=30' | SHEET No. C-1.3

McMAHON
a Bowman company

Appendix B

Trip Generation Information

Land Use: 151
Mini-Warehouse

Description

A mini-warehouse is a building in which a number of storage units or vaults are rented for the storage of goods. They are typically referred to as “self-storage” facilities. Each unit is physically separated from other units, and access is usually provided through an overhead door or other common access point.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Colorado, Massachusetts, Minnesota, Nevada, New Jersey, Texas, and Utah.

Source Numbers

212, 403, 551, 568, 642, 708, 724, 850, 868, 876, 1024, 1035

Mini-Warehouse
(151)

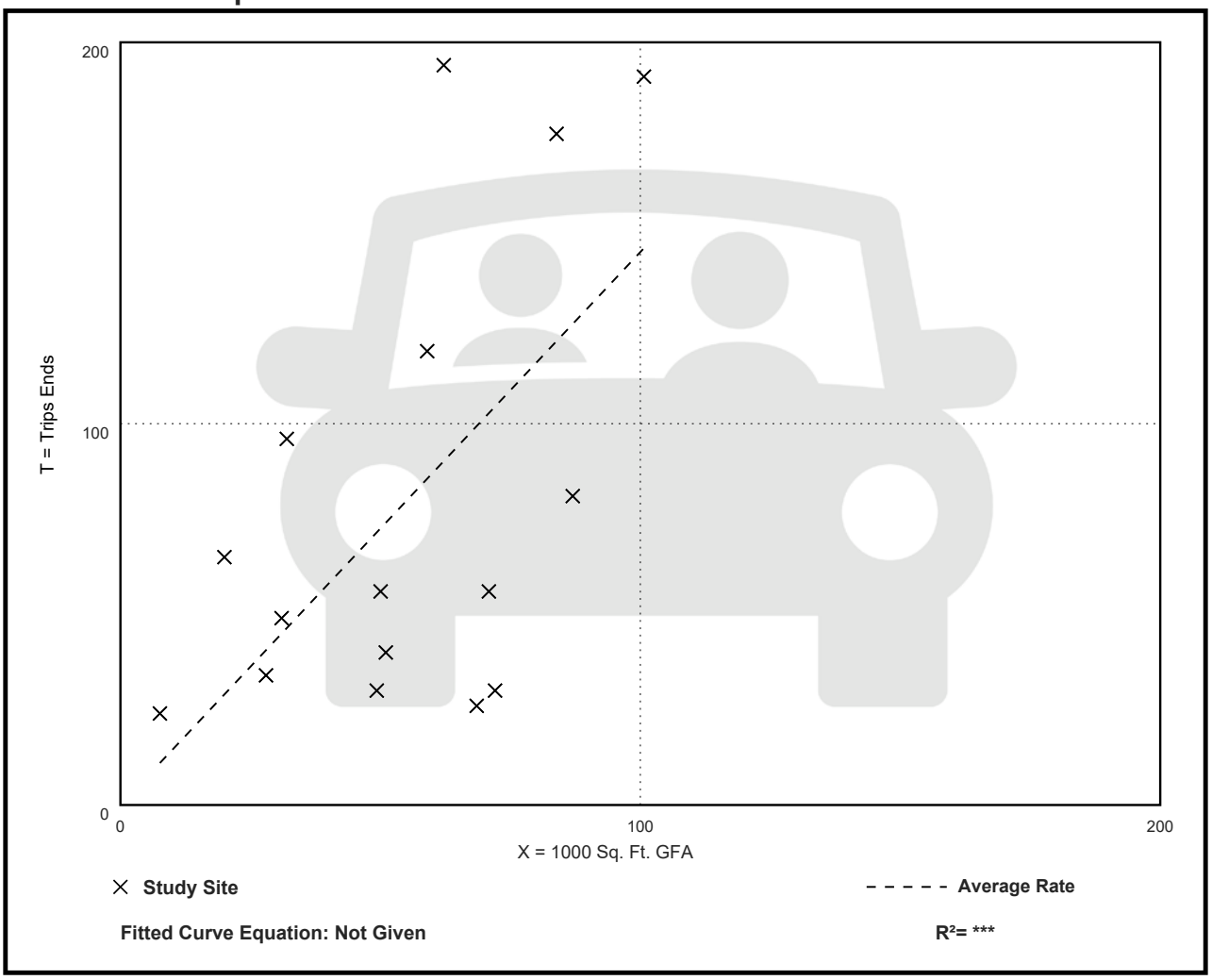
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 16
Avg. 1000 Sq. Ft. GFA: 55
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.45	0.38 - 3.25	0.92

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ***

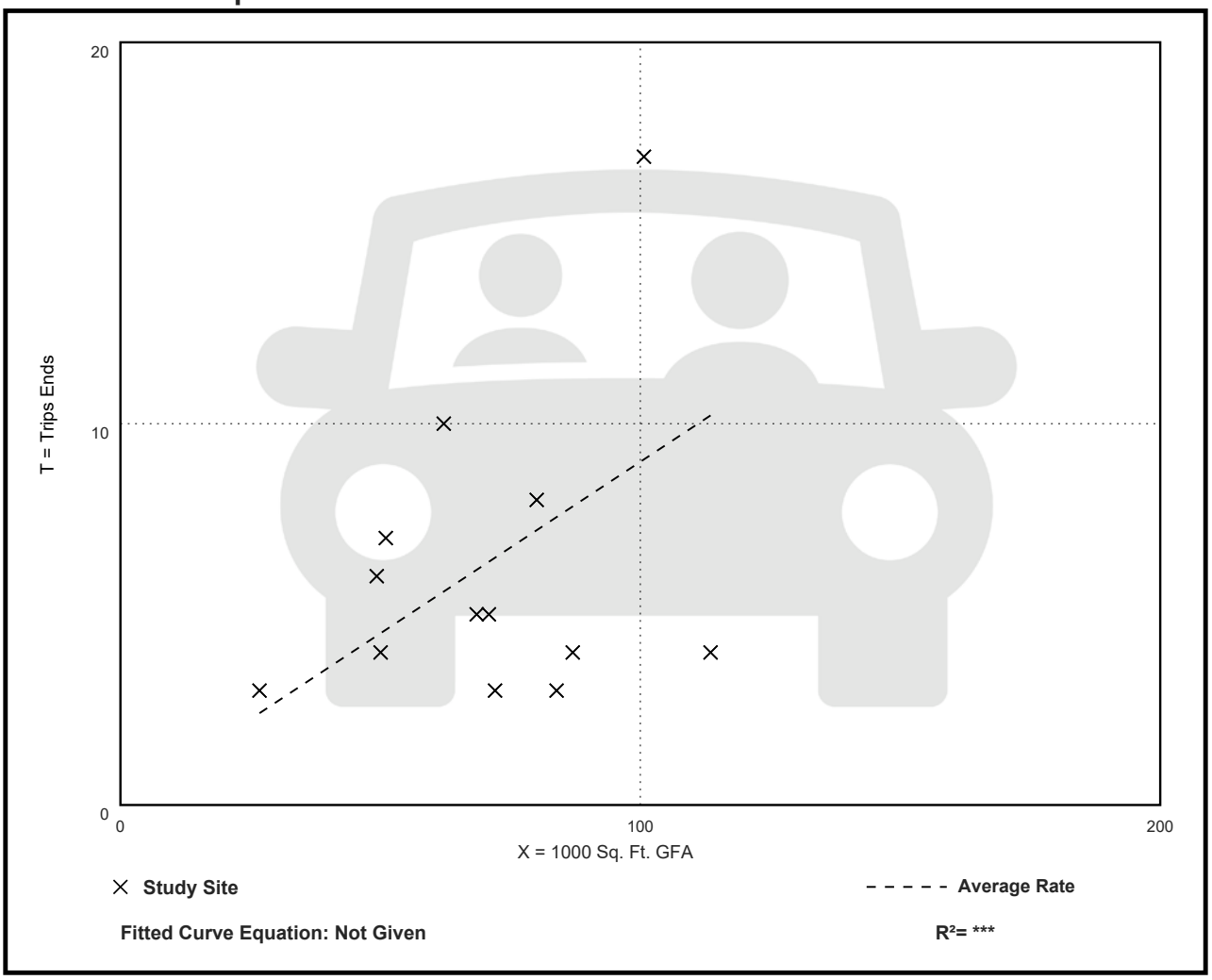
Mini-Warehouse
(151)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 13
Avg. 1000 Sq. Ft. GFA: 70
Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.09	0.04 - 0.17	0.05

Data Plot and Equation



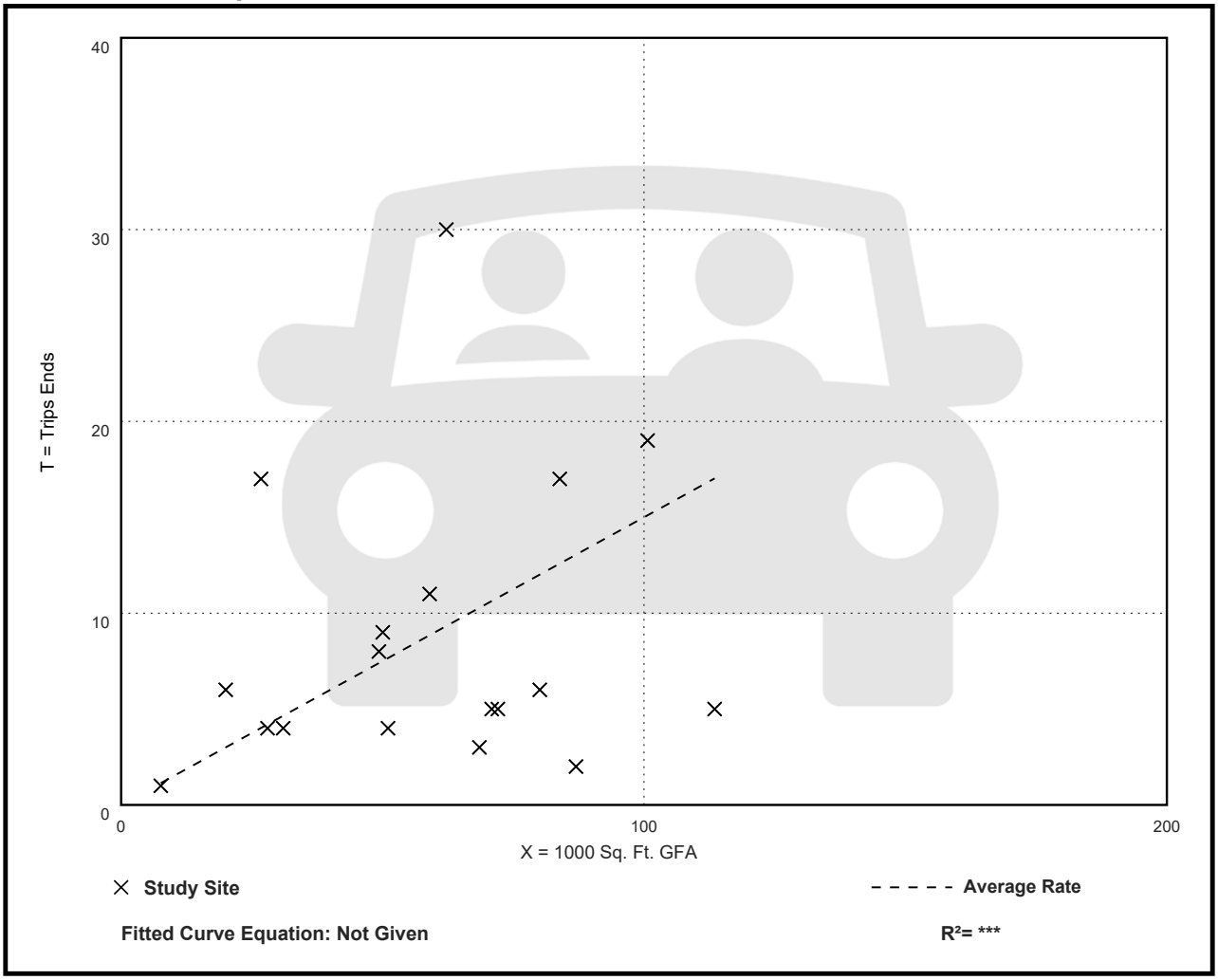
Mini-Warehouse
(151)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 18
Avg. 1000 Sq. Ft. GFA: 59
Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.15	0.02 - 0.64	0.14

Data Plot and Equation



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Appendix C

Gate Queueing Analysis Information

Gate Queueing Analysis

Required Storage:

$$M = \frac{[\ln P(x > M) - \ln QM]}{\ln \rho} - 1$$

coefficient of utilization:

$$\rho = q/NQ$$

q is the demand rate. For this analysis,

q = 20 veh/hr.

N is the number of elevators. For this analysis,

N = 1 Lane

Q is the processing rate per hour for each lane. For this analysis,

Processing Time: 15 sec * 1 min/60 sec = 0.25 min

$$\rho = \frac{20}{(1)\ 240} = \mathbf{0.0833}$$

Total Time: **0.25 min**

$$Q = \frac{1 \text{ proccess}}{\text{process time}} * \frac{60 \text{ min}}{1 \text{ hr}} => \frac{1 \text{ process}*60 \text{ min}}{0.25} => \mathbf{240\ proccesses/hr}$$

Required Storage with 95% confidence level [P(x >M)]:

$$M = \frac{\ln(.05) - \ln(0.0833)}{\ln(0.0833)} - 1 = \mathbf{-1\ vehicles}$$

without rounding = -0.79 vehicles

Q_M is a table value obtained from Table 8-11 based on ρ and N.

Table 8-11 (page 6 of pdf)

From Table: N = 1 and ρ = 0.0000 => 0.0000

From Table: N = 1 and ρ = 0.1000 => 0.1000

$$Q_M = 0.0000 + \frac{(0.1000 - 0.0000) * (0.0833 - 0.0000)}{(0.1000 - 0.0000)} = \mathbf{0.0833}$$

Mini-Warehouse
(151)

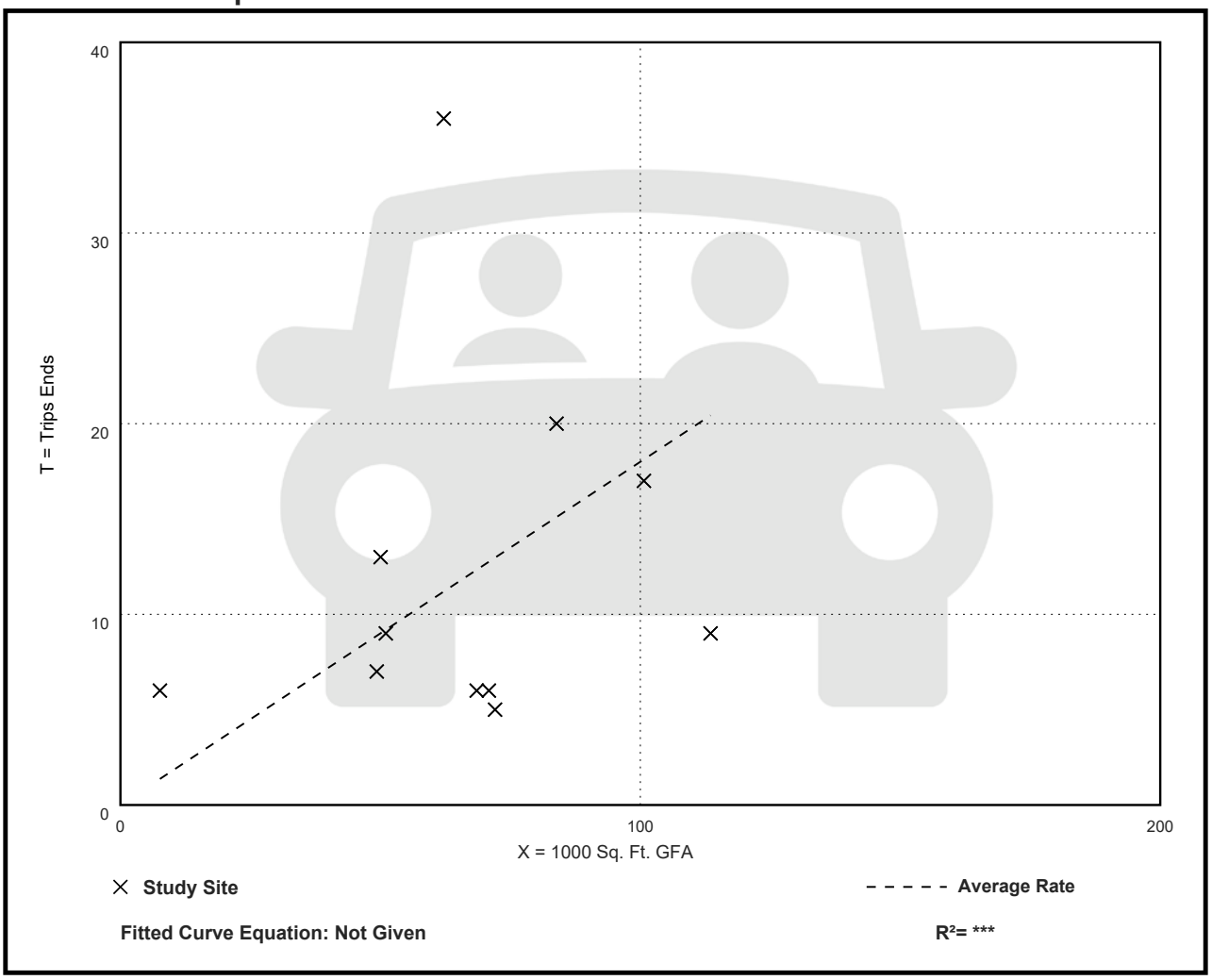
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 11
Avg. 1000 Sq. Ft. GFA: 66
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.18	0.07 - 0.79	0.16

Data Plot and Equation



Mini-Warehouse
(151)

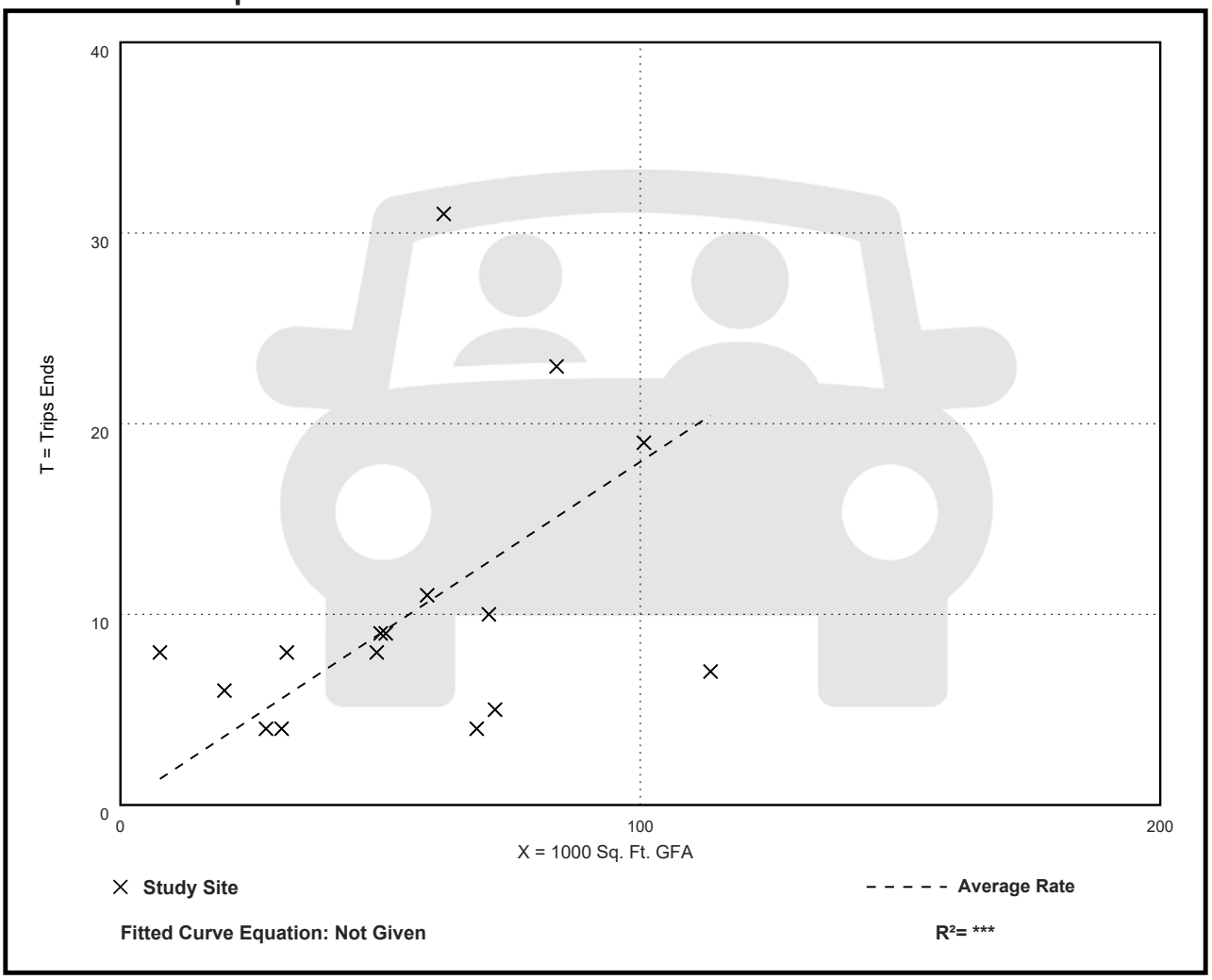
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 16
Avg. 1000 Sq. Ft. GFA: 56
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.18	0.06 - 1.05	0.14

Data Plot and Equation



Mini-Warehouse
(151)

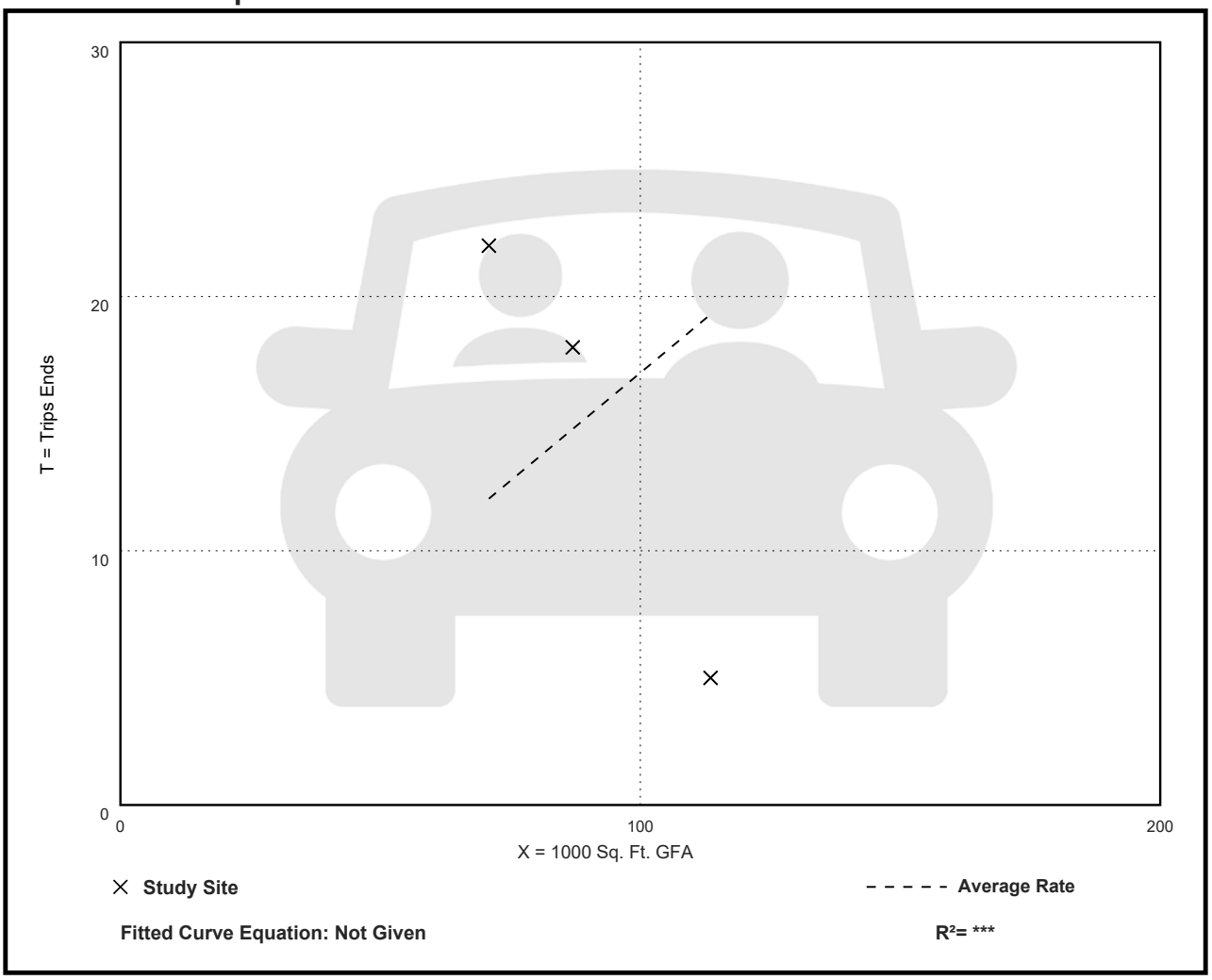
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 3
Avg. 1000 Sq. Ft. GFA: 90
Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.17	0.04 - 0.31	0.14

Data Plot and Equation



Mini-Warehouse
(151)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Sunday, Peak Hour of Generator

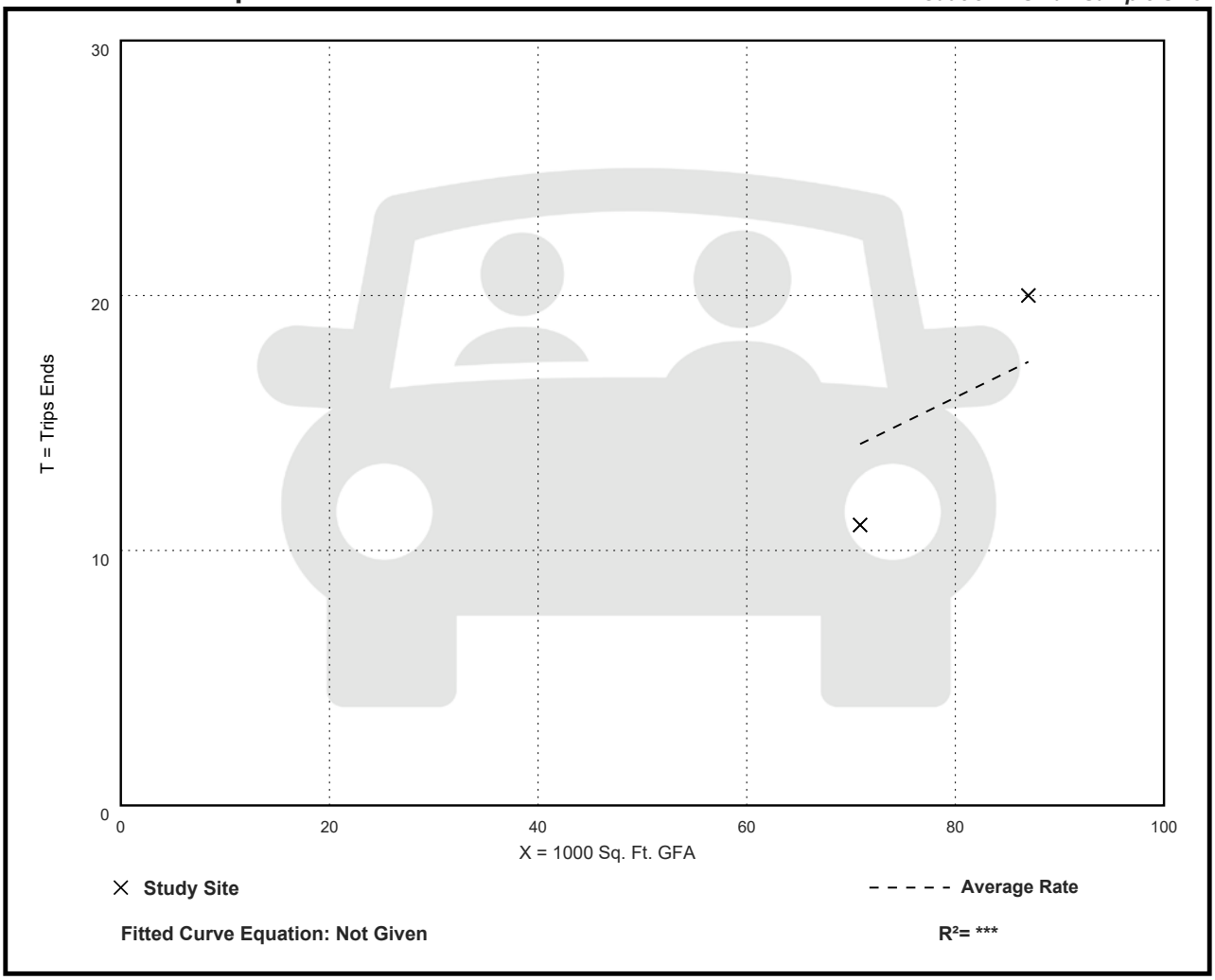
Setting/Location: General Urban/Suburban
Number of Studies: 2
Avg. 1000 Sq. Ft. GFA: 79
Directional Distribution: 45% entering, 55% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.20	0.16 - 0.23	***

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= *

Transportation and Land Development

Vergil G. Stover / Frank J. Koepke

Institute of Transportation Engineers

TABLE 8-1
Design-Hour Lobby Traffic Generation for Banks with Drive-In Windows

Gross Floor Area Used by Bank	*Hourly One-Way Traffic Generation (per 1,000 sq. ft.)*
5,000 to 20,000 sq. ft.	15 to 20 vehicles
20,000 to 40,000 sq. ft.	10 to 15 vehicles
Over 40,000 sq. ft.	5 to 10 vehicles

SOURCE: Peter N. Scifres [8].

Parking. It is desirable to have as much traffic as possible use the drive-in windows. Petersen [7] reported a 50–50 split between lobby and drive-thru customers when the drive-thru facilities are not unduly congested. Customer parking duration averages about 15 to 20 minutes. During the peak period, parking demand should not exceed 90% of the parking capacity if customers are to be able to find a parking space without excessive delay. Scifres [8] reported customer parking requirements as given in Table 8-2.

TABLE 8-2
Design-Hour Lobby Customer Parking Requirements for Banks with Drive-In Windows

Gross Floor Area Used by Bank	*Customer Parking Requirements (per 1,000 sq. ft.)*
5,000 to 20,000 sq. ft.	2.0 to 2.5 Spaces
20,000 to 40,000 sq. ft.	1.5 to 2.0 Spaces
Over 40,000 sq. ft.	1.0 to 1.5 Spaces

SOURCE: Peter N. Scifres [8].

Drive-In Window Requirements. The number of service positions required is a function of the average service time and the demand. The technique contained in the section "Analysis of Service Times," presented later in this chapter, can be used to calculate the average time in the system and the average time in the queue for different operating conditions (number of service positions, number of tellers, average service time, and demand) in order to help evaluate proposed designs.

Bank officials commonly underestimate service and waiting time; therefore the average service time should be obtained through observation of similar facilities in the local area, since wait time and, theoretically, storage requirements are fairly sensitive to the parameter.

Table 8-3 gives guidelines for the number of drive-in windows as a function of lobby size. These guidelines assume an average service time of approximately 2 minutes and that 50% of the bank customers will use the drive-in windows. These typical values might be used where a more detailed (and expensive) analysis is not warranted.

TABLE 8-3
Lobby Size Versus Drive-In Window Requirements

Lobby Sizes (sq. ft.)	*Number of Drive-In Windows*
5,000 to 10,000	2 to 3
10,000 to 20,000	3 to 4
20,000 to 30,000	4 to 5
30,000 to 40,000	6 to 8
40,000 to 50,000	8 to 10

SOURCE: Peter N. Scifres [8].

APPLICATIONS OF QUEUEING ANALYSIS

Providing an adequate and well-defined storage area for drive-thru traffic is particularly critical, especially at fast-food restaurants and drive-thru bank facilities where queues can, and do, become quite long. Waiting vehicles should be stored on private property clear of driveways so that traffic back-up does not interfere with movement on the arterial street. At fast-food restaurants, the menu board should be installed upstream of the service window to permit drive-thru customers to place their orders prior to their arrival at the service window. Preparation of their order can then begin before they reach the service window, thus minimizing their time at the service window. A well-defined storage area for the waiting traffic should be located so that the waiting vehicles do not block or impede the movement of driveway traffic.

Where a single service position is involved, the situation is referred to as a *single-channel problem. Multiple-channel problems* arise when two or more service positions are available. Such problems commonly arise with bank tellers (indoor as well as drive-in windows), entrances and exits at large parking lots and garages, at passenger pick-up areas at transit stations and taxi stands, truck terminals or loading/unloading areas, supermarket checkout counters, telephone calls, building entrances, and transit-station turnstiles. The assumptions of Poisson arrivals and negative exponential service time are commonly acceptable and used for both single- and multiple-channel problems. Thurgood [11] found these assumptions to be representative of drive-in facilities.

Customers arriving randomly at a drive-in facility may enter into service immediately or may have to enter the queue until they can be served. Waiting lines occur whenever the immediate demand for service exceeds the current capacity of the facility providing that service.

Basic Notation and Terminology

The following notation is employed throughout this section:

n = number of customers in the drive-in system
M = number of customers in the queue waiting to be served (number of customers in the system minus the number being served)
$P(n)$ = steady-state probability that exactly n customers are in the queueing system
$P(0)$ = probability that zero vehicles are in the queueing system
N = number of parallel service positions
q = mean average arrival rate of vehicles into the system (vehicles/hour)
Q = mean average service rate per service position (vehicles/hour/position)
Avg $(t) = {}^{60}/_{Q}$ = mean service time expressed in minutes per vehicle
$\rho = {}^{q}/_{NQ}$ = coefficient of utilization
$E(m)$ = expected (average) number of customers in the system
$E(n)$ = expected (average) number of customers waiting in the queue
$E(t)$ = expected (average) waiting time in system (includes service time)
$E(w)$ = expected (average) waiting time in queue (excludes service time)

The equations employed in the analysis of queueing problems are given in Table 8-10.

Jones, Woods, and Thurgood [4] have developed a graph (Figure 8-6) for determining the probability that there will be no customers in the system—values for $P(0)$. They also developed graphs for determining the average number of waiting customers (Figure 8-7), the average waiting time (Figure 8-8), and average queue length (Figure 8-9). These figures avoid the necessity to perform the time-consuming, although simple, queueing-analysis calculations. See pp. 228–30.

TABLE 8-10
Queueing System Equations

Equation Number	Variable	Equation
(8-1)	Coefficient of utilization	$p = \frac{q}{NQ}$
(8-2)	Probability of no customers in the system	$P(0) = \left[\sum_{n=0}^{N-1} \frac{\left(\frac{q}{Q}\right)^n}{n!} + \frac{\left(\frac{q}{Q}\right)^N}{N!(1-\rho)}\right]^{-1}$
(8-3)	Mean number in the queue	$E(m) = \left[\frac{\rho\left(\frac{q}{Q}\right)^N}{N!(1-\rho)^2}\right] P(0)$
(8-4)	Mean number in the system	$E(n) = E(m) + \frac{q}{Q}$
(8-5)	Mean wait time in queue (hours)	$E(w) = \frac{E(m)}{q}$
(8-6)	Mean time in the system (hours)	$E(t) = E(w) + \frac{1}{Q}$ $= E(w) + \text{Avg } (t)$
(8-7)	Proportion of customers who wait	$P[E(w) > 0] = \left[\frac{\left(\frac{q}{Q}\right)^N}{N!(1-\rho)}\right] P(0)$
(8-8)	Probability of a queue exceeding a length M	$P(x > M) = (\rho^{N+1})P[E(w) > 0]$
(8-9a)	Queue storage required	$M = \left[\frac{\ln P(x > M) - \ln E(w) > 0}{\ln \rho}\right] - 1$
(8-9b)*	Queue storage required	$M = \left[\frac{\ln P(x > M) - \ln Q_M}{\ln \rho}\right] - 1$

*Q_M is a statistic which is a function of the utilization rate and the number of service channels (service positions); see Table 8-11. The table of Q_M values and use of Equation (8-9b) greatly simplifies the calculations compared to those using Equations (8-9a).

Use of the equations and the graphs may be illustrated by the following example of a drive-in bank.

Conditions:

Number of drive-in windows, $N = 3$
Demand on the system, $q = 70$
Service capacity per channel, $Q = 28.6$ for an average service time, Avg $(t) = 2.1$ minutes

Solution Using Graphs:

- Coefficient of utilization $= 70/(3)(28.6) = 0.816$
- Probability that there are customers waiting in the system, Figure 8-6: $P(0) = 0.05$
- Expected average number of customers waiting in the queue, Figure 8-7: $E(m)/N = 1.0$; and the average number $E(m) = (3)(1.0) = 3$

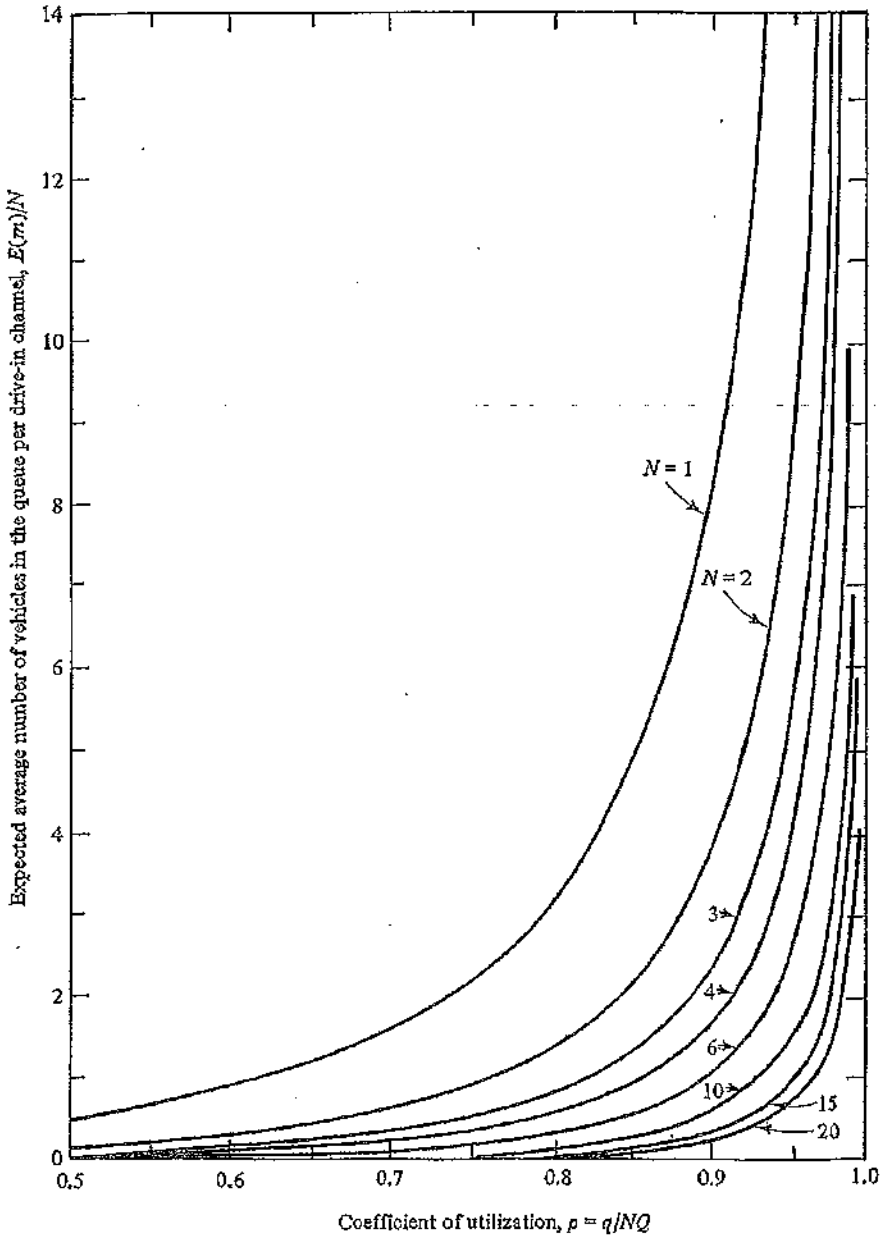


Figure 8-9 Average queue length per service position [$E(m)/N$ values]. SOURCE: Jones, Woods, and Thurgood [4].

Comparison:

Variable	Graphs	Equations
$P(0)$	0.05	0.0505
$E(m)$	3	2.97
$E(w)$	2.5	2.55

Example and Case Studies of Required Storage at a Drive-In Bank

Consider the following example of a drive-in bank facility as a demonstration of the use of queueing analysis. Review of a site plan for a proposed bank shows there are six drive-in window positions plus space to store 18 vehicles waiting to be served. In view of its

location, a 5% probability of back-up onto the adjacent street is judged to be acceptable. Demand on the system for design is expected to be 110 vehicles in a 45-minute period. Average service time was expected to be 2.2 minutes. Is the queue storage adequate?

Such problems can be quickly solved using Equation (8–9b) given in Table 8-10 and repeated below for convenience.

$$M = \left[\frac{\ln P(x > M) - \ln Q_M}{\ln \rho}\right] - 1$$

where:

M = queue length which is exceeded p percent of the time
N = number of service channels (drive-in positions)
Q = service rate per channel (vehicles per hour)
$\rho = \dfrac{\text{demand rate}}{\text{service rate}} = \dfrac{q}{NQ}$ = utilization factor
q = demand rate on the system (vehicles per hour)
Q_M = tabled values of the relationship between queue length, number of channels, and utilization factor (see Table 8.11)

TABLE 8-11
Table of Q_M Values

	N = 1	2	3	4	6	8	10
0.0	0.0000	0.0000	0.0000	0.0000			
0.1	.1000	.0182	.0037	.0008	.0000	0.0000	0.0000
.2	.2000	.0666	.0247	.0096	.0015	.0002	.0000
.3	.3000	.1385	.0700	.0370	.0111	.0036	.0011
.4	.4000	.2286	.1411	.0907	.0400	.0185	.0068
.5	.5000	.3333	.2368	.1739	.0991	.0591	.0360
.6	.6000	.4501	.3548	.2870	.1965	.1395	.1013
.7	.7000	.5766	.4923	.4286	.3359	.2706	.2218
.8	.8000	.7111	.6472	.5964	.5178	.4576	.4093
.9	.9000	.8526	.8172	.7878	.7401	.7014	.6687
1.0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

$\rho = \dfrac{q}{NQ} = \dfrac{\text{arrival rate, total}}{\text{(number of channels)(service rate per channel)}}$
N = number of channels (service positions)

Solution

Step 1: $Q = \dfrac{60 \text{ min/hr}}{2.2 \text{ min/service}} = 27.3$ services per hour

Step 2: $q = (110 \text{ veh}/45 \text{ min}) \times (60 \text{ min/hr}) = 146.7$ vehicles per hour

Step 3: $\rho = \dfrac{q}{NQ} = \dfrac{146.7}{(6)(27.3)} = 0.8956$

Step 4: $Q_M = 0.7303$ by interpolation between 0.8 and 0.9 for $N = 6$ from the table of Q_M values (see Table 8-11).

Step 5: The acceptable probability of the queue, M, being longer than the storage, 18 spaces in this example, was stated to be 5%. $P(x > M) = 0.05$, and:

$$M = \left[\frac{\ln 0.05 - \ln 0.7303}{\ln 0.8956}\right] - 1 = \left[\frac{-2.996 - (-0.314)}{-0.110}\right] - 1$$
$$= 24.38 - 1 = 23.38, \text{ say } 23 \text{ vehicles.}$$

The number of vehicles in the queue would be expected to exceed 23 more than 5% of the time. Since the site plan will accommodate a queue of 18 vehicles, the storage is not sufficient for the conditions stated.

It is important to realize that, for any $P\ (x > M)$ value, the queue length required increases very rapidly for values of $\rho > 0.85$ (see Figure 8-9). When $\rho > 1.0$, the solution is indeterminate and the queue length theoretically becomes infinite.

Analysis of Service Times. In many instances it is effective to demonstrate that a proposed design not only is inadequate to store vehicles waiting for service but will result in unacceptable wait times as well. The necessary equations are given in Table 8-10.

For purposes of checking computations it is convenient to know that the limit of $P(0)$, as the number of channels approaches infinity (in practical terms when $N > 10$), is:

$$\lim_{N \to \infty} P(0) = e^{-\lambda} \qquad \text{where } \lambda = q/Q$$

Drive-In Bank Example: Under the site-development approval requirements, representatives of a bank presented a site plan for the construction of a new bank having three service positions. Information provided by bank officials and observations at other local banks provided the following data:

- Expected average arrival rate during the design hour (4:30–5:30 p.m. on Fridays) = 70 vehicles per hour (vph)
- Average service time per customer = 2.1 minutes

Does the site plan provide for sufficient storage to accommodate all vehicles arriving 95% of the time?

$$q = 70 \text{ vph arrival rate}$$

$$Q = \frac{60 \text{ minutes per hour}}{2.1 \text{ minutes per service}} = 28.6 \text{ vph service rate}$$

$$\rho = \frac{70}{(3)\,(28.6)} = 0.816$$

$$\frac{q}{Q} = \frac{70}{28.6} = 2.45$$

$$Q_M = 0.674 \text{ by interpolation from Table 8-11}$$

$$P(x > M) = 1.00 - 0.95 = 0.05$$

By Equation (8-9b)

$$M = \left[\frac{\ln 0.05 - \ln 0.674}{\ln 0.816}\right] - 1 = \left[\frac{-2.996 - (-0.396)}{-0.203}\right] - 1 = 11.8, \text{ say } 12$$

Thus, it would be necessary to store 12 vehicles, exclusive of the three service positions, in order to accommodate the arriving vehicles 95% of the time; or alternatively, to have waiting vehicles extending back into the adjacent street no more than 5% of the time between 4:30 and 5:30 p.m. on Fridays. Since the site plan provides for six spaces, the site plan as submitted is inadequate and should be disapproved.

A solution to the problem would be to increase the storage, or if this is not possible add a service position in order to reduce the average service time.

Addition of a service position would reduce the number of storage spaces needed to three (three storage plus four service positions)—assuming the same arrival rate and service time:

$$M = \left[\frac{\ln 0.05 - \ln 0.301}{\ln 0.612}\right] - 1 = 2.7, \text{ say } 3$$

A redesign to provide four service positions would have the additional benefit of substantially reducing the expected waiting time (from over 4 minutes to less than $\frac{1}{2}$ minute) for the bank customers using the drive-in windows:

With Three Service Positions:

$$q = 70 \text{ vph}$$
$$Q = 28.6 \text{ vph}$$
$$\frac{q}{Q} = 2.45$$
$$\rho = \frac{70}{(3)(28.6)} = 0.816$$
$$P(0) = \left[\frac{(2.45)^0}{0!} + \frac{(2.45)^1}{1!} + \frac{(2.45)^2}{2!} + \frac{(2.45)^3}{3!\left[1 - \left(\frac{2.45}{3}\right)\right]}\right]^{-1}$$
$$= [1 + 2.45 + 3.00 + 13.37]^{-1} = 0.0505$$
$$E(m) = \left[\frac{(0.816)\left(\frac{70}{28.6}\right)^3}{3!(1 - 0.816)^2}\right] 0.0505 = 2.97$$
$$E(n) = 2.97 + 70.28.6 = 5.42$$
$$E(t) = \frac{2.97}{70} = 0.0424 \text{ hours or } 2.55 \text{ minutes}$$
$$E(w) = 0.0424 + \frac{1}{28.6} = 0.0774 \text{ hours or } 4.64 \text{ minutes}$$

With Four Service Positions:

$$q = 70 \text{ vph}$$
$$Q = 28.6 \text{ vph}$$
$$\frac{q}{Q} = 2.45$$
$$\rho = \frac{70}{(4)(28.6)} = 0.612$$
$$P(0) = \left[\frac{(2.45)^0}{0!} + \frac{(2.45)^1}{1!} + \frac{(2.45)^2}{2!} + \frac{(2.45)^3}{3!} + \frac{(2.45)^4}{4!\left[1 - \left(\frac{2.45}{4}\right)\right]}\right]^{-1}$$
$$= 0.0783$$
$$E(m) = \left[\frac{(0.612)(2.45)^4}{4!(1 - 0.612)^2}\right] 0.0783 = 0.48$$
$$E(n) = 0.48 + 2.45 = 2.93$$
$$E(t) = 0.007 + \frac{1}{28.6} = 0.042 \text{ hours or } 2.51 \text{ minutes}$$
$$E(w) = \frac{0.48}{70} = 0.007 \text{ hours or } 0.41 \text{ minutes}$$

However, the service time would increase somewhat unless an additional teller were also added. Nevertheless, an increase to 2.5 minutes, or more, would still reduce the storage space required and result in better service (less time in the system). Besides, time spent being served is less irritating to the customer than an equal time spent waiting.

86- 67.35

AMENDED 31081/0104

PLAT BOOK 122 PAGE 25

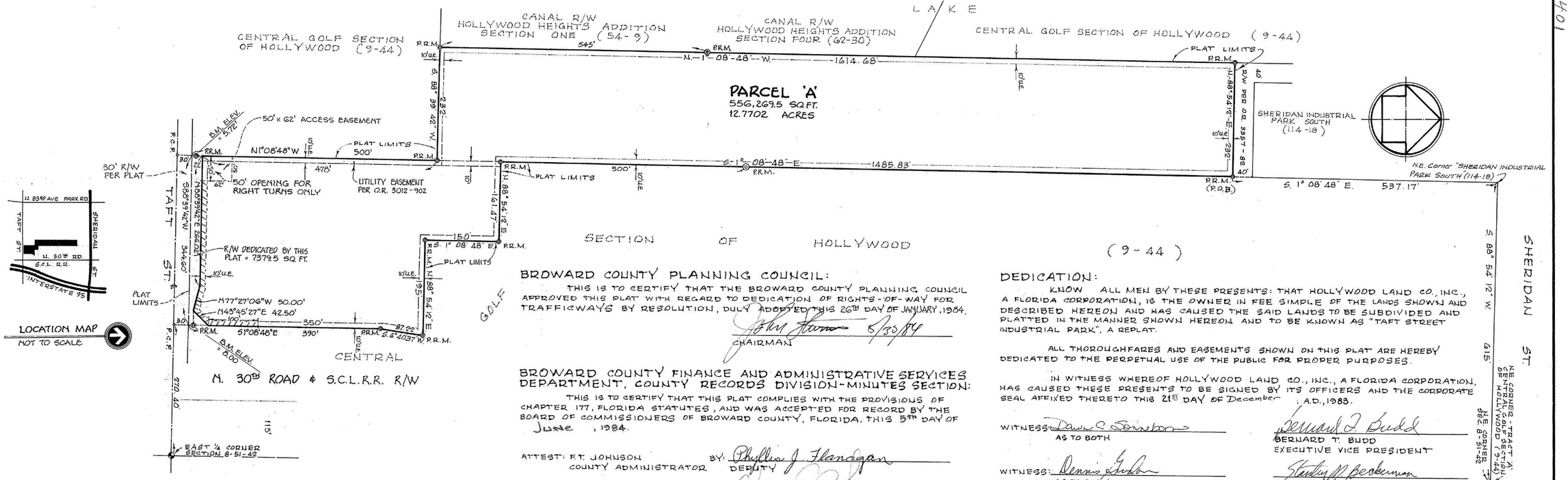
OR 12349 PG 401

TAFT STREET INDUSTRIAL PARK

A REPLAT OF A PORTION OF TRACT 'A', "CENTRAL GOLF SECTION OF HOLLYWOOD" (9-44) SEC. 8, TWP. 51 SOUTH, RGE. 42 EAST
CITY OF HOLLYWOOD, BROWARD COUNTY, FLORIDA

SCALE 0 100' 250' 500' 750' 1050' 1" = 100'

BERRY, CALVIN, BROOME & FARINA - SURVEYORS & ENGINEERS - HOLLYWOOD, FLORIDA



DESCRIPTION:

A PORTION OF TRACT 'A' OF "CENTRAL GOLF SECTION OF HOLLYWOOD", AS RECORDED IN PLAT BOOK 9, PAGE 44, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID TRACT 'A', RUN ON AN ASSUMED BEARING OF S. 88° 54' 12" W. ALONG THE NORTH LINE OF TRACT 'A' 615 FEET TO THE NORTHEAST CORNER OF "SHERIDAN INDUSTRIAL PARK SOUTH", AS RECORDED IN PLAT BOOK 114, PAGE 18, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA; THENCE, S. 1° 08' 48" E. PARALLEL WITH THE EAST LINE OF SAID TRACT 'A' AND ALONG THE EAST LINE OF SAID "SHERIDAN INDUSTRIAL PARK SOUTH" 537.17 FEET TO A POINT OF BEGINNING; THENCE, CONTINUE S. 1° 08' 48" E. 1485.83 FEET; THENCE, N. 88° 54' 12" E. 161.47 FEET; THENCE, S. 1° 08' 48" E. 150 FEET; THENCE, N. 88° 54' 12" E. 195 FEET; THENCE, S. 6° 40' 37" W. 87.22 FEET; THENCE, S. 1° 08' 48" E. 390 FEET TO THE SOUTH LINE OF SAID TRACT 'A'; THENCE, S. 88° 39' 42" W. ALONG SAID SOUTH LINE 344.60 FEET; THENCE N. 1° 08' 48" W. 500 FEET; THENCE, S. 88° 39' 42" W. 232 FEET; THENCE, N. 1° 08' 48" W. 1614.68 FEET; THENCE, N. 88° 54' 12" E. 232 FEET TO THE POINT OF BEGINNING.

SAID LANDS CONTAINING 12.9396 ACRES (563,649 SQ. FT.), MORE OR LESS.

NOTES:

- P.C.P. INDICATES PERMANENT CONTROL POINT.
- P.R.M. INDICATES PERMANENT REFERENCE MONUMENT.

BENCHMARKS (B.M.'S) SHOWN ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM.

////// INDICATES NON-VEHICULAR INGRESS-EGRESS LINE

THIS PLAT IS RESTRICTED TO 225,500 SQ. FT. OF GENERAL INDUSTRIAL USE

U.E. INDICATES UTILITY EASEMENT

BROWARD COUNTY PLANNING COUNCIL:

THIS IS TO CERTIFY THAT THE BROWARD COUNTY PLANNING COUNCIL APPROVED THIS PLAT WITH REGARD TO DEDICATION OF RIGHTS-OF-WAY FOR TRAFFICWAYS BY RESOLUTION, DULY ADOPTED THIS 26TH DAY OF JANUARY, 1984.

CHAIRMAN 5/23/84

BROWARD COUNTY FINANCE AND ADMINISTRATIVE SERVICES DEPARTMENT, COUNTY RECORDS DIVISION-MINUTES SECTION:

THIS IS TO CERTIFY THAT THIS PLAT COMPLIES WITH THE PROVISIONS OF CHAPTER 177, FLORIDA STATUTES, AND WAS ACCEPTED FOR RECORD BY THE BOARD OF COMMISSIONERS OF BROWARD COUNTY, FLORIDA, THIS 5TH DAY OF June, 1984.

ATTEST: F.T. JOHNSON, COUNTY ADMINISTRATOR
BY: Phyllis J. Flanagan, DEPUTY
BY: _____, CHAIRMAN - COUNTY COMMISSION

BROWARD COUNTY FINANCE AND ADMINISTRATIVE SERVICES DEPARTMENT, COUNTY RECORDS DIVISION-RECORDING SECTION:

THIS INSTRUMENT WAS FILED FOR RECORD THIS 26th DAY OF February, 1985 AND RECORDED IN PLAT BOOK 122 AT PAGE 25, RECORD VERIFIED.

ATTEST: F.T. JOHNSON, COUNTY ADMINISTRATOR
BY: _____, DEPUTY

BROWARD COUNTY ENGINEERING DIVISION:

THIS PLAT IS APPROVED AND ACCEPTED FOR RECORD:

BY: Henry P. Cook
HENRY P. COOK
DIRECTOR OF ENGINEERING
FLA. P.E. REG. NO. 12506

2-20-85
DATE

CITY COMMISSION:

THIS IS TO CERTIFY THAT THIS PLAT WAS APPROVED AND ACCEPTED BY THE CITY COMMISSION OF HOLLYWOOD, FLORIDA BY RESOLUTION NO. R-84-36 ADOPTED THIS 15TH DAY OF February, 1984, AND THAT BY SAID RESOLUTION ALL THOROUGHFARES SHOWN ON THIS PLAT WERE ACCEPTED IN THE NAME OF SAID CITY AND ALL PREVIOUS PLATS OF THIS LAND ARE CANCELLED AND SUPERCEDED.

ATTEST: Betty J. Derrington, CITY CLERK
APPROVED: David D. Keating, MAYOR
APPROVED: M. Bergacker, CITY ENGINEER

DEDICATION:

KNOW ALL MEN BY THESE PRESENTS: THAT HOLLYWOOD LAND CO., INC., A FLORIDA CORPORATION, IS THE OWNER IN FEE SIMPLE OF THE LANDS SHOWN AND DESCRIBED HEREON AND HAS CAUSED THE SAID LANDS TO BE SUBDIVIDED AND PLATTED IN THE MANNER SHOWN HEREON AND TO BE KNOWN AS "TAFT STREET INDUSTRIAL PARK", A REPLAT.

ALL THOROUGHFARES AND EASEMENTS SHOWN ON THIS PLAT ARE HEREBY DEDICATED TO THE PERPETUAL USE OF THE PUBLIC FOR PROPER PURPOSES.

IN WITNESS WHEREOF HOLLYWOOD LAND CO., INC., A FLORIDA CORPORATION, HAS CAUSED THESE PRESENTS TO BE SIGNED BY ITS OFFICERS AND THE CORPORATE SEAL AFFIXED THERETO THIS 21ST DAY OF December, A.D., 1983.

WITNESS: Dawn S. Sorenson, AS TO BOTH
WITNESS: Dennis Gruber, AS TO BOTH

Bernard T. Budd
BERNARD T. BUDD
EXECUTIVE VICE PRESIDENT

Stanley M. Beckerman
STANLEY M. BECKERMAN
SECRETARY

ACKNOWLEDGEMENT:

STATE OF FLORIDA } SS
COUNTY OF BROWARD }

I HEREBY CERTIFY: THAT ON THIS DAY PERSONALLY APPEARED BEFORE ME BERNARD T. BUDD AND STANLEY M. BECKERMAN, EXECUTIVE VICE PRESIDENT AND SECRETARY, RESPECTIVELY OF HOLLYWOOD LAND CO., INC., A FLORIDA CORPORATION, TO ME WELL KNOWN TO BE THE PERSONS DESCRIBED IN AND WHO EXECUTED THE FOREGOING PLAT AND INSTRUMENT OF DEDICATION AND SEVERALLY ACKNOWLEDGED THE EXECUTION THEREOF TO BE THEIR FREE ACT AND DEED AS SUCH OFFICERS AND THAT THEY AFFIXED THERETO THE OFFICIAL SEAL OF SAID CORPORATION, AND THAT SAID INSTRUMENT IS THE ACT AND DEED OF SAID CORPORATION.

WITNESS MY SIGNATURE AND OFFICIAL SEAL AT HOLLYWOOD, BROWARD COUNTY, FLORIDA, THIS 21ST DAY OF December, A.D. 1983.

MY COMMISSION EXPIRES: NOTARY PUBLIC STATE OF FLORIDA BY COMMISSION EXP. OCT 20,1987 BONDED THRU GENERAL INS. UND.

Cathy A. Silva
NOTARY PUBLIC - STATE OF FLORIDA

SURVEYOR'S CERTIFICATE:

I, MAURICE E. BERRY II, HEREBY CERTIFY THAT THIS PLAT COMPLIES WITH ALL OF THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUTES, AND THAT IT IS A TRUE AND CORRECT REPRESENTATION OF A RECENT SURVEY MADE UNDER MY DIRECTION.

THE P.R.M.'S HAVE BEEN SET WHERE INDICATED AND THE P.C.P.'S WILL BE SET WITHIN ONE YEAR AFTER THE RECORDING OF THIS PLAT.

ALL SURVEY INFORMATION SHOWN ON THIS PLAT MEETS THE MINIMUM TECHNICAL STANDARDS SET FORTH IN RULE 21HH-16, ADOPTED BY THE FLORIDA BOARD OF LAND SURVEYORS PURSUANT TO FLORIDA STATUTES CHAPTER 472.027. BENCHMARKS ARE SET IN CONFORMITY WITH 3RD ORDER ACCURACY.

DATED AT HOLLYWOOD, BROWARD COUNTY, FLORIDA THIS 2ND DAY OF APRIL, 1984.

Maurice E. Berry II
MAURICE E. BERRY II
REGISTERED LAND SURVEYOR NO. 1122
STATE OF FLORIDA

DRAINAGE REPORT

Safeguard Storage
3090 Sherman Street
Hollywood, FL 33021

2/22/2023

This item has been digitally signed and sealed by Robert J. Ross, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Prepared by:
Ross Engineering, Inc.

A. Executive Summary

The scope of Safeguard Storage Sheridan includes an additional building within the property. In order for this to be performed an existing retention area and parking spaces in the center of the property will be removed for the new storage building. After further drainage analysis Ross Engineering was able to identify the existing flood conditions using Cascade 2001. The existing conditions of this site does not provide proper drainage to prevent flooding issues. The existing property does not meet Broward County's updated criteria as of 2017 or does it meet the previously used Water Table values. The existing site is over designed for water quality by exfiltration trench, for the property's 100yr-3day storm event stage to decrease additional water quality and storage is provided in new dry retention area, and underground raintank.

B. PROPERTY DESCRIPTION

The subject property is located at 3090 Sherman Street, Hollywood, 33021. The scope of this project includes the existing site, and the central retention area. Based on as-builts received from Broward County and existing survey there is an existing drainage system present.

All elevations presented are in North American Vertical Datum, 1988 (NAVD).

C. HYDROLOGY

The following storm events for both existing and proposed conditions were considered:

- 5-Year, 24-Hour
- 10-Year, 24-Hour
- 25-Year, 72-Hour
- 100-Year, 72-Hour

D. WATER QUANTITY ANALYSIS

Water Control Elevation:

The permitted plans used an assumed Water Table of 2.0 feet, NGVD, which translates to 0.4 NAVD (Existing Criteria). Broward County's water table has changed in 2017 to 1.50 NAVD.

Wet Season Water Table (Control) = **1.50 NAVD**
(refer to Appendix A)

Design Storm Rainfall Data: Water Quantity

5-Year, 24-Hour = 7.50 Inches *(*See Appendix "A" Rainfall Maps)*
10-Year, 24-Hour = 9.00 Inches *(*See Appendix "A" Rainfall Maps)*
25-Year, 72-Hour = 13.50 Inches *(*See Appendix "A" Rainfall Maps)*
100-Year, 72-Hour = 17.00 Inches *(*See Appendix "A" Rainfall Maps)*

ROSS ENGINEERING, INC.
3325 S. University Drive, Suite 111, Davie, FL 33328 Main Office: 954.318.0624 Fax: 954.358.0190 Web: www.rossengineers.com

Table 1: Land Use Breakdown (Existing)

Land Use Breakdown (Pre-Development)							
Land Use	Area			Grade			
	sf	ac	%	Low	High	Average	Wtd. Avg.
Impervious Areas	**152,853**	**3.509**	**66.8%**			**5.89**	**3.93**
Building	67,850	1.558	29.7%	6.40		6.40	1.90
Pond	5,435	0.125	2.4%	-0.02		-0.02	0.00
Asphalt Road/Other Impervious	74,060	1.700	32.4%	4.35	7.26	5.81	1.88
Concrete Parking	5,508	0.126	2.4%	6.41	6.57	6.49	0.16
Pervious Areas	**75,859**	**1.741**	**33.2%**			**4.15**	**1.38**
Retention Pond Top of Bank (L)	4,851	0.111	2.1%	-0.02	5.80	2.89	0.06
Retention 2 (V)	137	0.003	0.1%	1.68		1.68	0.00
Retention 2 (L)	1,141	0.026	0.5%	1.68	6.05	3.87	0.02
Retention 3 (V)	3,584	0.082	1.6%	0.68		0.68	0.01
Retention 3 (L)	6,605	0.152	2.9%	0.72	7.12	3.92	0.11
Green	59,541	1.367	26.0%	2.50	6.50	4.50	1.17
Total	**228,712**	**5.2505**	**100.0%**			**5.31**	**5.31**

Table 2: Land Use Breakdown (Future)

Land Use Breakdown (Post-Development)							
Land Use	Area			Grade			
	sf	ac	%	Low	High	Average	Wtd. Avg.
Impervious Areas	**150,382**	**3.452**	**65.8%**			**6.21**	**4.08**
Existing Buildings to Remain	58,450	1.342	25.6%	6.95		6.95	1.78
Exist. Asphalt Road/Other Impervio	61,437	1.410	26.9%	4.43	6.40	5.42	1.45
Proposed Building	30,495	0.700	13.3%	6.40		6.40	0.85
Pervious Areas	**78,330**	**1.798**	**34.2%**			**3.89**	**1.33**
Proposed Retention 1 (V)	17,631	0.405	7.7%	2.50		2.50	0.19
Proposed Retention 1(L)	5,768	0.132	2.5%	2.50	5.00	3.75	0.09
Green	54,932	1.26	24.0%	2.50	6.20	4.35	1.04
Total Site	**228,712**	**5.25051**	**100.0%**			**5.42**	**5.42**

Table 3: SCS Runoff Calculations

Runoff & Max Stage (Post-Development)			
SCS Equation **Storm Event**	**Rainfall (P)** Taken from SFWMD Maps	**P Excess (Pe)** $Pe = \frac{(P-0.2S)^2}{(P+0.8S)}$	**Runoff (Q)** $Q=Pe \times A \times \frac{1ft}{12in}$
5 yr 1 hr	3.28 in	2.29 in	1.000 ac-ft

Area (A) = 5.25 ac

Table 4: Soil Storage & CN: Calculations

Soil Storage (Pre-Development)		
Average Finished Grade (NAVD)	4.15 ft	
Average Water Table (NAVD)	1.50 ft	
Depth to Water Table	2.65 ft	= (4.15 ft) - (1.5 ft)
Soil Storage SFWMD (S*)	3.88 in	
%Total Pervious Area (%A_P)	33.2%	
Site Specific Soil Storage (S)	**1.29 in**	**= (S*) x (%Ap)**
Curve Number (CN)	**89**	**= 1000 / (10 + S)**

S = Soil Storage (SFWMD Table)*

Table 5: Soil Storage & CN: Calculations (Future)

Soil Storage (Post-Development)		
Average Finished Grade	3.89 ft	NAVD
Average Water Table	1.50 ft	NAVD
Depth to Water Table	2.39 ft	= (3.89 ft) - (1.5 ft)
Soil Storage SFWMD (S*)	3.08 in	
%Total Pervious Area (%A_P)	34.2%	
Site Specific Soil Storage (S)	**1.05 in**	**= (S*) x (%Ap)**
Curve Number (CN)	**90**	**= 1000 / (10 + S)**

S = Soil Storage (SFWMD Table)*

Table 6: Water Quality – Pre and Post

Water Quality Calculations	(Pre)	(Post)
Compute First in. of Runoff times Site Area	**5.251 ac-in**	5.251 ac-in
	0.438 ac-ft	0.438 ac-ft
Compute % of Imperviousness times depth:	3.28 in	3.28 in
Site Area for WQ perv/imperv calc only	3.57 ac	3.91 ac
Imperv Area for WQ perv/imperv calc only	1.83 ac	2.11 ac
% of Imperviousness for WQ	51.2%	54.0%
Depth times % Imperv = Depth to be treated	1.68 in	1.77 in
Volume required for WQ treatment	**8.607 ac-in**	**9.299 ac-in**
	0.717 ac-ft	**0.775 ac-ft**
The greater of 1st in. of runoff or % imp. X depth	**8.607 ac-in**	**9.299 ac-in**
controls & is the volume to be treated for WQ	**0.717 ac-ft**	**0.775 ac-ft**

WQ Volume Treated in Exfil Trench	**8.607 ac-in**	**10.605 ac-in**
WQ Volume Treated in Lake	**0.000 ac-in**	**2.353 ac-in**
WQ Volume Treated in Dry Retention	**0.000 ac-in**	**3.234 ac-in**
Total WQ Volume Treated	**8.607 ac-in**	**16.192 ac-in**

The entirety of the site's water quality is taken care of in the existing over designed exfiltration trench, we have provided additional water quality measures in dry retention. This was done to lower our 100yr-3day flood stage below the existing building's FFE.

Table 7 & 8 & 9: Exfiltration Trench Calcs – Pre & Post

Exfiltration Trench Calcs (Pre-Development)		
Ds>Du	False	
W>2(Ds+Du)	False	
Use Standard Equation unless either statement is True. If True, then use Conservative Equation.		
Standard Equation $L=\frac{FS[\%WQ(Vwq)+Vadd]}{K[H2W+2H2Du-Du2+2H2Ds]+1.39x10\text{-}4(WDu)}$		
V_{wq}	8.607	ac-in
FS	2	
%WQ	50%	
V_{add}		
W	6	ft
K	3.35E-04	CFS/SF-ft head
H_2	4.50	ft
D_u	3.00	ft
D_s	1.00	ft
L	**417.97**	**ft**

Exfiltration Trench Calcs (Post-Development)		
Check for Governing Equation		
Ds>Du	False	
W>2(Ds+Du)	False	
Use Standard Equation unless either statement is True. If True, then use Conservative Equation.		
Standard Equation $L=\frac{FS[\%WQ(Vwq)+Vadd]}{K[H2W+2H2Du-Du2+2H2Ds]+1.39x10\text{-}4(WDu)}$		
V_{wq}	9.299	ac-in
FS	2	
%WQ	50%	
W	6	ft
K	3.35E-04	CFS/SF-ft head
H_2	4.50	ft
D_u	3.00	ft
D_s	1.00	ft
L	**451.57**	**ft**

Reverse Trench Calcs (Post-Development)		
Check for Governing Equation		
Ds>Du	False	
W>2(Ds+Du)	False	
Use Standard Equation unless either statement is True. If True, then use Conservative Equation.		
Reverse Standard Equation *V = L{K[H2W+2H2Du-Du2+2H2Ds]+1.39x10-4(W *V = FS[%WQ(Vwq)+Vadd]		
L	**515.00**	**ft**
W	6	ft
K	3.35E-04	CFS/SF-ft head
H_2	4.50	ft
D_u	3.00	ft
D_s	1.00	ft
***V**	**10.605**	**ac-in**
***V**	**0.8837**	**ac-ft**
FS	2	
%WQ	50%	

Table 10: Exfiltration Trench Calcs – Existing

Exfiltration Trench Design

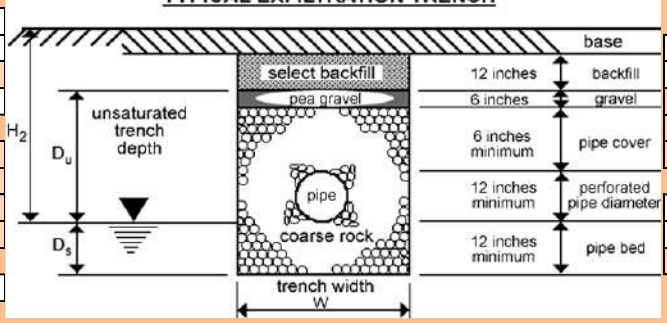
Trench Length=	2824.00 ft	ft	K=	3.35E-04	*Geotech Report*
Trench Width=	6.00 ft	ft	%WQ=	50%	
Trench Depth=	4.00 ft	ft	FS=	2	
Trench Volume=	67776	CF			

	NAVD
Lowest Surf. Elev. Above Trench=	
Lowest Rim Elev.=	6.00 ft
Top of Trench Elev.=	4.50 ft
Lowest Discharge Elev.=	

	Depth
H2=	4.50 ft
Du=	3.00 ft
WT=	1.50 ft
Ds=	1.00 ft

	NAVD
Bottom of Trench Elev.=	.50 ft

TYPICAL EXFILTRATION TRENCH



	Depth	
	6.00 in	=Base
	12.00 in	=Backfill
	6.00 in	=Pea Gravel
	3.50 ft	=Coarse Rock
	3.00 ft	=Pipe Cover
Pipe		
	18.00 in	=Pipe Diameter
	3.00 ft	=Pipe Inv. Elev.
	2.50 ft	=Pipe Bed Elev.

Trench Width (ft)= 6.00 ft

Table 11: Exfiltration Trench Calcs – Existing Trench to Remain

Exfiltration Trench Design

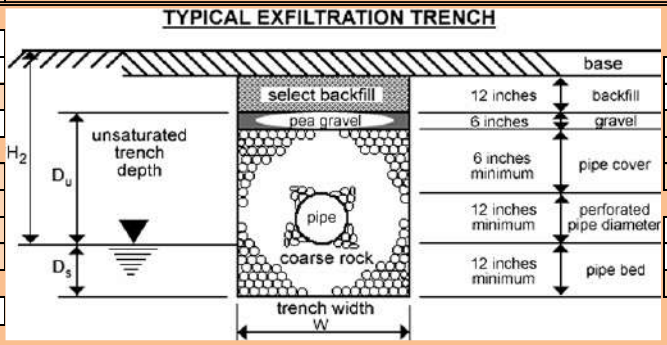
Trench Summary			**Trench Variables**		
Trench Length=	515.00 ft	ft	K=	3.35E-04	*Geotech Report*
Trench Width=	6.00 ft	ft	%WQ=	50%	*50% allowable reduction in %WQ per SFWMD*
Trench Depth=	4.00 ft	ft	FS=	2	
Trench Volume=	12360	CF			

	NAVD
Lowest Surf. Elev. Above Trench=	
Lowest Rim Elev.=	6.00 ft
Top of Trench Elev.=	4.50 ft
Lowest Discharge Elev.=	

	Depth
H2=	4.50 ft
Du=	3.00 ft
WT=	1.50 ft
Ds=	1.00 ft

	NAVD
Bottom of Trench Elev.=	.50 ft

TYPICAL EXFILTRATION TRENCH



	Depth	
	6.00 in	=Base
	12.00 in	=Backfill
	6.00 in	=Pea Gravel
	3.50 ft	=Coarse Rock
	3.25 ft	=Pipe Cover
Pipe		
	15.00 in	=Pipe Diameter
	.51 ft	=Pipe Inv. Elev.
	.01 ft	=Pipe Bed Elev.

Trench Width (ft)= 6.00 ft

Table 12: R-Tank Stage Storage Table

R-TANK SUBSURFACE STORAGE SYSTEM

R-TANK STAGE-STORAGE TABLE

R-Tank Module Size	HD Double	Elevations	
		Base Invert Elevation	1.25
Width of R-Tank	15.75 in	R-Tank Invert Elevation	1.50
Length of R-Tank	28.15 in	Top of R-Tank	4.32
Height of R-Tank	33.86 in	Top of Cover	5.32
Storage per R-Tank	8.25 cf	HS-20 Minimum Cover Elevation	5.99
		Maximum Cover Elevation	11.31
Total Number of R-Tanks	4,450	Stage Storage Increment	0.25
Unit Void Space	95%		
Base Thickness	3 in	Dead Storage	
Cover Thickness	12 in	Dead Storage Required	No
R-Tank Footprint	13,701.14 sq.ft.		
Excavation Footprint	15,019.00 sq.ft.		
		Stone Storage	
Total Volume Provided in R-Tank Only	36,705 cf	Use Stone Storage	Yes
Total Volume Provided in Stone	8,996 cf	Use Stone Base for Storage	Yes
Dead Storage	0 cf	Use Stone Cover for Storage	Yes
Total System Storage Volume	45,701 cf	Stone Void Ratio	40%

Elevation	Volume						
1.25	0.00						
1.50	1,501.90						
1.75	4,887.71						
2.00	8,273.51						
2.25	11,659.32						
2.50	15,045.13						
2.75	18,430.93						
3.00	21,816.74						
3.25	25,202.55						
3.50	28,588.35						
3.75	31,974.16						
4.00	35,359.97						
4.25	38,745.77						
4.50	40,775.17						
4.75	42,277.07						
5.00	43,778.97						
5.25	45,280.87						
5.32	45,701.40						

R-TANK FERGUSON WATERWORKS

(*Note: Volume values in table above are in cubic feet (ft^3) and have been converted into ac-ft below in Table 12)*

Table 13: Stage Storage – Existing Conditions

Stage Storage (Pre-Development)											
	Pond	Asphalt Road/Other Impervious	Concrete Parking	Retention Pond Top of Bank (L)	Retention 2 (V)	Retention 2 (L)	Retention 3 (V)	Retention 3 (L)	Green	Trench 1	Total
Area (AC)	0.12	1.70	0.13	0.11	0.00	0.03	0.08	0.15	1.37	n/a	3.69
Low Elev	-0.02	4.35	6.41	-0.02	1.68	1.68	0.68	0.72	2.50	0.50	
High Elev		7.26	6.57	5.80	6.05	6.05	7.12	7.12	6.50	4.50	
Stage Feet NAVD	Linear Storage ac-ft	Linear Storage ac-ft	Linear Storage ac-ft	Linear Storage ac-ft	Vertical Storage ac-ft	Linear Storage ac-ft	Vertical Storage ac-ft	Linear Storage ac-ft	Linear Storage ac-ft	on Storage ac-ft	Total Storage ac-ft
1.50	0.19	0.00	0.00	0.01	0.00	0.00	0.07	0.00	0.00	0.00	0.26
2.00	0.25	0.00	0.00	0.01	0.00	0.00	0.11	0.00	0.00	1.82	2.20
2.50	0.31	0.00	0.00	0.03	0.00	0.00	0.15	0.01	0.00	2.42	2.93
3.00	0.38	0.00	0.00	0.05	0.00	0.00	0.19	0.02	0.01	3.03	3.67
3.50	0.44	0.00	0.00	0.07	0.01	0.00	0.23	0.04	0.04	3.63	4.47
4.00	0.50	0.00	0.00	0.11	0.01	0.01	0.27	0.07	0.14	4.24	5.35
4.50	0.56	0.00	0.00	0.15	0.01	0.02	0.31	0.10	0.34	4.85	6.34
5.00	0.63	0.03	0.00	0.21	0.01	0.03	0.36	0.15	0.67	4.85	6.91
5.50	0.69	0.15	0.00	0.28	0.01	0.04	0.40	0.20	1.15	4.85	7.77
6.00	0.75	0.45	0.00	0.35	0.01	0.06	0.44	0.27	1.83	4.85	9.00
6.50	0.81	1.00	0.00	0.40	0.02	0.07	0.48	0.36	2.73	4.85	10.72
7.00	0.88	1.87	0.06	0.46	0.02	0.08	0.52	0.46	3.42	4.85	12.61
7.50	0.94	2.88	0.13	0.51	0.02	0.10	0.56	0.54	4.10	4.85	14.63

Table 14: Stage Storage – Proposed Conditions

Stage Storage (Post-Development)								
	Exist. Asphalt Road/Other Impervious	Proposed Building	Proposed Retention 1 (V)	Proposed Retention 1(L)	Raintank 1	Green	Trench 1	Total
Area (AC)	1.41	0.70	0.40	0.13		1.26	n/a	3.91
Low Elev	4.43	6.40	2.50	2.50	1.50	2.50	0.50	
High Elev	6.40		5.00	5.00	5.00	6.20	4.50	
Feet NAVD	Storage ac-ft	Storage ac-ft	Storage ac-ft	Storage ac-ft	Storage ac-ft	Storage ac-ft	Storage ac-ft	Storage ac-ft
2.50	0.00	0.00	0.00	0.00	0.18993365	0.00	0.38745	0.58
3.00	0.00	0.00	0.20	0.00	0.34538866	0.01	0.48431	1.04
3.50	0.00	0.00	0.40	0.01	0.50084343	0.05	0.58117	1.54
4.00	0.00	0.00	0.61	0.04	0.6562982	0.16	0.67803	2.13
4.50	0.00	0.00	0.81	0.08	0.81175321	0.37	0.77489	2.85
5.00	0.03	0.00	1.01	0.17	0.93606909	0.72	0.77489	3.64
5.50	0.22	0.00	1.21	0.23	1.00502685	1.24	0.77489	4.69
6.00	0.70	0.00	1.42	0.30	1.04916023	1.97	0.77489	6.22
6.50	1.53	0.00	1.62	0.36	1.04916023	2.71	0.77489	8.05
7.00	2.24	0.00	1.82	0.43	1.04916023	3.34	0.77489	9.65
7.50	2.94	0.00	2.02	0.50	1.04916023	3.97	0.77489	11.26

E. FLOOD ROUTING RESULTS

All flood routing result scenarios can be found in "Appendix B-F" for the 5 year - 24-hour, 10 year - 24-hour, 25 year-72 hour and 100 year - 72-hour storm events.

5-Year, 24-Hour = 7.50 Inches
10-Year, 24-Hour = 9.00 Inches
25-Year, 72-Hour = 13.50 Inches
100-Year, 72-Hour = 17.00 Inches

Table 15: Max Stage Design Criteria (ft)

Storm Events	Proposed Development		
100yr. - 3day	*6.18 ft*	*Exist. Building FFE=6.40 ft*	☑
25yr. - 3day	*5.72 ft*	*N/A*	☑
10yr. – 1day	*4.70 ft*	*Existing Crown of Road = 6.00 ft*	☑
5yr.-1day	*4.28 ft*	*Lowest Storm Rim in Asphalt = 5.35 ft*	☑

F. Flood Protection RESULTS

FEMA Flood Zone	*Flood Zone X*
100- yr Flood BC 2060	*7.50 ft*
Design 100yr 3-day	*6.18 ft*

Building will have flood protection up to 7.50 ft from 6.95 ft, since building is a commercial storage facility and uninhabitable.

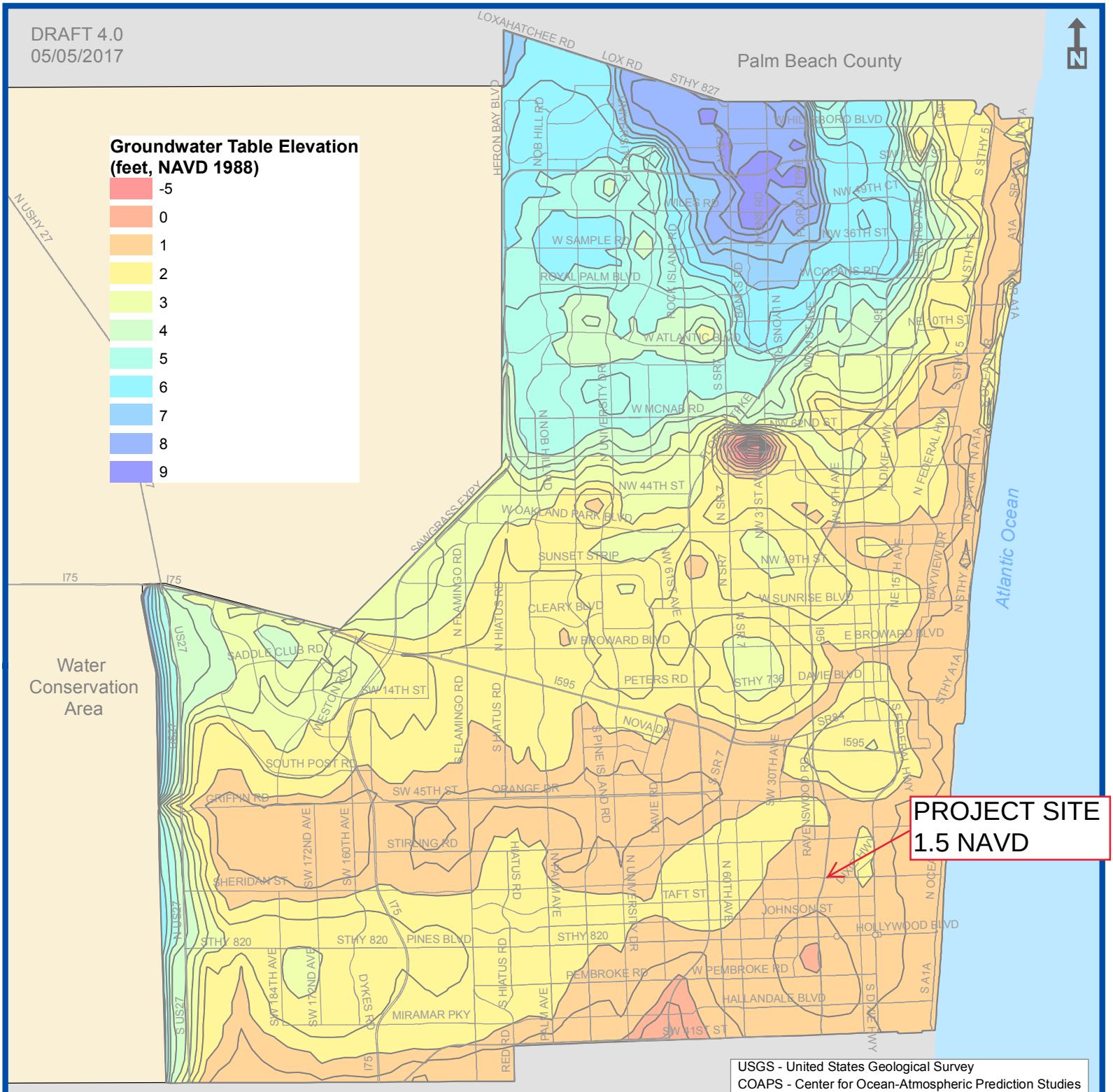
Proposed FFE = 6.95 ft NAVD > ALL OF THE ABOVE

APPENDIX A

Water Table Map
Rainfall Maps
Flood Maps

Future Conditions Average Wet Season Groundwater Elevation Map

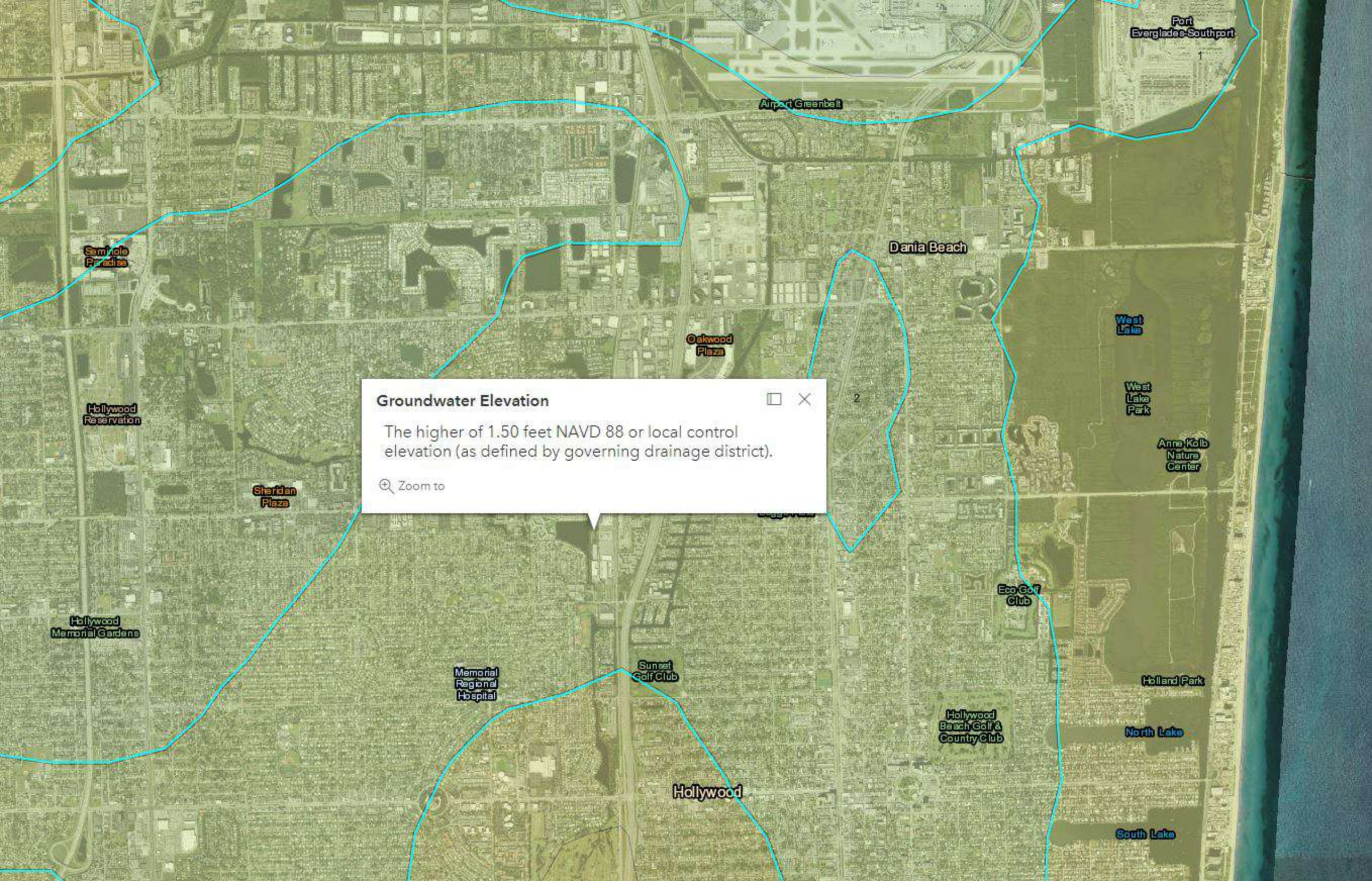
DRAFT 4.0
05/05/2017



USGS - United States Geological Survey
COAPS - Center for Ocean-Atmospheric Prediction Studies
CCSM - Community Climate System Model
USACE - United States Army Corps of Engineers
NRC3 - National Research Council Curve 3
NAVD 88 - 1988 North American Vertical Datum

Division Name: Environmental Planning and Community Resilience
Department Name: Environmental Protection and Growth Management

The map represents the expected future average wet season groundwater elevations for Broward County. The average is based on model outputs for the months of May through October over the period of 2060-2069. The models used are The Broward County Inundation Model and the Broward County Northern Variable Density model, both developed by the USGS and MODFLOW based. The future conditions that are modified in the models are both precipitation and sea level rise. The future precipitation pattern is based on the COAPS downscaled CCSM global model and represents an increase of 9.1% rainfall from the base case of 1990-1999 (53.4 in/yr to 58.2 in/yr). Sea level rise was based on the USACE NRC3 curve which equates to an increase of 26.6 to 33.9 inches to the future period from 1992 levels. Final results are presented in NAVD 88.


Groundwater Elevation
The higher of 1.50 feet NAVD 88 or local control elevation (as defined by governing drainage district).
Zoom to
Port Everglades-Southport
Airport Greenbelt
Dania Beach
Seminole Paradise
Oakwood Plaza
West Lake
West Lake Park
Anne Kolb Nature Center
Hollywood Reservation
Sheridan Plaza
Hollywood Memorial Gardens
Memorial Regional Hospital
Sunset Golf Club
Hollywood
Eco Golf Club
Holland Park
Hollywood Beach Golf & Country Club
North Lake
South Lake

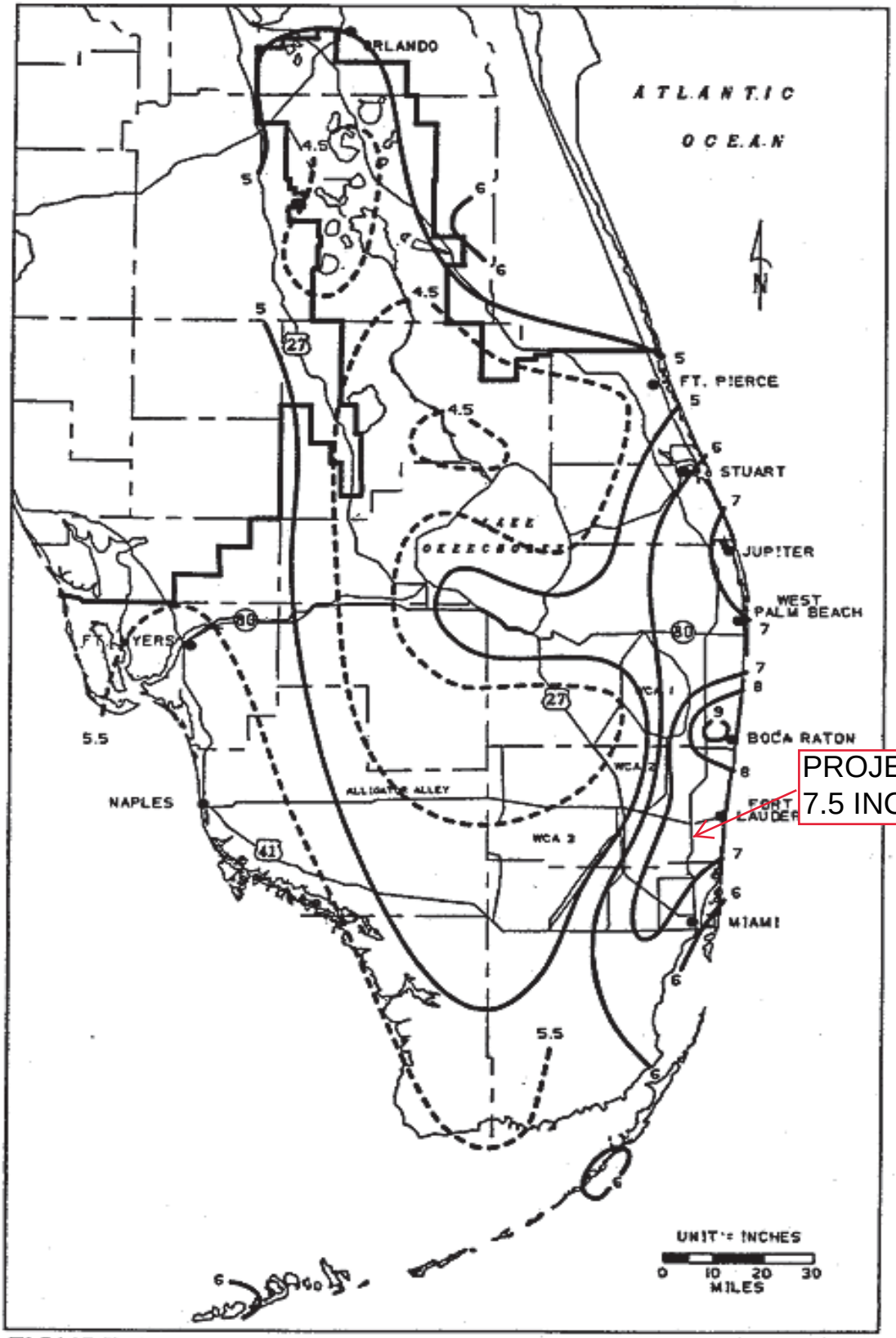


FIGURE C-3. 1-DAY RAINFALL: 5-YEAR RETURN PERIOD

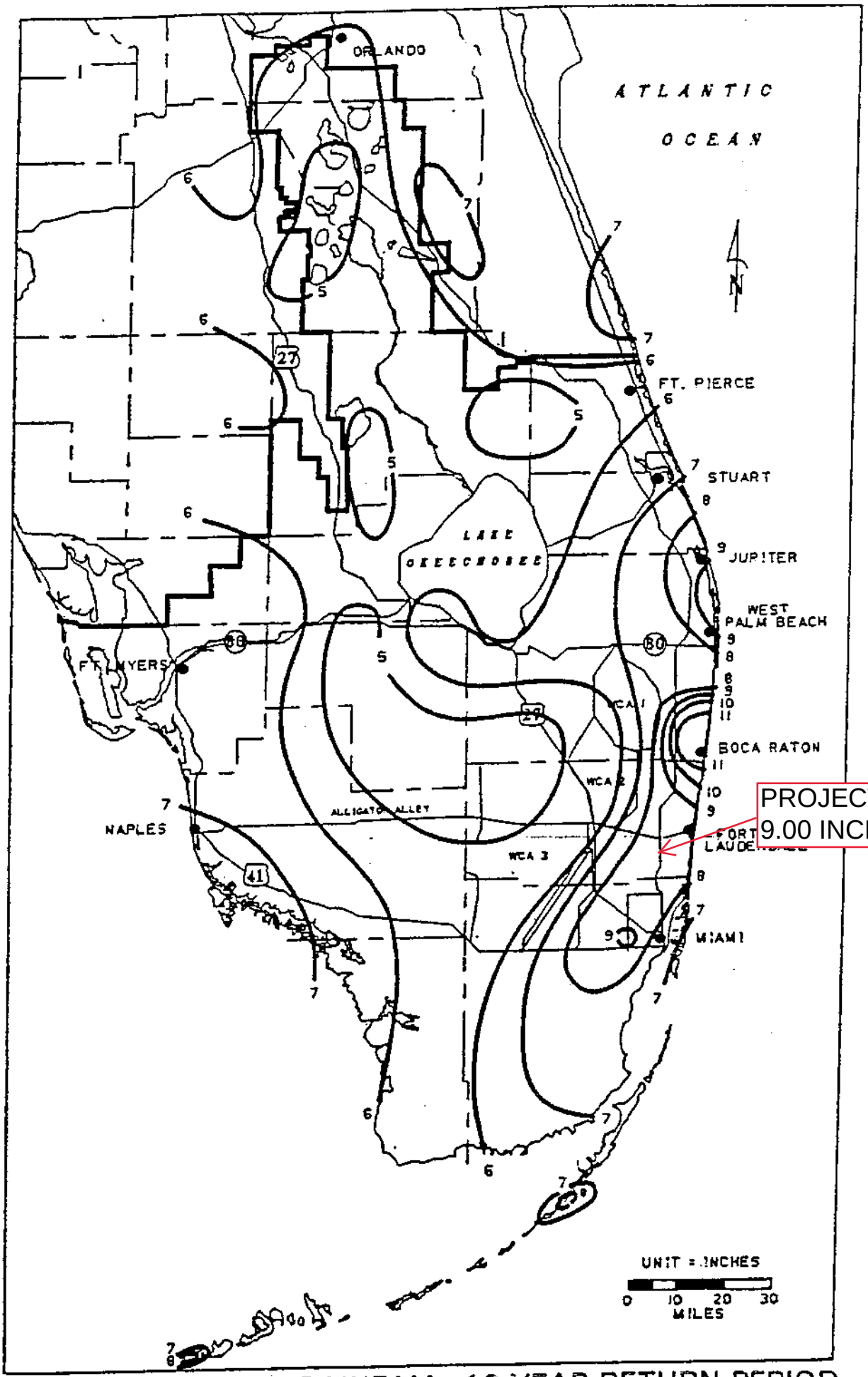


FIGURE C-4. 1-DAY RAINFALL: 10-YEAR RETURN PERIOD

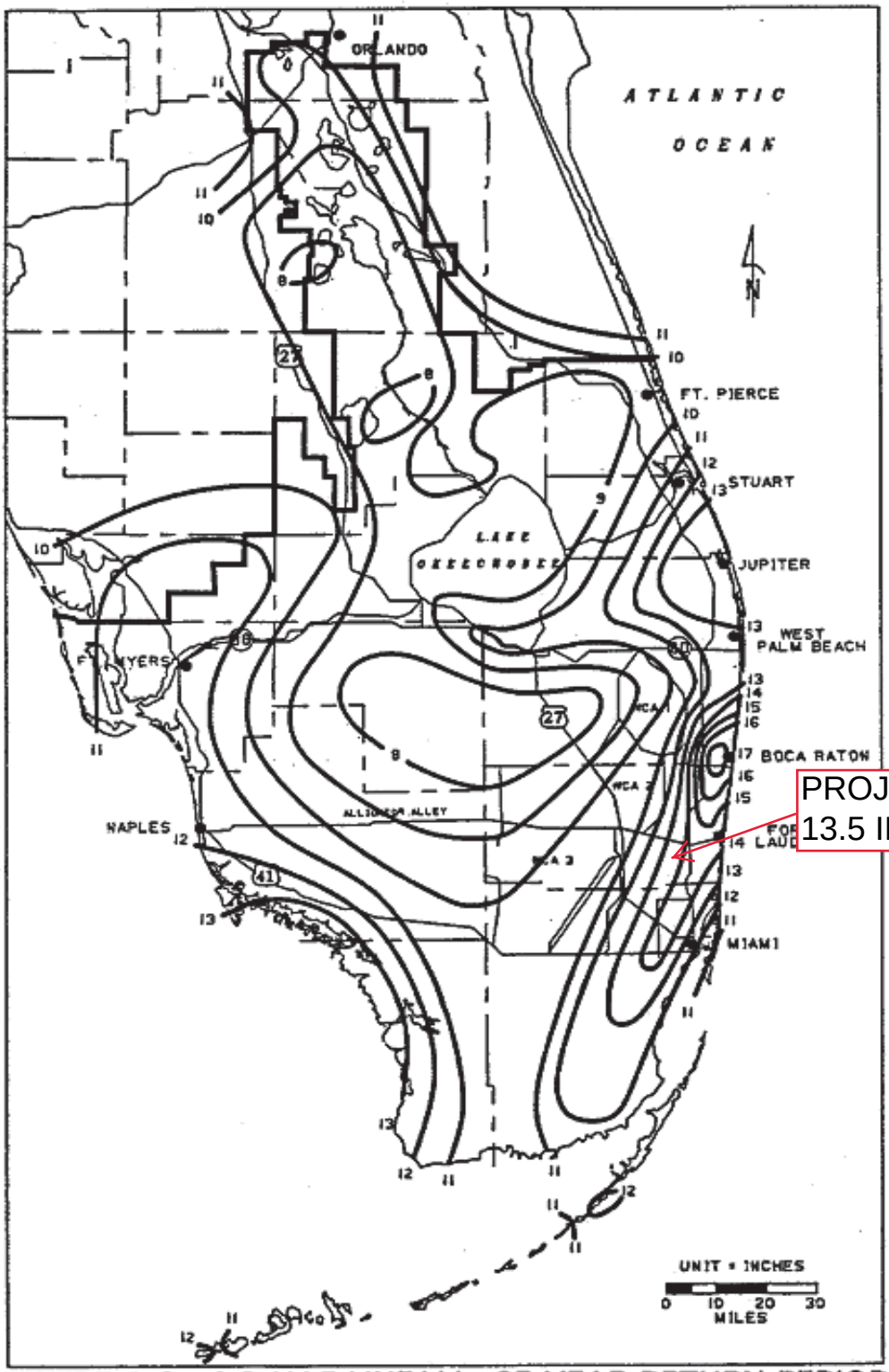


FIGURE C-8. 3-DAY RAINFALL: 25-YEAR RETURN PERIOD

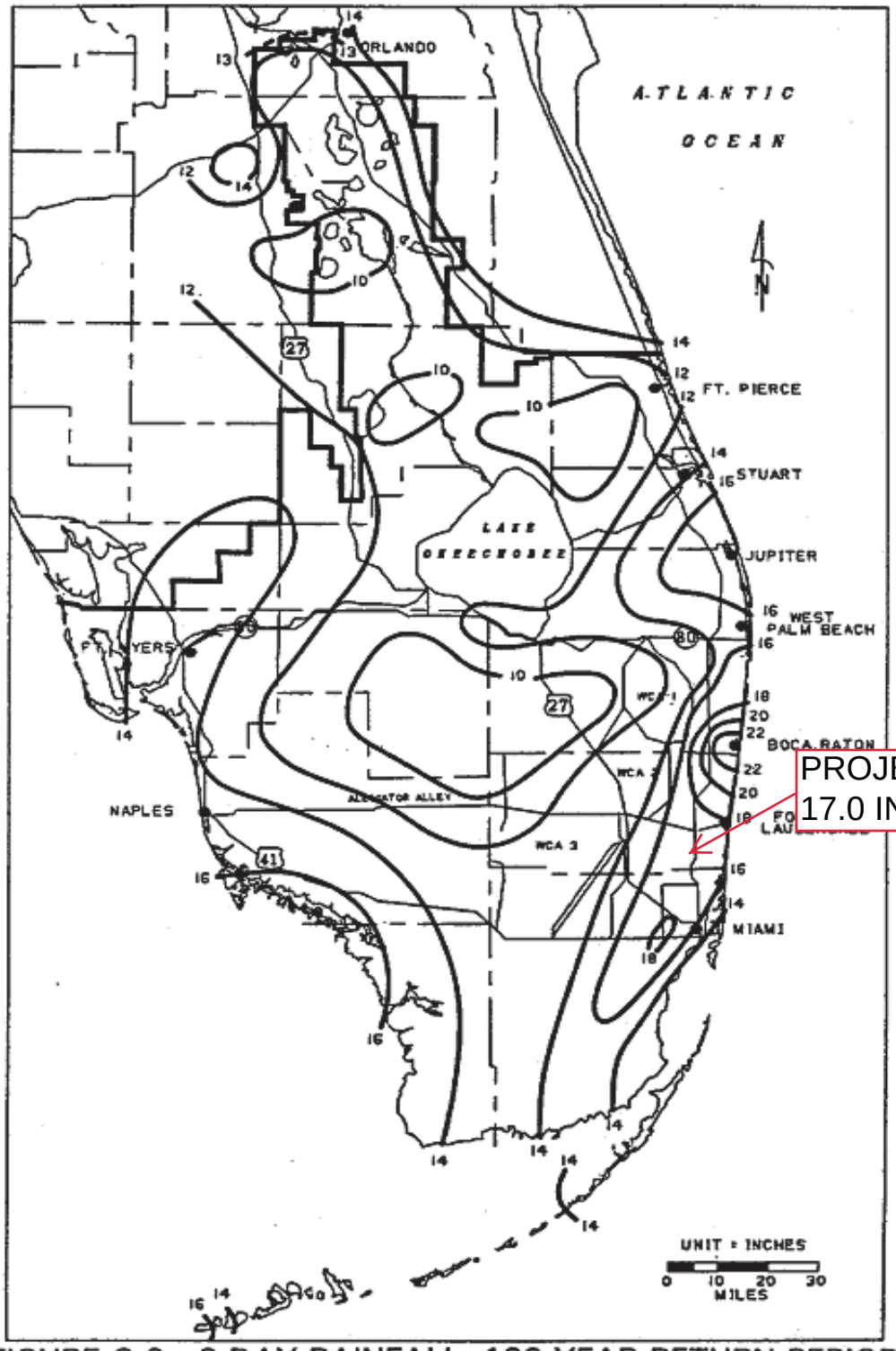
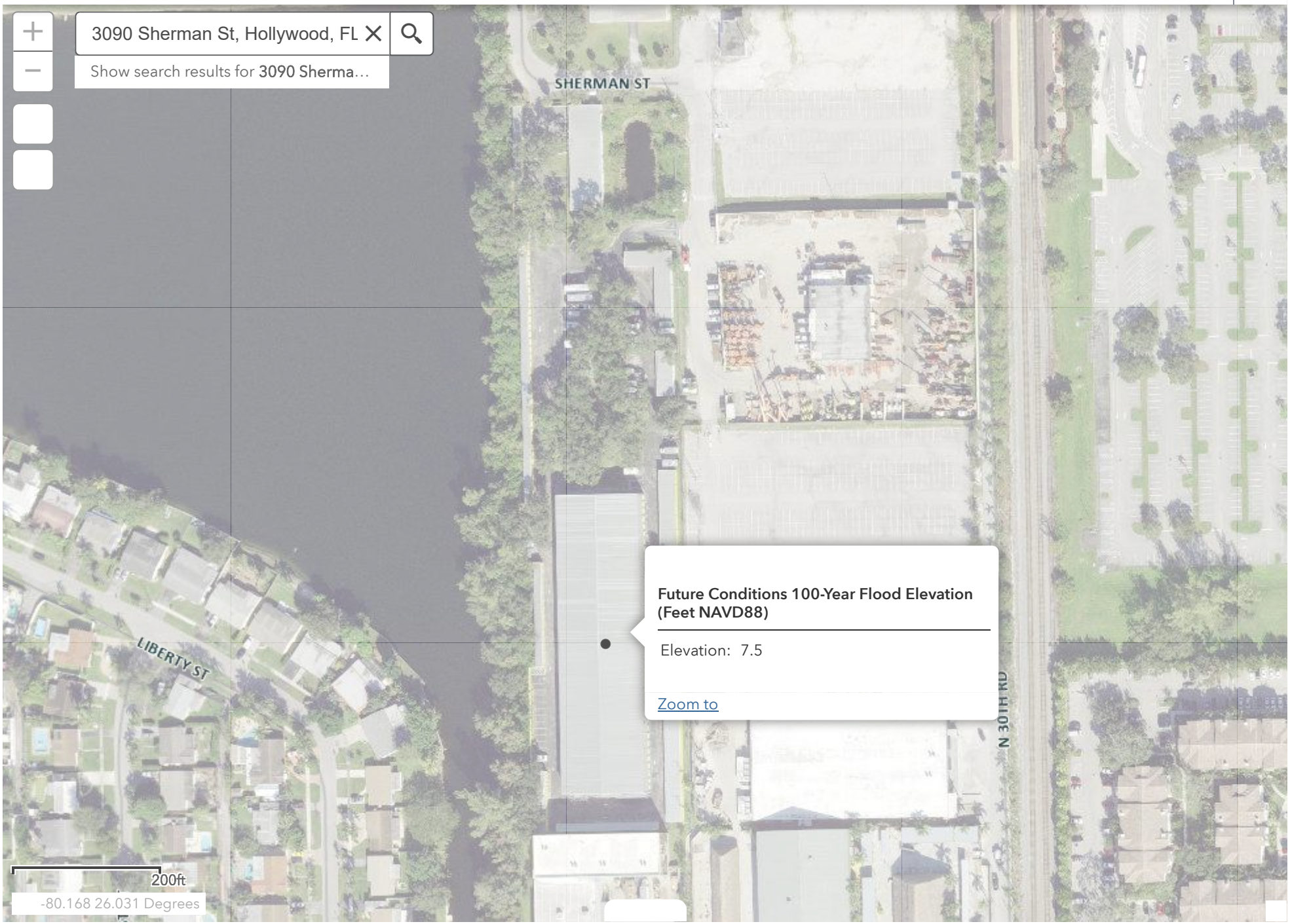


FIGURE C-9. 3-DAY RAINFALL: 100-YEAR RETURN PERIOD

Future Conditions 100-Year Flood Map 2060



APPENDIX B

Cascade
Existing Conditions

Project Name: SafeGuard Self Storage Existing Conditions
Reviewer: Ross Engineering
Project Number:
  Period Begin: Jan 01, 2000;0000 hr End: Jan 02, 2000;0000 hr Duration: 24 hr
  Time Step: 0.2 hr, Iterations: 10

Basin 1: Safeguard Self Storage

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 24 hr
  Design Frequency: 5 year
  1 Day Rainfall: 7.5 inches
  Area: 5.2505 acres
  Ground Storage: 1.29 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
1.50	0.26
2.00	1.02
2.50	1.36
3.00	1.72
3.50	2.12
4.00	2.61
4.50	3.21
5.00	3.78
5.50	4.64
6.00	5.87
6.50	7.59
7.00	9.48
7.50	11.50

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Safeguard Self	4.27	24.00	1.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Safeguard Self	2.67	0.00	0.00	0.26	2.93	0.00

Project Name: SafeGuard Self Storage Existing Conditions
Reviewer: Ross Engineering
Project Number:
  Period Begin: Jan 01, 2000;0000 hr End: Jan 02, 2000;0000 hr Duration: 24 hr
  Time Step: 0.2 hr, Iterations: 10

Basin 1: Safeguard Self Storage

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 24 hr
  Design Frequency: 10 year
  1 Day Rainfall: 9 inches
  Area: 5.2505 acres
  Ground Storage: 1.29 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
1.50	0.26
2.00	1.02
2.50	1.36
3.00	1.72
3.50	2.12
4.00	2.61
4.50	3.21
5.00	3.78
5.50	4.64
6.00	5.87
6.50	7.59
7.00	9.48
7.50	11.50

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Safeguard Self	4.81	24.00	1.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Safeguard Self	3.31	0.00	0.00	0.26	3.57	0.00

Project Name: SafeGuard Self Storage Existing Conditions
Reviewer: Ross Engineering
Project Number:
  Period Begin: Jan 01, 2000;0000 hr End: Jan 04, 2000;0000 hr Duration: 72 hr
  Time Step: 0.2 hr, Iterations: 10

Basin 1: Safeguard Self Storage

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 3day
  Design Frequency: 25 year
  3 Day Rainfall: 13.5 inches
  Area: 5.2505 acres
  Ground Storage: 1.29 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
1.50	0.26
2.00	1.02
2.50	1.36
3.00	1.72
3.50	2.12
4.00	2.61
4.50	3.21
5.00	3.78
5.50	4.64
6.00	5.87
6.50	7.59
7.00	9.48
7.50	11.50

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Safeguard Self	5.85	72.00	1.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Safeguard Self	5.25	0.00	0.00	0.26	5.51	0.00

Project Name: SafeGuard Self Storage Existing Conditions
Reviewer: Ross Engineering
Project Number:
  Period Begin: Jan 01, 2000;0000 hr End: Jan 04, 2000;0000 hr Duration: 72 hr
  Time Step: 0.2 hr, Iterations: 10

Basin 1: Safeguard Self Storage

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 3day
  Design Frequency: 100 year
  3 Day Rainfall: 17 inches
  Area: 5.2505 acres
  Ground Storage: 1.29 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
1.50	0.26
2.00	1.02
2.50	1.36
3.00	1.72
3.50	2.12
4.00	2.61
4.50	3.21
5.00	3.78
5.50	4.64
6.00	5.87
6.50	7.59
7.00	9.48
7.50	11.50

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Safeguard Self	6.34	72.00	1.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Safeguard Self	6.77	0.00	0.00	0.26	7.03	0.00

APPENDIX C

Cascade
Proposed Development

Project Name: SafeGuard Self Storage - Post Design
Reviewer: Ross Engineering
Project Number:
  Period Begin: Jan 01, 2000;0000 hr End: Jan 04, 2000;0000 hr Duration: 72 hr
  Time Step: 0.2 hr, Iterations: 10

Basin 1: Safeguard Self Storage

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 24 hr
  Design Frequency: 5 year
  1 Day Rainfall: 7.5 inches
  Area: 5.2505 acres
  Ground Storage: 1.05 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
1.50	0.00
2.00	0.33
2.50	0.58
3.00	1.04
3.50	1.54
4.00	2.13
4.50	2.85
5.00	3.64
5.50	4.69
6.00	6.22
6.50	8.05
7.00	9.65
7.50	11.26

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Safeguard Self	4.46	29.40	1.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Safeguard Self	2.79	0.00	0.00	0.00	2.79	0.00

Project Name: SafeGuard Self Storage - Post Design
Reviewer: Ross Engineering
Project Number:
  Period Begin: Jan 01, 2000;0000 hr End: Jan 04, 2000;0000 hr Duration: 72 hr
  Time Step: 0.2 hr, Iterations: 10

Basin 1: Safeguard Self Storage

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 24 hr
  Design Frequency: 10 year
  1 Day Rainfall: 9 inches
  Area: 5.2505 acres
  Ground Storage: 1.05 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
1.50	0.00
2.00	0.33
2.50	0.58
3.00	1.04
3.50	1.54
4.00	2.13
4.50	2.85
5.00	3.64
5.50	4.69
6.00	6.22
6.50	8.05
7.00	9.65
7.50	11.26

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Safeguard Self	4.87	29.60	1.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Safeguard Self	3.43	0.00	0.00	0.00	3.43	0.00

Project Name: SafeGuard Self Storage - Post Design
Reviewer: Ross Engineering
Project Number:
  Period Begin: Jan 01, 2000;0000 hr End: Jan 04, 2000;0000 hr Duration: 72 hr
  Time Step: 0.2 hr, Iterations: 10

Basin 1: Safeguard Self Storage

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 3day
  Design Frequency: 25 year
  3 Day Rainfall: 13.5 inches
  Area: 5.2505 acres
  Ground Storage: 1.05 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
1.50	0.00
2.00	0.33
2.50	0.58
3.00	1.04
3.50	1.54
4.00	2.13
4.50	2.85
5.00	3.64
5.50	4.69
6.00	6.22
6.50	8.05
7.00	9.65
7.50	11.26

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Safeguard Self	5.72	72.00	1.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Safeguard Self	5.36	0.00	0.00	0.00	5.36	0.00

Project Name: SafeGuard Self Storage - Post Design
Reviewer: Ross Engineering
Project Number:
  Period Begin: Jan 01, 2000;0000 hr End: Jan 04, 2000;0000 hr Duration: 72 hr
  Time Step: 0.2 hr, Iterations: 10

Basin 1: Safeguard Self Storage

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 3day
  Design Frequency: 100 year
  3 Day Rainfall: 17 inches
  Area: 5.2505 acres
  Ground Storage: 1.05 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
1.50	0.00
2.00	0.33
2.50	0.58
3.00	1.04
3.50	1.54
4.00	2.13
4.50	2.85
5.00	3.64
5.50	4.69
6.00	6.22
6.50	8.05
7.00	9.65
7.50	11.26

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Safeguard Self	6.18	72.00	1.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Safeguard Self	6.88	0.00	0.00	0.00	6.88	0.00

APPENDIX D

Geotechnical Report

UNIVERSAL ENGINEERING SCIENCES

Florida's Leading Engineering Source

Geotechnical Exploration Report

3090 SHERIDAN STREET
Hollywood, Florida

May 12, 2022
UES Project No.: 0630.2200058.0000

Prepared for: Mike Carter Construction, Inc.

A Universal Engineering Sciences Company

OFFICES THROUGHOUT FLORIDA
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Geotechnical Engineering | Construction Materials Testing and Inspections
Building Code Compliance | Environmental, Health & Safety | Facilities Consulting

LOCATIONS

Atlanta, GA	Hagerstown, MD	Pensacola, FL
Buford, GA	Irvine, CA	Port St. Lucie, FL
Chantilly, VA	Jacksonville, FL	Reno, NV
Charlotte, NC	Kennesaw, GA	Rockledge, FL
Clewiston, FL	Las Vegas, NV	Sarasota, FL
Daytona, FL	Miami, FL	St. Petersburg, FL
Delray Beach, FL	Ocala, FL	Tampa, FL
Douglasville, GA	Orlando, FL	Tifton, GA
Fort Myers, FL	Palm Coast, FL	West Palm Beach, FL
Fort Pierce, FL	Panama City, FL	
Gainesville, FL	Pelham, AL	

May 12, 2022

Mike Adams
Mike Carter Construction, Inc.
435 12th Street West
Bradenton, FL 34205
Phone: 941-745-1700
Email: KristiKramer@MCCONST.com

RE: Geotechnical Exploration
3090 Sheridan Street
Hollywood, FL 33201
UES Project No.: 0630.2200058.0000

Dear Mr. Adams:

In accordance with your authorization, Universal Engineering Sciences (UES) has completed the subsurface exploration and geotechnical engineering evaluation for the above referenced project in accordance with the signed geotechnical and engineering service agreement for this project. The scope of UES's services was planned in conjunction with and authorized by you.

The purpose of UES's subsurface exploration was to classify the nature of the subsurface soils and general geomorphic conditions and to evaluate their impact upon the proposed construction. This report contains the results and UES's engineering interpretation of subsurface conditions of the site with respect to the project characteristics as described to UES including recommendations for foundation design, hydrogeological conditions, and site preparation procedures.

EXECUTIVE SUMMARY

The subject property is located at 3090 Sheridan Street in Hollywood, Florida. It is UES's understanding that this project is to consist of the construction of a 3-story CMU building approximately ±34,135 ft^2. A preliminary design site plan prepared by Studio x2 Architects, PA, dated February 8, 2022, was provided by the client. The site is occupied by multiple commercial buildings and associated paved parking lots that are to be demolished for the proposed construction.

Structural details were provided by the client. UES understands the proposed construction will be constructed using reinforced concrete, masonry, and structural steel construction. UES was provided structural loads via email on April 29th, 2022 by Kristi Kramer, from Mike Carter Construction, Inc. Maximum anticipated column and wall loads are on the order of **84 kips** and **4 klf**, respectively.

If conditions vary from those indicated above, UES should be requested to review the data to see if the recommendations contained herein are still valid.

The soils at the explored locations generally consisted of 1.5” to 2” of asphalt, with the exception of the location of B06 where a 5” layer of concrete was encountered, atop loose to very dense, fine to medium grained sand with variable amounts of limestone fragments from the ground surface to approximate depths of 6 to 8 feet below ground surface (BGS). The following layer consisted of weathered limestone with some sand to approximately 13 to 18 feet BGS. The borings then showed intermittent layers of medium dense to dense sand and sand with varying amounts of limestone fragments to the termination depth of the borings at 20 feet below ground surface (BGS).

Groundwater at the time of testing (April 2022) was encountered at an approximate depth of 5’3” to 7’ BGS.

Based on the subsoil conditions and the anticipated foundation loads, it is UES’s professional opinion that the proposed construction can be supported on a conventional shallow foundation system bearing on properly compacted existing soils or on properly compacted engineered fill. A net allowable soil bearing pressure of **3,500 pounds per square foot (psf)** may be used for the design of shallow isolated spread footings and/or continuous strip footings. Design and installation criteria have been provided herein.

UES appreciates the opportunity to be of service to you on this project and look forward to a continued association with **Mike Carter Construction, Inc.** Please, contact the undersigned if you have any questions or comments, or if UES may further assist you as your plans proceed.

Respectfully Submitted,
UNIVERSAL ENGINEERING SCIENCES
Registry No. 4930

David Lopez, E.I.
Staff Engineer

Estela G. León Aguilar, M.S., P.E.
Geotechnical Department Manager
Professional Engineer #83307
State of Florida

This item has been digitally signed and sealed by [Estela G. León Aguilar] on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

TABLE OF CONTENTS

Appendices

1.0 INTRODUCTION

1.1 Project Description

The subject property is located at 3090 Sheridan Street in Hollywood, Florida. **Figure 1** shows the site location plan. It is UES's understanding that this project is to consist of the construction of a 3-story CMU building approximately ±34,135 ft^2. A preliminary design site plan prepared by Studio x2 Architects, PA, dated February 8, 2022, was provided by the client. **Figure 2** shows the preliminary site plan. The site is occupied by multiple commercial buildings and associated paved parking lots that are to be demolished for the proposed construction.

Structural details were provided by the client. UES understands the proposed construction will be constructed using reinforced concrete, masonry, and structural steel construction. UES was provided structural loads via email on April 29th, 2022 by Kristi Kramer, from Mike Carter Construction, Inc. Maximum anticipated column and wall loads are on the order of **84 kips** and **4 klf**, respectively.

The recommendations provided in this report are based upon the information noted above. If project information differs significantly, please inform UES so that UES may review and revise the recommendations, if necessary, with respect to any modifications.

1.2 Purpose

The primary purpose of the geotechnical exploration was to evaluate the general type and condition of the subsurface soil materials underlying the project site, to provide professional opinions with respect to site preparation, hydrogeological conditions, and recommend foundation design parameters for the proposed structure.

1.3 Scope of Services

The primary objectives of the geotechnical exploration were to collect subsurface data at the proposed project site, summarize test results, and discuss any apparent site conditions that may have geotechnical significance for building construction. The following are provided within this report:

1. Soil boring logs depicting the subsurface soil conditions encountered during the field exploration.

2. A review of each soil sample obtained during the field exploration by the geotechnical engineer.

3. Analysis of the existing soil conditions found during the exploration with the respect to foundation support.

3090 Sheridan Street
Hollywood, FL
UES Project No.: 0630.2200058.0000

Figure 1 – Site Location Plan