

W.K. (Trey) Hoffman, Chairman  
Anne-Marie McMichael, Vice Chair  
Jarrad Bourger, Secretary  
Jim Autenreith



Nathan Carroll  
Brad Jones  
Jerry Kent  
Lucian Bukowski, Alternate

**Notice is Hereby Given of a Regular Meeting of the Planning and Zoning Commission of Spring Valley, Texas, 1025 Campbell Road, Spring Valley Village, Texas, in the Council Chambers, May 12, 2026, beginning at 6:30 PM. For the Purpose of Considering and Acting upon the Following Items of Business:**

The meeting agenda and agenda packet are posted online at [www.springvalleytx.com](http://www.springvalleytx.com).

The video link to this meeting is <https://us02web.zoom.us/j/84548830334>

The public toll-free dial-in numbers to participate in the telephonic meeting are 1-346-248-7799 (Houston), 1-253-215-8782 (US), and 1-301-715-8592 (US); enter the Meeting ID: 845 4883 0334 and #.

The public will be permitted to offer public comments as provided by the agenda and as permitted by the presiding officer during the meeting.

An audio recording of the meeting will be made and will be available to the public in accordance with the Open Meetings Act upon written request.

**1. CALL THE ROLL AND ANNOUNCE A QUORUM IS PRESENT**

**2. APPROVAL OF MEETING MINUTES**

2.1 Approval of Meeting Minutes for Regular Meeting of the City Council on April 14, 2026.

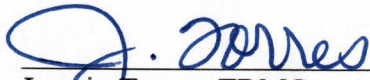
**3. NEW BUSINESS**

3.1 **DISCUSSION CONCERNING:** A proposed Area Development concerning property located at 1045 Bingle (BWPADD)

**4. ADJOURNMENT**

I certify that a copy of the May 12, 2026, agenda of items to be considered was posted on or before the 6th day of May 2026, at 6:00 p.m. pursuant to the Open Meetings Act, Chapter 551 of the Local Government Code.

Attest:

  
\_\_\_\_\_  
Jasmin Torres, TRMC  
City Secretary



In compliance with the Americans with Disabilities Act, this facility is wheelchair accessible and accessible parking spaces are available. To better serve attendees, requests for accommodations or interpretive services should be made 48 hours prior to this meeting. Please contact the City Secretary's office at 713-465-8308, Fax 713-461-7969, or [Email Jasmin Torres](mailto:Jasmin.Torres@springvalleyvillage.com) for further information.

Planning & Zoning Commission Meeting Minutes  
City of Spring Valley Village  
Tuesday, April 14, 2026

**1. The Planning & Zoning Commission meeting was called to order by Chairman Trey Hoffman at 6:30 p.m. in the Council Chambers of City Hall, 1025 Campbell Road, Houston, Texas.**

Planning & Zoning Members present at City Hall:

- Trey Hoffman, Chairman
- Brad Jones, member
- Anne-Marie McMichael, Vice Chair
- Jerry Kent, member
- Jarrad Bourger, secretary

*A quorum was present.*

City Officials present:

- Jasmin Torres, City Secretary
- Philip J. Boedeker, City Attorney
- Jose Gomez, Development Services Manager

**2. Approval of meeting minutes for the regular Planning and Zoning meeting on February 10, 2026**

Brad Jones made the motion to approve the minutes. Anne-Marie McMichael seconded the motion. The motion carried unanimously.

### **3. NEW BUSINESS**

**3.1 CONDUCT A PUBLIC HEARING CONCERNING:** AN ORDINANCE OF THE CITY OF SPRING VALLEY VILLAGE, TEXAS, AMENDING CHAPTER 9, SUBDIVISIONS, OF THE CODE OF ORDINANCES, BY AMENDING ARTICLE 9.116 TO ADD DELEGATION OF AUTHORITY RELATING TO THE REVIEW AND APPROVAL OF PLATS; PROVIDING FOR THE INCORPORATION OF PREAMBLE; PROVIDING A PENALTY OF AN AMOUNT NOT TO EXCEED \$2,000 FOR EACH DAY OF VIOLATION OF ANY PROVISION HEREOF; AND

PROVIDING A REPEALER CLAUSE, A SEVERABILITY CLAUSE, A SAVINGS CLAUSE, AND AN EFFECTIVE DATE.

Jose Gomez presented proposed amendments to Chapter 9. The public hearing was opened at 6:39 p.m. and closed at 6:40 p.m. with no public comment.

**3.2 CONSIDERATION AND POSSIBLE ACTION CONCERNING:** AN ORDINANCE OF THE CITY OF SPRING VALLEY VILLAGE, TEXAS, AMENDING CHAPTER 9, SUBDIVISIONS, OF THE CODE OF ORDINANCES, BY AMENDING ARTICLE 9.116 TO ADD DELEGATION OF AUTHORITY RELATING TO THE REVIEW AND APPROVAL OF PLATS; PROVIDING FOR THE INCORPORATION OF PREAMBLE; PROVIDING A PENALTY OF AN AMOUNT NOT TO EXCEED \$2,000 FOR EACH DAY OF VIOLATION OF ANY PROVISION HEREOF; AND PROVIDING A REPEALER CLAUSE, A SEVERABILITY CLAUSE, A SAVINGS CLAUSE, AND AN EFFECTIVE DATE.

Jerry Kent made the motion to approve. Brad Jones seconded the motion. The motion carried unanimously.

**3.3 CONDUCT A PUBLIC HEARING CONCERNING:** AN ORDINANCE OF THE CITY OF SPRING VALLEY VILLAGE, TEXAS, PROVIDING FOR THE AMENDMENT OF SECTION 11:01.05. PERMITTED LOCATIONS TO PROVIDE EXCEPTIONS PROVISIONS TO SECTION 11 FENCES, OF CHAPTER 12, PLANNING AND ZONING; PROVIDING FOR SEVERABILITY; AND PROVIDING A PENALTY IN AN AMOUNT NOT TO EXCEED \$2,000.00 PER DAY, WITH EACH DAY CONSTITUTING A NEW VIOLATION.

Jose Gomez presented proposed amendments. Public hearing was opened at 6:41 p.m. and closed at 6:43 p.m. with no public comment.

**3.4 CONSIDERATION AND POSSIBLE ACTION CONCERNING:** AN ORDINANCE OF THE CITY OF SPRING VALLEY VILLAGE, TEXAS, PROVIDING FOR THE AMENDMENT OF SECTION 11:01.05. PERMITTED LOCATIONS TO PROVIDE EXCEPTIONS PROVISIONS TO SECTION 11 FENCES, OF CHAPTER 12, PLANNING AND ZONING; PROVIDING FOR SEVERABILITY; AND PROVIDING A PENALTY IN AN AMOUNT NOT TO EXCEED \$2,000.00 PER DAY, WITH EACH DAY CONSTITUTING A NEW VIOLATION.

The Commission discussed proposed amendments to Section 11:01.05 regarding fencing exceptions for corner lots on major thoroughfares. The Commission developed an

amendment to the proposed ordinance stating that the fence amendment should be updated to include the requirements of only including homes on corner lots parallel and immediately adjacent to a major thoroughfare (as defined by city ordinance), provided the fence does not violate the sight triangle, and is no closer than 10 feet from the entry street right-of-way line.

Jerry Kent made the motion to approve. Anne-Marie McMichael seconded the motion. The motion carried unanimously.

**3.5 CONSIDERATION AND POSSIBLE ACTION CONCERNING: AN ORDINANCE OF THE CITY OF SPRING VALLEY VILLAGE, TEXAS PROVIDING FOR THE REPEAL AND REPLACEMENT OF ARTICLE 3.1000, URBAN FOREST PRESERVATION AND PROTECTION, CHAPTER 3, BUILDINGS & CONSTRUCTION, OF THE CITY’S CODE OF ORDINANCES; PROVIDING FOR A TREE FUND; AND PROVIDING FOR A PENALTY PER DAY WITH EACH DAY CONSTITUTING A NEW VIOLATION.**

The Commission conducted a final review of the comprehensive rewrite of Chapter 3, Article 3.1 (Urban Forest Preservation and Protection), developed over multiple meetings. Chairman Hoffman reviewed outstanding edits from prior meeting notes and the Commission worked through final language refinements. The Chairman recommended the city communicate these changes to residents via newsletter or social media.

Brad Jones made the motion to approve the amended tree ordinance as edited and forward to City Council. Jarrad Bourger seconded the motion. The motion carried unanimously.

**4. ADJOURNMENT**

Jerry Kent made a motion to adjourn. Anne-Marie McMichael seconded the motion. The motion carried unanimously. The meeting was adjourned at 8:01 p.m.

Signed: \_\_\_\_\_

Trey Hoffman, Chairman

Attest: \_\_\_\_\_

Jarrad Bourger, Secretary



## Spring Valley Village Planning and Zoning Commission Agenda Item Data Sheet

<b>MEETING DATE:</b>	May 12, 2026
<b>SUBMITTING STAFF:</b>	Jose Gomez, Development Services Manager
<b>SUBJECT:</b>	<b>DISCUSSION CONCERNING:</b> A proposed Area Development concerning property located at 1045 Bingle (BWPADD)

### **BACKGROUND:**

Identity Architects is presenting a preliminary conceptual mixed-use development for discussion with the Planning & Zoning Commission within the Bingle West Planned Area Development (BWPADD) located at 1045 Bingle Road. This preliminary discussion is intended to provide an overview of the conceptual development and allow for initial feedback regarding potential future amendments to the existing BWPADD ordinance requirements.

The conceptual development currently being discussed includes a proposed two-story mixed-use structure approximately 45 feet in height that may incorporate retail, restaurant, and office uses. Preliminary concepts presented by Identity Architects also include monument signage at proposed entry locations, shared parking arrangements, and primary site access from Bingle Road. Discussions have also included the potential use of adjacent property areas associated with parking and site circulation.

The surrounding uses identified as part of the preliminary compatibility discussion include the Dad's Club Aquatics Center and Grace Chapel Chinese Church Specific Use Permit properties, the adjacent Dolphins Cove Planned Area Development, and nearby City-owned property. Preliminary buffering and screening concepts discussed include masonry wall and fencing elements, landscaping enhancements, and preservation of portions of the existing mature trees on-site where feasible.

Utility and drainage concepts remain preliminary and would require additional engineering review as part of any future

formal application process to evaluate compliance with applicable City ordinances, infrastructure requirements, and development standards.

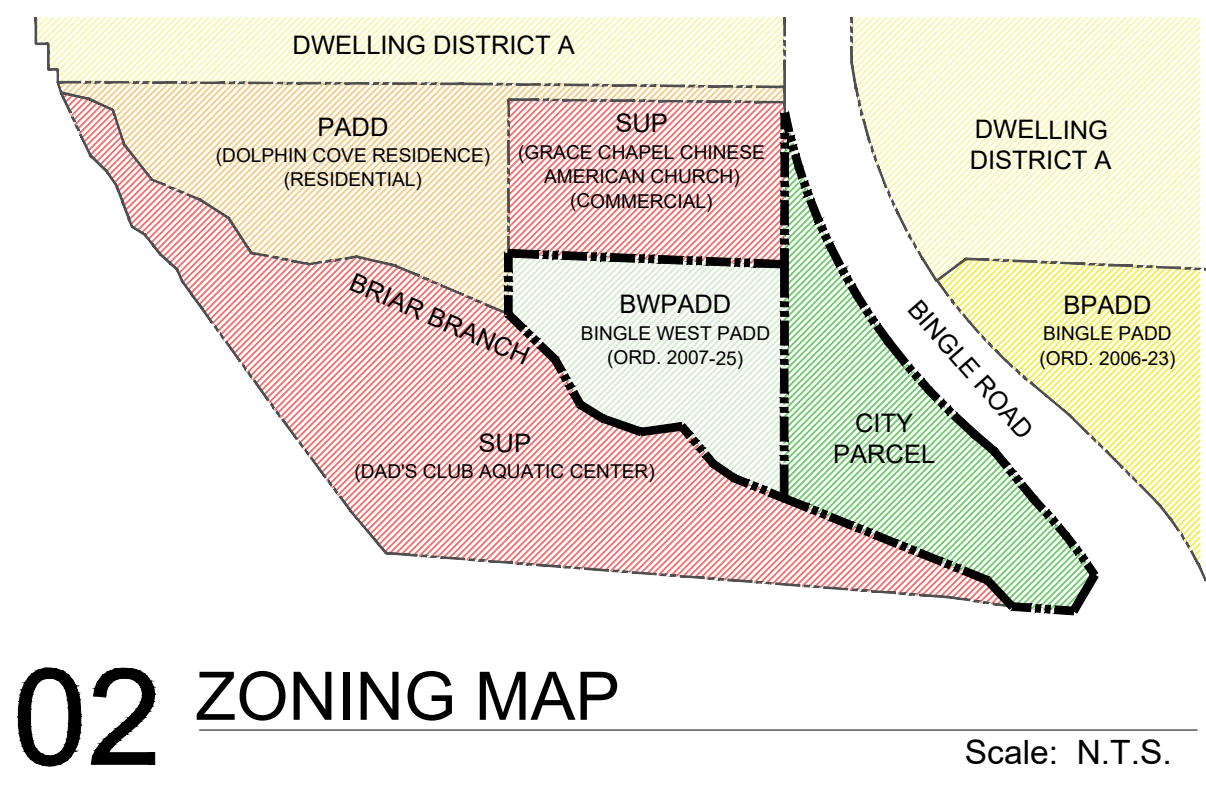
Any future request associated with amendments to the existing BWPADD ordinance would be subject to additional review and consideration by the Planning & Zoning Commission and City Council.

**ATTACHMENTS:** Concept Plans - 22099-03\_NWQ Bingle I10 SD\_251205, Development Site Plans - 20260310\_Bingle Road Retail 1

**FUNDING:**

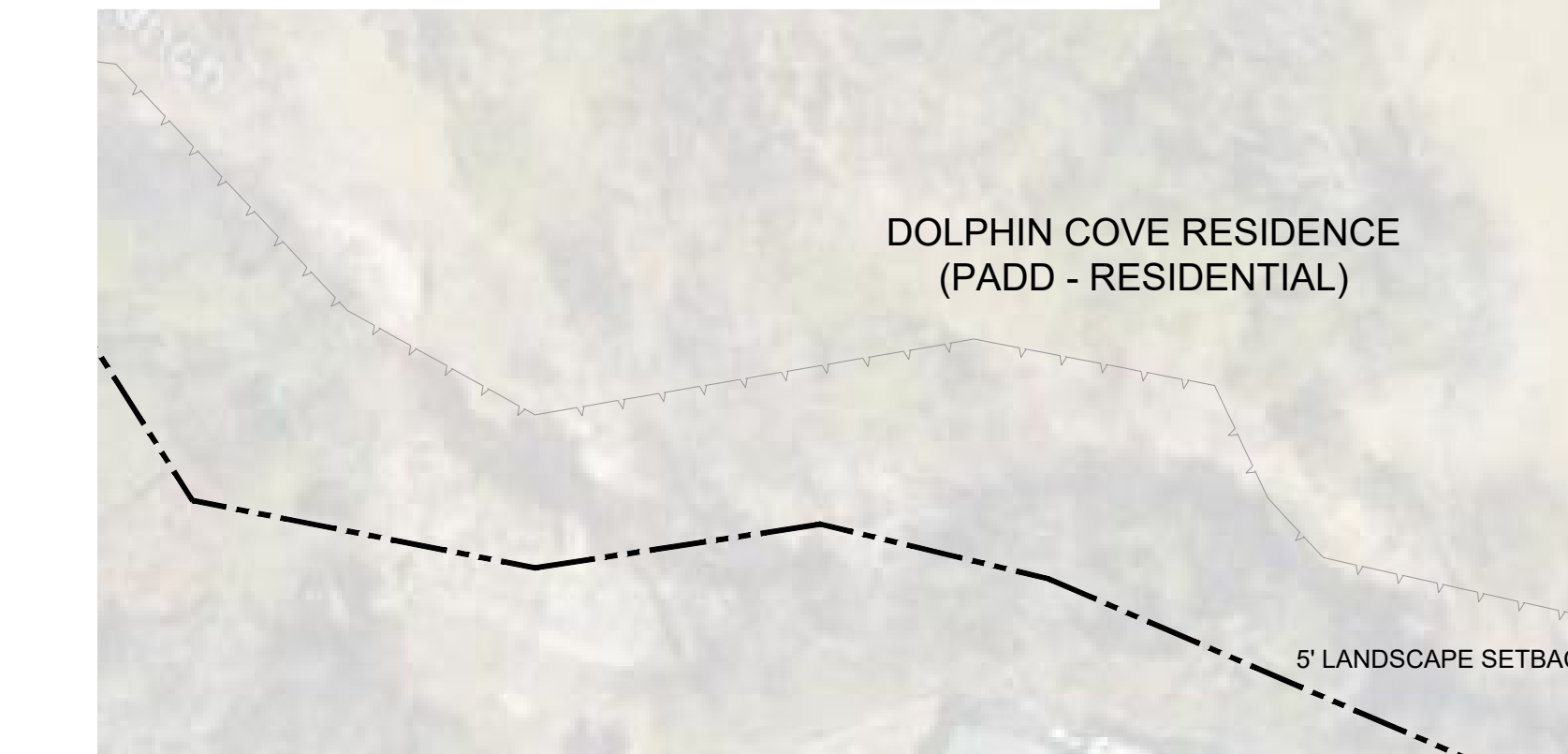
Amount Available	Account No.	Additional Appropriation Required	Project No.	Amount Budgeted	Account Description
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**RECOMMENDATION:** Discussion item only



## 02 ZONING MAP

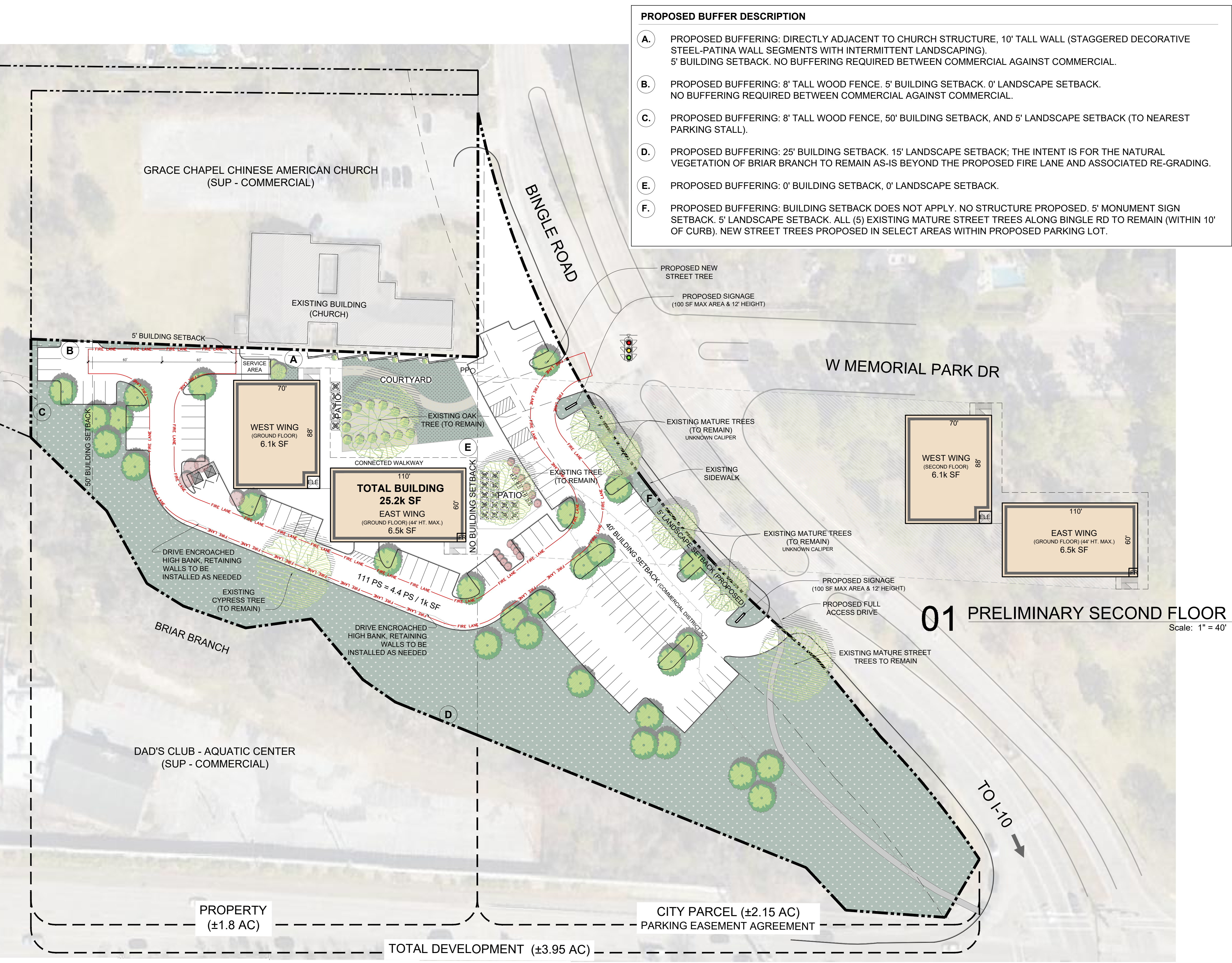
Scale: N.T.S.



DATA TABLE:			
SITE	3.95 AC		
JURISDICTION	SPRING VALLEY VILLAGE, TEXAS		
ZONING	BINGLE WEST PADD		
PARKING SYNOPSIS	SF	PS REQ'D	PS PROVIDED
RETAIL/MIXED USE (~50%) (@ 3.5 PS / 1k)	12,600 SF	45 PS	SHARED
OFFICE (NON MEDICAL) (~25%) (@ 4 PS / 1k)	6,300 SF	26 PS	SHARED
RESTAURANT (~25%) (@ 8 PS / 1k)	6,300 SF	51 PS	SHARED
<b>TOTAL</b>	<b>25,200 SF</b>	<b>122 PS</b> <b>110* PS</b>	<b>111 PS</b> <b>(@ 4.4 PS / 1k)</b>

- NOTES:
- BWPADD ALLOWS RETAIL / RESTAURANT ON F1
  - BWPADD ALLOWS RETAIL / RESTAURANT / OFFICE ON F2
  - SHARED PARKING IS UNDEFINED IN SPRING VALLEY VILLAGE ORDINANCE. MAY BE POSSIBLE PENDING CONFIRMATION WITH THE CITY (PEAK-USE CALCULATION STUDY PER URBAN LAND INSTITUTE STANDARDS)
  - OFF-SITE PARKING UNDEFINED IN ORDINANCE, MAY BE BE POSSIBLE PENDING CONFIRMATION WITH THE CITY
  - BICYCLE PARKING REDUCTION UNDEFINED IN ORDINANCE, MAY BE POSSIBLE PENDING CONFIRMATION WITH THE CITY
  - SPRING VALLEY VILLAGE USE / RATIO REQUIREMENTS:
    - RETAIL : 3.5 PS / 1k
    - RESTAURANT : 8 PS / 1k
    - OFFICE (MEDICAL) : 5 PS / 1k
    - OFFICE (GENERAL) : 4 PS / 1k
    - MISC. COMMERCIAL : 5 PS / 1k
- \*PROPOSED SHARED PARKING CALCULATION FOR ±10% REDUCTION

- GENERAL NOTES:
- FIRE LANE REQUIREMENTS MET ASSUMING BUILDING IS SPRINKLERED.
  - FURTHER ORDINANCE / CODE STUDY NEEDED TO REASSURE CODE / ORDINANCE COMPLIANCE.
  - CLIENT TO CONFIRM DETENTION REQUIREMENTS. DETENTION SIZE AND LOCATION TO BE VERIFIED BY A CIVIL ENGINEER.
  - STREET-FRONTING TREES TO REMAIN IN ORDER TO COMPLY WITH CITY URBAN FORESTRY REQUIREMENTS.



- PROPOSED BUFFER DESCRIPTION**
- PROPOSED BUFFERING: DIRECTLY ADJACENT TO CHURCH STRUCTURE, 10' TALL WALL (STAGGERED DECORATIVE STEEL-PATINA WALL SEGMENTS WITH INTERMITTENT LANDSCAPING). 5' BUILDING SETBACK. NO BUFFERING REQUIRED BETWEEN COMMERCIAL AGAINST COMMERCIAL.
  - PROPOSED BUFFERING: 8' TALL WOOD FENCE. 5' BUILDING SETBACK. 0' LANDSCAPE SETBACK. NO BUFFERING REQUIRED BETWEEN COMMERCIAL AGAINST COMMERCIAL.
  - PROPOSED BUFFERING: 8' TALL WOOD FENCE, 50' BUILDING SETBACK, AND 5' LANDSCAPE SETBACK (TO NEAREST PARKING STALL).
  - PROPOSED BUFFERING: 25' BUILDING SETBACK. 15' LANDSCAPE SETBACK; THE INTENT IS FOR THE NATURAL VEGETATION OF BRIAR BRANCH TO REMAIN AS-IS BEYOND THE PROPOSED FIRE LANE AND ASSOCIATED RE-GRADING.
  - PROPOSED BUFFERING: 0' BUILDING SETBACK, 0' LANDSCAPE SETBACK.
  - PROPOSED BUFFERING: BUILDING SETBACK DOES NOT APPLY. NO STRUCTURE PROPOSED. 5' MONUMENT SIGN SETBACK. 5' LANDSCAPE SETBACK. ALL (5) EXISTING MATURE STREET TREES ALONG BINGLE RD TO REMAIN (WITHIN 10' OF CURB). NEW STREET TREES PROPOSED IN SELECT AREAS WITHIN PROPOSED PARKING LOT.

## 01 PRELIMINARY SECOND FLOOR

Scale: 1" = 40'

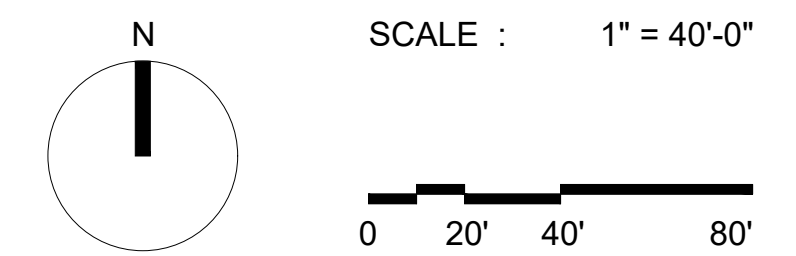


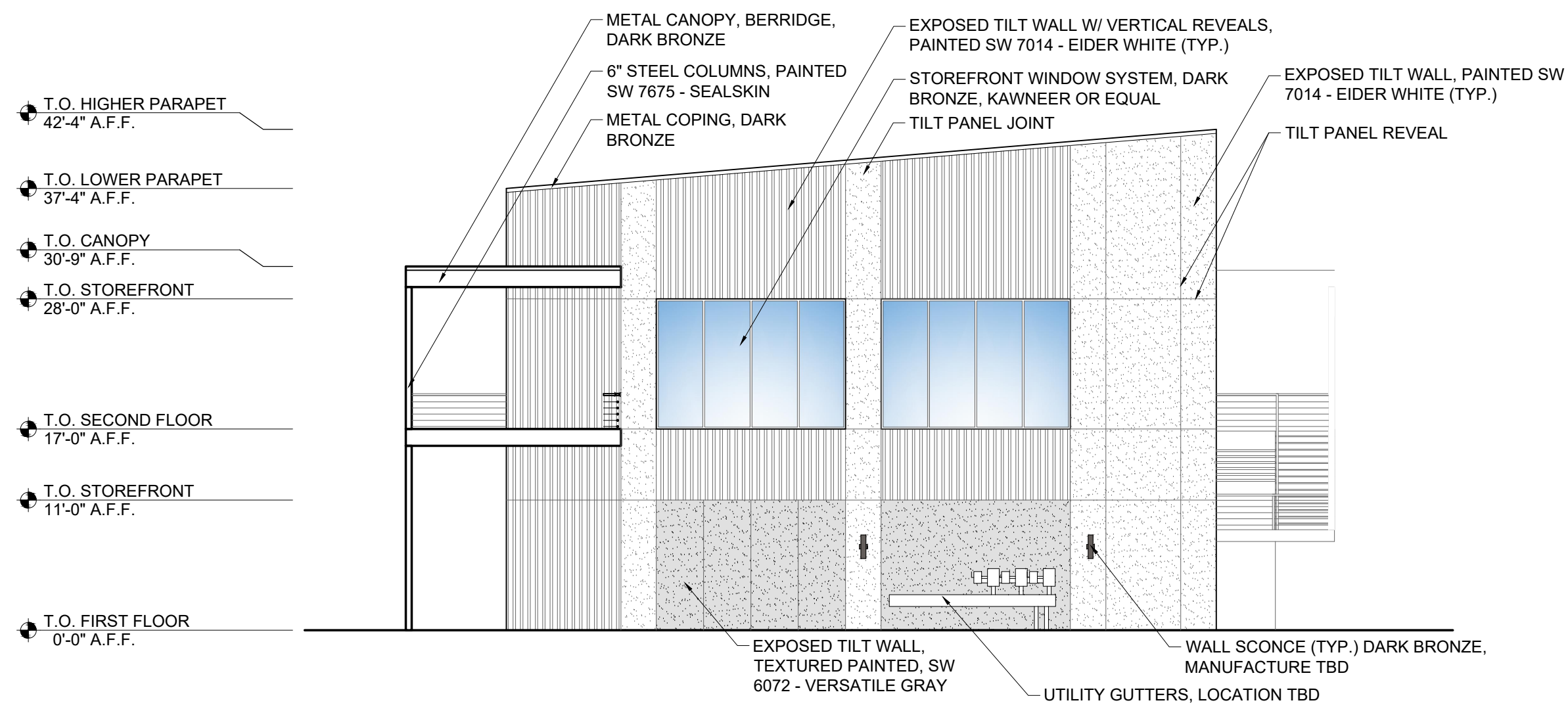
111 TRAVIS STREET  
HOUSTON TX 77002  
713.595.2150  
www.identityarchitects.com

THIS DRAWING IS FOR PRESENTATION PURPOSES ONLY. ANY AND ALL FEATURES, MATTERS AND OTHER INFORMATION DEPICTED HEREON OR CONTAINED HEREIN ARE FOR ILLUSTRATIVE MARKETING PURPOSES ONLY. ARE SUBJECT TO MODIFICATION WITHOUT NOTICE. ARE NOT INTENDED TO BE RELIED UPON BY ANY PARTY AND ARE NOT INTENDED TO CONSTITUTE REPRESENTATIONS AND WARRANTIES AS TO THE SIZE AND NATURE OF IMPROVEMENTS TO BE CONSTRUCTED (OR THAT ANY IMPROVEMENTS WILL BE CONSTRUCTED) OR AS TO THE IDENTITY OR NATURE OF ANY OCCUPANTS THEREOF.

## PRELIMINARY SITE PLAN - PHASE I

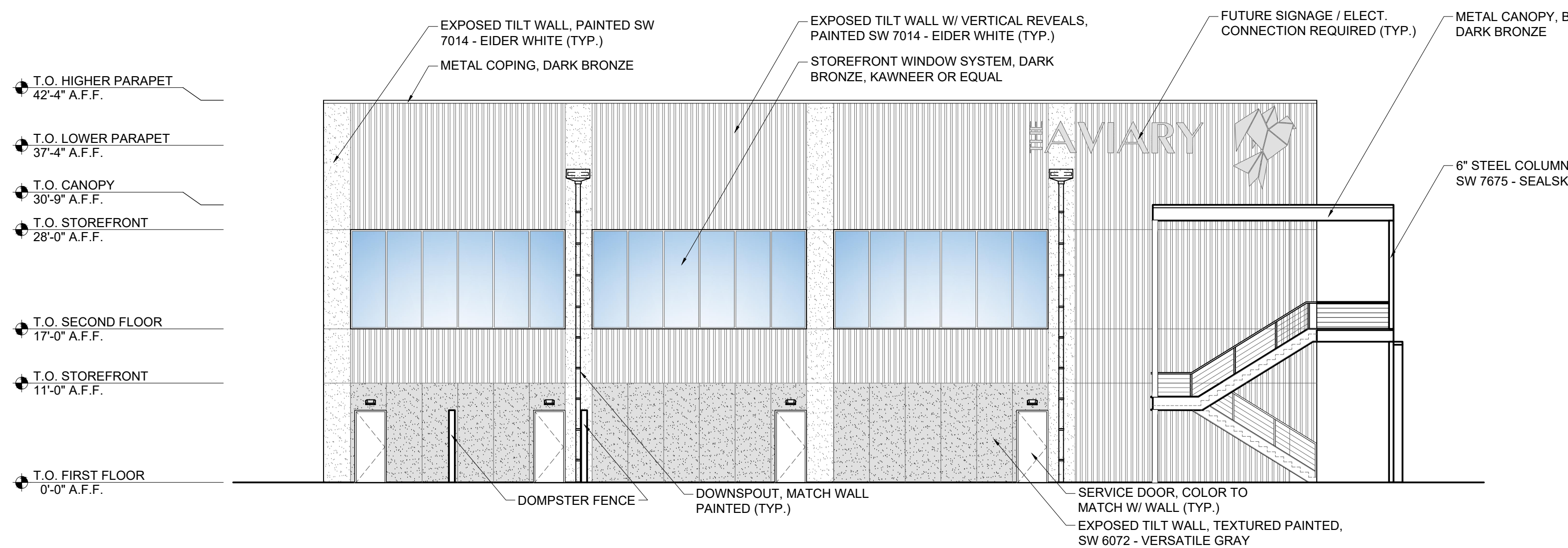
December 5, 2025  
(COMMERCIAL DEVELOPMENT)  
BINGLE ROAD @ WEST MEMORIAL PARK DRIVE  
SPRING VALLEY VILLAGE, TX  
22099-03\_Site.dwg





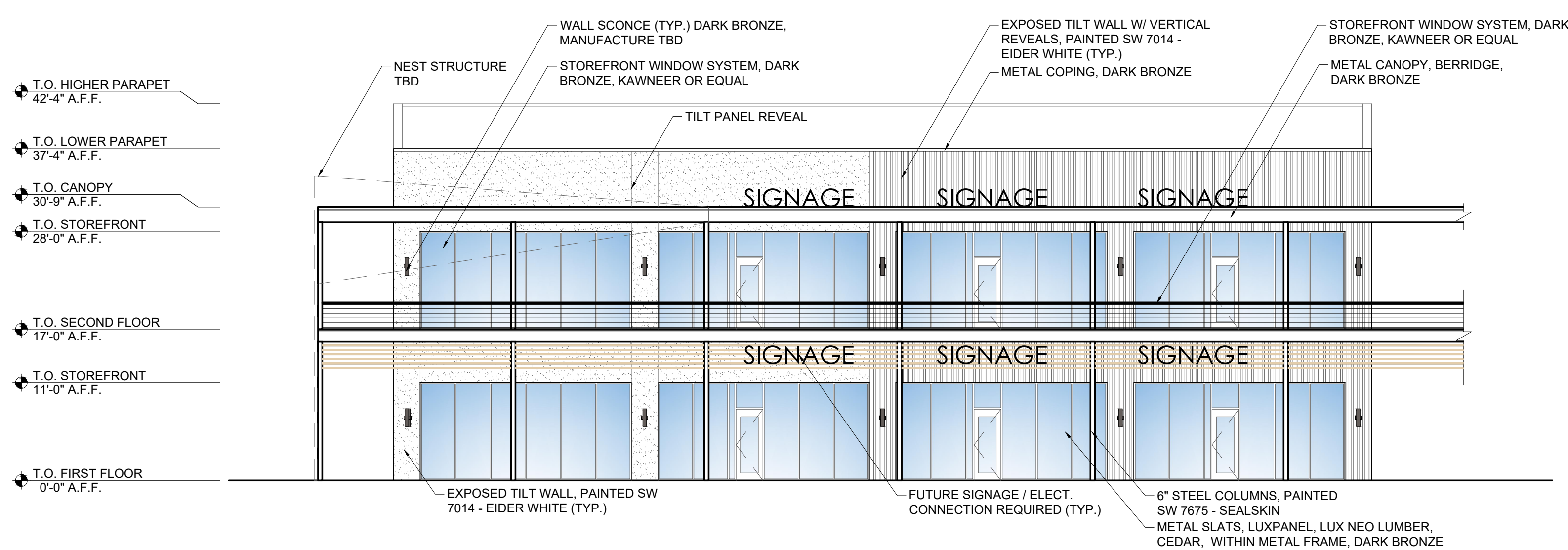
### 03 WEST ELEVATION

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



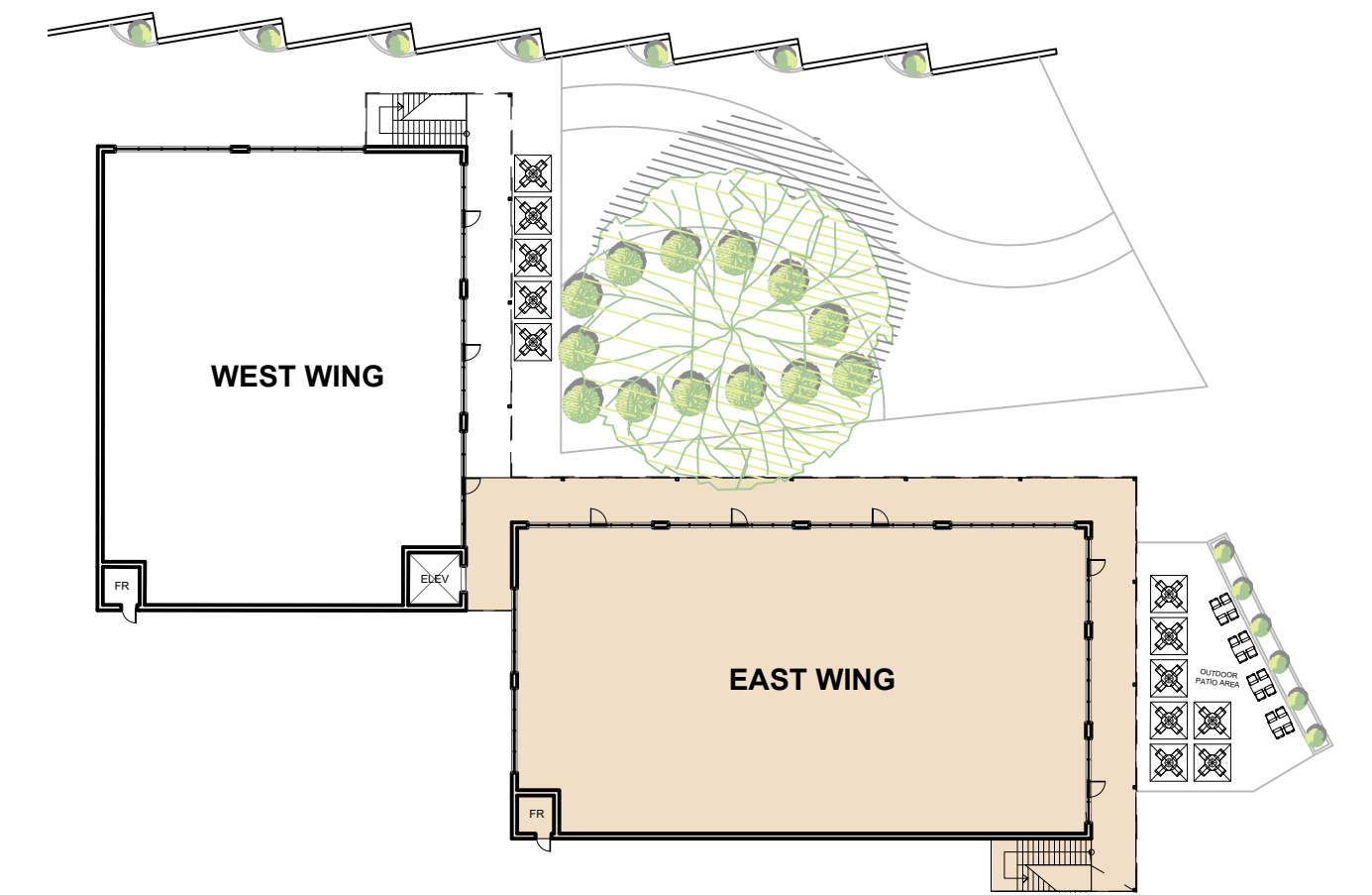
### 02 SOUTH ELEVATION (FACING I-10)

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



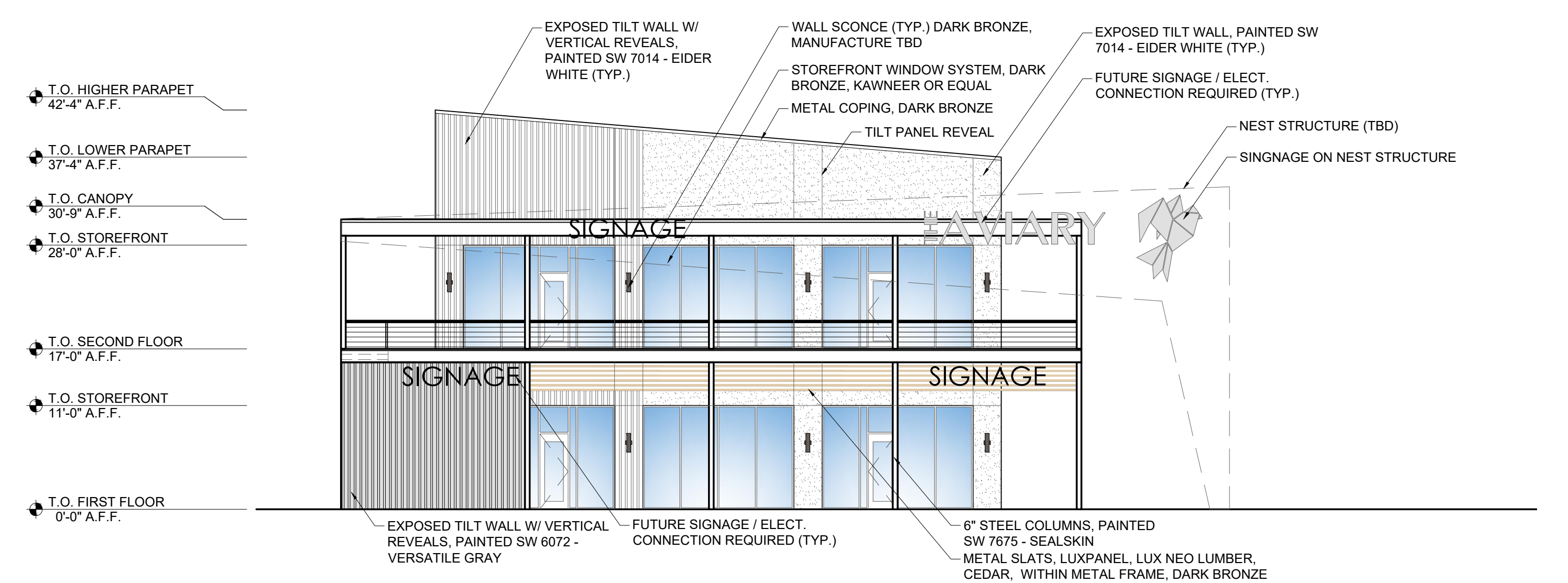
### 01 NORTH ELEVATION (FACING COURTYARD)

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



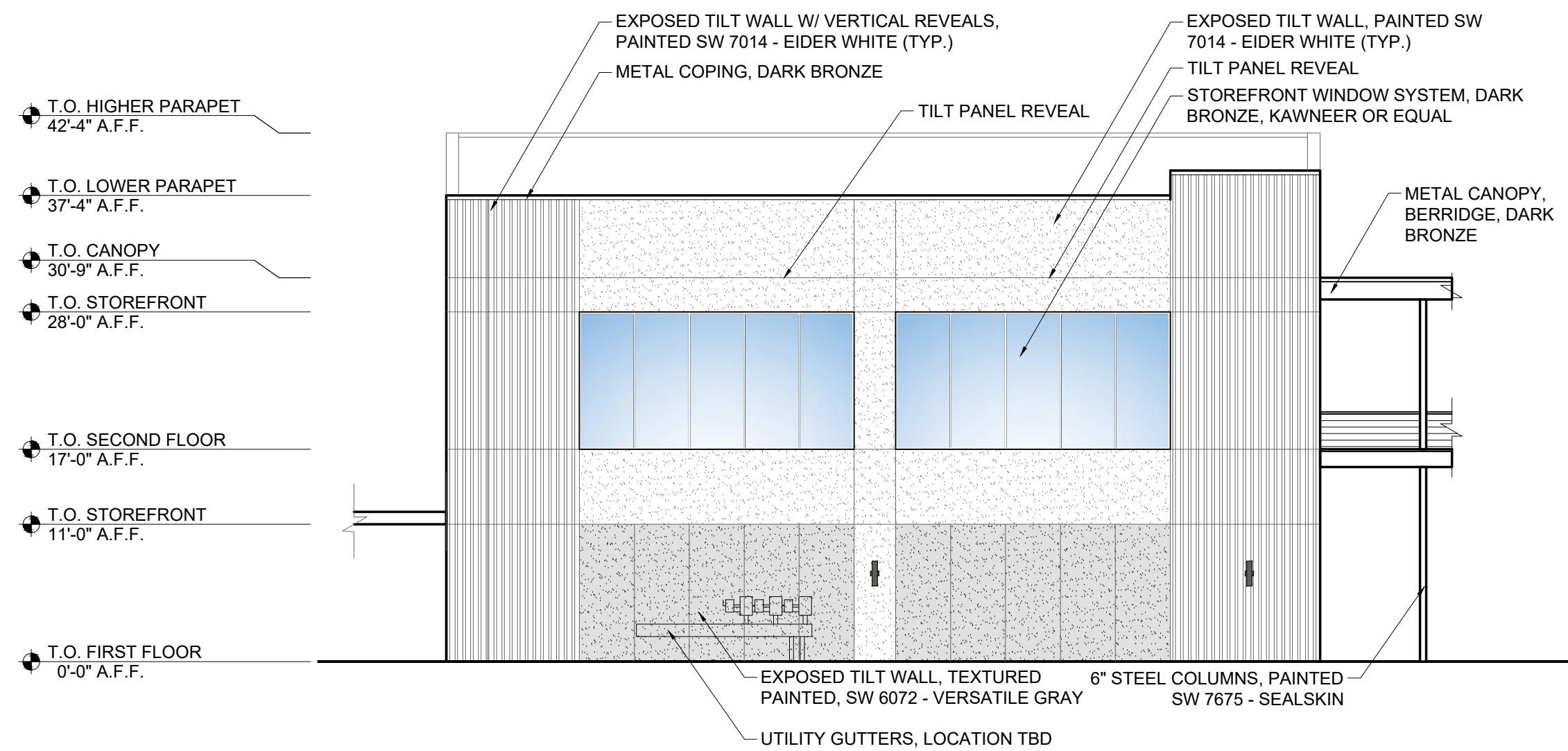
### 05 KEY PLAN

Scale: NTS



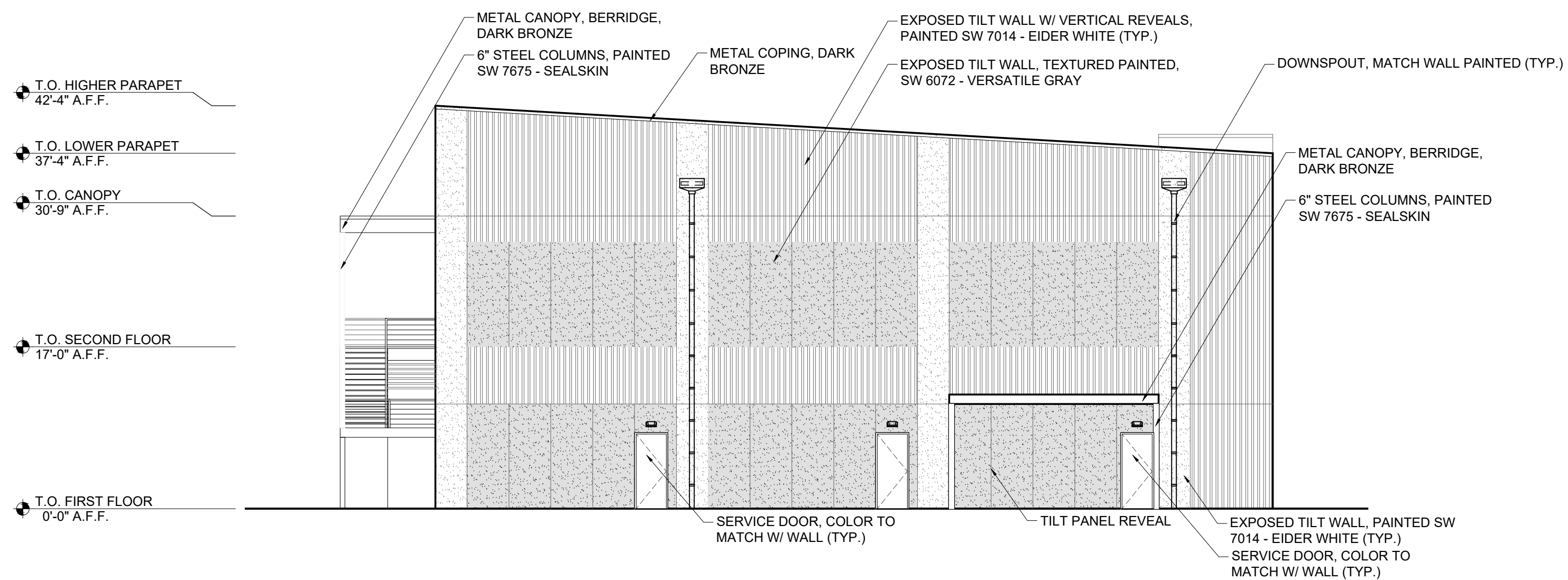
### 04 EAST ELEVATION (FACING BINGLE RD)

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



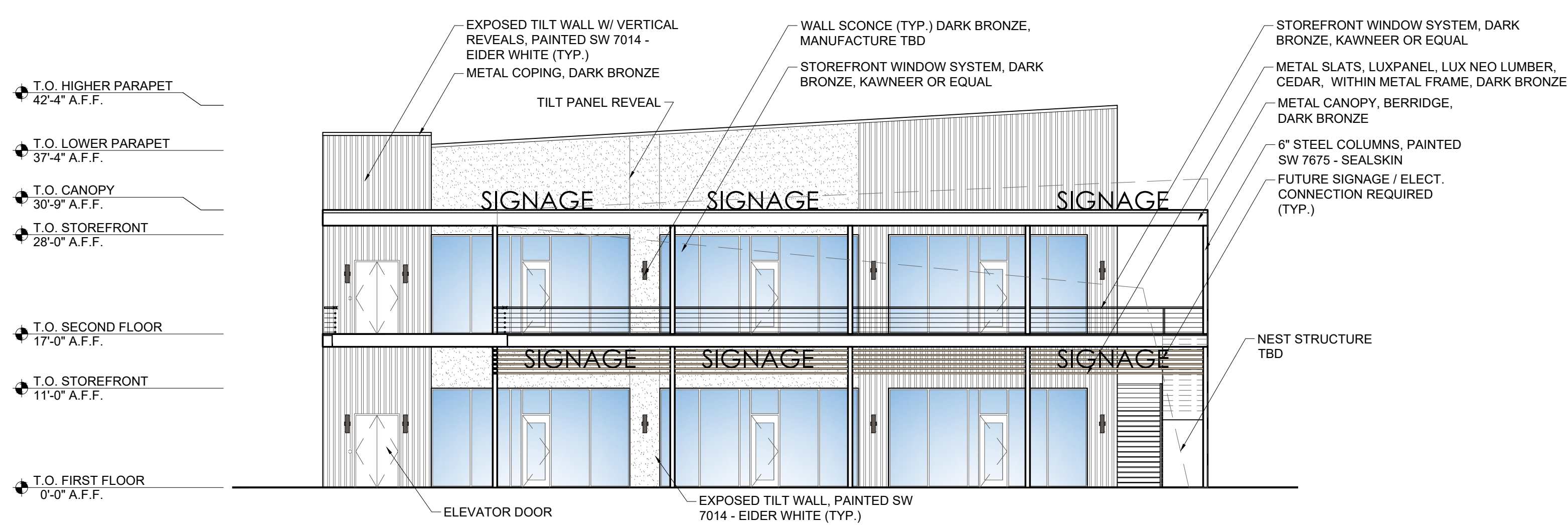
### 03 SOUTH ELEVATION (FACING I-10)

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



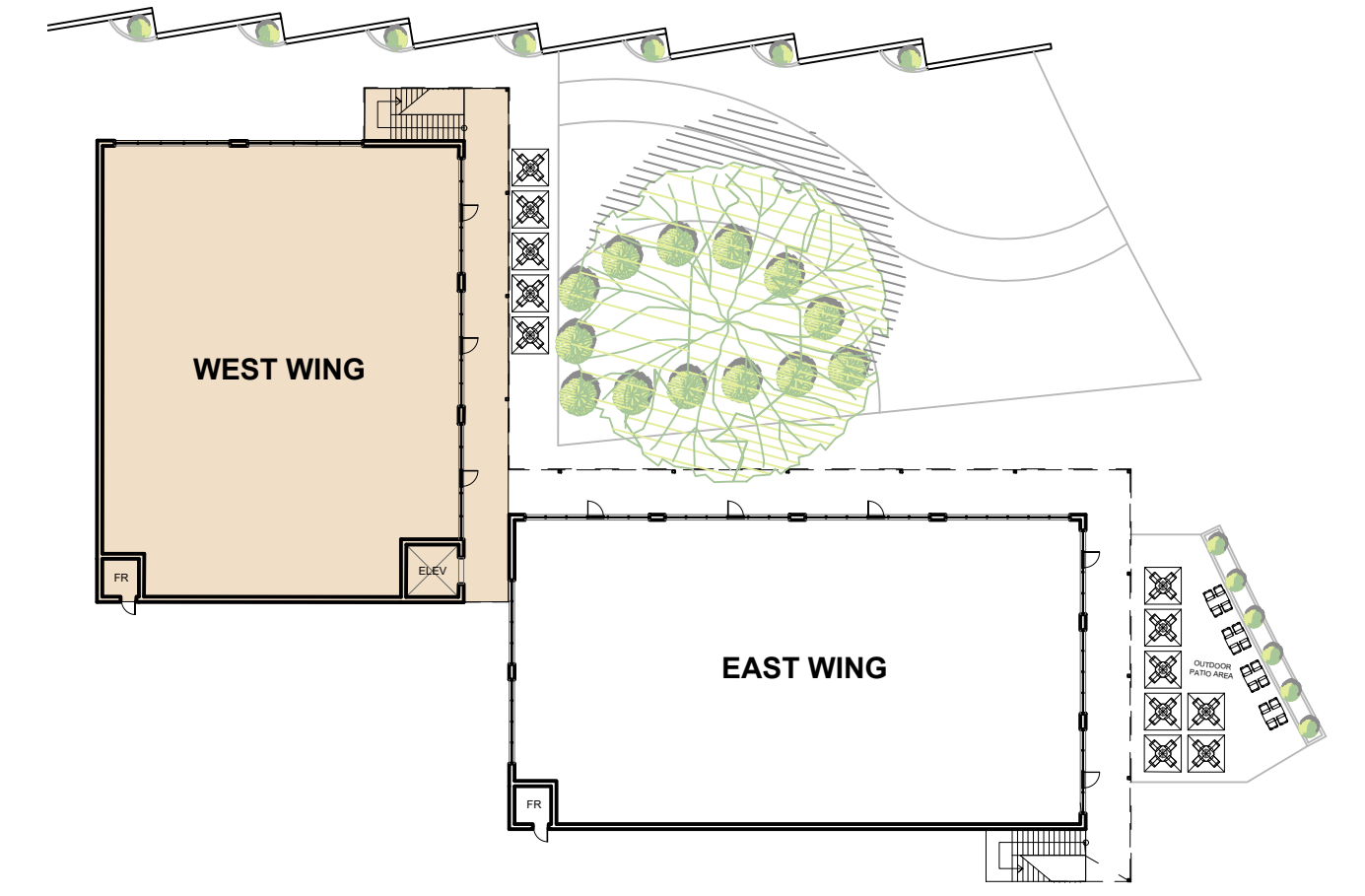
### 02 WEST ELEVATION

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



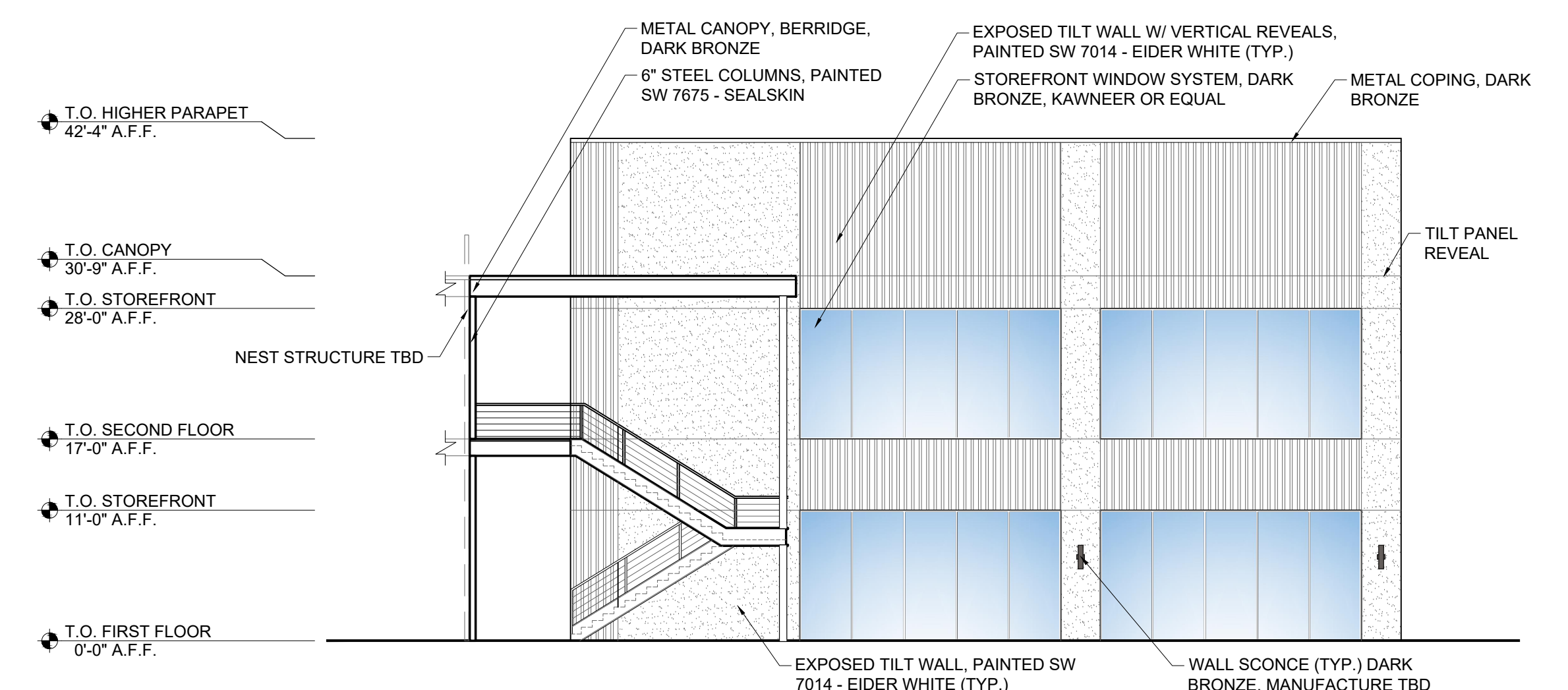
### 01 EAST ELEVATION (FACING COURTYARD)

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



### 05 KEY PLAN

Scale: NTS



### 04 NORTH ELEVATION (FACING CHURCH)

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



THE AVIARY

THE BURGER BARN

central office

zen spa

Art Gallery

DENTIX

BARBER

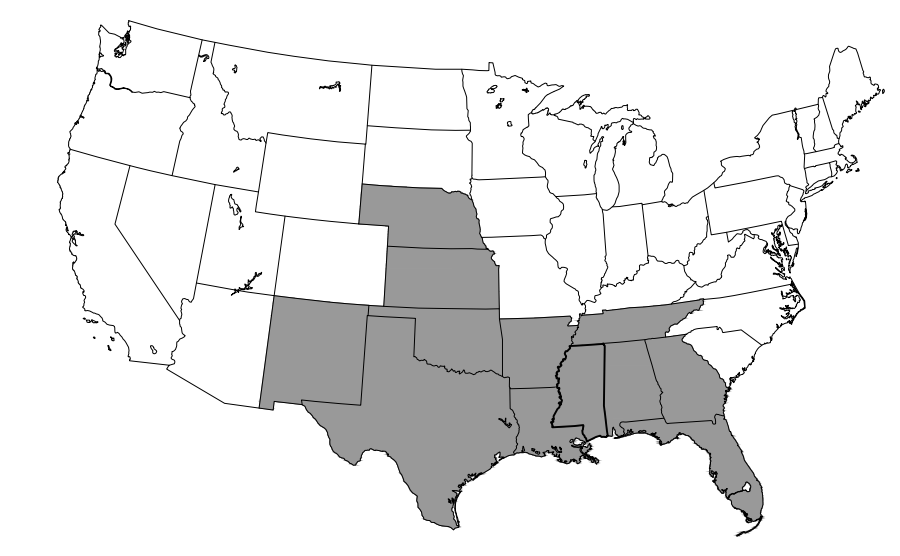
crema coffee

CRAFT CLOSET



22099-04

identity  
ARCHITECTURE

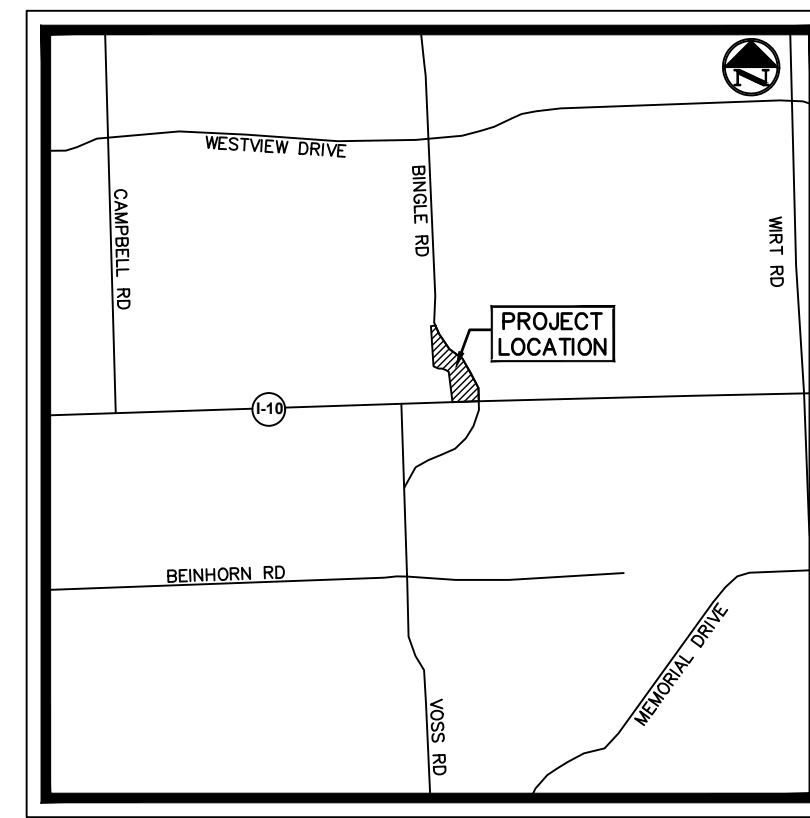


\*LICENSED IN AL, AR, FL, GA, KS, LA, MS, NE, NM, OK, TN, & TX

# CIVIL PLANS FOR BINGLE ROAD RETAIL

LOCATED @

1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

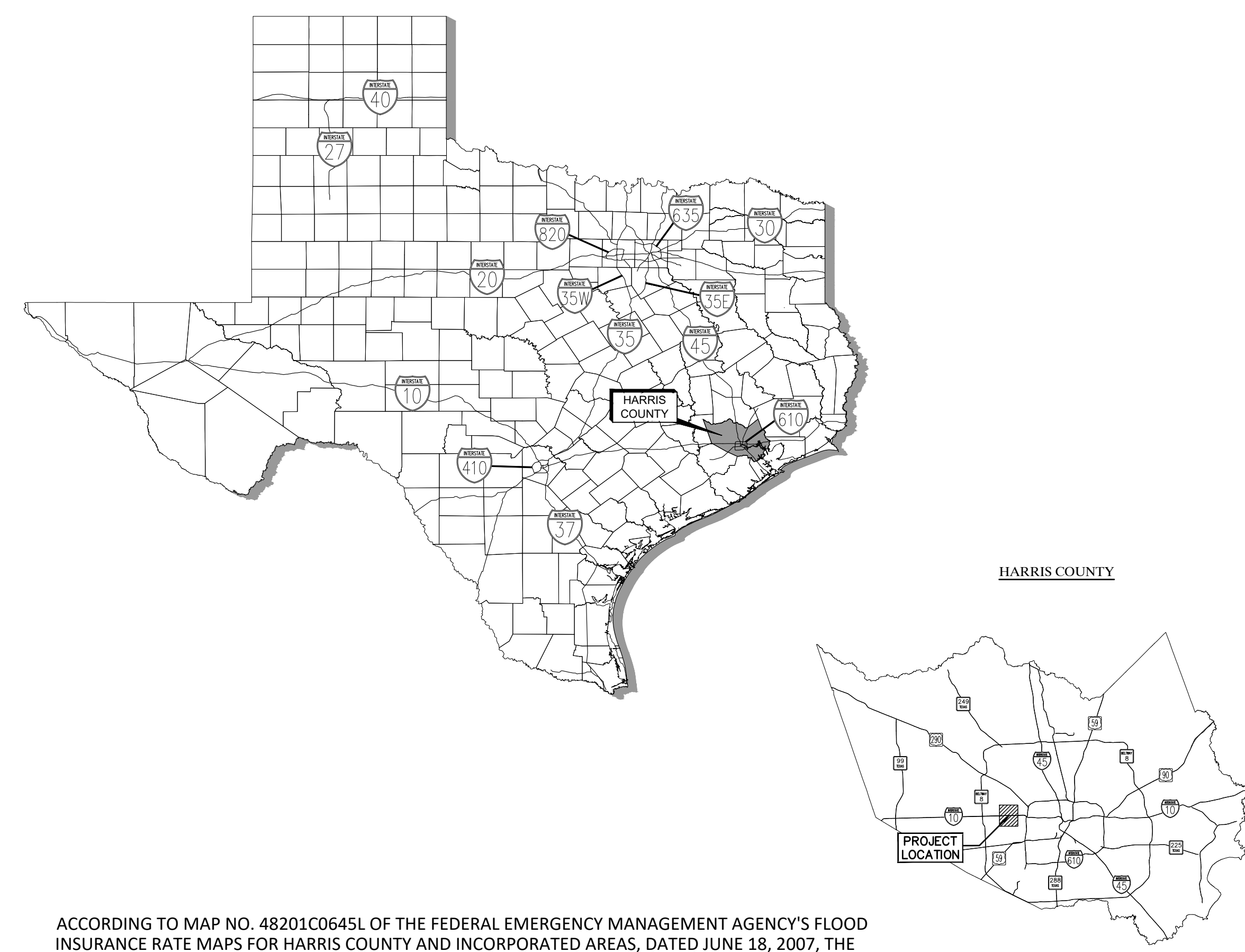


LOCATION MAP  
N.T.S.

GIMS TILE: 5058b  
KEYMAP NO.: 490D  
ZIP CODE: 77055

### PLANS SUBMITTAL/REVIEW LOG

50% REVIEW SET -NOT FOR CONSTRUCTION	01/21/2026
90% REVIEW SET -NOT FOR CONSTRUCTION	01/30/2026
SUBMIT TO CITY OF SPRING VALLEY VILLAGE -NOT FOR CONSTRUCTION	03/10/2026



ACCORDING TO MAP NO. 48201C0645L OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR HARRIS COUNTY AND INCORPORATED AREAS, DATED JUNE 18, 2007, THE SUBJECT TRACT IS SITUATED WITHIN: FLOODWAY AREA, ZONE AE, SHADED ZONE X & UNSHADED ZONE X

### INDEX OF SHEETS

CIVIL ENGINEERING (ALJ LINDSEY, LLC)	
SHEET NO.	DESCRIPTION
C0.0	COVER SHEET
C0.1	GENERAL NOTES
C0.2	TOPOGRAPHIC SURVEY
C0.3	DEMOLITION PLAN
C1.0	DIMENSION CONTROL PLAN
C2.0	OVERALL UTILITY PLAN
C2.1	SANITARY SEWER PLAN
C2.2	WATER PLAN
C3.0	STORM SEWER PLAN
C3.1	STORM SEWER CALCULATIONS
C4.0	GRADING PLAN (1 OF 2)
C4.1	GRADING PLAN (2 OF 2)
C5.0	PAVING PLAN
C6.0	EROSION CONTROL PLAN
C7.0	CONSTRUCTION DETAILS (1 OF 7)
C7.1	CONSTRUCTION DETAILS (2 OF 7)
C7.2	CONSTRUCTION DETAILS (3 OF 7)
C7.3	CONSTRUCTION DETAILS (4 OF 7)
C7.4	CONSTRUCTION DETAILS (5 OF 7)
C7.5	CONSTRUCTION DETAILS (6 OF 7)
C7.6	CONSTRUCTION DETAILS (7 OF 7)

NO.	REVISIONS	DATE

**ALJLindsey**  
Civil Engineers  
1885 N. Spring Pkwy, Suite 200  
Houston, TX 77077  
281-301-9955  
PRN F-11526

*Brett T. Hanrahan*  
BRETT T. HANRAHAN  
112908  
REGISTERED  
PROFESSIONAL ENGINEER  
10 MARCH 2026

ALJ PROJECT NO. 02225CV1620	DATE: MARCH 2026	SCALE: N/A	DRAWN BY: SRH	CHECKED BY: BTH
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COVER SHEET

BINGLE ROAD RETAIL  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

CALL BEFORE YOU DIG  
TEXAS ONE CALL PARTICIPANTS REQUEST  
72 HOURS NOTICE BEFORE YOU DIG, DRILL  
OR BLAST - STOP CALL  
TEXAS ONE CALL SYSTEM  
1-800-344-8377  
IN HOUSTON  
(713)-223-4567

SHEET  
C0.0

GENERAL NOTES	PAVING AND STRIPING NOTES	SWPPP NOTES	GENERAL NOTES																								
<p>1. THE LOCATION OF ALL UTILITIES SHOWN ON THESE PLANS WAS TAKEN FROM AVAILABLE SURVEY INFORMATION AND/OR EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES MUST BE DETERMINED BY CONTRACTOR. IT SHALL BE THE DUTY AND RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF A DISCREPANCY AND/OR CONFLICT IS DISCOVERED. CONTRACTOR WILL BE RESPONSIBLE FOR REMEDIATION TO EXISTING UTILITIES DURING CONSTRUCTION.</p> <p>2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PUBLIC UTILITIES, PAYMENT TO REMAIN, CURBS, SIDEWALKS, SIGNS, TREES, ETC., IN THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DURING CONSTRUCTION AND DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE OWNING/OPERATING AUTHORITY, WITH NO COST TO THE CITY, COUNTY, PRIVATE UTILITY OWNERS, ENGINEER, OR THE OWNER.</p> <p>3. CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITY LINES AND SHALL NOTIFY THE FOLLOWING AGENCIES 72 HOURS PRIOR TO EXCAVATING OR AUGERING NEAR EXISTING FACILITIES.</p> <p>A. TEXAS ONE CALL SYSTEM AT 1-800-245-4545  B. LONE STAR NOTIFICATION CENTER AT 1-800-669-8344  C. TEXAS EXCAVATION SAFETY SYSTEM AT 1-800-344-8377</p> <p>4. PRIOR TO ANY CONSTRUCTION ACTIVITY, CONTRACTOR IS TO ACQUIRE ALL REQUIRED CONSTRUCTION PERMITS FROM APPROPRIATE AUTHORITIES. CONTRACTOR SHALL GIVE AT LEAST 48 HOURS NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PUBLIC AND PRIVATE UTILITY LINES AFFECTED BY HIS OPERATIONS PRIOR TO COMMENCEMENT OF WORK.</p> <p>5. THE ENGINEER AND THE AUTHORITY HAVING JURISDICTION ("A.H.J.") SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE CONTRACTOR CONNECTING TO ANY EXISTING UTILITY LINES.</p> <p>6. NO CONNECTIONS SHALL BE MADE TO EXISTING PUBLIC WATER LINES OR PUBLIC SANITARY SEWERS UNTIL ALL PROPOSED WATER OR SEWER LINES HAVE BEEN THOROUGHLY CLEANED, TESTED (AS REQUIRED) AND APPROVED BY THE APPROPRIATE AUTHORITIES.</p> <p>7. HORIZONTAL AND VERTICAL INFORMATION REGARDING UTILITY CONNECTIONS TO PROPOSED BUILDINGS ON THIS SET OF PLANS TERMINATE AT FIVE (5) FEET FROM THE NEAREST BUILDING WALL.</p> <p>8. ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PERMANENT PAVING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THE PAVING FOR THIS DEVELOPMENT. ALL UTILITY STRUCTURES, BOXES, AND VALVES PLACED WITHIN EXISTING/PROPOSED PAVING SHALL BE HEAVY DUTY TRAFFIC RATED.</p> <p>9. ALL APPURTENANCES WILL BE ASSUMED TO BE IN GOOD CONDITION UNLESS OTHERWISE CONFIRMED IN WRITING PRIOR TO COMMENCEMENT OF WORK.</p> <p>10. OVERHEAD LINES EXIST ON THE PROPERTY. WE HAVE NOT ATTEMPTED TO MARK THOSE LINES SINCE THEY ARE CLEARLY VISIBLE, BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING CONSTRUCTION. TEXAS LAW, SECTION 752, FORBIDS ANY ACTIVITIES OR OPERATIONS THAT WOULD BE A HAZARDOUS TO PUBLIC SAFETY WITHIN 6 FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES. CONTRACTORS ARE LEGALLY RESPONSIBLE FOR SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CIVIL AND CRIMINAL LIABILITY.</p> <p>11. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND ALL REGULATIONS OF UTILITY COMPANIES CONCERNING SAFETY AND HEALTH PRACTICES. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SITE. TRENGH SAFETY REQUIREMENTS IN ACCORDANCE WITH A.H.J. STANDARDS, TEXAS STATE LAW, AND O.S.H.A. STANDARDS FOR ALL EXCAVATION.</p> <p>12. PRIOR TO THE START OF CONSTRUCTION, OWNER AND CONTRACTOR ARE RESPONSIBLE FOR SUBMITTING THE "NOTICE OF INTENT" (N.O.I.) AND ANY ADDITIONAL INFORMATION REQUIRED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ). UPON COMPLETION OF THE PROJECT, OWNER AND CONTRACTOR ARE RESPONSIBLE FOR SUBMITTING THE "NOTICE OF TERMINATION" (N.O.T.).</p> <p>13. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE AT ALL TIMES DURING CONSTRUCTION.</p> <p>14. CONTRACTOR SHALL REMOVE ALL MUD, DIRT, AND DEBRIS DEPOSITED OR DROPPED ON THE EXISTING ROADWAY AT THE END OF EACH WORK DAY. MATERIAL THAT IS HAZARDOUS TO TRAFFIC OR OTHERWISE PRESENTS A SAFETY CONCERN, SHALL BE REMOVED IMMEDIATELY.</p> <p>15. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL STATE AND LOCAL REGULATIONS RELATED TO STORM WATER POLLUTION AND QUALITY. REFER TO EROSION CONTROL PLAN.</p> <p>16. CONTRACTOR SHALL REESTABLISH ALL TURF DISTURBED DURING CONSTRUCTION TO ACCEPTABLE OPERATING CONDITION, AS DETERMINED BY OWNER AND/OR REGULATORY AGENCIES.</p> <p>17. CONTRACTOR SHALL MAINTAIN A WORKSITE FREE OF TRASH AND DEBRIS.</p> <p>18. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES. NO TREE SHALL BE REMOVED OR ALTERED WITHOUT WRITTEN PERMISSION FROM OWNER OR ENGINEER. EQUIPMENT OR MATERIALS SHALL NOT BE STAGED UNDER THE DRIP LINE OF EXISTING TREES.</p> <p>19. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A SET OF "AS-BUILT" PLANS FOR ALL WORK PERFORMED ON AND OFF SITE. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL PROVIDE AS-BUILT PLANS IDENTIFYING ALL DEVIATIONS OR VARIATIONS FROM ORIGINAL PLANS TO THE OWNER AND THE ENGINEER. ANY REQUIREMENTS BY THE A.H.J. TO PROVIDE AN AS-BUILT TOPO SURVEY SHALL BE PERFORMED BY THE CONTRACTOR AND INCLUDED WITHIN THE BASE BID.</p> <p>20. ALL TRAFFIC CONTROL AND WARNING SIGNS SHALL BE IN ACCORDANCE WITH THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.</p> <p>21. ALL SIDEWALKS, RAMPS, AND HANDRAILS TO MEET OR EXCEED A.H.J., TAS, AND ADA REQUIREMENTS.</p> <p>22. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO APPLICABLE "A.H.J. RULES AND REGULATIONS, CONSTRUCTION SPECIFICATIONS, AND CONSTRUCTION DETAILS.</p> <p>23. ALL EXCESS SPOL MATERIAL GENERATED FROM CONSTRUCTION ACTIVITY TO BE HAULED OFFSITE AND DISPOSED IN ACCORDANCE WITH LOCAL LAWS, RULES, AND REGULATIONS, UNLESS OTHERWISE NOTED ON THE PLANS.</p> <p>24. AT THE END OF ALL CONSTRUCTION PROJECTS, THE CONTRACTOR SHALL RESTORE THE EXISTING FACILITIES, TO EQUAL TO BETTER THAN EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. ALL FINISHED GRADES SHALL VARY UNIFORMLY BETWEEN THE FINISHED ELEVATIONS SHOWN.</p> <p>25. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING LANDSCAPING AND IRRIGATION. NO SEPARATE PAY.</p> <p>26. PRIOR TO SUBMITTAL OF BID OR PROPOSAL, CONTRACTOR SHALL VISIT PROJECT SITE AND BECOME FAMILIAR WITH THE PROJECT AND THE EXISTING CONDITIONS ON THE SITE. NO ADDITIONAL CONSIDERATION WILL BE GIVEN FOR ADDITIONAL WORK CAUSED BY FIELD CONDITIONS VISIBLE ON SITE DURING BIDDING BUT NOT SHOWN ON THESE PLANS.</p> <p>27. THERE WILL BE NO SEPARATE PAYMENT FOR WORK SHOWN ON THESE PLANS, UNLESS SPECIFICALLY ESTABLISHED IN THE BID SECTION OF THE CONTRACT DOCUMENTS. INCLUDE COST OF SAME TO WHICH THIS WORK IS A COMPONENT PART.</p> <p>28. IN THE EVENT OF A DISCREPANCY WITHIN THESE PLANS, OR BETWEEN THESE PLANS AND THE GEOTECHNICAL REPORT, THE MOST CONSERVATIVE CRITERIA SHALL APPLY.</p> <p>29. ALL UTILITY TRENCHES BELOW PROPOSED OR FUTURE PAVING SHALL BE BACKFILLED WITH CEMENT SAND.</p> <p>30. UTILITY TRENCHES ARE A COMMON SOURCE OF WATER INFILTRATION AND MIGRATION. ALL UTILITY TRENCHES THAT PENETRATE BENEATH THE BUILDING SHOULD BE EFFECTIVELY SEALED TO RESTRICT WATER INTRUSION AND FLOW THROUGH THE TRENCHES THAT COULD MIGRATE BELOW THE BUILDING. WE RECOMMEND CONSTRUCTING AN EFFECTIVE CLAY "TRENCH PLUG" THAT EXTENDS AT LEAST 5 FEET OUT FROM THE FACE OF THE BUILDING EXTERIOR. THE PLUG MATERIAL SHOULD CONSIST OF CLAY COMPACTED AT A WATER CONTENT AT OR ABOVE THE SOILS OPTIMUM WATER CONTENT. THE CLAY FILL SHOULD BE PLACED TO COMPLETELY SURROUND THE UTILITY LINE AND BE COMPACTED IN ACCORDANCE WITH RECOMMENDATIONS WITHIN THE GEOTECHNICAL REPORT.</p> <p>31. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY TIE IN LOCATIONS FOR MATERIAL, SIZE, ELEVATION, AND FIELD CONDITIONS. IN THE EVENT THE PLANS DO NOT REPRESENT FIELD CONDITIONS, THE CONTRACTOR IS TO CONTACT THE ENGINEER AND OWNER IMMEDIATELY AND PRIOR TO PERFORMING ANY WORK.</p> <p>32. PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR TO CONFIRM POSSESSION OF LATEST DRAWINGS, INCLUDING ANY REVISIONS. IF THE DRAWINGS ARE NOT LABELED AS "CONSTRUCTION SET" ON THE COVER PAGE, CONTRACTOR TO CONTACT ENGINEER IMMEDIATELY.</p> <p>33. CONTRACTOR TO OBTAIN ALL PERMITS. OWNER WILL PROVIDE PAYMENT AS NECESSARY AND REQUESTED BY CONTRACTOR.</p> <p>34. THE REVIEW/APPROVAL OF CONTRACTOR SUBMITTALS BY THE CIVIL ENGINEER DOES NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITIES OF CONFIRMING THAT ALL QUANTITIES, FLOW LINES, AND MATERIALS ARE PER THE LATEST ISSUED PLANS AND SPECIFICATIONS, INCLUDING ANY REQUIREMENTS FOR WORK IN THE PUBLIC R.O.W. AS SPECIFIED BY THE A.H.J.</p>	<p>1. PAVEMENT DESIGN AND SOIL PREPARATION RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT PREPARED BY GEOTEEST ENGINEERING, INC., DATED JANUARY 2023 (PROJECT NUMBER 1140278201) SHALL BE ADHERED TO FOR BOTH MATERIALS AND PRACTICE OF INSTALLATION. CONTRACTOR SHALL ENSURE ALL SPECIFICATIONS AND TESTING ARE MET AS OUTLINED IN THIS REPORT.</p> <p>2. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AND A.H.J. STANDARDS.</p> <p>3. CONTRACTOR SHALL FURNISH ALL PAVEMENT MARKINGS FOR FIRE LINES, ROADWAY LANES, PARKING STALLS, HANDICAPPED PARKING SYMBOLS, ACCESS AISLES, STOP BARS AND SIGNS, AND MISCELLANEOUS STRIPING WITHIN PARKING LOT AS SHOWN ON THE PLANS.</p> <p>4. ALL JOINTS SHALL BE SEALED PER A.H.J. SPECIFICATIONS. ALL JOINTS SHALL EXTEND THROUGH THE CURB.</p> <p>5. THE MATERIALS AND PROPERTIES OF CONCRETE SHALL MEET THE APPLICABLE REQUIREMENTS IN THE A.C.I. (AMERICAN CONCRETE INSTITUTE) MANUAL OF CONCRETE PRACTICE AS WELL AS A.H.J. STANDARDS. IN THE EVENT OF A CONTRADICTION BETWEEN THESE TWO STANDARDS, THE MOST RESTRICTIVE (AS DETERMINED BY THE ENGINEER) SHALL APPLY.</p> <p>6. PAVEMENT THICKNESS'S SHOWN IN THIS PLAN SET ARE "MINIMUM" NOT AVERAGE. PAVEMENT THICKNESS AT ALL LOCATIONS SHALL EXCEED THE THICKNESS SPECIFIED.</p> <p>7. ANY DAMAGED PAVEMENT, CURB AND/OR SIDEWALK WILL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER AND OWNER.</p> <p>8. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE HANDICAPPED ROUTES (PER A.D.A. &amp; T.A.S.) EXIST TO AND FROM EVERY DOOR. IN NO CASE SHALL:</p> <p>A. HANDICAP RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL.  B. SIDEWALK CROSS SLOPES EXCEED 2.0 PERCENT.  C. LONGITUDINAL SIDEWALK SLOPES EXCEED 5.0 PERCENT.  D. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVEMENT CONSTRUCTION IF ANY SLOPES EXCEED THE ABOVE LIMITS.</p> <p>9. REINFORCING BAR SPLICES SHALL BE STAGGERED WITH NO MORE THAN 2 SPLICES ADJACENT TO EACH OTHER.</p> <p>10. STABILIZED SUBGRADE SHALL EXTEND A MINIMUM OF 1 FOOT BEYOND EDGE OF ALL PAVEMENT, OR AS DIRECTED IN GEOTECHNICAL REPORT.</p> <p>11. ALL CONCRETE PAVEMENT SHALL BE FLOAT FINISHED MECHANICALLY WITH APPROVED SELF-PROPELLED MACHINES. HANDING FLOATING SHALL BE PERMITTED ONLY IN AREAS INACCESSIBLE TO A FINISHING MACHINE. AFTER FLOATING, CONTRACTOR SHALL PROVIDE A FINE OR MEDIUM-COARSE "BROOM FINISH," UNLESS OTHERWISE INDICATED BY THE OWNER, FOR ALL EXTERIOR SIDEWALKS, EXTERIOR RAMPS, EQUIPMENT AND TRANSFORMER PADS, AND SITE PAVING. BROOMING SHALL BE DONE TRANSVERSELY TO THE DIRECTION OF MAIN TRAFFIC. ALL FINISHING SHALL CONFORM TO A.C.I.301. CONTRACTOR SHALL DETERMINE THE APPROPRIATE MEANS &amp; METHODS TO PROTECT THE FINISHED CONCRETE FROM PRECIPITATION FOR A MINIMUM OF 24 HOURS.</p> <p>12. CONTRACTOR SHALL PROTECT THE FINISHED CONCRETE PAVEMENT AGAINST LOSS OF MOISTURE FOR NO LESS THAN 72 HOURS IN CONFORMANCE WITH THE A.C.I. MANUAL OF CONCRETE PRACTICE.</p> <p>13. ALL PROPOSED PAVEMENT WITHIN ANY PUBLIC ROW SHALL BE CONSTRUCTED IN ACCORDANCE W/ THE APPROPRIATE DETAILS FROM THE APPLICABLE GOVERNING ENTITY AND WITH PROPER CONSTRUCTION INSPECTIONS.</p> <p>14. UNLESS OTHERWISE SPECIFIED IN THE PLANS PAVEMENT STRIPING SHALL MEET THE FOLLOWING CRITERIA:</p> <p>A. MARKING PAINT: HIGH SOLIDS, WATER BASED ACRYLIC PAINT CONTAINING ULTRAVIOLET RESISTANT PIGMENTS.  A.1. ICI PAINTS: TRAFFIC MARKING PAINT, #4800  A.2. M.A.B. PAINTS: ZONE MARKING LATEX TRAFFIC PAINT, #072 LINE  A.3. BENJAMIN MOORE AND CO. SAFETY AND ZONE MARKING LATEX, M58  A.4. PITTSBURGH PAINTS, ZONE &amp; TRAFFIC MARKING PAINT, #11-23  A.5. PORTER PAINT CO.; PORTERGUARD ACRYLIC TRAFFIC PAINT, #2408  A.6. THE SHERMAN WILLIAMS CO.; PROMARK TRAFFIC MARKING PAINT, B29 SERIES</p> <p>B. COLORS:  B.1. PARKING: WHITE  B.2. TRAFFIC LINES, DIRECTIONS, LETTERING, ETC.: OR PRIVATE PROPERTY WITHIN PUBLIC R.O.W., PER LOCAL CODE  B.3. HANDICAPPED EMBLEMS: BLUE  B.4. FIRE LANE: RED</p> <p>15. CONTRACTOR TO CONFIRM AND/OR ADJUST ALL EXISTING AND PROPOSED UTILITIES AND APPURTENANCES TO FINISH GRADE PRIOR TO PLACEMENT OF ANY PAVEMENT.</p>	<p>1. POTENTIAL POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION SITE:</p> <p>-ADHESIVES, PESTICIDES, DETERGENTS, PAINTS, FUELS, SOLVENTS, SEALANTS, FERTILIZERS, OILS, HERBICIDES, CLEANING SOLUTIONS, CONCRETE/CEMENT/PLASTER</p> <p>2. STORM WATER QUALITY MEASURE IMPLEMENTATION RELATIVE TO LAND DISTURBING ACTIVITIES:</p> <p>A. PRIOR TO CONSTRUCTION: SILT FENCING SHALL BE INSTALLED IN ALL LOCATIONS SHOWN ON SITE MAP THAT WILL NOT BE DISTURBED DURING THE INITIAL GRADING PROCESS. THE STABILIZED CONSTRUCTION EXIT SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.</p> <p>B. DURING CONSTRUCTION:  B.1. IMMEDIATELY AFTER PAVING CONSTRUCTION IS COMPLETE, INLET PROTECTION TRAPS WILL BE INSTALLED ON ALL NEWLY CONSTRUCTED INLETS.  B.2. WHEN EXISTING SILT FENCING NEEDS TO BE REMOVED FOR CONSTRUCTION OR ACCESS PURPOSES, IT WILL BE REPLACED AS SOON AS POSSIBLE AFTER CONSTRUCTION IN THE VICINITY OF THE REMOVED FENCE IS COMPLETE.  B.3. AS SOON AS PRACTICABLE AFTER SITE GRADING IS COMPLETE, FINAL STABILIZATION PROCEDURES SUCH AS TURF ESTABLISHMENT AND INSTALLATION OF PLANT MATERIAL WILL BE COMMENCED.</p> <p>C. AFTER CONSTRUCTION: AFTER CONSTRUCTION ACTIVITY AND SITE STABILIZATION PROCEDURES ARE COMPLETE, STRUCTURAL EROSION AND SEDIMENT CONTROLS WILL BE REMOVED. SOIL DISTURBED BY THE REMOVAL OF CONTROLS WILL BE STABILIZED.</p> <p>3. PERMANENT STORM WATER CONTROLS: AFTER CONSTRUCTION ACTIVITY IS COMPLETE, AREAS NOT COVERED BY CONCRETE PAVEMENT OR BY STRUCTURES WILL BE LANDSCAPED AND IRRIGATED. ONCE ESTABLISHED, THIS VEGETATION WILL HELP PREVENT SEDIMENT RUNOFF IN THE FUTURE STORM EVENTS. NEWLY GRADED AREA WILL BE TEXTURED TO REDUCE FLOW VELOCITY.</p> <p>4. MATERIAL HANDLING AND SPILL PREVENTION PLAN:  A. HAZARDOUS MATERIALS WILL BE STORED AND USED IN CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS. DISPOSAL WILL BE PERFORMED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION, AND IN ACCORDANCE WITH STATE AND LOCAL LAWS AND REGULATIONS.  B. THE FOLLOWING PROCEDURES WILL BE FOLLOWED FOR CONTAINMENT AND CLEAN-UP OF SPILLS:  B.1. ALL SPILLS WILL BE CLEANED UP AND PROPERLY REMOVED IN ACCORDANCE WITH STATE REGULATIONS AND LOCAL ORDINANCES.  B.2. SOIL AND SPILLED MATERIALS WILL BE COLLECTED UNTIL NO VISIBLE EVIDENCE OF SPILLED MATERIAL REMAINS  B.3. THE TYPE OF MATERIAL AND QUANTITY OF RELEASE SHALL BE IDENTIFIED, AND APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) SHALL BE WORN AS RECOMMENDED BY THE PRODUCT-SPECIFIC MSDS.  B.4. SPILL CONTAINMENT MAY INCLUDE CONSTRUCTION OF EARTH DIKES AROUND THE SPILL AREA, DEPLOYMENT OF ABSORBENT MATERIALS, OR USE OF COMMERCIALLY AVAILABLE KITS.  B.5. CONTAMINATED SOIL AND SPILLED MATERIAL WILL BE STORED IN APPROPRIATE AND PROPERLY LABELED CONTAINERS, AND DISPOSED OF IN ACCORDANCE WITH STATE, LOCAL, AND FEDERAL RULES AND REGULATIONS.</p> <p>5. GENERAL PERMIT MAINTENANCE REQUIREMENTS (FROM GENERAL PERMIT):  A. ALL PROTECTIVE MEASURES IDENTIFIED IN THIS SWPPP MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION. IF, THROUGH INSPECTION OR OTHER MEANS, THE PERMITEE DETERMINES THAT BMP'S ARE NOT OPERATING EFFECTIVELY, THEN THE PERMITEE SHALL PERFORM MAINTENANCE AS NECESSARY TO MAINTAIN THE CONTINUED EFFECTIVENESS OF STORM WATER CONTROLS, AND PRIOR TO THE NEXT RAIN EVENT, IF FEASIBLE. IF MAINTENANCE PRIOR TO THE NEXT ANTICIPATED STORM EVENT IS IMPRACTICABLE, THE REASON SHALL BE DOCUMENTED IN THE SWPPP AND MAINTENANCE MUST BE SCHEDULED AND ACCOMPLISHED AS SOON AS PRACTICABLE. EROSION AND SEDIMENT CONTROLS THAT HAVE BEEN INTENTIONALLY DISABLED, RUN-OVER, REMOVED, OR OTHERWISE RENDERED INEFFECTIVE MUST BE REPLACED OR CORRECTED IMMEDIATELY UPON DISCOVERY.  B. IF PERIODIC INSPECTIONS OR OTHER INFORMATION INDICATES A CONTROL HAS BEEN USED INCORRECTLY, IS PERFORMING INADEQUATELY, OR IS DAMAGED, THEN THE OPERATOR MUST REPLACE OR MODIFY THE CONTROL AS SOON AS PRACTICABLE AFTER MAKING THE DISCOVERY.  C. SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAPS AND SEDIMENTATION PONDS NO LATER THAN THE TIME THAT DESIGN CAPACITY HAS BEEN REDUCED BY 50%. FOR PERIMETER CONTROLS SUCH AS SILT FENCES, BERMS, ETC., THE TRAPPED SEDIMENT MUST BE REMOVED BEFORE IT REACHES 50% OF THE ABOVE GROUND HEIGHT.  D. IF SEDIMENT ESCAPES THE SITE, ACCUMULATIONS MUST BE REMOVED AT A FREQUENCY THAT MINIMIZES OFF-SITE IMPACTS, AND PRIOR TO THE NEXT RAIN EVENT, IF FEASIBLE. IF THE PERMITEE DOES NOT OWN THE OFFSITE CONVEYANCE, THEN THE PERMITEE MUST WORK WITH THE OWNER OR OPERATOR OF THE PROPERTY TO REMOVE THE SEDIMENT.</p> <p>6. EROSION AND SEDIMENT CONTROLS:  A. THE FOLLOWING NON-STRUCTURAL EROSION AND SEDIMENT CONTROLS WILL BE UTILIZED ON THE PROJECT SITE:  A.1. WHERE PRACTICAL, CARE WILL BE TAKEN TO PROTECT NATURAL VEGETATION THAT DOES NOT NEED TO BE REMOVED FOR CONSTRUCTION PURPOSES.  A.2. PLACEMENT OF CONCRETE PARKING AND DRIVEWAY AREAS WILL BE PERFORMED AS SOON AS POSSIBLE AFTER SUB-GRADE STABILIZATION, TO MINIMIZE THE AMOUNT OF TIME DISPOSED SOIL IS EXPOSED TO THE ELEMENTS. THIS PRACTICE WILL REDUCE THE FREQUENCY THAT MAINTENANCE IS REQUIRED ON THE STRUCTURAL BMP'S.  A.3. THE GENERAL PERMIT REQUIRES THAT EROSION AND STABILIZATION MEASURES MUST BE INITIATED WITHIN 14 DAYS IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED. IF CONSTRUCTION ACTIVITY IS SCHEDULED TO RESUME WITHIN 21 DAYS FROM THE CESSATION OF CONSTRUCTION ACTIVITY, EROSION AND STABILIZATION MEASURES ARE NOT REQUIRED FOR THAT PORTION OF THE SITE.  A.4. STABILIZATION PROCEDURES SUCH AS TURF ESTABLISHMENT AND INSTALLATION OF PLANT MATERIAL SHOULD BE COMMENCED AS SOON AS PRACTICABLE AFTER SITE GRADING IS COMPLETE AND FINAL.  B. THE FOLLOWING STRUCTURAL EROSION AND SEDIMENT CONTROLS WILL BE UTILIZED ON THE PROJECT SITE:  B.1. A STABILIZED CONSTRUCTION EXIT WILL BE INSTALLED AT THE LOCATION WHERE CONSTRUCTION TRAFFIC EXITS THE PROJECT SITE  B.2. INLET PROTECTION TRAPS WILL BE INSTALLED AT ALL INLETS IMMEDIATELY AFTER CONCRETE PAVEMENT IS PLACED  B.3. SILT FENCING (FILTER FABRIC FENCE OR REINFORCED FILTER FABRIC FENCE) WILL BE INSTALLED ALONG THE PROPERTY BOUNDARY AND ADJACENT TO EXISTING DITCHES, BAYOUS, STREAMS, RIVERS, AND/OR CHANNELS.  B.4. ANY SEDIMENT THAT ENTERS THE STORM SEWER SYSTEM WILL BE REMOVED IMMEDIATELY (NOT FLUSHED).  B.5. SINCE ALL PROPOSED INLETS DRAIN LESS THAN 10-ACRES, SEDIMENT BASINS ARE NOT REQUIRED FOR THIS SITE.  B.6. WHERE PRACTICAL, CARE WILL BE TAKEN TO PROTECT NATURAL VEGETATION THAT DOES NOT NEED TO BE REMOVED FOR CONSTRUCTION PURPOSES.</p>	<table border="1"> <tr> <td>AL PROJECT NO. 022-25-CV-1620</td> <td>DATE: MARCH 2026</td> <td>SCALE: N/A</td> <td>DRAWN BY: SRH</td> <td>CHECKED BY: BTH</td> <td>NO.</td> <td>REVISIONS</td> <td>DATE</td> </tr> <tr> <td colspan="7" style="text-align: center;">  </td> <td></td> </tr> <tr> <td colspan="8" style="text-align: center;">10 MARCH 2026</td> </tr> </table>	AL PROJECT NO. 022-25-CV-1620	DATE: MARCH 2026	SCALE: N/A	DRAWN BY: SRH	CHECKED BY: BTH	NO.	REVISIONS	DATE									10 MARCH 2026							
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<p><b>GRADING &amp; EXCAVATION NOTES</b></p> <p>1. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE START OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.</p> <p>2. BEFORE STARTING CONSTRUCTION, CONTRACTOR SHALL VERIFY BENCHMARK ELEVATION AND NOTIFY ENGINEER IF ANY DISCREPANCY AND/OR CONFLICT IS FOUND.</p> <p>3. CONTRACTOR SHALL ENSURE THERE IS POSITIVE DRAINAGE FROM THE PROPOSED BUILDINGS AND NO PONDING IN EITHER PAVED OR LANDSCAPE AREAS, AND SHALL NOTIFY ENGINEER IF ANY GRADING DISCREPANCIES ARE FOUND IN THE EXISTING AND PROPOSED GRADES PRIOR TO PLACEMENT OF PAVEMENT OR UTILITIES.</p> <p>4. CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES THAT ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION.</p> <p>5. ALL EXISTING CONCRETE PAVING, SIDEWALK, AND CURB DEMOLITION SHALL BE REMOVED AND DISPOSED OF BY CONTRACTOR. DISPOSAL SHALL BE AT AN APPROVED OFF-SITE, LAWFUL LOCATION, UNLESS DIRECTED OTHERWISE BY THE OWNER.</p> <p>6. FOR BUILDING PAD SUBGRADE PREPARATION AND GENERAL EARTHWORK OBSERVATIONS, REFER TO THE GEOTECHNICAL REPORT PREPARED BY GEOTEEST ENGINEERING, INC., DATED JANUARY 2023 (PROJECT NUMBER 1140278201). ALL MATERIAL SPECIFICATIONS AND TESTING SHALL BE ADHERED TO AS OUTLINED IN THIS REPORT.</p> <p>7. FINAL PAVEMENT GRADES SHALL BE WITHIN 0.05' OF DESIGN ELEVATIONS, EXCEPT FOR ADA AREAS, WHICH SHALL BE WITHIN 0.01' OF DESIGN ELEVATIONS. FINAL NON-PAVEMENT ELEVATIONS SHALL BE WITHIN 0.1' OF PROPOSED GRADE.</p> <p>8. ALL DETENTION POND SHALL BE GRADED TO WITHIN 0.1' OF HORIZONTAL LOCATION. AFTER COMPLETION AN AS-BUILT SURVEY WILL BE ORDERED BY OWNER, AND ANY POND NOT BUILT PER PLAN, WILL BE CORRECTED AT CONTRACTOR'S SOLE COST.</p> <p>9. ALL DISTURBED AREAS NOT COVERED BY PAVEMENT OR LANDSCAPING SHALL BE HYDROSEEDING WITH 95% GRASS COVER ESTABLISHED. THIS INCLUDES, BUT IS NOT LIMITED TO, DETENTION POND AND ROADSIDE DITCHES.</p> <p>10. GROUNDWATER MAY BE ENCOUNTERED DURING DETENTION POND AND/OR UTILITY CONSTRUCTION. THE CIVIL ENGINEER OF RECORD HAS NOT ATTEMPTED TO DEPCT THESE CONDITIONS ON THE PLANS, BUT CONTRACTOR SHALL REVIEW APPLICABLE GEOTECHNICAL REPORTS AND STUDIES PRIOR TO SUBMITTING BID AND ACCOUNT FOR REQUISITE GROUNDWATER CONTROL.</p> <p>11. CONTRACTOR SHALL THE ENGINEER OF RECORD WITH AS-BUILT SURVEY IF THE POND FOR VERIFICATION OF FINAL GRADES PRIOR TO PLACEMENT OF CONCRETE PILOT CHANNEL AND/OR SEEDING.</p> <p>12. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY WASHOUT OR RILLS THAT OCCUR PRIOR TO TURF ESTABLISHMENT.</p>	<p><b>SANITARY SEWERS</b></p> <p>1. ALL SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST A.H.J. AND TCEQ CRITERIA AND BE SUBJECT TO A REQUIRED FIELD TESTING. TESTS ARE TO BE PERFORMED ON THE TOTAL FOOTAGE OF SEWER LINE INCLUDED IN THE PROJECT. REQUIREMENTS OF TEXAS ADMINISTRATIVE CODE, TITLE 30 CHAPTER 217, "DESIGN CRITERIA FOR SEWERAGE SYSTEMS" SHALL GOVERN WHERE CONFLICTS EXIST EXCEPT WHERE A.H.J. REQUIREMENTS ARE OF HIGHER STANDARDS.</p> <p>2. SANITARY SEWER PIPE USED FOR CONNECTION TO SEWER IN PUBLIC RIGHT-OF-WAY SHALL BE 3000 P.V.C. PIPE MEETING ASTM SPECIFICATION D3034 WITH RUBBER GASKET JOINTS. ALL OTHER PRIVATE SANITARY SEWER MATERIAL SHALL CONFORM TO THE FOLLOWING CRITERIA:</p> <p>A. POLYVINYL CHLORIDE (PVC) SCHEDULE 40 TO BE USED FOR PIPE SIZES 6 INCHES AND SMALLER.  B. STANDARD DIMENSION RATIO (SDR) 35 PVC OR 26 PVC CAN BE USED FOR PIPE SIZES 8 INCHES AND LARGER. SEE NOTE 6 BELOW REGARDING SDR 26 FITTINGS.</p> <p>3. ALL SEWERS UNDER PROPOSED OR FUTURE PAVEMENT AND TO A POINT ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL BE BACKFILLED WITH 1 1/2 SACK CEMENT/C.Y. STABILIZED SAND TO WITHIN ONE (1) FOOT OF SUBGRADE. CEMENT STABILIZED SAND TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM C33, LATEST EDITION</p> <p>4. ALL SANITARY SEWERS AND WATER LINES CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH A.H.J. AND TCEQ REGULATIONS.</p> <p>5. SANITARY SEWER MANHOLE RIMS OUTSIDE OF PROPOSED PAVING WILL BE SET 3"- 6" ABOVE THE SURROUNDING LEVEL FINISHED GRADE AFTER PAVING AND GRADING OPERATIONS.</p> <p>6. SDR 26 P.V.C. PIPE USES "FULL BODIED" SDR 26 P.V.C. FITTINGS OR D.I.P. FITTINGS WITH APPROPRIATE ADAPTERS. AWWA C-900 DR-18 P.V.C. PIPE USES EITHER AWWA C900 DR-18 P.V.C. FITTINGS OR D.I.P. FITTINGS.</p> <p>7. DEFLECTION TEST: DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE AND SEMI-RIGID SEWER PIPE BETWEEN MANHOLES. SERVICE LEADS SHALL NOT BE TESTED. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. THE DEFLECTION TEST SHALL USE A RIGID 7-SIDED MANDREL, WITH A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. NO MECHANICAL PULLING IS ALLOWED.</p> <p>8. INFILTRATION, EXFILTRATION OR LOW-PRESSURE AIR TEST: EITHER OF THE FOLLOWING TESTS SHALL BE PERFORMED AS PER TAC, TITLE 30 217.2 WITHIN THE SPECIFIED TOLERANCES ON ALL GRAVITY SEWERS.</p> <p>9. NO CONNECTIONS SHALL BE MADE TO THE EXISTING SANITARY SEWER LINES UNTIL ALL PROPOSED SEWER LINES HAVE BEEN THOROUGHLY CLEANED, TESTED AND APPROVED BY THE ENGINEER. THE ENGINEER AND A.H.J. SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE CONTRACTOR CONNECTING TO ANY EXISTING SEWER LINES.</p> <p>10. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE A.H.J. AT LEAST 48 HOURS PRIOR TO PRESSURE AND DEFLECTION TEST ON ALL SANITARY LINES.</p> <p>11. ALL SEWER LINES ENTERING A MANHOLE AT A FLOWLINE HIGHER THAN 3.0' OR 36" ABOVE THE MANHOLE INVERT MUST BE PROVIDED WITH A DROP PIPE OUTSIDE OF THE MANHOLE.</p> <p>12. PUMPED SANITARY SEWER CONNECTIONS AND/OR PROPOSED SANITARY SEWER MANHOLES TO AN EXISTING SANITARY SEWER MAIN MAY REQUIRE BYPASS OPERATIONS OR OTHER MEANS AS REQUIRED BY THE A.H.J. TO AVOID THE INTERRUPTION OF SERVICE DURING CONSTRUCTION. CONTRACTOR SHALL INCLUDE THIS COST IN THE BASE BID.</p> <p>13. ALL GRAVITY BASED SANITARY SEWER LINES ARE TO BE CONSTRUCTED FROM THE POINT OF CONNECTION AND WORKED UP IN ELEVATION. PLEASE NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.</p>	<p><b>TRAFFIC NOTES</b></p> <p>1. THE CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) LATEST EDITION WITH REVISIONS DURING THE ENTIRE CONSTRUCTION PERIOD.</p> <p>2. NO WORK SHALL BE PERFORMED IN RESIDENTIAL AREAS FROM 7:00PM TO 7:00AM.</p> <p>3. CONTRACTOR SHALL MAINTAIN APPROVED NUMBER OF LANES OF TRAFFIC IN EACH DIRECTION DURING CONSTRUCTION WORKING HOURS. TRAFFIC CONTROL PLANS SHALL INCLUDE ONE-WAY AND/OR DETOUR PLANS. CONTRACTOR SHALL MAINTAIN ADA COMPLIANT PEDESTRIAN ACCESS TO BUS STOPS AND ADEQUATE BUS ACCESS TO THE BUS STOP.</p> <p>4. CONTRACTOR SHALL COVER OPEN PAVEMENT EXCAVATIONS FOR MINOR UTILITY WORK WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, OPEN LANES FOR NORMAL TRAFFIC FLOW WHEN FEASIBLE.</p> <p>5. CONTRACTOR SHALL SECURE LANE/SIDEWALK/BICYCLE FACILITY CLOSURE PERMITS AS REQUIRED BY THE A.H.J. BEFORE IMPLEMENTING THE TRAFFIC CONTROL PLAN. THE APPLICATION MUST BE SUBMITTED AND APPROVED PRIOR TO THE IMPLEMENTATION OF THE TRAFFIC CONTROL PLAN AND/OR BEGINNING CONSTRUCTION WORK. THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANS, CONSTRUCTION SCHEDULE WITH THE APPLICATION.</p> <p>6. CONTRACTOR SHALL HAVE APPROVED TRAFFIC CONTROL PLAN AND PERMIT AT THE JOB SITE FOR INSPECTION AT ALL TIMES.</p> <p>7. ACCESS TO DRIVEWAYS ADJACENT TO THE CONSTRUCTION WORK ZONE SHALL BE MAINTAINED AT ALL TIMES AS MUCH AS POSSIBLE. ADDITIONAL CONES AND/OR DELINEATORS MAY BE REQUIRED TO DELINEATE THE DRIVEWAY ACCESS ROUTE THROUGHOUT THE CONSTRUCTION WORK ZONE. A MINIMUM OF ONE TRAVEL LANE SHALL BE MAINTAINED ACROSS THE DRIVEWAY, UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE CITY OF HOUSTON.</p> <p>8. ADDITIONAL OFF-DUTY POLICE OFFICERS/FLAGGERS MAY BE REQUESTED TO DIRECT TRAFFIC WHEN THE LANES ARE BLOCKED AT THE DIRECTION OF THE CITY EVEN IF THEY ARE NOT SPECIFICALLY IDENTIFIED ON THE PROJECT PLANS.</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">BINGLE ROAD RETAIL 1045 BINGLE ROAD HOUSTON, TEXAS 77055</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">GENERAL NOTES</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">SHEET C0.1</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">VERSION 1.3 MAY 16, 2024</p>																								



VICINITY MAP  
NOT TO SCALE  
KEY MAP NO. 4900

**LEGEND**

AIN	TYPE A INLET
B	BOLLARD
BBN	TYPE BB INLET
BRS	BEARS
BS	BRICK SIGN MONUMENT
CIN	TYPE C INLET
CONC.	CONCRETE
EB	ELECTRICAL BOX
ECR	ELECTRICAL CONDUIT RISER
ELEV.	ELEVATION
EM	ELECTRIC METER
EMP	ELECTRIC METER POLE
ESMT.	EASEMENT
FI	FIBER OPTIC MARKER
FL	FLOOD LAMP
FND.	FOUND
FOM	FIBER OPTIC MARKER
FP	FLAG POLE
GXX.XX	GUTTER ELEVATION
H.C.C.F. NO.	HARRIS COUNTY CLERK FILE NUMBER
H.C.C.F. NO.	HARRIS COUNTY MAP RECORDS
I.	IRON
ICV	IRRIGATION CONTROL VALVE
MP	METER POLE
PAGE	PAGE
PG	PIPELINE MARKER
PLM	PIPELINE MARKER
PP	POWER POLE
PPG	POWER POLE WITH GUY
PPT	POWER POLE WITH TRANSFORMER
PPTG	POWER POLE WITH TRANSFORMER AND GUY
R.O.W.	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
SAMH	SANITARY MANHOLE
SAN.	SANITARY
SP	SERVICE POLE
SPG	SERVICE POLE WITH GUY
SQ. FT.	SQUARE FEET
STM.	STORM
STMH	STORM MANHOLE
TBM	TEMPORARY BENCHMARK
TCXX.XX	TOP OF CURB ELEVATION
TH	THROAT
TMH	TELEPHONE MANHOLE
TPED	TELEPHONE PEDESTAL
TSP	TRAFFIC SIGNAL POLE
UE	UTILITY EASEMENT
UCB	UNDERGROUND COMMUNICATION BOX
UEB	UNDERGROUND ELECTRICAL BOX
UTB	UNDERGROUND TELEPHONE BOX
VOL.	VOLUME
WIF	WROUGHT IRON FENCE
WM	WATER METER
WW	WATER VALVE
—	OVERHEAD ELECTRIC

**BENCHMARK NOTES**

**BM 210215**  
BRASS DISK LOCATED ON THE SOUTH WALKWAY OF BRIDGE AT THE INTERSECTION OF WESTVIEW DRIVE AND SPRING BRANCH (STREAM W140-00-00)  
ELEV. 68.31 NAVD88 (2001 ADJUSTMENT)

**BM 210255**  
BRASS DISK LOCATED ON THE EAST WALKWAY OF BRIDGE ON FRIES ROAD, BEING APPROX 0.5 MILES NORTH FROM THE INTERSECTION WITH INTERSTATE 10 (STREAM W140-00-00)  
ELEV. 70.83 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-7**  
SCRIBED "X" ON TOP OF A CURB LOCATED ON THE SOUTHWEST SIDE OF BINGLE ROAD, BEING APPROX 400 FEET NORTHWEST FROM THE INTERSECTION WITH INTERSTATE 10, APPROX 35.9 FEET NORTHEAST FROM A "NO DUMPING OR TRESPASSING" SIGN, AND APPROX 30.1 FEET SOUTHWEST FROM A STORM INLET  
ELEV. 66.74 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-8**  
SCRIBED "X" ON TOP OF A CURB INLET LOCATED ON THE NORTH SIDE OF INTERSTATE 10 WEST BOUND SERVICE ROAD, BEING THE FIRST INLET WEST FROM THE INTERSECTION WITH BINGLE ROAD.  
ELEV. 65.74 NAVD88 (2001 ADJUSTMENT)

I, SEAN CONLEY, A REGISTERED PROFESSIONAL LAND SURVEYOR OF THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS MANUAL OF PRACTICE REQUIREMENTS FOR A CATEGORY 6, CONDITION 1 SURVEY. FIELDWORK WAS COMPLETED ON APRIL 28, 2025.

DATE OF SURVEY: MAY 5, 2025.

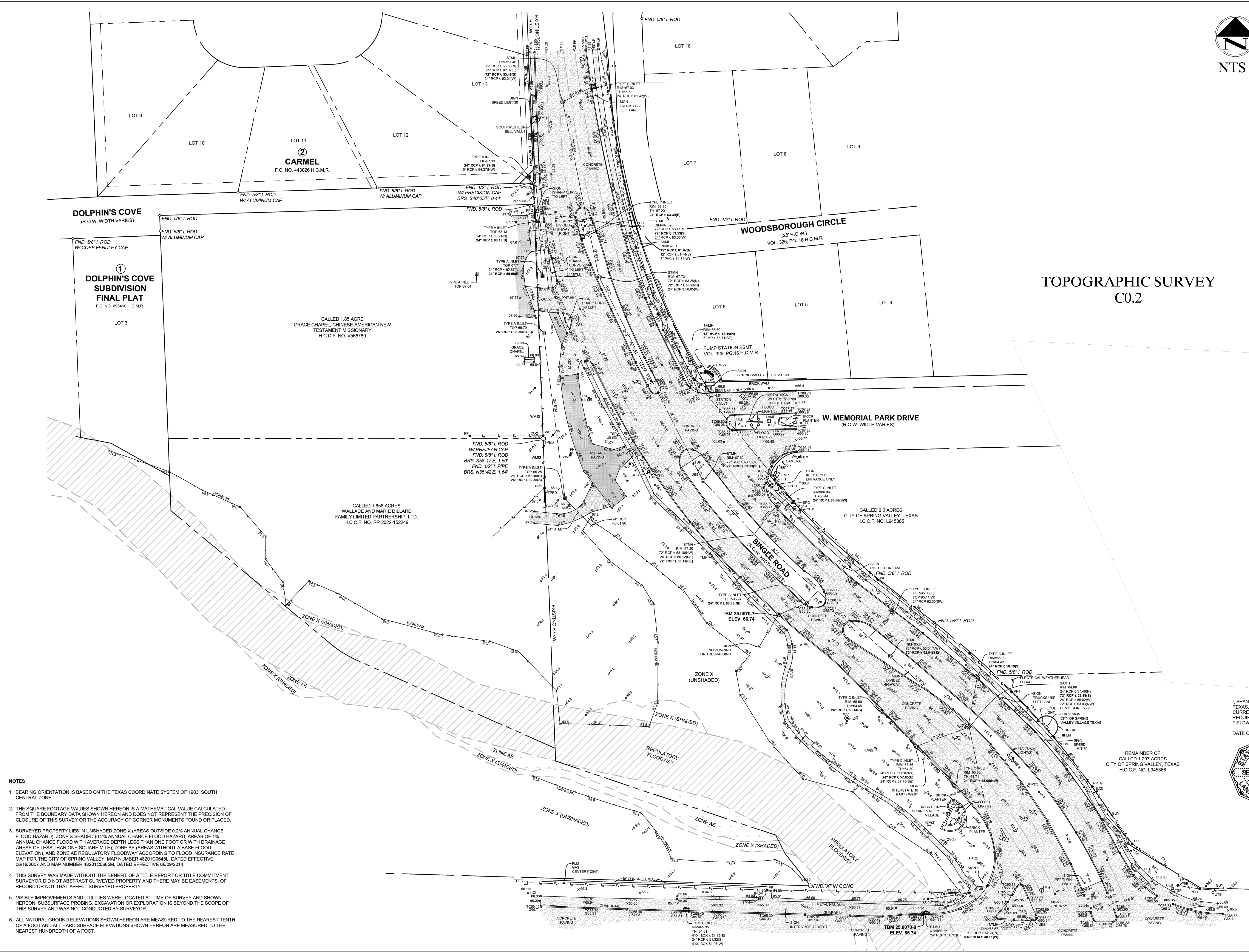


*SC*  
SEAN CONLEY RPLS. NO. 6739  
SEAN@CONLEYLAND.COM

ADDRESS NOT AVAILABLE  
PARTIAL TOPOGRAPHIC SURVEY OF  
BINGLE ROAD  
SITUATED IN THE  
A.H. OSBOURNE SURVEY, ABSTRACT 610  
CITY OF SPRING VALLEY  
HARRIS COUNTY, TEXAS

CONLEY LAND SERVICES, L.L.C.  
18935 NORTH ELDRIDGE PARKWAY, SUITE 101  
TOMBALL, TX 77377  
TEL. (832) 724-6997  
CONLEYLAND.COM  
TBBLE.FIRM.NO. 10184732  
SCALE: 1"=40' JOB NO. 25.0070 DATE: 05/05/2025 FS NO. 17

# TOPOGRAPHIC SURVEY C0.2



- NOTES**
- BEARING ORIENTATION IS BASED ON THE TEXAS COORDINATE SYSTEM OF 1983, SOUTH CENTRAL ZONE.
  - THE SQUARE FOOTAGE VALUES SHOWN HEREON IS A MATHEMATICAL VALUE CALCULATED FROM THE BOUNDARY DATA SHOWN HEREON AND DOES NOT REPRESENT THE PRECISION OF CLOSURE OF THIS SURVEY OR THE ACCURACY OF CORNER MONUMENTS FOUND OR PLACED.
  - SURVEYED PROPERTY LIES IN UNSHADED ZONE X (AREAS OUTSIDE 0.2% ANNUAL CHANCE FLOOD HAZARD), ZONE X SHADED (0.2% ANNUAL CHANCE FLOOD HAZARD), AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE), ZONE AE (AREAS WITHOUT A BASE FLOOD ELEVATION), AND ZONE AE REGULATORY FLOODWAY ACCORDING TO FLOOD INSURANCE RATE MAP FOR THE CITY OF SPRING VALLEY, MAP NUMBER 48201C0645L, DATED EFFECTIVE 06/18/2007 AND MAP NUMBER 48201C0665M, DATED EFFECTIVE 06/09/2014.
  - THIS SURVEY WAS MADE WITHOUT THE BENEFIT OF A TITLE REPORT OR TITLE COMMITMENT. SURVEYOR DID NOT ABSTRACT SURVEYED PROPERTY AND THERE MAY BE EASEMENTS, OF RECORD OR NOT THAT AFFECT SURVEYED PROPERTY.
  - VISIBLE IMPROVEMENTS AND UTILITIES WERE LOCATED AT TIME OF SURVEY AND SHOWN HEREON. SUBSURFACE PROBING, EXCAVATION OR EXPLORATION IS BEYOND THE SCOPE OF THIS SURVEY AND WAS NOT CONDUCTED BY SURVEYOR.
  - ALL NATURAL GROUND ELEVATIONS SHOWN HEREON ARE MEASURED TO THE NEAREST TENTH OF A FOOT AND ALL HARD SURFACE ELEVATIONS SHOWN HEREON ARE MEASURED TO THE NEAREST HUNDREDTH OF A FOOT.

**DOLPHIN'S COVE**  
(R.O.W. WIDTH VARIES)  
**1**  
**DOLPHIN'S COVE**  
SUBDIVISION  
FINAL PLAT  
F.C. NO. 695410 H.C.M.R.

**2**  
**CARMEL**  
F.C. NO. 443026 H.C.M.R.

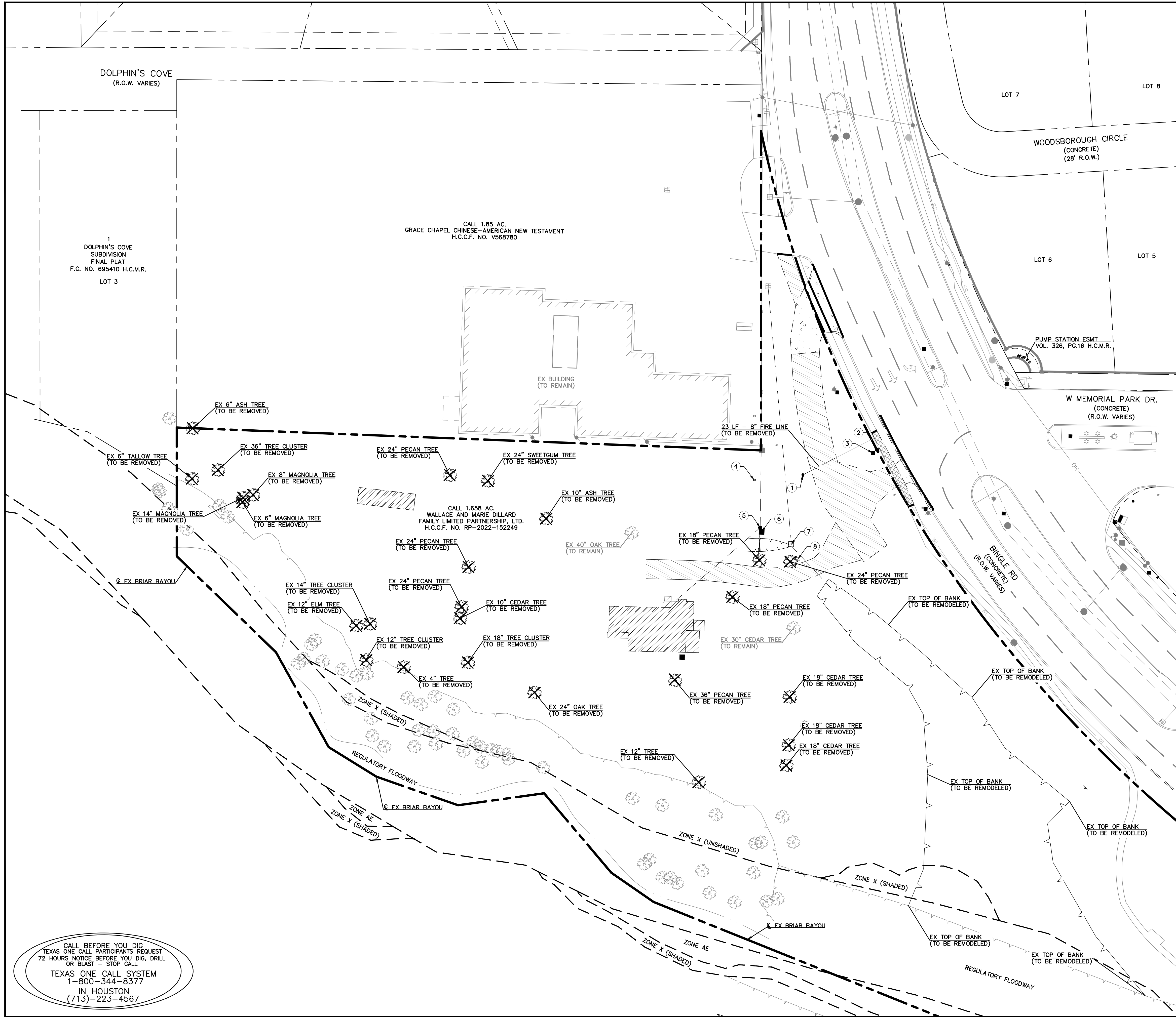
CALLED 1.85 ACRE  
GRACE CHAPEL, CHINESE-AMERICAN NEW  
TESTAMENT MISSIONARY  
H.C.C.F. NO. V568760

CALLED 1.658 ACRES  
WALLACE AND MARIE DILLARD  
FAMILY LIMITED PARTNERSHIP, LTD.  
H.C.C.F. NO. RP-2022-152249

**WOODSBOROUGH CIRCLE**  
(28' R.O.W.)  
VOL. 326, PG. 16 H.C.M.R.

**W. MEMORIAL PARK DRIVE**  
(R.O.W. WIDTH VARIES)

CALLED 2.0 ACRES  
CITY OF SPRING VALLEY, TEXAS  
H.C.C.F. NO. L945365



**BENCHMARK NOTES**

**RM 210216**  
BRASS DISK LOCATED ON THE SOUTH WALKWAY OF BRIDGE AT THE INTERSECTION OF WESTVIEW DRIVE AND SPRING BRANCH (STREAM W140-00-00). ELEV. 68.31 NAVD88 (2001 ADJUSTMENT)

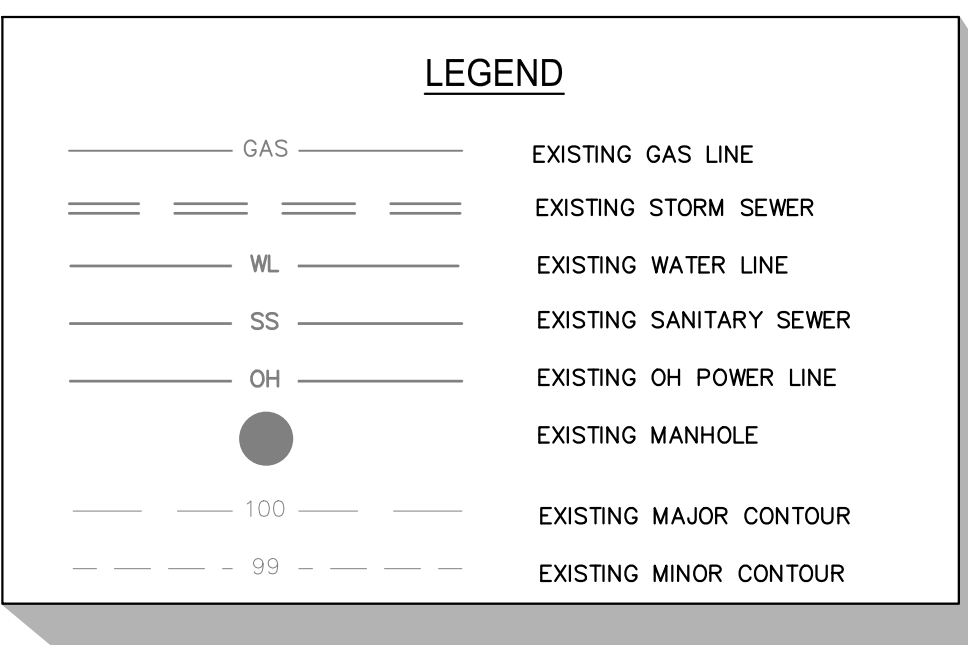
**RM 210255**  
BRASS DISK LOCATED ON THE EAST WALKWAY OF BRIDGE ON FRIES ROAD, BEING APPROX 0.5 MILES NORTH FROM THE INTERSECTION WITH INTERSTATE 10 (STREAM W140-00-00). ELEV. 70.83 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-7**  
SCRIBED "X" ON TOP OF A CURB LOCATED ON THE SOUTHWEST SIDE OF BINGLE ROAD, BEING APPROX 400 FEET NORTHWEST FROM THE INTERSECTION WITH INTERSTATE 10, APPROX 35.9 FEET NORTHEAST FROM A "NO DUMPING OR TRESPASSING" SIGN, AND APPROX 30.1 FEET SOUTHWEST FROM A STORM INLET. ELEV. 66.74 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-8**  
SCRIBED "X" ON TOP OF A CURB INLET LOCATED ON THE NORTH SIDE OF INTERSTATE 10 WEST BOUND SERVICE ROAD, BEING THE FIRST INLET WEST FROM THE INTERSECTION WITH BINGLE ROAD. ELEV. 65.74 NAVD88 (2001 ADJUSTMENT)

**GRAPHIC SCALE**  
1 inch = 30 ft

- KEYED NOTES**
- EXISTING FEATURES TO BE REMOVED**
- EX FIRE HYDRANT ASSEMBLY & GATE VALVE (TO BE RELOCATED)
  - EX PEDESTRIAN TRAFFIC SIGNAL POLE (TO BE RELOCATED)
  - EX UNDERGROUND ELECTRICAL BOX (TO BE RELOCATED)
  - EX WATER METER (TO BE REMOVED)
  - EX POWER POLE W/ GUY WIRE (TO BE RELOCATED)
  - EX TELEPHONE PEDESTAL (TO BE RELOCATED)
  - EX TYPE "A" INLET (TO BE REMOVED)
  - EX MAILBOX (TO BE REMOVED)
- EX TREE (TO BE REMOVED)
- EXISTING BUILDING (TO BE REMOVED) (SEE NOTE 4)
- EXISTING CONCRETE PAVEMENT (TO BE REMOVED)
- EXISTING ASPHALT PAVEMENT (TO BE REMOVED)
- EXISTING SIDEWALK (TO BE REMOVED)
- SAWCUT (FULL DEPTH)



- GENERAL NOTES**
- ALL SAWCUTS TO EXTEND FULL DEPTH OF EXISTING PAVEMENT, AND IN NO CASE SHALL THE PROPOSED CONCRETE PAVEMENT SECTION BE LESS THAN 24 INCHES IN WIDTH. CONTRACTOR TO SAWCUT ALONG GUTTER OF EXISTING PAVEMENT AND ADJUST LOCATION OF SAWCUT TO ENSURE ADEQUATE WIDTH OF PROPOSED PAVEMENT.
  - CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL FOR ALL WORK TO BE DONE IN RIGHT-OF-WAY ACCORDING TO THE LATEST MUTCD REQUIREMENTS.
  - CONTRACTOR TO CLEAR AND GRUB PROJECT SITE AS NECESSARY FOR INSTALLATION OF PROPOSED FACILITIES. CLEARING AND GRUBBING CONSISTS OF REMOVAL AND DISPOSAL OF TREES, STUMPS, BRUSH, ROOTS, VEGETATION, LOGS, RUBBISH AND OTHER OBJECTIONABLE MATTER WITHIN THE DESIGNATED AREA. CONTRACTOR TO REMOVE STUMPS AND ROOTS WITHIN CLEARING LIMITS TO MINIMUM DEPTH OF TWO (2') FEET BELOW NATURAL GROUND ELEVATION. CLEARED AND GRUBBED MATERIAL BECOMES PROPERTY OF THE CONTRACTOR, TO BE REMOVED FROM THE WORK SITE OR DISPOSED OF AT NO EXTRA COST TO THE OWNER.
  - CONTRACTOR TO REMOVE CONCRETE SLAB AND GRADE BEAMS IN THEIR ENTIRETY. CONTRACTOR TO NOTE ALL CONCRETE FOOTINGS LEFT IN PLACE ON A SURVEY AND PROVIDE THAT INFORMATION TO THE OWNER.

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

CALL BEFORE YOU DIG  
TEXAS ONE CALL PARTICIPANTS REQUEST  
72 HOURS NOTICE BEFORE YOU DIG, DRILL  
OR BLAST - STOP CALL  
TEXAS ONE CALL SYSTEM  
1-800-344-6377  
IN HOUSTON  
(713)-223-4567

NO.	REVISIONS	DATE

**ALJLindsey**  
Civil Engineers  
1885 N. Loop West, Suite 200  
Houston, TX 77027  
281.301.9565  
PRN.F-11526

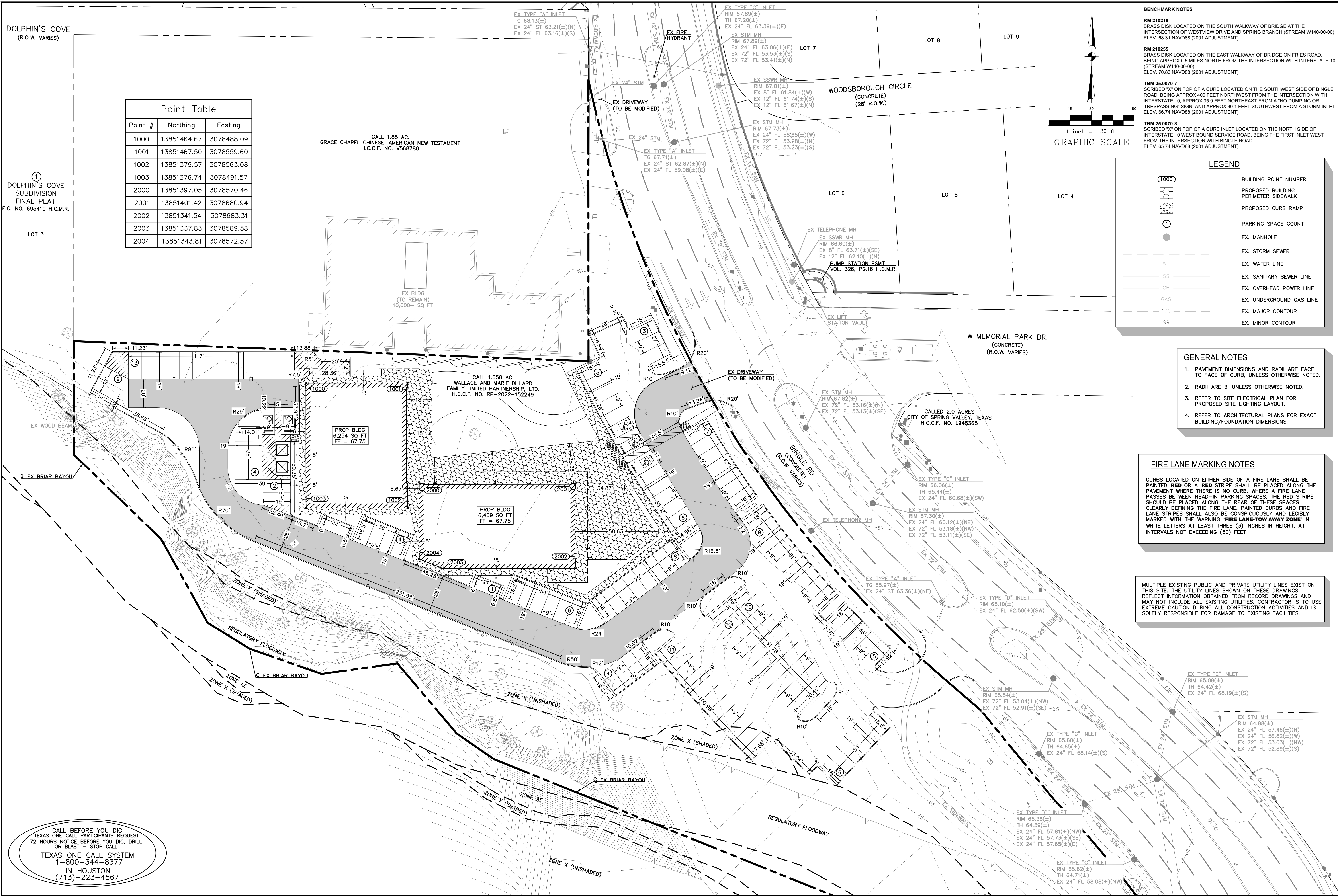
**BRETT T. HANRAHAN**  
REGISTERED PROFESSIONAL ENGINEER  
12908  
10 MARCH 2026

ALL PROJECT NO.  
02225CV1620  
DATE: MARCH 2026  
SCALE: 1"=X  
DRAWN BY: SRH  
CHECKED BY: BTH

**DEMOLITION PLAN**

**BINGLE ROAD RETAIL**  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

SHEET  
**C0.3**



**Point Table**

Point #	Northing	Easting
1000	13851464.67	3078488.09
1001	13851467.50	3078559.60
1002	13851379.57	3078563.08
1003	13851376.74	3078491.57
2000	13851397.05	3078570.46
2001	13851401.42	3078680.94
2002	13851341.54	3078683.31
2003	13851337.83	3078589.58
2004	13851343.81	3078572.57

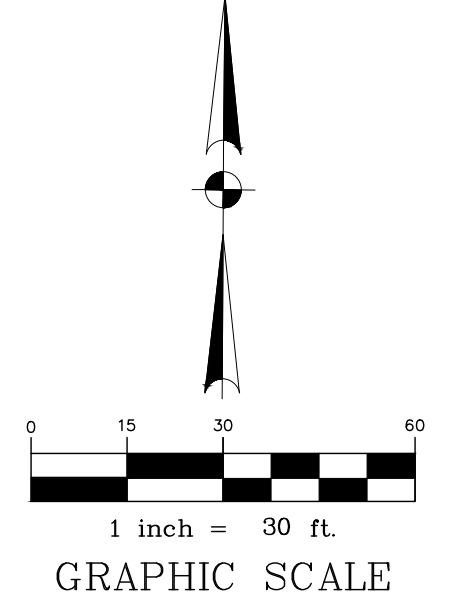
**BENCHMARK NOTES**

**RM 210216**  
BRASS DISK LOCATED ON THE SOUTH WALKWAY OF BRIDGE AT THE INTERSECTION OF WESTVIEW DRIVE AND SPRING BRANCH (STREAM W140-00-00). ELEV. 68.31 NAVD88 (2001 ADJUSTMENT)

**RM 210255**  
BRASS DISK LOCATED ON THE EAST WALKWAY OF BRIDGE ON FRIES ROAD, BEING APPROX 0.5 MILES NORTH FROM THE INTERSECTION WITH INTERSTATE 10 (STREAM W140-00-00). ELEV. 70.83 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-7**  
SCRIBED "X" ON TOP OF A CURB LOCATED ON THE SOUTHWEST SIDE OF BINGLE ROAD, BEING APPROX 400 FEET NORTHWEST FROM THE INTERSECTION WITH INTERSTATE 10, APPROX 35.9 FEET NORTHEAST FROM A "NO DUMPING OR TRESPASSING" SIGN, AND APPROX 30.1 FEET SOUTHWEST FROM A STORM INLET. ELEV. 65.74 NAVD88 (2001 ADJUSTMENT)

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**LEGEND**

(1000)	BUILDING POINT NUMBER
[Pattern]	PROPOSED BUILDING PERIMETER SIDEWALK
[Pattern]	PROPOSED CURB RAMP
(1)	PARKING SPACE COUNT
(●)	EX. MANHOLE
(○)	EX. STORM SEWER
(○)	EX. WATER LINE
(○)	EX. SANITARY SEWER LINE
(○)	EX. OVERHEAD POWER LINE
(○)	EX. UNDERGROUND GAS LINE
(○)	EX. MAJOR CONTOUR
(○)	EX. MINOR CONTOUR

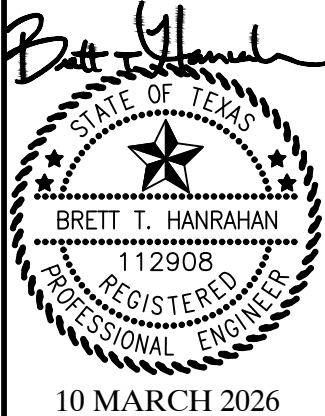
- GENERAL NOTES**
1. PAVEMENT DIMENSIONS AND RADII ARE FACE TO FACE OF CURB, UNLESS OTHERWISE NOTED.
  2. RADII ARE 3' UNLESS OTHERWISE NOTED.
  3. REFER TO SITE ELECTRICAL PLAN FOR PROPOSED SITE LIGHTING LAYOUT.
  4. REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING/FOUNDATION DIMENSIONS.

**FIRE LANE MARKING NOTES**

CURBS LOCATED ON EITHER SIDE OF A FIRE LANE SHALL BE PAINTED RED OR A RED STRIPE SHALL BE PLACED ALONG THE PAVEMENT WHERE THERE IS NO CURB. WHERE A FIRE LANE PASSES BETWEEN HEAD-IN PARKING SPACES, THE RED STRIPE SHOULD BE PLACED ALONG THE REAR OF THESE SPACES CLEARLY DEFINING THE FIRE LANE. PAINTED CURBS AND FIRE LANE STRIPES SHALL ALSO BE CONSPICUOUSLY AND LEGIBLY MARKED WITH THE WARNING "FIRE LANE-TOW AWAY ZONE" IN WHITE LETTERS AT LEAST THREE (3) INCHES IN HEIGHT, AT INTERVALS NOT EXCEEDING (50) FEET

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

No.	REVISIONS	DATE



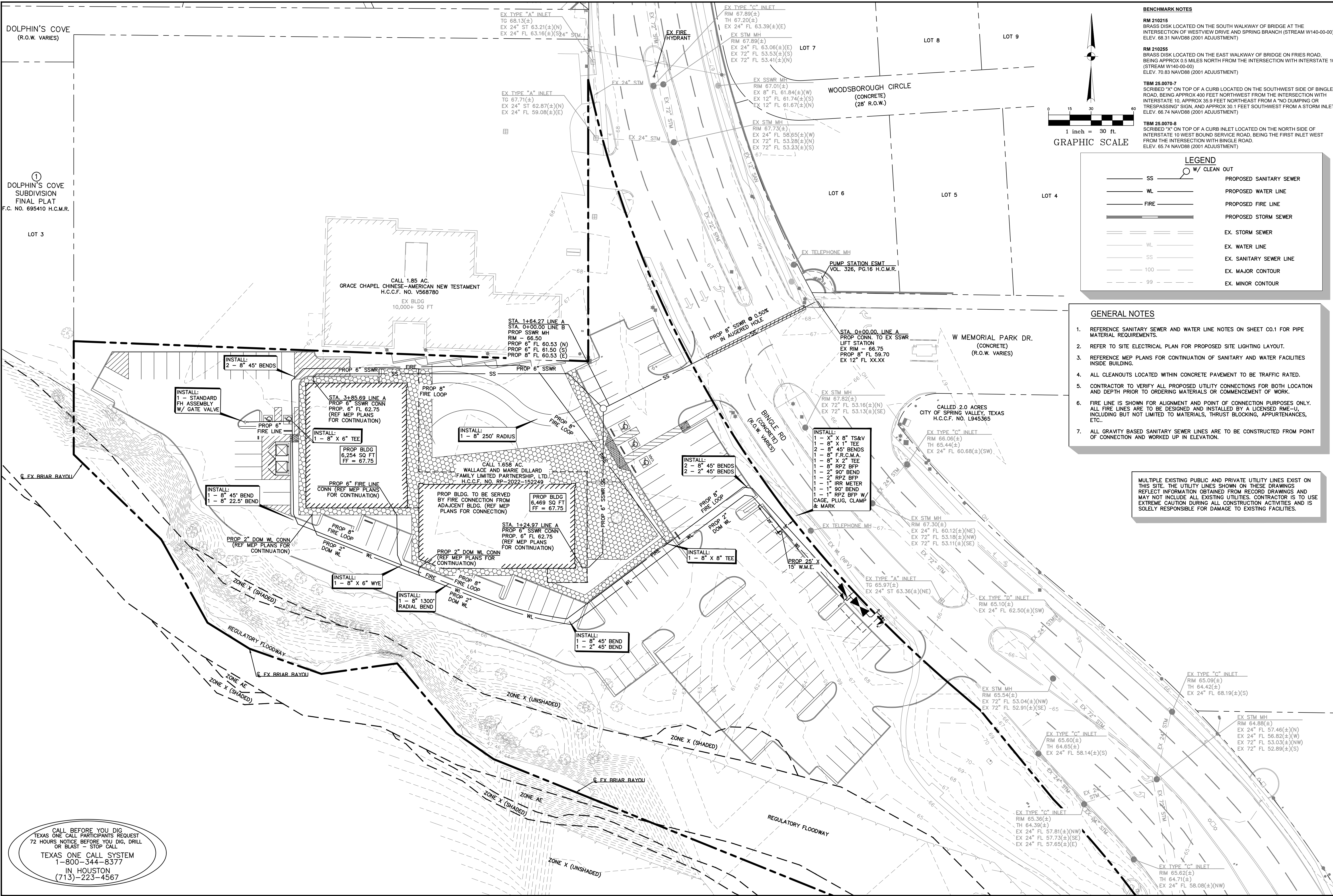
ALL PROJECT NO. 022-25-0620  
DATE: MARCH 2026  
SCALE: 1" = 30'  
DRAWN BY: SRH  
CHECKED BY: BTH

**DIMENSION CONTROL PLAN**

**BINGLE ROAD RETAIL**  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

SHEET  
**C1.0**

CALL BEFORE YOU DIG  
TEXAS ONE CALL PARTICIPANTS REQUEST  
72 HOURS NOTICE BEFORE YOU DIG, DRILL  
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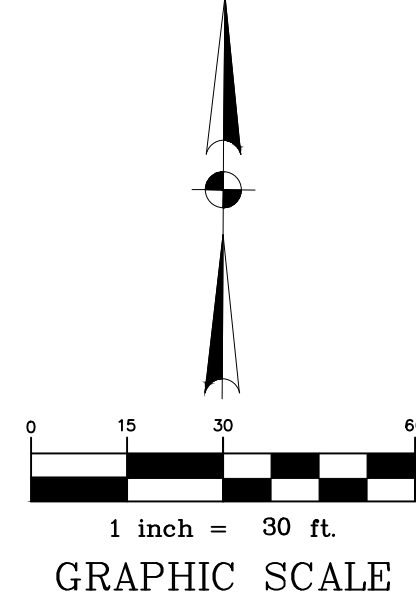
**BENCHMARK NOTES**

**BM 210216**  
BRASS DISK LOCATED ON THE SOUTH WALKWAY OF BRIDGE AT THE INTERSECTION OF WESTVIEW DRIVE AND SPRING BRANCH (STREAM W140-00-00). ELEV. 68.31 NAVD88 (2001 ADJUSTMENT)

**BM 210255**  
BRASS DISK LOCATED ON THE EAST WALKWAY OF BRIDGE ON FRIES ROAD, BEING APPROX 0.5 MILES NORTH FROM THE INTERSECTION WITH INTERSTATE 10 (STREAM W140-00-00) ELEV. 70.83 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-7**  
SCRIBED "X" ON TOP OF A CURB LOCATED ON THE SOUTHWEST SIDE OF BINGLE ROAD, BEING APPROX 400 FEET NORTHWEST FROM THE INTERSECTION WITH INTERSTATE 10, APPROX 35.9 FEET NORTHEAST FROM A "NO DUMPING OR TRESPASSING" SIGN, AND APPROX 30.1 FEET SOUTHWEST FROM A STORM INLET. ELEV. 65.74 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-8**  
SCRIBED "X" ON TOP OF A CURB LOCATED ON THE NORTH SIDE OF INTERSTATE 10 WEST BOUND SERVICE ROAD, BEING THE FIRST INLET WEST FROM THE INTERSECTION WITH BINGLE ROAD. ELEV. 65.74 NAVD88 (2001 ADJUSTMENT)



**LEGEND**

SS	W/ CLEAN OUT	PROPOSED SANITARY SEWER
WL		PROPOSED WATER LINE
FIRE		PROPOSED FIRE LINE
		PROPOSED STORM SEWER
		EX. STORM SEWER
		EX. WATER LINE
		EX. SANITARY SEWER LINE
		EX. MAJOR CONTOUR
		EX. MINOR CONTOUR

- GENERAL NOTES**
1. REFERENCE SANITARY SEWER AND WATER LINE NOTES ON SHEET CO.1 FOR PIPE MATERIAL REQUIREMENTS.
  2. REFER TO SITE ELECTRICAL PLAN FOR PROPOSED SITE LIGHTING LAYOUT.
  3. REFERENCE MEP PLANS FOR CONTINUATION OF SANITARY AND WATER FACILITIES INSIDE BUILDING.
  4. ALL CLEANOUTS LOCATED WITHIN CONCRETE PAVEMENT TO BE TRAFFIC RATED.
  5. CONTRACTOR TO VERIFY ALL PROPOSED UTILITY CONNECTIONS FOR BOTH LOCATION AND DEPTH PRIOR TO ORDERING MATERIALS OR COMMENCEMENT OF WORK.
  6. FIRE LINE IS SHOWN FOR ALIGNMENT AND POINT OF CONNECTION PURPOSES ONLY. ALL FIRE LINES ARE TO BE DESIGNED AND INSTALLED BY A LICENSED RME-U, INCLUDING BUT NOT LIMITED TO MATERIALS, THRUST BLOCKING, APPURTENANCES, ETC..
  7. ALL GRAVITY BASED SANITARY SEWER LINES ARE TO BE CONSTRUCTED FROM POINT OF CONNECTION AND WORKED UP IN ELEVATION.

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

DOLPHIN'S COVE  
(R.O.W. VARIES)

①  
DOLPHIN'S COVE  
SUBDIVISION  
FINAL PLAT  
F.C. NO. 695410 H.C.M.R.

LOT 3

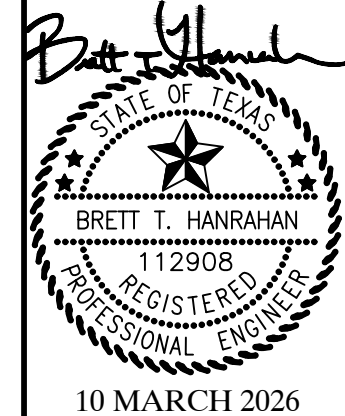
EX BRIAR BAYOU

CALL BEFORE YOU DIG  
TEXAS ONE CALL PARTICIPANTS REQUEST  
72 HOURS NOTICE BEFORE YOU DIG, DRILL  
OR BLAST - STOP CALL

TEXAS ONE CALL SYSTEM  
1-800-344-8377  
IN HOUSTON  
(713)-223-4567

NO.	DATE	REVISIONS

**ALJ Lindsey**  
Civil Engineers  
1885 N. Loop West, Suite 200  
Houston, TX 77017  
281.381.9955  
PRN.F-11526



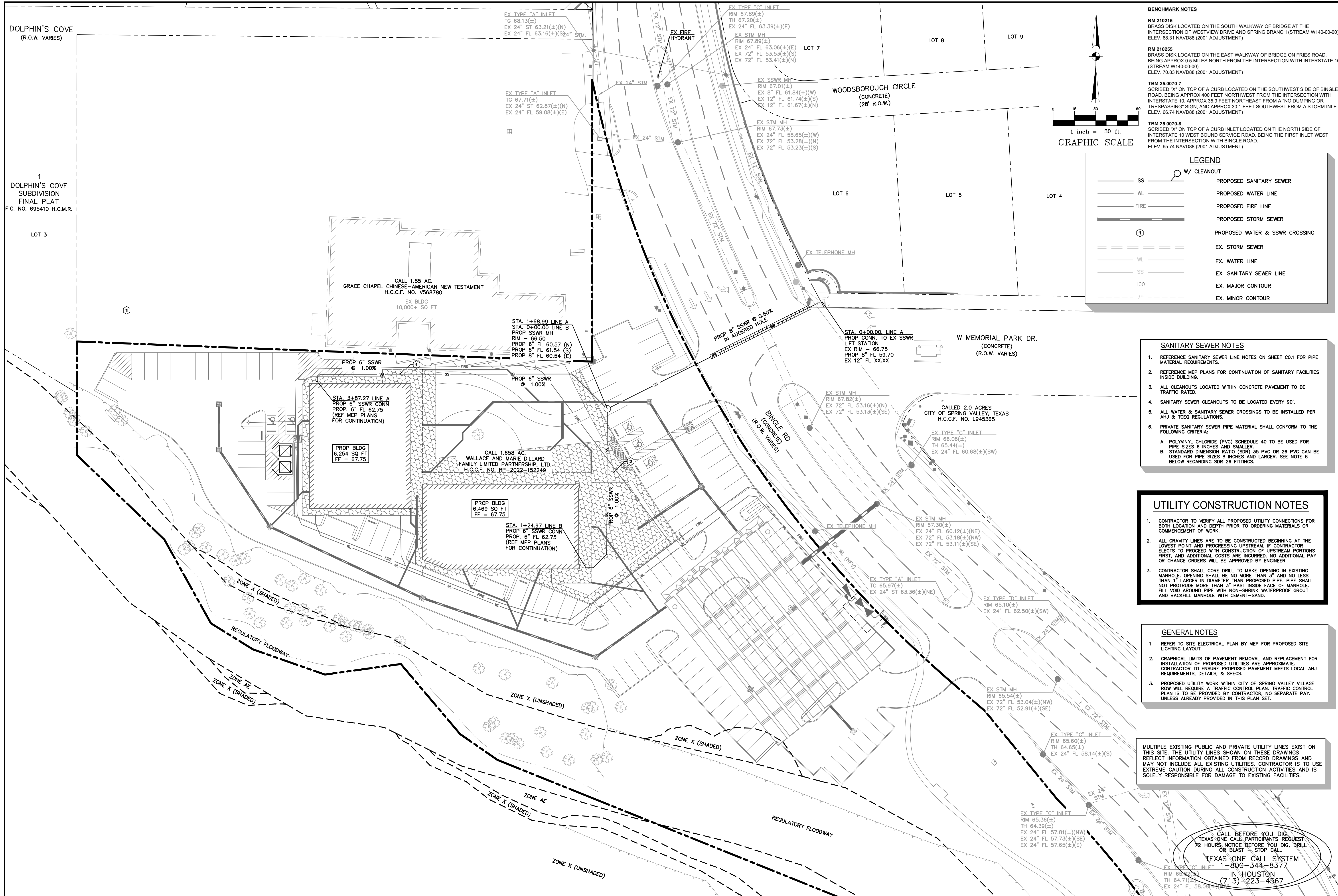
10 MARCH 2026

ALL PROJECT NO.  
022.25CV1620  
DATE: MARCH 2026  
SCALE: 1" = 30'  
DRAWN BY: SRH  
CHECKED BY: BTH

**OVERALL UTILITY  
PLAN**

**BINGLE ROAD RETAIL**  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

SHEET  
**C2.0**



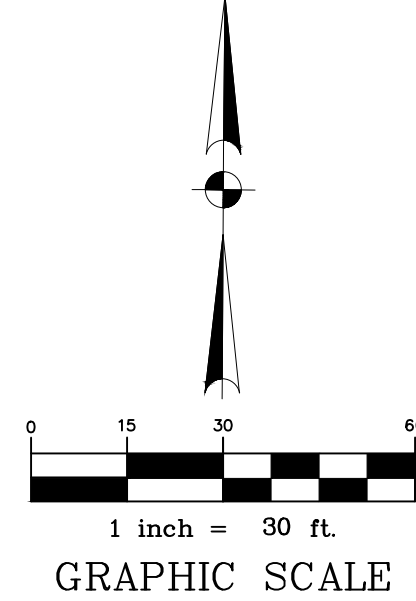
**BENCHMARK NOTES**

RM 210215  
BRASS DISK LOCATED ON THE SOUTH WALKWAY OF BRIDGE AT THE INTERSECTION OF WESTVIEW DRIVE AND SPRING BRANCH (STREAM W140-00-00). ELEV. 68.31 NAVD88 (2001 ADJUSTMENT)

RM 210255  
BRASS DISK LOCATED ON THE EAST WALKWAY OF BRIDGE ON FRIES ROAD, BEING APPROX 0.5 MILES NORTH FROM THE INTERSECTION WITH INTERSTATE 10 (STREAM W140-00-00) ELEV. 70.83 NAVD88 (2001 ADJUSTMENT)

TBM 25.0070-7  
SCRIBED "X" ON TOP OF A CURB LOCATED ON THE SOUTHWEST SIDE OF BINGLE ROAD, BEING APPROX 400 FEET NORTHWEST FROM THE INTERSECTION WITH INTERSTATE 10, APPROX 35.9 FEET NORTHEAST FROM A "NO DUMPING OR TRESPASSING" SIGN, AND APPROX 30.1 FEET SOUTHWEST FROM A STORM INLET. ELEV. 66.74 NAVD88 (2001 ADJUSTMENT)

TBM 25.0070-8  
SCRIBED "X" ON TOP OF A CURB INLET LOCATED ON THE NORTH SIDE OF INTERSTATE 10 WEST BOUND SERVICE ROAD, BEING THE FIRST INLET WEST FROM THE INTERSECTION WITH BINGLE ROAD. ELEV. 65.74 NAVD88 (2001 ADJUSTMENT)



**LEGEND**

SS	PROPOSED SANITARY SEWER
WL	PROPOSED WATER LINE
FIRE	PROPOSED FIRE LINE
SSW	PROPOSED STORM SEWER
SSW	PROPOSED WATER & SSW CROSSING
SS	EX. STORM SEWER
WL	EX. WATER LINE
SS	EX. SANITARY SEWER LINE
100	EX. MAJOR CONTOUR
99	EX. MINOR CONTOUR

**SANITARY SEWER NOTES**

- REFERENCE SANITARY SEWER LINE NOTES ON SHEET C0.1 FOR PIPE MATERIAL REQUIREMENTS.
- REFERENCE MEP PLANS FOR CONTINUATION OF SANITARY FACILITIES INSIDE BUILDING.
- ALL CLEANOUTS LOCATED WITHIN CONCRETE PAVEMENT TO BE TRAFFIC RATED.
- SANITARY SEWER CLEANOUTS TO BE LOCATED EVERY 90°.
- ALL WATER & SANITARY SEWER CROSSINGS TO BE INSTALLED PER AHJ & TCEQ REGULATIONS.
- PRIVATE SANITARY SEWER PIPE MATERIAL SHALL CONFORM TO THE FOLLOWING CRITERIA:
  - A. POLYVINYL CHLORIDE (PVC) SCHEDULE 40 TO BE USED FOR PIPE SIZES 6 INCHES AND SMALLER.
  - B. STANDARD DIMENSION RATIO (SDR) 35 PVC OR 26 PVC CAN BE USED FOR PIPE SIZES 8 INCHES AND LARGER. SEE NOTE 6 BELOW REGARDING SDR 26 FITTINGS.

**UTILITY CONSTRUCTION NOTES**

- CONTRACTOR TO VERIFY ALL PROPOSED UTILITY CONNECTIONS FOR BOTH LOCATION AND DEPTH PRIOR TO ORDERING MATERIALS OR COMMENCEMENT OF WORK.
- ALL GRAVITY LINES ARE TO BE CONSTRUCTED BEGINNING AT THE LOWEST POINT AND PROGRESSING UPSTREAM. IF CONTRACTOR ELECTS TO PROCEED WITH CONSTRUCTION OF UPSTREAM PORTIONS FIRST, AND ADDITIONAL COSTS ARE INCURRED, NO ADDITIONAL PAY OR CHANGE ORDERS WILL BE APPROVED BY ENGINEER.
- CONTRACTOR SHALL CORE DRILL TO MAKE OPENING IN EXISTING MANHOLE. OPENING SHALL BE NO MORE THAN 3" AND NO LESS THAN 1" LARGER IN DIAMETER THAN PROPOSED PIPE. PIPE SHALL NOT PROTRUDE MORE THAN 3" PAST INSIDE FACE OF MANHOLE. FILL VOID AROUND PIPE WITH NON-SHRINK WATERPROOF GROUT AND BACKFILL MANHOLE WITH CEMENT-SAND.

**GENERAL NOTES**

- REFER TO SITE ELECTRICAL PLAN BY MEP FOR PROPOSED SITE LIGHTING LAYOUT.
- GRAPHICAL LIMITS OF PAVEMENT REMOVAL AND REPLACEMENT FOR INSTALLATION OF PROPOSED UTILITIES ARE APPROXIMATE. CONTRACTOR TO ENSURE PROPOSED PAVEMENT MEETS LOCAL AHJ REQUIREMENTS, DETAILS, & SPECS.
- PROPOSED UTILITY WORK WITHIN CITY OF SPRING VALLEY VILLAGE ROW WILL REQUIRE A TRAFFIC CONTROL PLAN. TRAFFIC CONTROL PLAN IS TO BE PROVIDED BY CONTRACTOR, NO SEPARATE PAY, UNLESS ALREADY PROVIDED IN THIS PLAN SET.

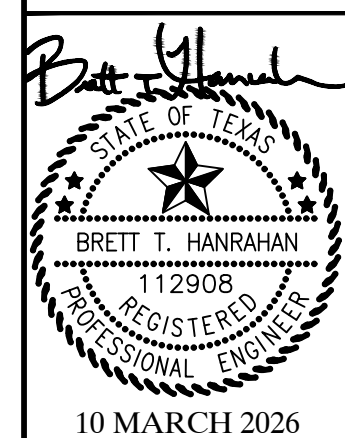
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CALL BEFORE YOU DIG  
TEXAS ONE CALL PARTICIPANTS REQUEST  
72 HOURS NOTICE BEFORE YOU DIG, DRILL  
OR BLAST - STOP CALL

TEXAS ONE CALL SYSTEM  
1-800-344-8377  
IN HOUSTON  
(713)-223-4567

NO.	DATE

**ALJ Lindsey**  
Civil Engineers  
1885 N. Arroyo Pkwy, Suite 200  
Houston, TX 77057  
281.301.9555  
PRN F-11526



10 MARCH 2026

ALL PROJECT NO.  
022.25.CV.1620

DATE: MARCH 2026

SCALE: 1"=X'

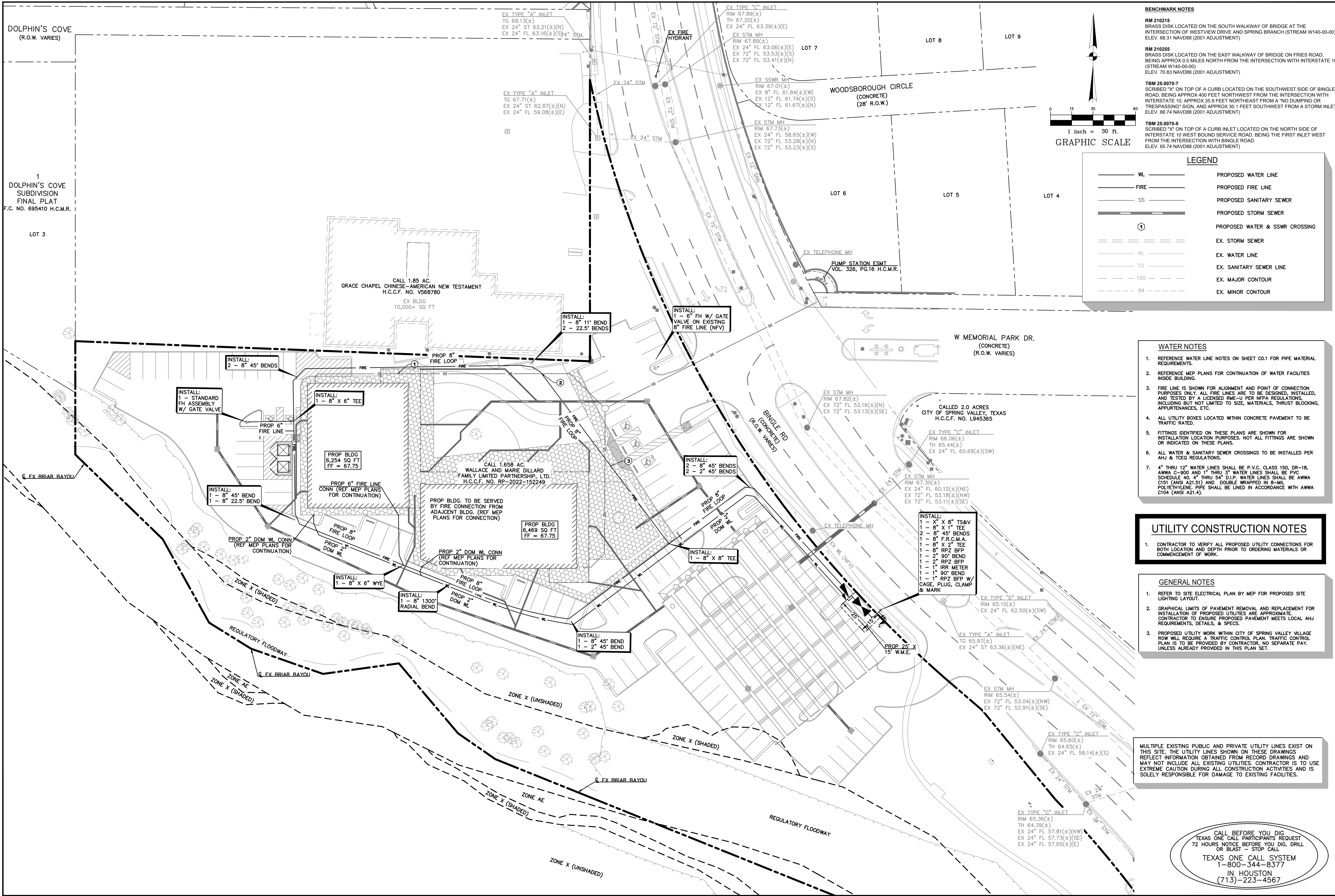
DRAWN BY: SRH

CHECKED BY: BTH

**SANITARY SEWER PLAN**

**BINGLE ROAD RETAIL**  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

SHEET  
C2.1



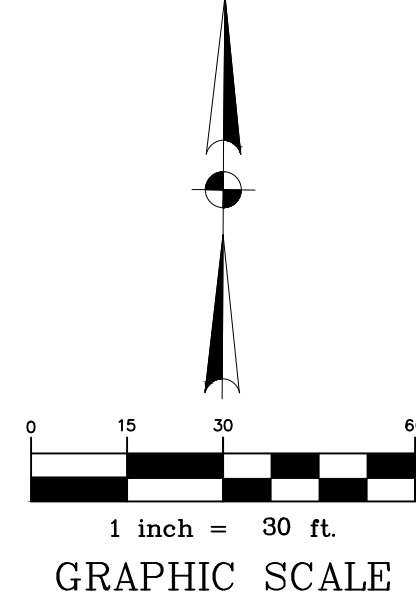
**BENCHMARK NOTES**

**RM 210216**  
BRASS DISK LOCATED ON THE SOUTH WALKWAY OF BRIDGE AT THE INTERSECTION OF WESTVIEW DRIVE AND SPRING BRANCH (STREAM W140-00-00) ELEV. 68.31 NAVD88 (2001 ADJUSTMENT)

**RM 210255**  
BRASS DISK LOCATED ON THE EAST WALKWAY OF BRIDGE ON FRIES ROAD, BEING APPROX 0.5 MILES NORTH FROM THE INTERSECTION WITH INTERSTATE 10 (STREAM W140-00-00) ELEV. 70.83 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-7**  
SCRIBED "X" ON TOP OF A CURB LOCATED ON THE SOUTHWEST SIDE OF BINGLE ROAD, BEING APPROX 400 FEET NORTHWEST FROM THE INTERSECTION WITH INTERSTATE 10, APPROX 35.9 FEET NORTHEAST FROM A "NO DUMPING OR TRESPASSING" SIGN, AND APPROX 30.1 FEET SOUTHWEST FROM A STORM INLET. ELEV. 66.74 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-8**  
SCRIBED "X" ON TOP OF A CURB LOCATED ON THE NORTH SIDE OF INTERSTATE 10 WEST BOUND SERVICE ROAD, BEING THE FIRST INLET WEST FROM THE INTERSECTION WITH BINGLE ROAD. ELEV. 65.74 NAVD88 (2001 ADJUSTMENT)



**LEGEND**

— WL —	PROPOSED WATER LINE
— FIRE —	PROPOSED FIRE LINE
— SS —	PROPOSED SANITARY SEWER
— S —	PROPOSED STORM SEWER
— (1) —	PROPOSED WATER & SSWR CROSSING
— S —	EX. STORM SEWER
— WL —	EX. WATER LINE
— SS —	EX. SANITARY SEWER LINE
— 100 —	EX. MAJOR CONTOUR
— 99 —	EX. MINOR CONTOUR

- WATER NOTES**
- REFERENCE WATER LINE NOTES ON SHEET C01 FOR PIPE MATERIAL REQUIREMENTS.
  - REFERENCE MEP PLANS FOR CONTINUATION OF WATER FACILITIES INSIDE BUILDING.
  - FIRE LINE IS SHOWN FOR ALIGNMENT AND POINT OF CONNECTION PURPOSES ONLY. ALL FIRE LINES ARE TO BE DESIGNED, INSTALLED, AND TESTED BY A LICENSED RME-U PER NFPA REGULATIONS, INCLUDING BUT NOT LIMITED TO SIZE, MATERIALS, THRUST BLOCKING, APPURTENANCES, ETC.
  - ALL UTILITY BOXES LOCATED WITHIN CONCRETE PAVEMENT TO BE TRAFFIC RATED.
  - FITTINGS IDENTIFIED ON THESE PLANS ARE SHOWN FOR INSTALLATION LOCATION PURPOSES. NOT ALL FITTINGS ARE SHOWN OR INDICATED ON THESE PLANS.
  - ALL WATER & SANITARY SEWER CROSSINGS TO BE INSTALLED PER AHJ & TCEQ REGULATIONS.
  - 4" THRU 12" WATER LINES SHALL BE P.V.C. CLASS 150, DR-18, AWWA C-900 AND 1" THRU 3" WATER LINES SHALL BE PVC SCHEDULE 40, 4" THRU 54" D.I.P. WATER LINES SHALL BE AWWA C151 (ANSI A21.51) AND DOUBLE WRAPPED IN 8-MIL POLYETHYLENE PIPE SHALL BE LINED IN ACCORDANCE WITH AWWA C104 (ANSI A21.4).

- UTILITY CONSTRUCTION NOTES**
- CONTRACTOR TO VERIFY ALL PROPOSED UTILITY CONNECTIONS FOR BOTH LOCATION AND DEPTH PRIOR TO ORDERING MATERIALS OR COMMENCEMENT OF WORK.
- GENERAL NOTES**
- REFER TO SITE ELECTRICAL PLAN BY MEP FOR PROPOSED SITE LIGHTING LAYOUT.
  - GRAPHICAL LIMITS OF PAVEMENT REMOVAL AND REPLACEMENT FOR INSTALLATION OF PROPOSED UTILITIES ARE APPROXIMATE. CONTRACTOR TO ENSURE PROPOSED PAVEMENT MEETS LOCAL AHJ REQUIREMENTS, DETAILS, & SPECS.
  - PROPOSED UTILITY WORK WITHIN CITY OF SPRING VALLEY VILLAGE ROW WILL REQUIRE A TRAFFIC CONTROL PLAN. TRAFFIC CONTROL PLAN IS TO BE PROVIDED BY CONTRACTOR, NO SEPARATE PAY, UNLESS ALREADY PROVIDED IN THIS PLAN SET.

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DATE: \_\_\_\_\_

NO. \_\_\_\_\_

REVISIONS \_\_\_\_\_

**ALJ Lindsey**  
Civil Engineers  
1885 N. Spring Valley Pkwy, Suite 200  
Houston, TX 77077  
281.301.9555  
PRN F-11526

*Brett T. Hanrahan*  
BRETT T. HANRAHAN  
REGISTERED PROFESSIONAL ENGINEER  
112908  
10 MARCH 2026

ALL PROJECT NO. 022525CV1620  
DATE: MARCH 2026  
SCALE: 1"X  
DRAWN BY: SRH  
CHECKED BY: BTH

**WATER PLAN**

**BINGLE ROAD RETAIL**  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

SHEET  
**C2.2**

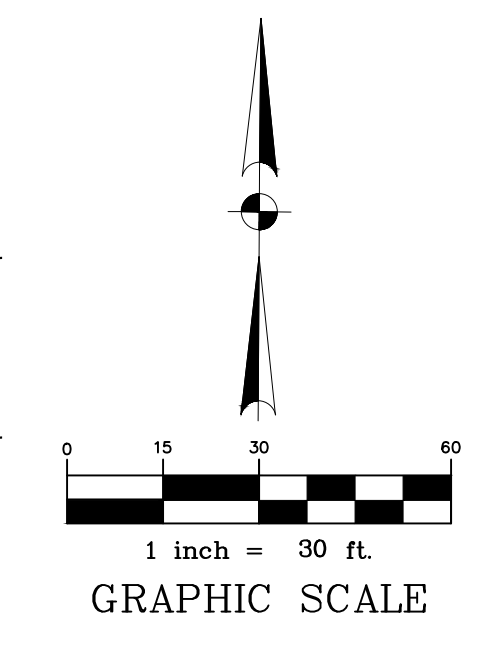
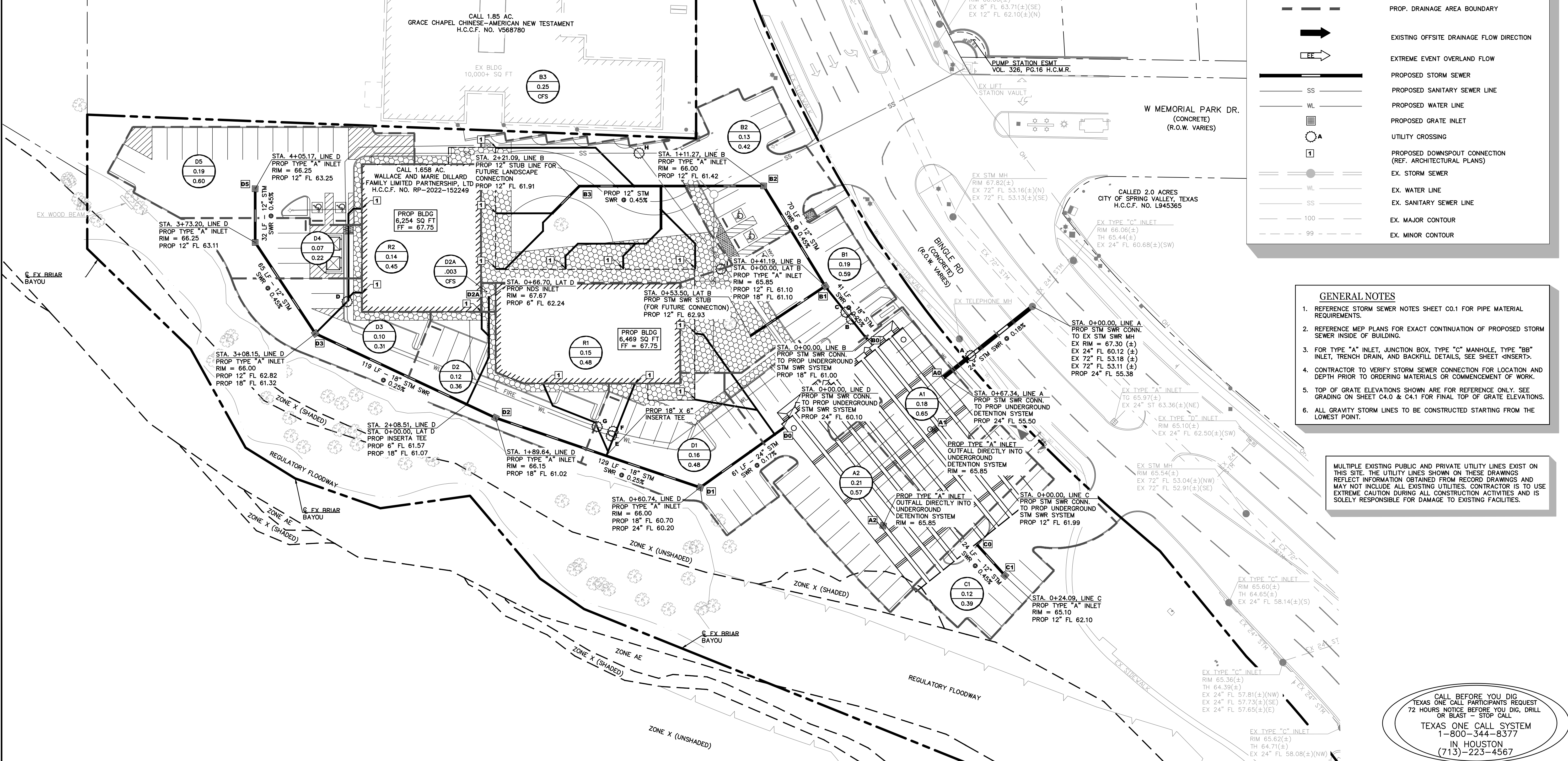
DOLPHIN'S COVE  
(R.O.W. VARIES)

DETENTION VOLUME TO BE  
PROVIDED IN UNDERGROUND  
DETENTION SYSTEM: 58,516 CF

		FL		FL	CLR
A	24" STM	55.46	16" WTR	60.00	2.54'
B	12" STM	62.56	2" WTR	60.00	2.39'
C	12" STM	62.58	8" WTR	60.00	1.91'
D	6" STM	61.64	8" WTR	60.00	0.97'
E	6" STM	61.47	2" WTR	60.00	1.30'
F	6" STM	61.50	8" WTR	60.00	0.83'
G	6" STM	61.55	8" WTR	60.00	0.88'
H	6" SSWR	62.13	8" WTR	60.00	1.46'
I	6" SSWR	61.48	8" WTR	60.00	0.81'

1  
DOLPHIN'S COVE  
SUBDIVISION  
FINAL PLAT  
F.C. NO. 695410 H.C.M.R.

LOT 3



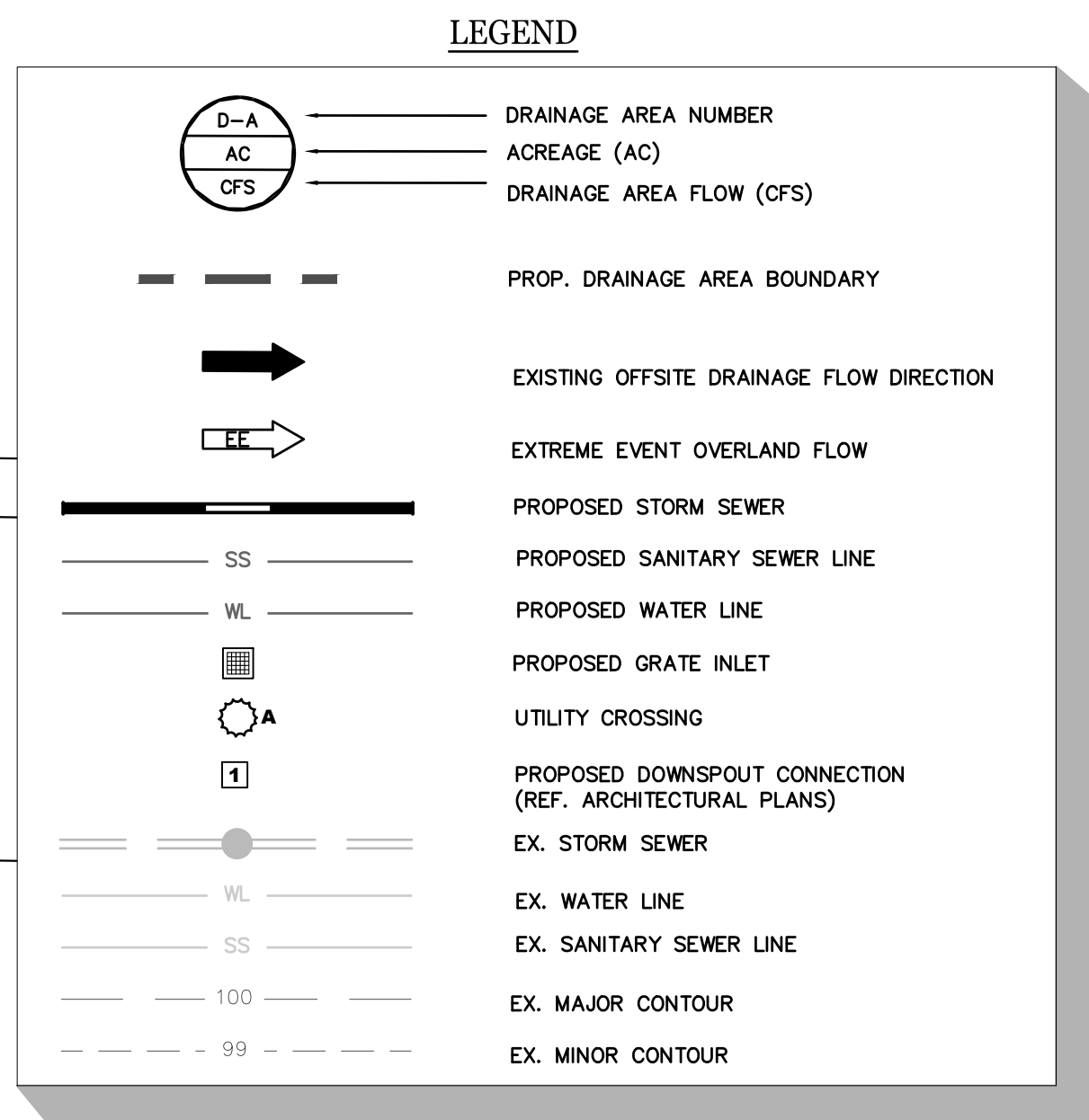
**BENCHMARK NOTES**

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BRASS DISK LOCATED ON THE SOUTH WALKWAY OF BRIDGE AT THE INTERSECTION OF WESTVIEW DRIVE AND SPRING BRANCH (STREAM W140-00-00). ELEV. 68.31 NAVD88 (2001 ADJUSTMENT)

**RM 210255**  
BRASS DISK LOCATED ON THE EAST WALKWAY OF BRIDGE ON FRIES ROAD, BEING APPROX 0.5 MILES NORTH FROM THE INTERSECTION WITH INTERSTATE 10 (STREAM W140-00-00). ELEV. 70.83 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-7**  
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**TBM 25.0070-8**  
SCRIBED "X" ON TOP OF A CURB INLET LOCATED ON THE NORTH SIDE OF INTERSTATE 10 WEST BOUND SERVICE ROAD, BEING THE FIRST INLET WEST FROM THE INTERSECTION WITH BINGLE ROAD. ELEV. 65.74 NAVD88 (2001 ADJUSTMENT)



**GENERAL NOTES**

- REFERENCE STORM SEWER NOTES SHEET CO.1 FOR PIPE MATERIAL REQUIREMENTS.
- REFERENCE MEP PLANS FOR EXACT CONTINUATION OF PROPOSED STORM SEWER INSIDE OF BUILDING.
- FOR TYPE "A" INLET, JUNCTION BOX, TYPE "C" MANHOLE, TYPE "BB" INLET, TRENCH DRAIN, AND BACKFILL DETAILS, SEE SHEET "INSERT".
- CONTRACTOR TO VERIFY STORM SEWER CONNECTION FOR LOCATION AND DEPTH PRIOR TO ORDERING MATERIALS OR COMMENCEMENT OF WORK.
- TOP OF GRATE ELEVATIONS SHOWN ARE FOR REFERENCE ONLY. SEE GRADING ON SHEET C4.0 & C4.1 FOR FINAL TOP OF GRATE ELEVATIONS.
- ALL GRAVITY STORM LINES TO BE CONSTRUCTED STARTING FROM THE LOWEST POINT.

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

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(713)-223-4567

DATE: \_\_\_\_\_

NO. \_\_\_\_\_

REVISIONS \_\_\_\_\_

**ALJ Lindsey**  
Civil Engineers  
1885 N. Spring Freeway, Suite 200  
Houston, TX 77055  
PH: 281-301-9565  
FAX: 281-301-1526

**BRETT T. HANRAHAN**  
REGISTERED PROFESSIONAL ENGINEER  
12908  
10 MARCH 2026

ALL PROJECT NO.: 022.25.CV.1620  
DATE: MARCH 2026  
SCALE: 1"=30'  
DRAWN BY: SRH  
CHECKED BY: BTH

**STORM SEWER PLAN**

**BINGLE ROAD RETAIL**  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

SHEET  
**C3.0**

Storm Sewer Design Analysis  
Bingle Road Retail  
Bingle Road & IH-10  
Houston, Texas

Design Frequency: 2 years  
100-Year Multiplier: 1.00  
Downstream 25-year WS ELEV: 59.11 feet

Manhole No. From	Manhole No. to	Sta. Up (ft)	Sta. Down (ft)	Drainage Area (acres)	Total Area (acres)	Runoff Coefficient C	DA C * A	Total C * A	Time of Conc. (min)	Intensity I (in/hr)	Drainage Area Flow (cfs)	Total Flow (cfs)	Reach Length (ft)	Diameter (in)	Slope %	Manning's Roughness Coefficient "n"	Design Capacity (cfs)	Design Velocity (ft/sec)	Full Pipe Flow			Drop from Downstream Manhole (ft)	Flowline Elevation Upstream (ft)	Flowline Elevation Downstream (ft)	Minimum Depth Ratio (y/d or y/h)	Minimum W.S. Elev. Downstream (ft)	Actual Depth Ratio (y/d or y/h)	Actual Flow per Barrel			Change in Head (ft)	Elevation of Hyd. Grad. Upstream (ft)	Elevation of Hyd. Grad. Downstream (ft)	Top of Pipe Elevation Upstream (ft)	Top of Pipe Elevation Downstream (ft)	Pvmt / Grate Elevation Upstream (ft)	
																			Area (sq ft)	Wetted Perimeter (ft)	Fall (ft)							Actual Velocity (ft/sec)	Area (sq ft)	Wetted Perimeter (ft)							Hydraulic Gradient %
A2	A1	0+00.00	0+00.00	0.18	0.18	0.80	0.14	0.14	22.39	3.98	0.57	0.57	0	12	0.500	0.013	2.5	3.2	0.8	3.1	0.00	0.00	0.00													65.85	
A1	A0	0+00.00	0+00.00	0.21	0.39	0.80	0.17	0.31	23.47	3.88	0.65	1.21	0	12	0.500	0.013	2.5	3.2	0.8	3.1	0.00																65.85
B3	B2	2+21.09	1+11.27	0.25	0.25	0.80	0.20	0.20	22.83	3.94	0.79	0.79	110	12	0.450	0.013	2.4	3.0	0.8	3.1	0.49	0.00	61.91	61.42	0.39	61.81	1.00	1.00	0.79	3.14	0.049	0.05	62.64	62.59	62.91	62.42	66.00
B2	B1	1+11.27	0+41.19	0.13	0.38	0.80	0.10	0.30	23.43	3.88	0.40	1.18	70	12	0.450	0.013	2.4	3.0	0.8	3.1	0.32	0.00	61.42	61.10	0.49	61.59	1.00	1.50	0.79	3.14	0.110	0.08	62.59	62.51	62.42	62.10	66.00
B1	B0	0+41.19	0+00.00	0.19	0.57	0.80	0.15	0.46	24.06	3.83	0.58	1.75	41	18	0.250	0.013	5.3	3.0	1.8	4.7	0.10		61.10	61.00	0.39	61.59	1.00	0.99	1.77	4.71	0.028	0.01	62.51	62.50	62.60	62.50	65.85
C1	C0	0+24.09	0+00.00	0.12	0.12	0.80	0.10	0.10	21.88	4.02	0.39	0.39	24	12	0.450	0.013	2.4	3.0	0.8	3.1	0.11		62.10	61.99	0.27	62.26	1.00	0.49	0.79	3.14	0.012	0.00	62.99	62.99	63.10	62.99	65.10
D5	D4	4+05.17	3+73.20	0.19	0.19	0.80	0.15	0.15	22.46	3.97	0.60	0.60	32	12	0.450	0.013	2.4	3.0	0.8	3.1	0.14	0.00	63.25	63.11	0.34	63.45	0.54	1.43	0.42	1.63	0.094	0.03	63.68	63.65	64.25	64.11	66.25
D4	D3	3+73.20	3+08.15	0.07	0.40	0.80	0.06	0.32	23.51	3.88	0.22	1.24	65	12	0.450	0.013	2.4	3.0	0.8	3.1	0.29	0.50	63.11	62.82	0.51	63.33	0.51	3.16	0.39	1.57	0.485	0.32	63.65	63.33	64.11	63.82	66.25
D3	D2	3+08.15	1+89.64	0.10	0.50	0.80	0.08	0.40	23.85	3.85	0.31	1.54	119	18	0.250	0.013	5.3	3.0	1.8	4.7	0.30	0.00	62.32	62.02	0.37	62.58	0.76	1.07	1.44	3.18	0.025	0.03	63.19	63.16	63.82	63.52	66.00
D2	D1	1+89.64	0+60.74	0.12	0.77	0.80	0.10	0.62	24.56	3.79	0.36	2.34	129	18	0.250	0.013	5.3	3.0	1.8	4.7	0.32	0.50	62.02	61.70	0.46	62.39	0.94	1.37	1.71	3.91	0.043	0.06	63.16	63.11	63.52	63.20	66.15
D1	D0	0+60.74	0+00.00	0.16	0.93	0.80	0.13	0.75	24.88	3.76	0.48	2.81	61	24	0.170	0.013	9.3	3.0	3.1	6.3	0.10		61.20	61.10	0.37	61.84	1.00	0.89	3.14	6.28	0.015	0.01	63.11	63.10	63.20	63.10	66.00
D2A	D2	0+66.70	0+00.00	0.003	0.003	0.80	0.002	0.002	18.60	4.36	0.01	0.01	67	12	0.500	0.013	2.5	3.2	0.8	3.1	0.33		0.33	0.00													
R1	D2	0+01.00	0+00.00	0.15	0.15	0.80	0.12	0.12	22.16	4.00	0.48	0.48	1	12	0.500	0.013	2.5	3.2	0.8	3.1	0.01		0.01	0.00													
R2	D4	0+01.00	0+00.00	0.14	0.14	0.80	0.11	0.11	22.07	4.00	0.45	0.45	1	12	0.500	0.013	2.5	3.2	0.8	3.1	0.01		0.01	0.00													

Storm Sewer Design Analysis  
Bingle Road Retail  
Bingle Road & IH-10  
Houston, Texas

Design Frequency: 100 years  
100-Year Multiplier: 1.00  
Downstream 25-year WS ELEV: 59.11 feet

Manhole No. From	Manhole No. to	Sta. Up (ft)	Sta. Down (ft)	Drainage Area (acres)	Total Area (acres)	Runoff Coefficient C	DA C * A	Total C * A	Time of Conc. (min)	Intensity I (in/hr)	Drainage Area Flow (cfs)	Total Flow (cfs)	Reach Length (ft)	Diameter (in)	Slope %	Manning's Roughness Coefficient "n"	Design Capacity (cfs)	Design Velocity (ft/sec)	Full Pipe Flow			Drop from Downstream Manhole (ft)	Flowline Elevation Upstream (ft)	Flowline Elevation Downstream (ft)	Minimum Depth Ratio (y/d or y/h)	Minimum W.S. Elev. Downstream (ft)	Actual Depth Ratio (y/d or y/h)	Actual Flow per Barrel			Change in Head (ft)	Elevation of Hyd. Grad. Upstream (ft)	Elevation of Hyd. Grad. Downstream (ft)	Top of Pipe Elevation Upstream (ft)	Top of Pipe Elevation Downstream (ft)	Pvmt / Grate Elevation Upstream (ft)		
																			Area (sq ft)	Wetted Perimeter (ft)	Fall (ft)							Actual Velocity (ft/sec)	Area (sq ft)	Wetted Perimeter (ft)							Hydraulic Gradient %	
A2	A1	0+00.00	0+00.00	0.18	0.18	0.80	0.14	0.14	22.39	9.01	1.30	1.30	0	12	0.500	0.013	2.5	3.2	0.8	3.1	0.00	0.00	0.00													65.85		
A1	A0	0+00.00	0+00.00	0.21	0.39	0.80	0.17	0.31	23.47	8.81	1.48	2.75	0	12	0.500	0.013	2.5	3.2	0.8	3.1	0.00																	65.85
B3	B2	2+21.09	1+11.27	0.25	0.25	0.80	0.20	0.20	22.83	8.92	1.78	1.78	110	12	0.450	0.013	2.4	3.0	0.8	3.1	0.49	0.00	61.91	61.42	0.64	62.06	1.00	2.27	0.79	3.14	0.251	0.28	63.23	62.96	62.91	62.42	66.00	
B2	B1	1+11.27	0+41.19	0.13	0.38	0.80	0.10	0.30	23.43	8.81	0.92	2.68	70	12	0.450	0.013	2.4	3.0	0.8	3.1	0.32	0.00	61.42	61.10	1.00	62.10	1.00	3.41	0.79	3.14	0.565	0.40	62.96	62.56	62.42	62.10	66.00	
B1	B0	0+41.19	0+00.00	0.19	0.57	0.80	0.15	0.46	24.06	8.70	1.32	3.97	41	18	0.250	0.013	5.3	3.0	1.8	4.7	0.10		61.10	61.00	0.64	61.96	1.00	2.25	1.77	4.71	0.143	0.06	62.56	62.50	62.60	62.50	65.85	
C1	C0	0+24.09	0+00.00	0.12	0.12	0.80	0.10	0.10	21.88	9.11	0.87	0.87	24	12	0.450	0.013	2.4	3.0	0.8	3.1	0.11		62.10	61.99	0.41	62.40	1.00	1.11	0.79	3.14	0.060	0.01	63.00	62.99	63.10	62.99	65.10	
D5	D4	4+05.17	3+73.20	0.19	0.19	0.80	0.15	0.15	22.46	9.00	1.37	1.37	32	12	0.450	0.013	2.4	3.0	0.8	3.1	0.14	0.00	63.25	63.11	0.54	63.65	1.00	1.74	0.79	3.14	0.147	0.05	64.27	64.23	64.25	64.11	66.25	
D4	D3	3+73.20	3+08.15	0.07	0.40	0.80	0.06	0.32	23.51	8.80	0.49	2.82	65	12	0.450	0.013	2.4	3.0	0.8	3.1	0.29	0.50	63.11	62.82	1.00	63.82	1.00	3.59	0.79	3.14	0.625	0.41	64.23	63.82	64.11	63.82	66.25	
D3	D2	3+08.15	1+89.64	0.10	0.50	0.80	0.08	0.40	23.85	8.74	0.70	3.49	119	18	0.250	0.013	5.3	3.0	1.8	4.7	0.30	0.00	62.32	62.02	0.59	62.91	0.94	2.03	1.72	3.97	0.096	0.11	63.55	63.44	63.82	63.52	66.00	
D2	D1	1+89.64	0+60.74	0.12	0.77	0.80	0.10	0.62	24.56	8.61	0.83	5.33	129	18	0.250	0.013	5.3	3.0	1.8	4.7	0.32	0.50	62.02	61.70	0.83	62.95	0.97	3.06	1.74	4.11	0.224	0.29	63.44	63.15	63.52	63.20	66.15	
D1	D0	0+60.74	0+00.00	0.16	0.93	0.80	0.13	0.75	24.88	8.56	1.10	6.39	61	24	0.170	0.013	9.3	3.0	3.1	6.3	0.10		61.20	61.10	0.60	62.30	1.00	2.03	3.14	6.28	0.080	0.05	63.15	63.10	63.20	63.10	66.00	
D2A	D2	0+66.70	0+00.00	0.003	0.003	0.80	0.002	0.002	18.60	9.84	0.02	0.02	67	12	0.500	0.013	2.5	3.2	0.8	3.1	0.33		0.33	0.00														
R1	D2	0+01.00	0+00.00	0.15	0.15	0.80	0.12	0.12	22.16	9.06	1.09	1.09	1	12	0.500	0.013	2.5	3.2	0.8	3.1	0.01		0.01	0.00														
R2	D4	0+01.00	0+00.00	0.14	0.14	0.80	0.11	0.11	22.07	9.07	1.02	1.02	1	12	0.500	0.013	2.5	3.2	0.8	3.1	0.01		0.01	0.00														

CALL BEFORE YOU DIG  
TEXAS ONE CALL PARTICIPANTS REQUEST  
72 HOURS NOTICE BEFORE YOU DIG, DRILL  
OR BLAST - STOP CALL  
TEXAS ONE CALL SYSTEM  
1-800-344-8377  
IN HOUSTON  
(713)-223-4567

BINGLE ROAD RETAIL  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055  
STORM SEWER  
CALCULATIONS  
SHEET  
C3.1

ALJLindsey  
Civil Engineers  
1885 N. Loop West, Suite 200  
Houston, TX 77028  
281-301-9955  
PRNF-11526  
BRETT T. HANRAHAN  
REGISTERED PROFESSIONAL ENGINEER  
12908  
10 MARCH 2026

No.	REVISIONS	DATE

CALL BEFORE YOU DIG  
 TEXAS ONE CALL PARTICIPANTS REQUEST  
 72 HOURS NOTICE BEFORE YOU DIG, DRILL  
 OR BLAST - STOP CALL  
 TEXAS ONE CALL SYSTEM  
 1-800-344-8377  
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 (713)-223-4567

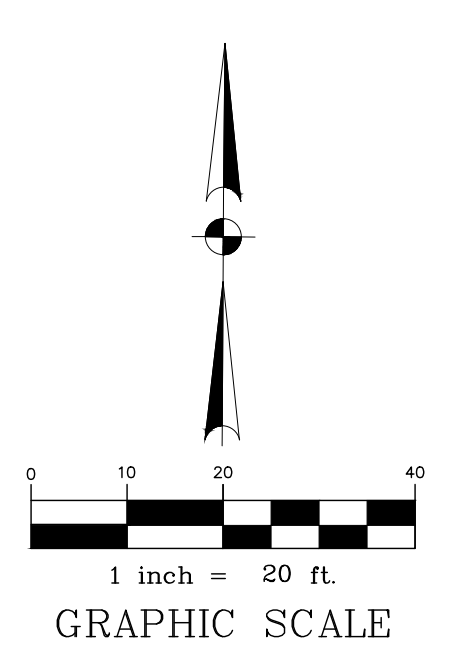
**GENERAL NOTES**

- REFER TO ARCHITECTURAL PLANS FOR GRADES INSIDE THE BUILDING ENVELOPE.
- PAVING CONTRACTOR TO CONFIRM AND/OR ADJUST ALL EXISTING AND PROPOSED UTILITIES AND APPURTENANCES TO FINISHED GRADE PRIOR TO PLACEMENT OF ANY PAVING.
- CONTRACTOR TO MATCH EXISTING TOP OF PAVEMENT AND CURB ELEVATIONS.
- CONTRACTOR TO INSTALL NEW SIDEWALK IN ADA ACCESSIBLE ROUTES AT MAXIMUM 5% LONGITUDINAL SLOPE AND 2% CROSS SLOPE.

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

**LEGEND**

- PROPOSED TYPE "A" INLET (SEE DETAIL, SHEET C7.4)
- TG TOP OF GRATE
- TP TOP OF PAVEMENT
- TC TOP OF CURB
- TS TOP OF SIDEWALK
- FG FINISHED FLOOR
- FF FINISHED FLOOR
- TR TOP OF RAMP
- EXISTING SANITARY OR STORM SEWER MANHOLE
- PROPOSED HIGH POINT OF PAVEMENT
- DRAINAGE FLOW ARROWS
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR



**BENCHMARK NOTES**

**RM 210216**  
 BRASS DISK LOCATED ON THE SOUTH WALKWAY OF BRIDGE AT THE INTERSECTION OF WESTVIEW DRIVE AND SPRING BRANCH (STREAM W140-00-00). ELEV. 68.31 NAVD88 (2001 ADJUSTMENT)

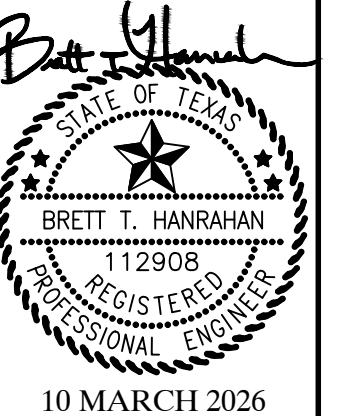
**RM 210255**  
 BRASS DISK LOCATED ON THE EAST WALKWAY OF BRIDGE ON FRIES ROAD, BEING APPROX 0.5 MILES NORTH FROM THE INTERSECTION WITH INTERSTATE 10 (STREAM W140-00-00). ELEV. 70.83 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-7**  
 SCRIBED "X" ON TOP OF A CURB LOCATED ON THE SOUTHWEST SIDE OF BINGLE ROAD, BEING APPROX 400 FEET NORTHWEST FROM THE INTERSECTION WITH INTERSTATE 10, APPROX 35.9 FEET NORTHEAST FROM A "NO DUMPING OR TRESPASSING" SIGN, AND APPROX 30.1 FEET SOUTHWEST FROM A STORM INLET. ELEV. 66.74 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-8**  
 SCRIBED "X" ON TOP OF A CURB INLET LOCATED ON THE NORTH SIDE OF INTERSTATE 10 WEST BOUND SERVICE ROAD, BEING THE FIRST INLET WEST FROM THE INTERSECTION WITH BINGLE ROAD. ELEV. 65.74 NAVD88 (2001 ADJUSTMENT)

NO.	REVISIONS	DATE

**ALJLindsey**  
 Civil Engineers  
 18856 N. Katy Pkwy, Suite 200  
 Houston, TX 77077  
 281.301.9565  
 PRN.F-11526



10 MARCH 2026

ALL PROJECT NO.  
 022-25-CV-1620

DATE: MARCH 2026

SCALE: 1" = 20'

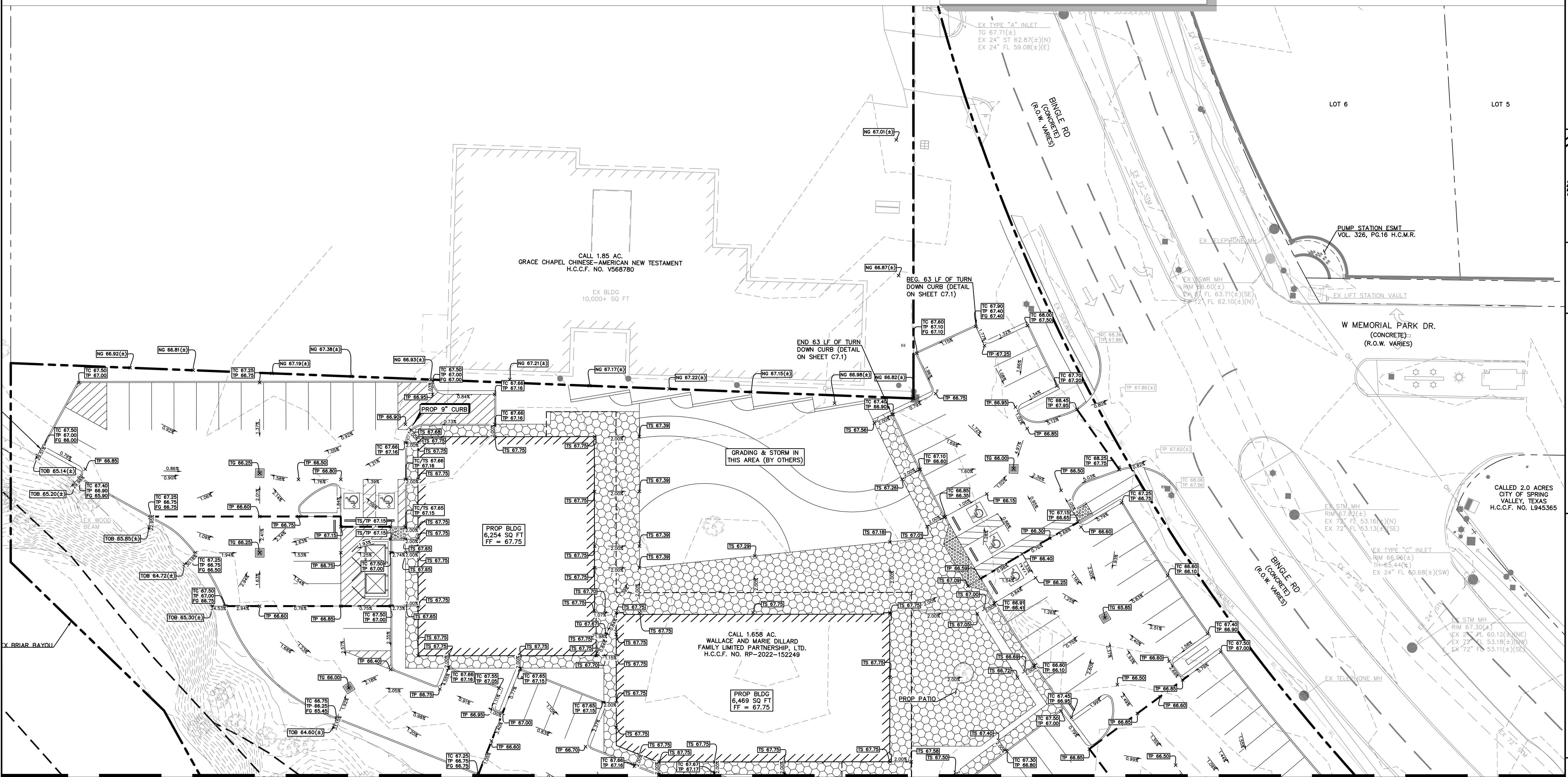
DRAWN BY: SRH

CHECKED BY: BTH

**GRADING PLAN**  
 (1 OF 2)

**BINGLE ROAD RETAIL**  
 1045 BINGLE ROAD  
 HOUSTON, TEXAS 77055

SHEET  
**C4.0**



MATCHLINE A-A (SEE SHEET C4.1)

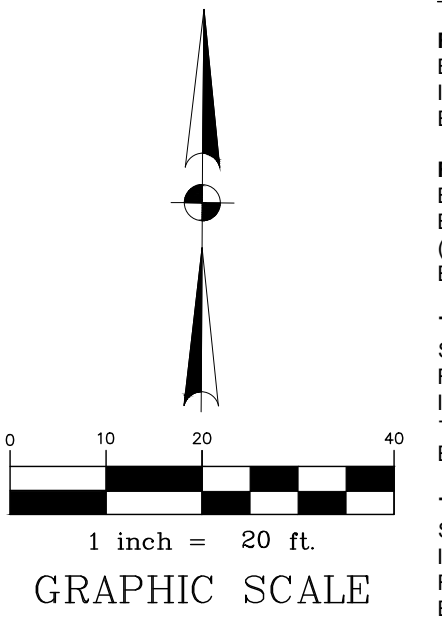
**GENERAL NOTES**

- REFER TO ARCHITECTURAL PLANS FOR GRADES INSIDE THE BUILDING ENVELOPE.
- PAVING CONTRACTOR TO CONFIRM AND/OR ADJUST ALL EXISTING AND PROPOSED UTILITIES AND APPURTENANCES TO FINISHED GRADE PRIOR TO PLACEMENT OF ANY PAVING.
- CONTRACTOR TO MATCH EXISTING TOP OF PAVEMENT AND CURB ELEVATIONS.
- CONTRACTOR TO INSTALL NEW SIDEWALK IN ADA ACCESSIBLE ROUTES AT MAXIMUM 5% LONGITUDINAL SLOPE AND 2% CROSS SLOPE.

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**LEGEND**

- PROPOSED TYPE "A" INLET (SEE DETAIL, SHEET C7.4)
- TOP OF GRATE
- TOP OF PAVEMENT
- TOP OF CURB
- TOP OF SIDEWALK
- FINISHED GROUND
- FINISHED FLOOR
- TOP OF RAMP
- EXISTING SANITARY OR STORM SEWER MANHOLE
- PROPOSED HIGH POINT OF PAVEMENT
- DRAINAGE FLOW ARROWS
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR



**BENCHMARK NOTES**

**RM 210215**  
BRASS DISK LOCATED ON THE SOUTH WALKWAY OF BRIDGE AT THE INTERSECTION OF WESTVIEW DRIVE AND SPRING BRANCH (STREAM W140-00-00). ELEV. 68.31 NAVD88 (2001 ADJUSTMENT)

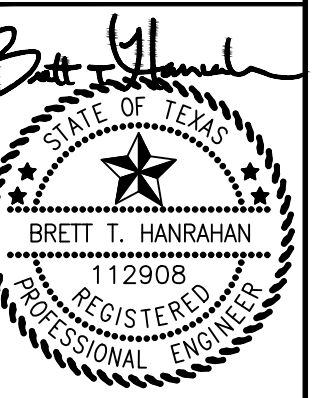
**RM 210255**  
BRASS DISK LOCATED ON THE EAST WALKWAY OF BRIDGE ON FRIES ROAD, BEING APPROX 0.5 MILES NORTH FROM THE INTERSECTION WITH INTERSTATE 10 (STREAM W140-00-00). ELEV. 70.83 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-7**  
SCRIBED "X" ON TOP OF A CURB LOCATED ON THE SOUTHWEST SIDE OF BINGLE ROAD, BEING APPROX 400 FEET NORTHWEST FROM THE INTERSECTION WITH INTERSTATE 10, APPROX 35.9 FEET NORTHEAST FROM A "NO DUMPING OR TRESPASSING" SIGN, AND APPROX 30.1 FEET SOUTHWEST FROM A STORM INLET. ELEV. 66.74 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-8**  
SCRIBED "X" ON TOP OF A CURB INLET LOCATED ON THE NORTH SIDE OF INTERSTATE 10 WEST BOUND SERVICE ROAD, BEING THE FIRST INLET WEST FROM THE INTERSECTION WITH BINGLE ROAD. ELEV. 65.74 NAVD88 (2001 ADJUSTMENT)

NO.	REVISIONS	DATE

**ALJ Lindsey**  
Civil Engineers  
1885 N. Loop West, Suite 200  
Houston, TX 77017  
281.301.9595  
FRN F-1526



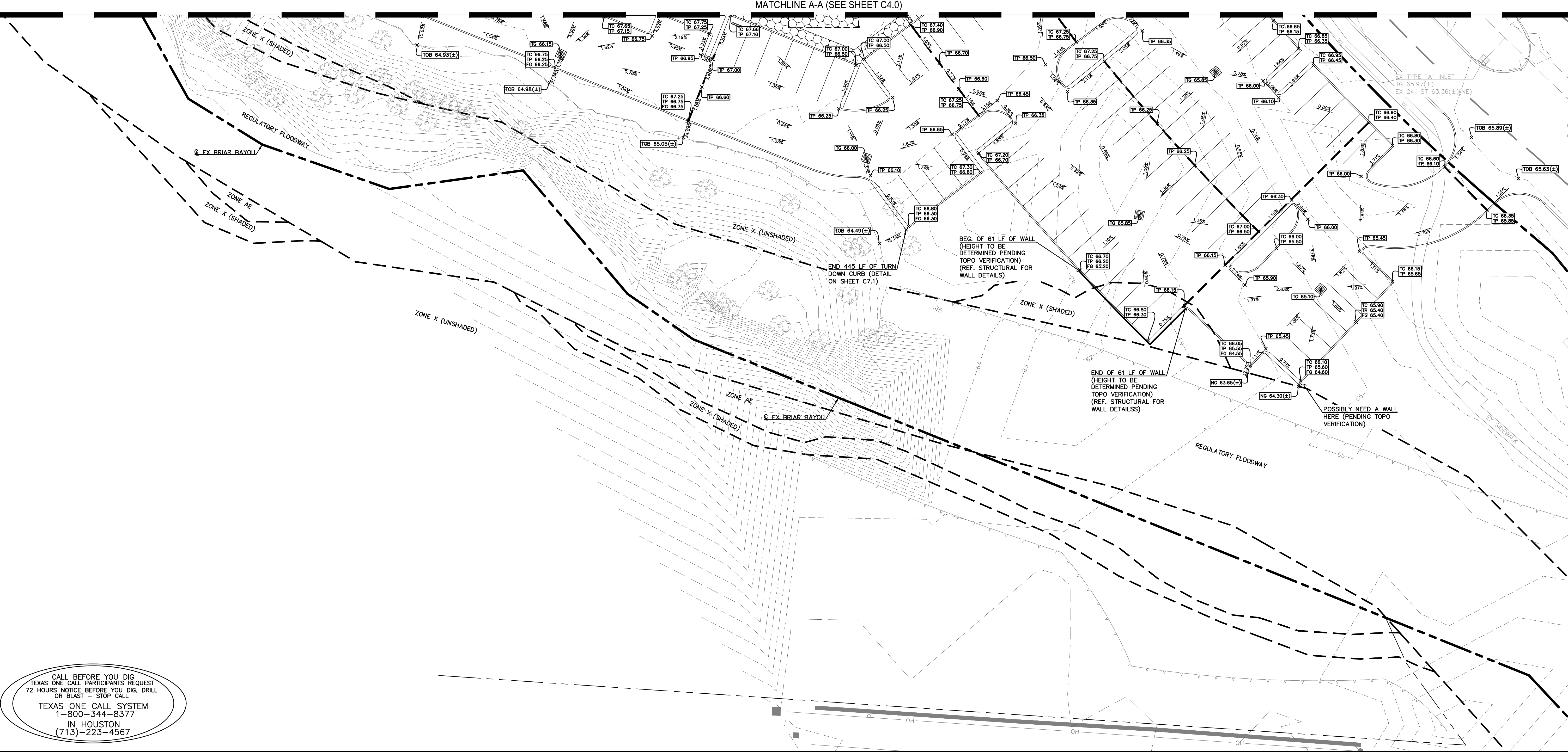
10 MARCH 2026

ALL PROJECT NO.  
022-25-CV-1620  
DATE: MARCH 2026  
SCALE: 1" = 20'  
DRAWN BY: SRH  
CHECKED BY: BTH

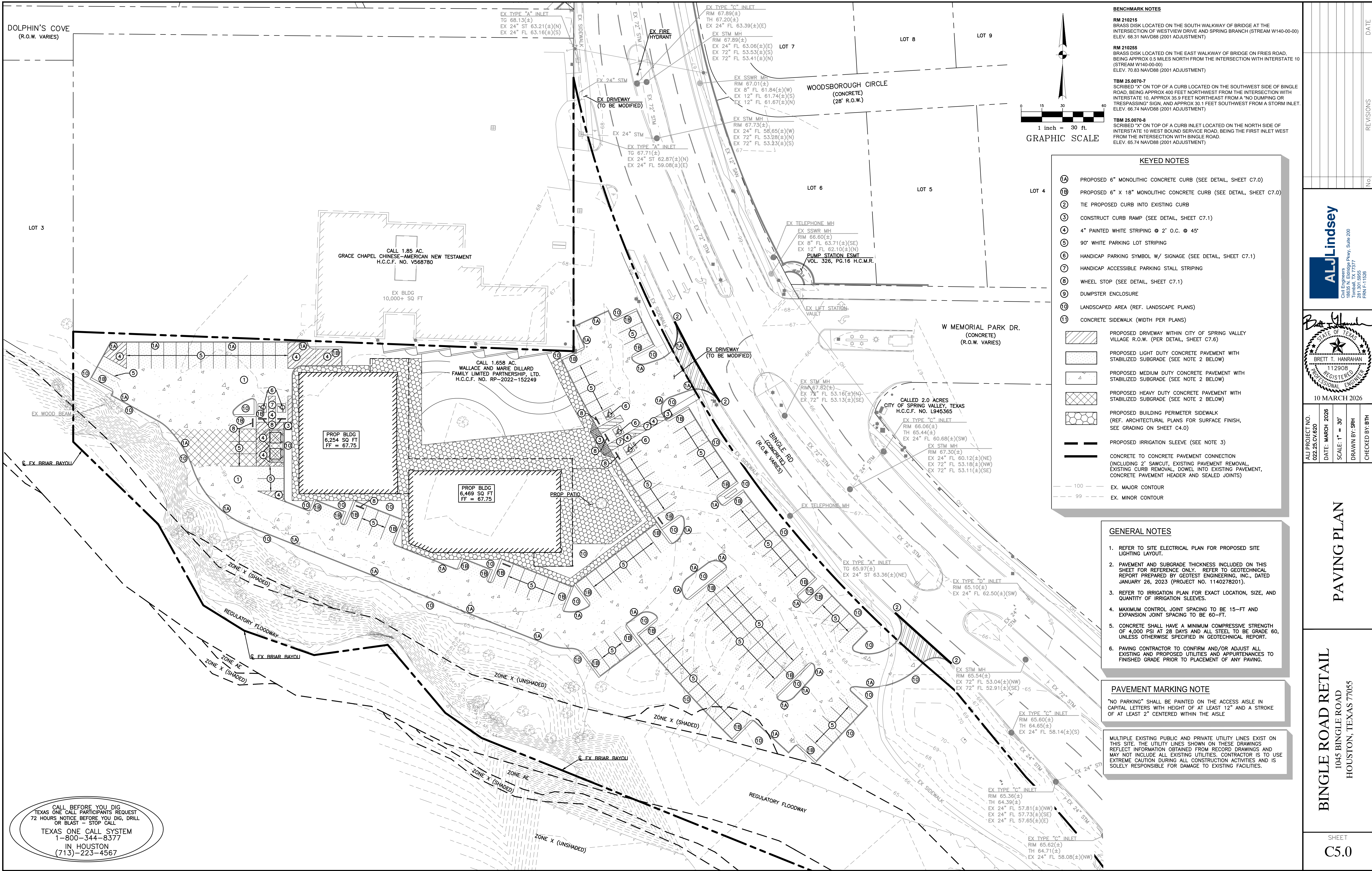
**GRADING PLAN**  
(2 OF 2)

**BINGLE ROAD RETAIL**  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

SHEET  
**C4.1**



CALL BEFORE YOU DIG  
TEXAS ONE CALL PARTICIPANTS REQUEST  
72 HOURS NOTICE BEFORE YOU DIG, DRILL  
OR BLAST - STOP CALL  
TEXAS ONE CALL SYSTEM  
1-800-344-8377  
IN HOUSTON  
(713)-223-4567



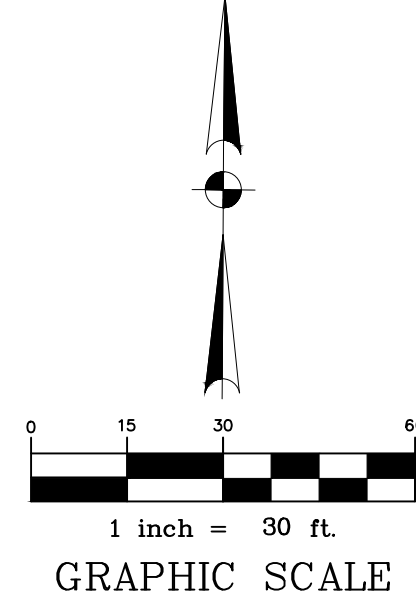
**BENCHMARK NOTES**

**RM 210216**  
BRASS DISK LOCATED ON THE SOUTH WALKWAY OF BRIDGE AT THE INTERSECTION OF WESTVIEW DRIVE AND SPRING BRANCH (STREAM W140-00-00). ELEV. 68.31 NAVD88 (2001 ADJUSTMENT)

**RM 210255**  
BRASS DISK LOCATED ON THE EAST WALKWAY OF BRIDGE ON FRIES ROAD, BEING APPROX 0.5 MILES NORTH FROM THE INTERSECTION WITH INTERSTATE 10 (STREAM W140-00-00). ELEV. 70.83 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-7**  
SCRIBED "X" ON TOP OF A CURB LOCATED ON THE SOUTHWEST SIDE OF BINGLE ROAD, BEING APPROX 400 FEET NORTHWEST FROM THE INTERSECTION WITH INTERSTATE 10, APPROX 35.9 FEET NORTHEAST FROM A "NO DUMPING OR TRESPASSING" SIGN, AND APPROX 30.1 FEET SOUTHWEST FROM A STORM INLET. ELEV. 66.74 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-8**  
SCRIBED "X" ON TOP OF A CURB INLET LOCATED ON THE NORTH SIDE OF INTERSTATE 10 WEST BOUND SERVICE ROAD, BEING THE FIRST INLET WEST FROM THE INTERSECTION WITH BINGLE ROAD. ELEV. 65.74 NAVD88 (2001 ADJUSTMENT)



- KEYED NOTES**
- (1A) PROPOSED 6" MONOLITHIC CONCRETE CURB (SEE DETAIL, SHEET C7.0)
  - (1B) PROPOSED 6" X 18" MONOLITHIC CONCRETE CURB (SEE DETAIL, SHEET C7.0)
  - (2) TIE PROPOSED CURB INTO EXISTING CURB
  - (3) CONSTRUCT CURB RAMP (SEE DETAIL, SHEET C7.1)
  - (4) 4" PAINTED WHITE STRIPING @ 2' O.C. @ 45°
  - (5) 90° WHITE PARKING LOT STRIPING
  - (6) HANDICAP PARKING SYMBOL W/ SIGNAGE (SEE DETAIL, SHEET C7.1)
  - (7) HANDICAP ACCESSIBLE PARKING STALL STRIPING
  - (8) WHEEL STOP (SEE DETAIL, SHEET C7.1)
  - (9) DUMPSTER ENCLOSURE
  - (10) LANDSCAPED AREA (REF. LANDSCAPE PLANS)
  - (11) CONCRETE SIDEWALK (WIDTH PER PLANS)
- PROPOSED DRIVEWAY WITHIN CITY OF SPRING VALLEY VILLAGE R.O.W. (PER DETAIL, SHEET C7.6)
  - PROPOSED LIGHT DUTY CONCRETE PAVEMENT WITH STABILIZED SUBGRADE (SEE NOTE 2 BELOW)
  - PROPOSED MEDIUM DUTY CONCRETE PAVEMENT WITH STABILIZED SUBGRADE (SEE NOTE 2 BELOW)
  - PROPOSED HEAVY DUTY CONCRETE PAVEMENT WITH STABILIZED SUBGRADE (SEE NOTE 2 BELOW)
  - PROPOSED BUILDING PERIMETER SIDEWALK (REF. ARCHITECTURAL PLANS FOR SURFACE FINISH, SEE GRADING ON SHEET C4.0)
  - PROPOSED IRRIGATION SLEEVE (SEE NOTE 3)
  - CONCRETE TO CONCRETE PAVEMENT CONNECTION (INCLUDING 2" SAWCUT, EXISTING PAVEMENT REMOVAL, EXISTING CURB REMOVAL, DOWEL INTO EXISTING PAVEMENT, CONCRETE PAVEMENT HEADER AND SEALED JOINTS)
  - EX. MAJOR CONTOUR
  - EX. MINOR CONTOUR

- GENERAL NOTES**
1. REFER TO SITE ELECTRICAL PLAN FOR PROPOSED SITE LIGHTING LAYOUT.
  2. PAVEMENT AND SUBGRADE THICKNESS INCLUDED ON THIS SHEET FOR REFERENCE ONLY. REFER TO GEOTECHNICAL REPORT PREPARED BY GEOTEST ENGINEERING, INC., DATED JANUARY 26, 2023 (PROJECT NO. 1140278201).
  3. REFER TO IRRIGATION PLAN FOR EXACT LOCATION, SIZE, AND QUANTITY OF IRRIGATION SLEEVES.
  4. MAXIMUM CONTROL JOINT SPACING TO BE 15-FT AND EXPANSION JOINT SPACING TO BE 60-FT.
  5. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS AND ALL STEEL TO BE GRADE 60, UNLESS OTHERWISE SPECIFIED IN GEOTECHNICAL REPORT.
  6. PAVING CONTRACTOR TO CONFIRM AND/OR ADJUST ALL EXISTING AND PROPOSED UTILITIES AND APPURTENANCES TO FINISHED GRADE PRIOR TO PLACEMENT OF ANY PAVING.

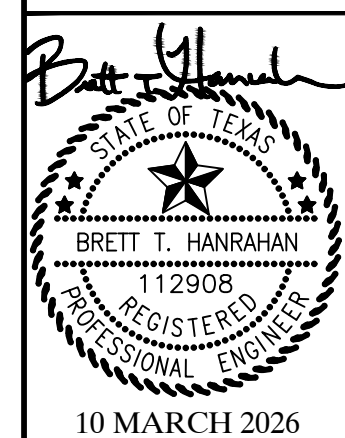
**PAVEMENT MARKING NOTE**

"NO PARKING" SHALL BE PAINTED ON THE ACCESS AISLE IN CAPITAL LETTERS WITH HEIGHT OF AT LEAST 12" AND A STROKE OF AT LEAST 2" CENTERED WITHIN THE AISLE.

MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

NO.	REVISIONS	DATE

**ALJ Lindsey**  
Civil Engineers  
1885 N. Loop West, Suite 200  
Houston, TX 77056  
281.301.9555  
FRN F-11526



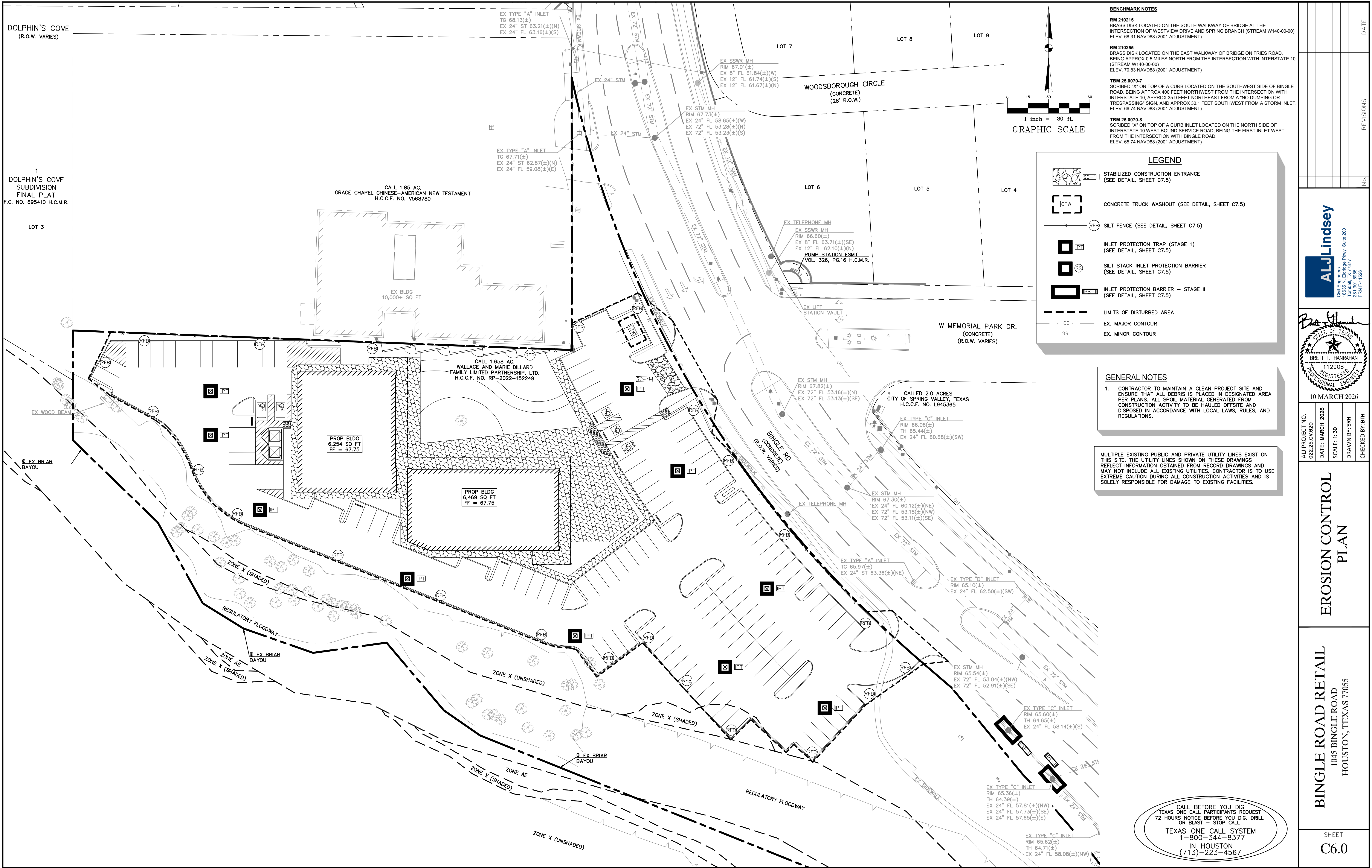
10 MARCH 2026  
ALL PROJECT NO. 022.25.CV.1620  
DATE: MARCH 2026  
SCALE: 1" = 30'  
DRAWN BY: SRH  
CHECKED BY: BTH

**PAVING PLAN**

**BINGLE ROAD RETAIL**  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

SHEET  
**C5.0**

CALL BEFORE YOU DIG  
TEXAS ONE CALL PARTICIPANTS REQUEST  
72 HOURS NOTICE BEFORE YOU DIG, DRILL  
OR BLAST - STOP CALL  
TEXAS ONE CALL SYSTEM  
1-800-344-8377  
IN HOUSTON  
(713)-223-4567



**BENCHMARK NOTES**

**RM 210215**  
BRASS DISK LOCATED ON THE SOUTH WALKWAY OF BRIDGE AT THE INTERSECTION OF WESTVIEW DRIVE AND SPRING BRANCH (STREAM W140-00-00). ELEV. 68.31 NAVD88 (2001 ADJUSTMENT)

**RM 210255**  
BRASS DISK LOCATED ON THE EAST WALKWAY OF BRIDGE ON FRIES ROAD, BEING APPROX 0.5 MILES NORTH FROM THE INTERSECTION WITH INTERSTATE 10 (STREAM W140-00-00). ELEV. 70.83 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-7**  
SCRIBED "X" ON TOP OF A CURB LOCATED ON THE SOUTHWEST SIDE OF BINGLE ROAD, BEING APPROX 400 FEET NORTHWEST FROM THE INTERSECTION WITH INTERSTATE 10, APPROX 35.9 FEET NORTHEAST FROM A "NO DUMPING OR TRESPASSING" SIGN, AND APPROX 30.1 FEET SOUTHWEST FROM A STORM INLET. ELEV. 66.74 NAVD88 (2001 ADJUSTMENT)

**TBM 25.0070-8**  
SCRIBED "X" ON TOP OF A CURB INLET LOCATED ON THE NORTH SIDE OF INTERSTATE 10 WEST BOUND SERVICE ROAD, BEING THE FIRST INLET WEST FROM THE INTERSECTION WITH BINGLE ROAD. ELEV. 65.74 NAVD88 (2001 ADJUSTMENT)

**LEGEND**

- STABILIZED CONSTRUCTION ENTRANCE (SEE DETAIL, SHEET C7.5)
- CONCRETE TRUCK WASHOUT (SEE DETAIL, SHEET C7.5)
- SILT FENCE (SEE DETAIL, SHEET C7.5)
- INLET PROTECTION TRAP (STAGE I) (SEE DETAIL, SHEET C7.5)
- SILT STACK INLET PROTECTION BARRIER (SEE DETAIL, SHEET C7.5)
- INLET PROTECTION BARRIER - STAGE II (SEE DETAIL, SHEET C7.5)
- LIMITS OF DISTURBED AREA
- EX. MAJOR CONTOUR
- EX. MINOR CONTOUR

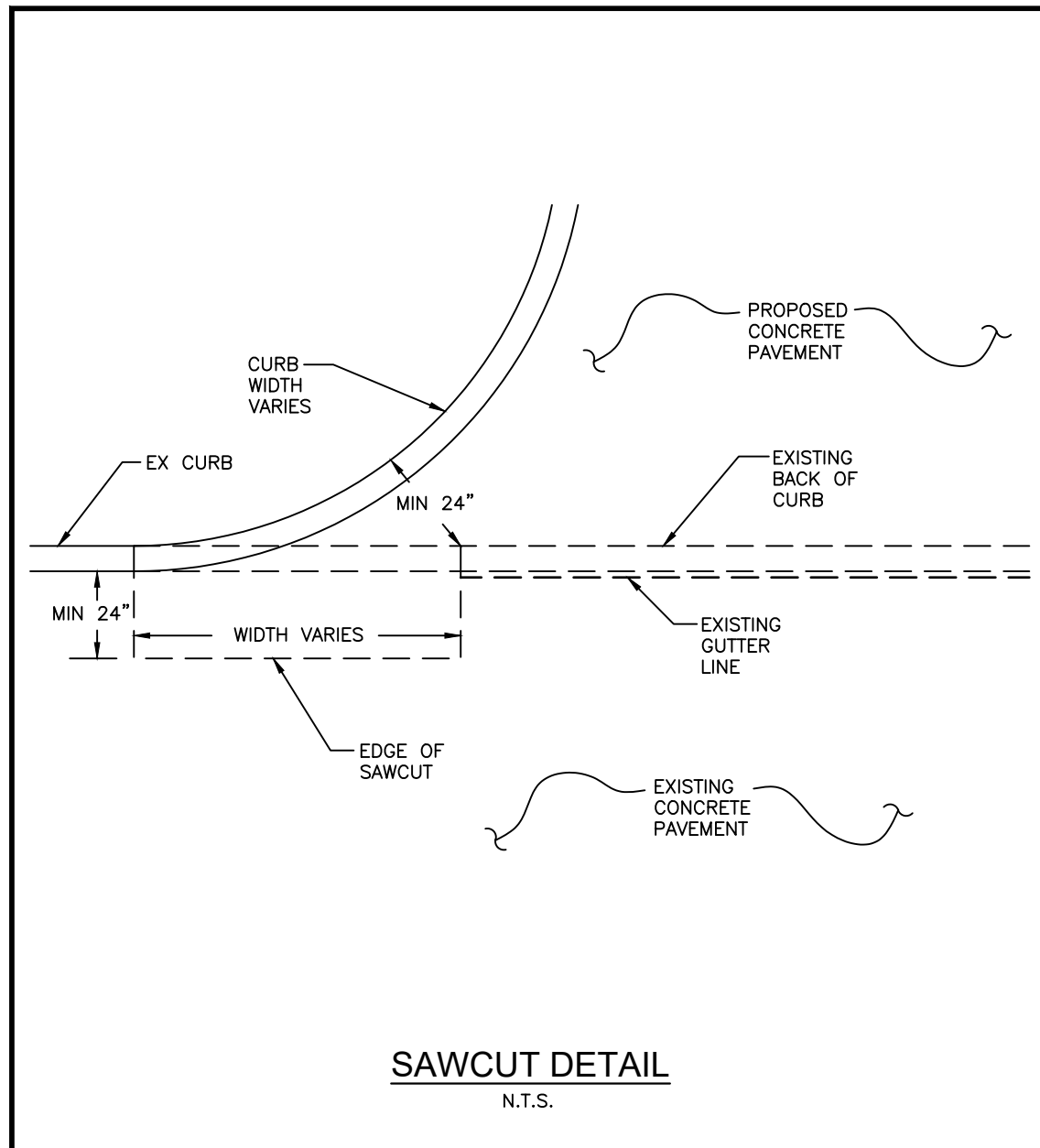
**GENERAL NOTES**

1. CONTRACTOR TO MAINTAIN A CLEAN PROJECT SITE AND ENSURE THAT ALL DEBRIS IS PLACED IN DESIGNATED AREA PER PLANS. ALL SPOIL MATERIAL GENERATED FROM CONSTRUCTION ACTIVITY TO BE HAULED OFFSITE AND DISPOSED IN ACCORDANCE WITH LOCAL LAWS, RULES, AND REGULATIONS.

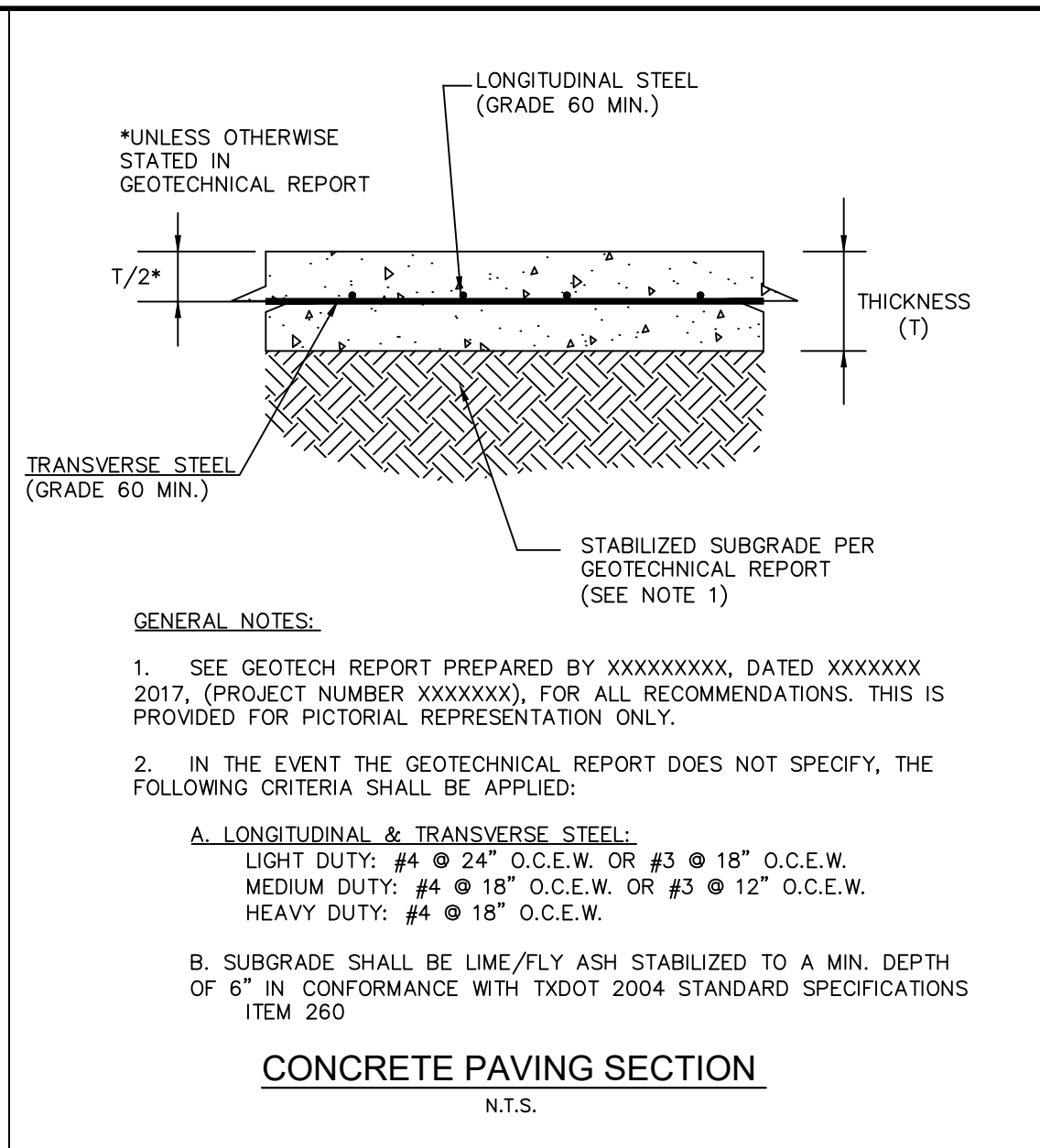
MULTIPLE EXISTING PUBLIC AND PRIVATE UTILITY LINES EXIST ON THIS SITE. THE UTILITY LINES SHOWN ON THESE DRAWINGS REFLECT INFORMATION OBTAINED FROM RECORD DRAWINGS AND MAY NOT INCLUDE ALL EXISTING UTILITIES. CONTRACTOR IS TO USE EXTREME CAUTION DURING ALL CONSTRUCTION ACTIVITIES AND IS SOLELY RESPONSIBLE FOR DAMAGE TO EXISTING FACILITIES.

CALL BEFORE YOU DIG  
TEXAS ONE CALL PARTICIPANTS REQUEST  
72 HOURS NOTICE BEFORE YOU DIG, DRILL  
OR BLAST - STOP CALL  
TEXAS ONE CALL SYSTEM  
1-800-344-8377  
IN HOUSTON  
(713)-223-4567

NO.	DATE	REVISIONS
10 MARCH 2026		
ALL PROJECT NO.	DATE:	CHECKED BY:
022.25.CV.1620	MARCH 2026	BTH
SCALE:	DRAWN BY:	
1:30	SRH	
<b>EROSION CONTROL PLAN</b>		
<b>BINGLE ROAD RETAIL</b> 1045 BINGLE ROAD HOUSTON, TEXAS 77055		
SHEET		
C6.0		



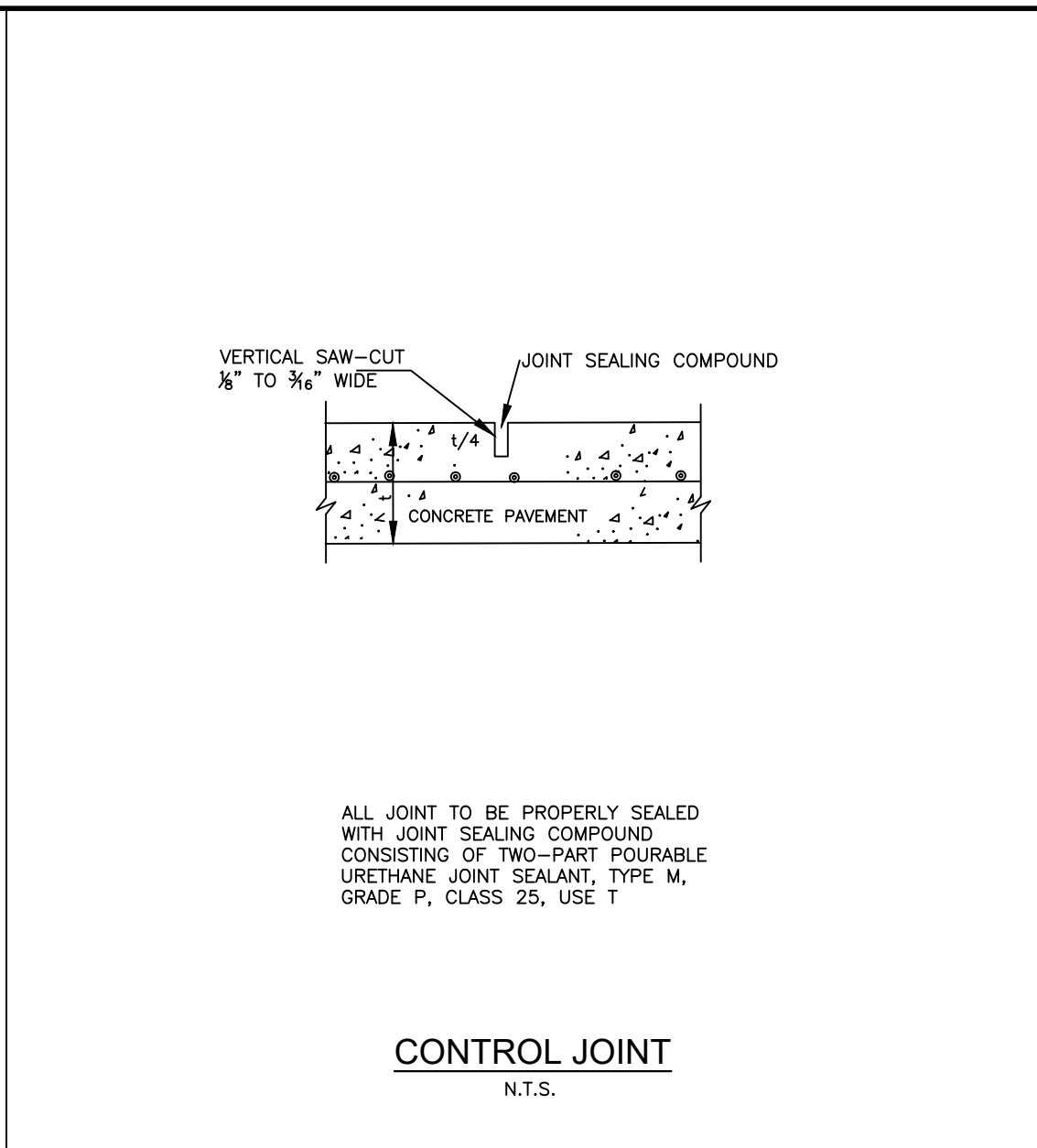
**SAWCUT DETAIL**  
N.T.S.



**CONCRETE PAVING SECTION**  
N.T.S.

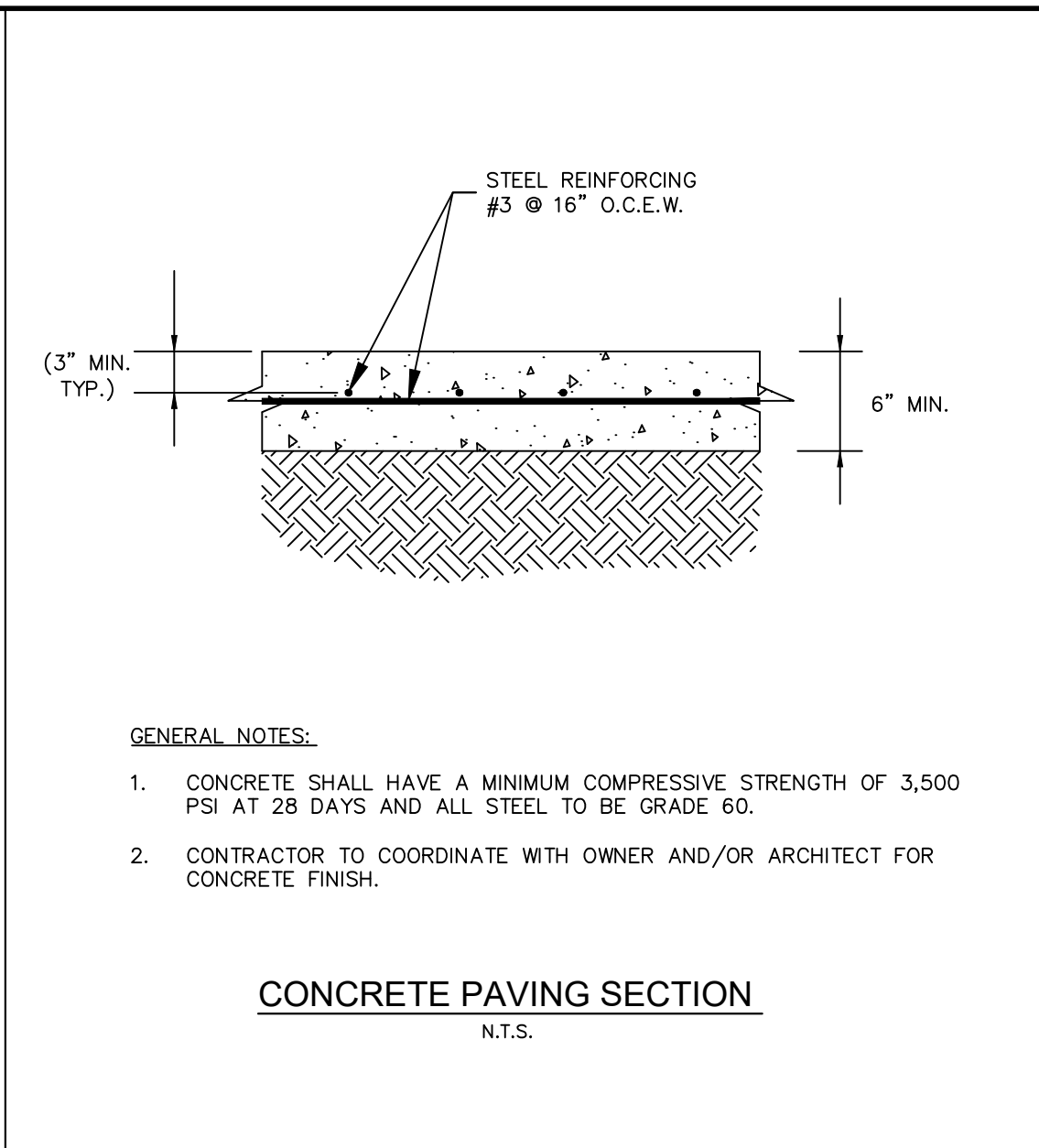
**GENERAL NOTES:**

- SEE GEOTECH REPORT PREPARED BY XXXXXXXX, DATED XXXXXX 2017, (PROJECT NUMBER XXXXXXX), FOR ALL RECOMMENDATIONS. THIS IS PROVIDED FOR PICTORIAL REPRESENTATION ONLY.
- IN THE EVENT THE GEOTECHNICAL REPORT DOES NOT SPECIFY, THE FOLLOWING CRITERIA SHALL BE APPLIED:
  - A. LONGITUDINAL & TRANSVERSE STEEL:**  
 LIGHT DUTY: #4 @ 24" O.C.E.W. OR #3 @ 18" O.C.E.W.  
 MEDIUM DUTY: #4 @ 18" O.C.E.W. OR #3 @ 12" O.C.E.W.  
 HEAVY DUTY: #4 @ 18" O.C.E.W.
  - B. SUBGRADE SHALL BE LIME/FLY ASH STABILIZED TO A MIN. DEPTH OF 6" IN CONFORMANCE WITH TXDOT 2004 STANDARD SPECIFICATIONS ITEM 260**



**CONTROL JOINT**  
N.T.S.

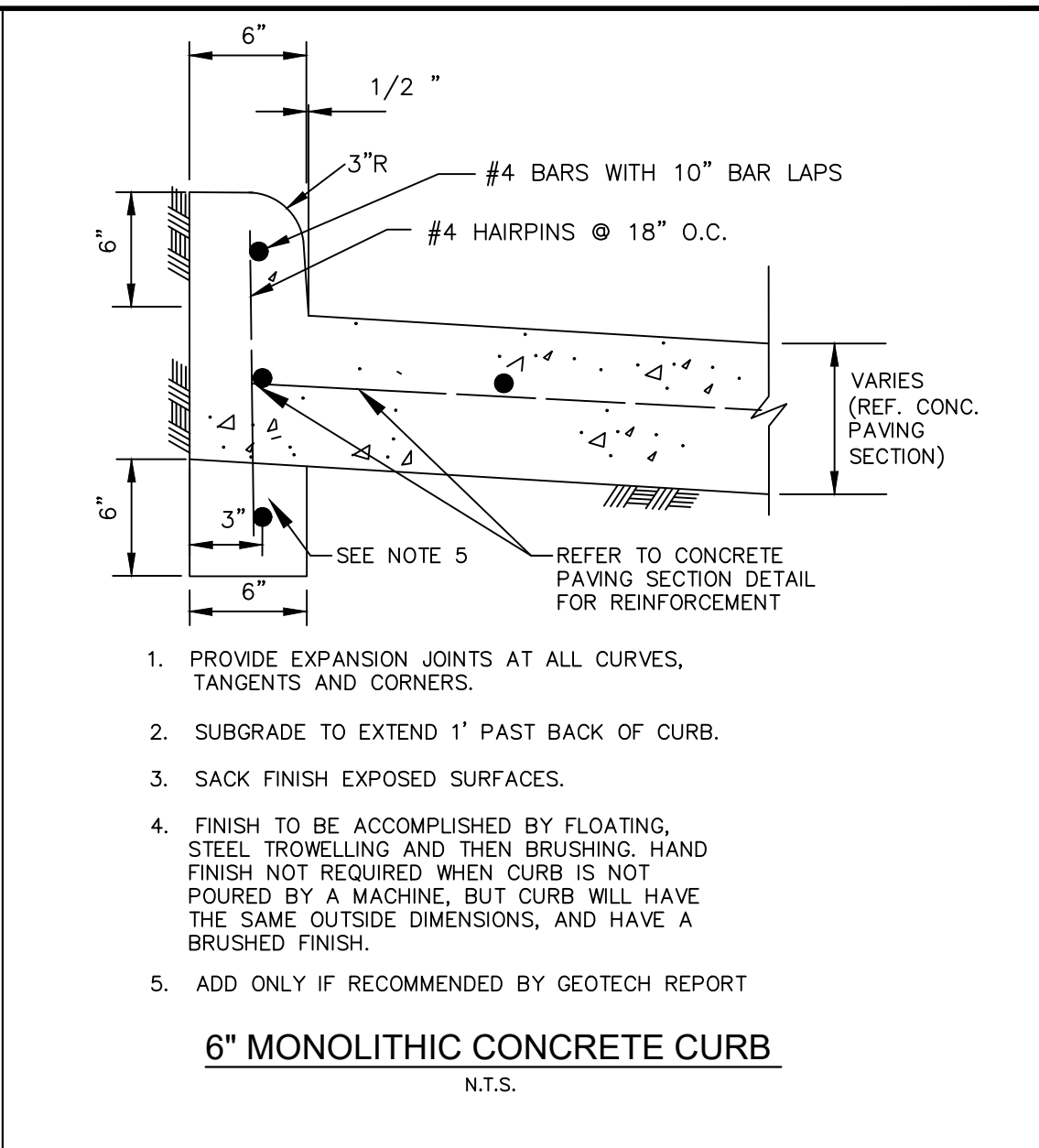
ALL JOINTS TO BE PROPERLY SEALED WITH JOINT SEALING COMPOUND CONSISTING OF TWO-PART POURABLE URETHANE JOINT SEALANT, TYPE M, GRADE P, CLASS 25, USE 1



**CONCRETE PAVING SECTION**  
N.T.S.

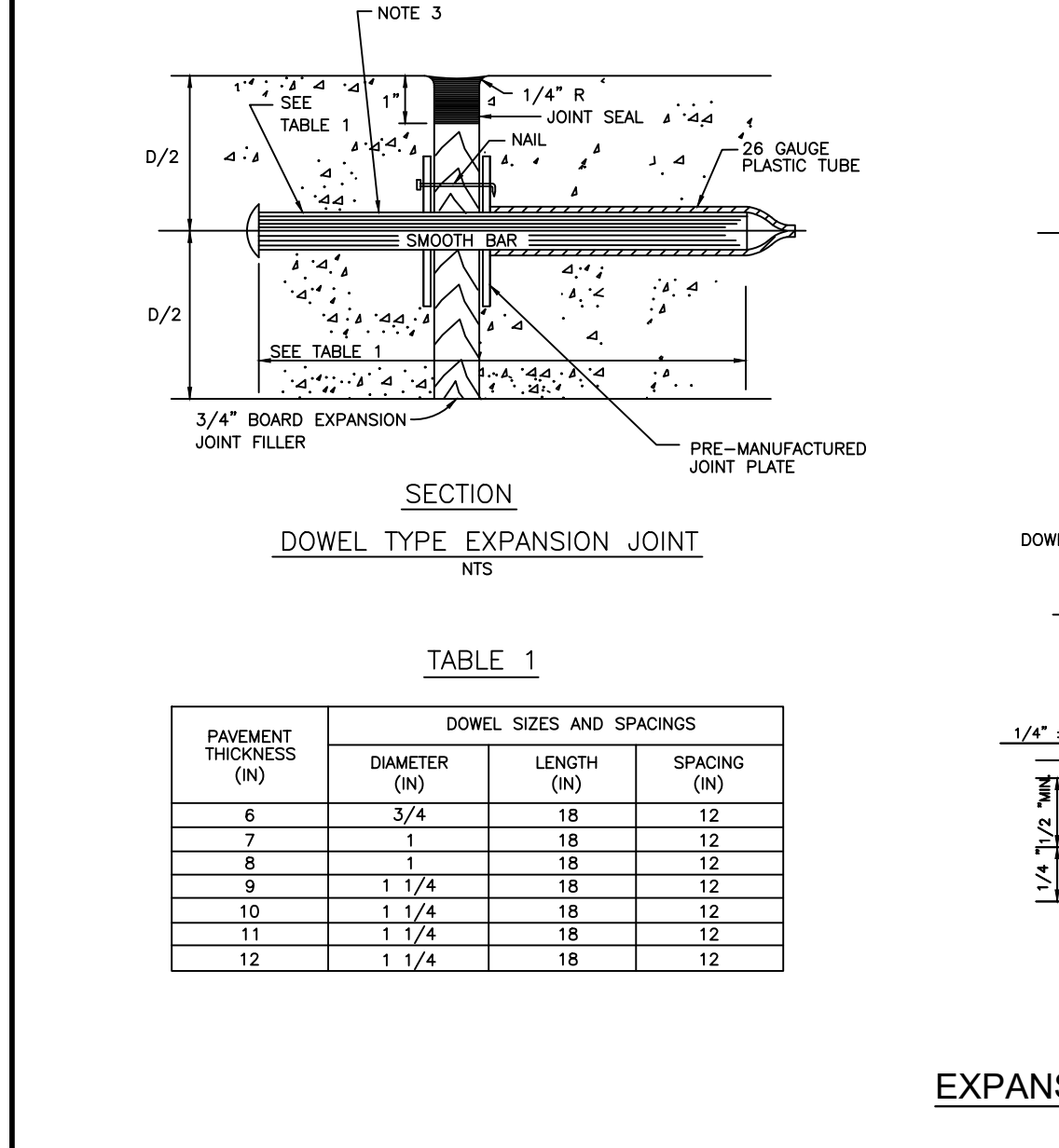
**GENERAL NOTES:**

- CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS AND ALL STEEL TO BE GRADE 60.
- CONTRACTOR TO COORDINATE WITH OWNER AND/OR ARCHITECT FOR CONCRETE FINISH.

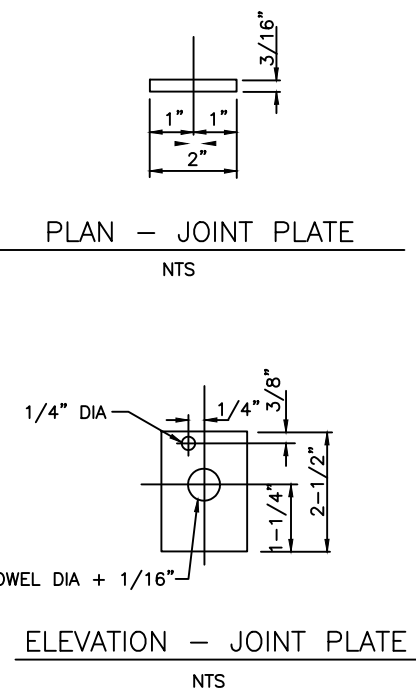


**6\"/>**

- PROVIDE EXPANSION JOINTS AT ALL CURVES, TANGENTS AND CORNERS.
- SUBGRADE TO EXTEND 1' PAST BACK OF CURB.
- SACK FINISH EXPOSED SURFACES.
- FINISH TO BE ACCOMPLISHED BY FLOATING, STEEL TROWELLING AND THEN BRUSHING. HAND FINISH NOT REQUIRED WHEN CURB IS NOT POURED BY A MACHINE, BUT CURB WILL HAVE THE SAME OUTSIDE DIMENSIONS, AND HAVE A BRUSHED FINISH.
- ADD ONLY IF RECOMMENDED BY GEOTECH REPORT



**SECTION DOWEL TYPE EXPANSION JOINT**  
N.T.S.



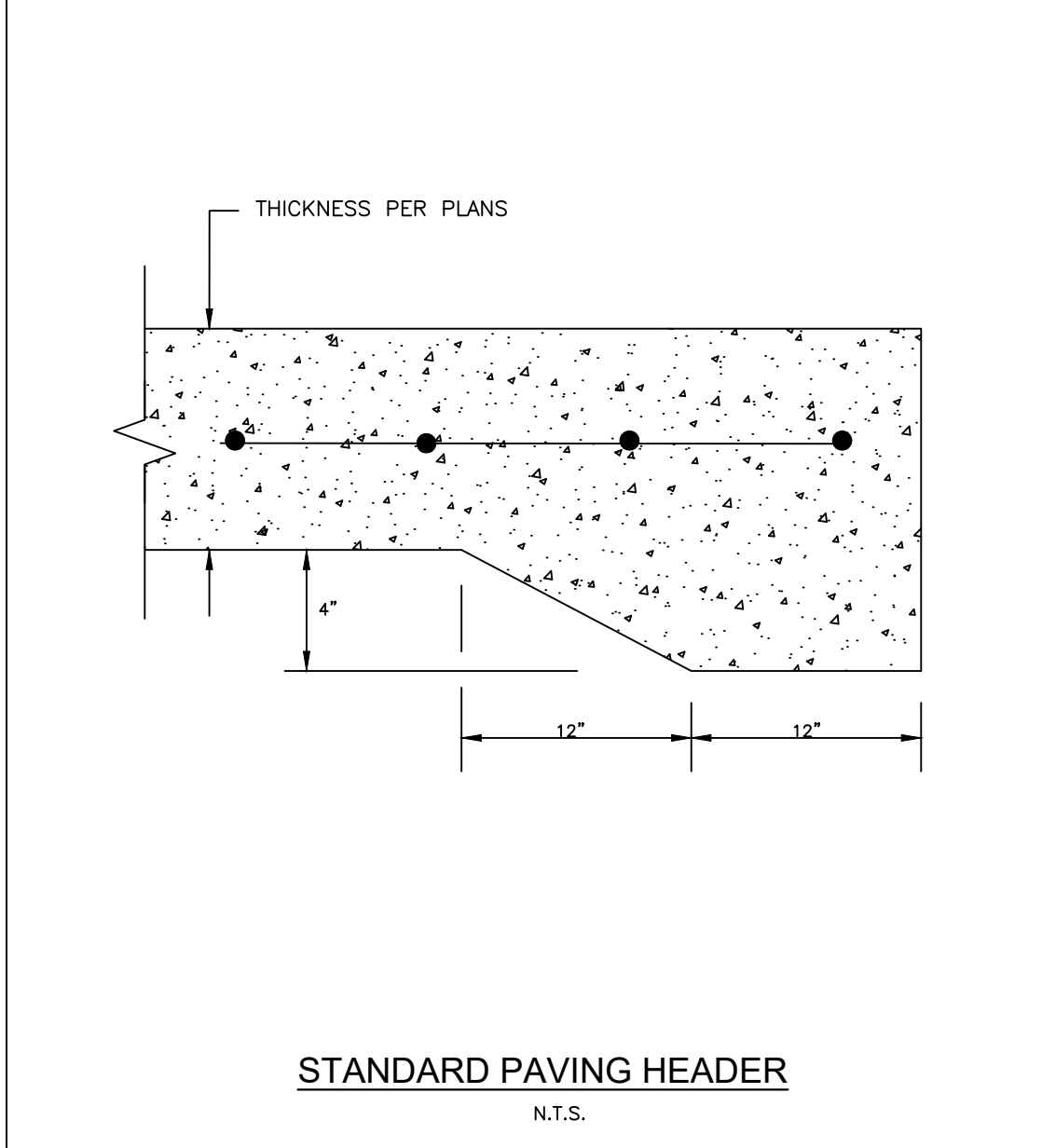
**NOTES:**

- STEEL TO MEET ASTM STANDARD SPECIFICATIONS FOR CONCRETE REINFORCING BARS. SPACING AND BAR SIZE MAY BE REDUCED IF GEOTECHNICAL REPORT PROVIDES RECOMMENDATIONS.
- CENTER DOWEL HORIZONTALLY ON JOINT.
- CENTER DOWEL VERTICALLY IN CONCRETE BASE. EXTEND THICKENED CONCRETE AS NEEDED TO MAINTAIN 3" MIN COVER.
- THE LOCATION OF CONSTRUCTION JOINTS MAY BE VARIED WITH THE APPROVAL OF THE COUNTY ENGINEER.
- JOINT SEALANT TO BE TWO-PART POURABLE URETHANE JOINT SEALANT, TYPE M, GRADE P, CLASS 25, USE 1

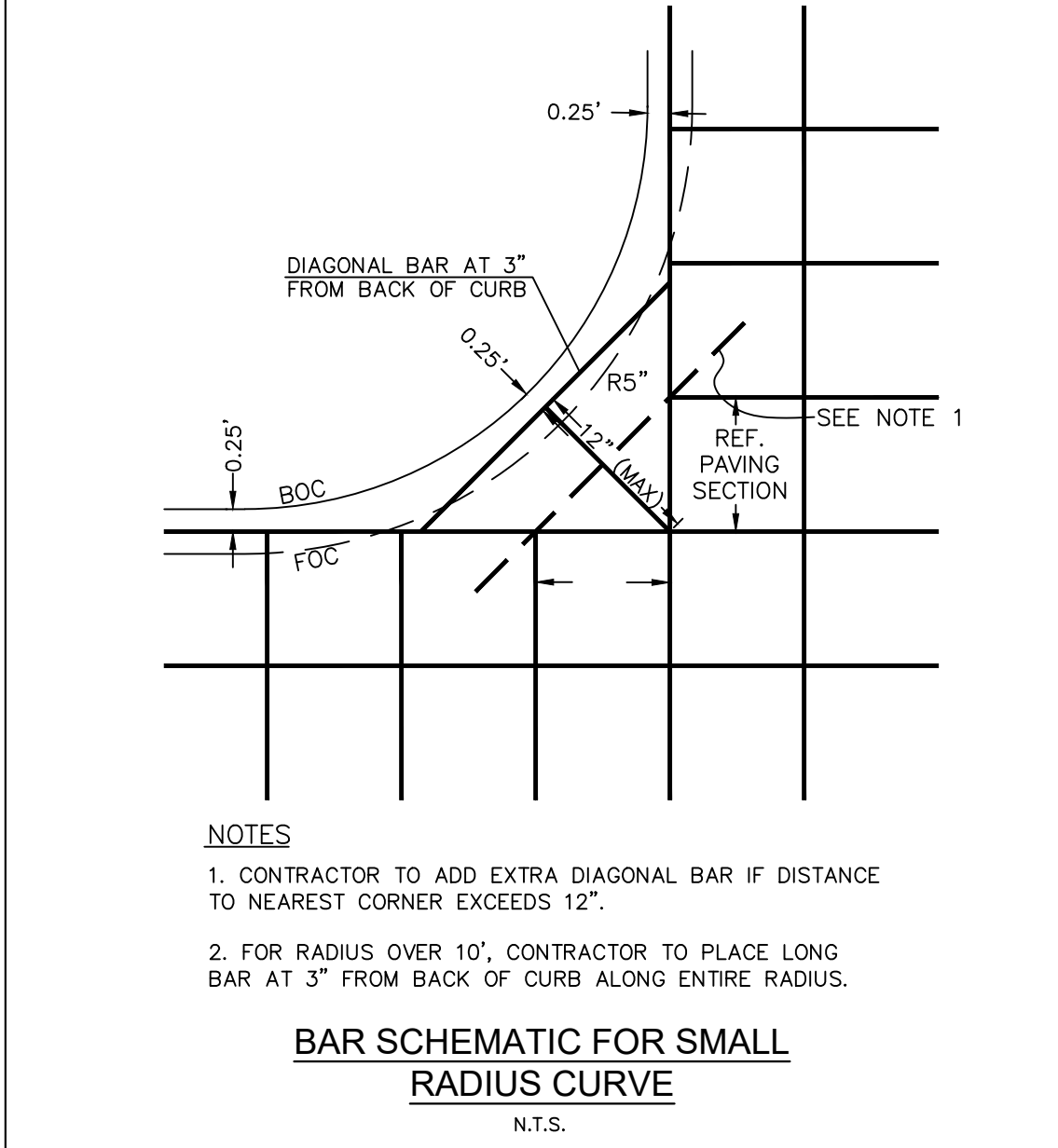
**TABLE 1**

PAVEMENT THICKNESS (IN)	DOWEL SIZES AND SPACINGS		
	DIAMETER (IN)	LENGTH (IN)	SPACING (IN)
6	3/4	18	12
7	1	18	12
8	1	18	12
9	1 1/4	18	12
10	1 1/4	18	12
11	1 1/4	18	12
12	1 1/4	18	12

**EXPANSION JOINT**  
N.T.S.



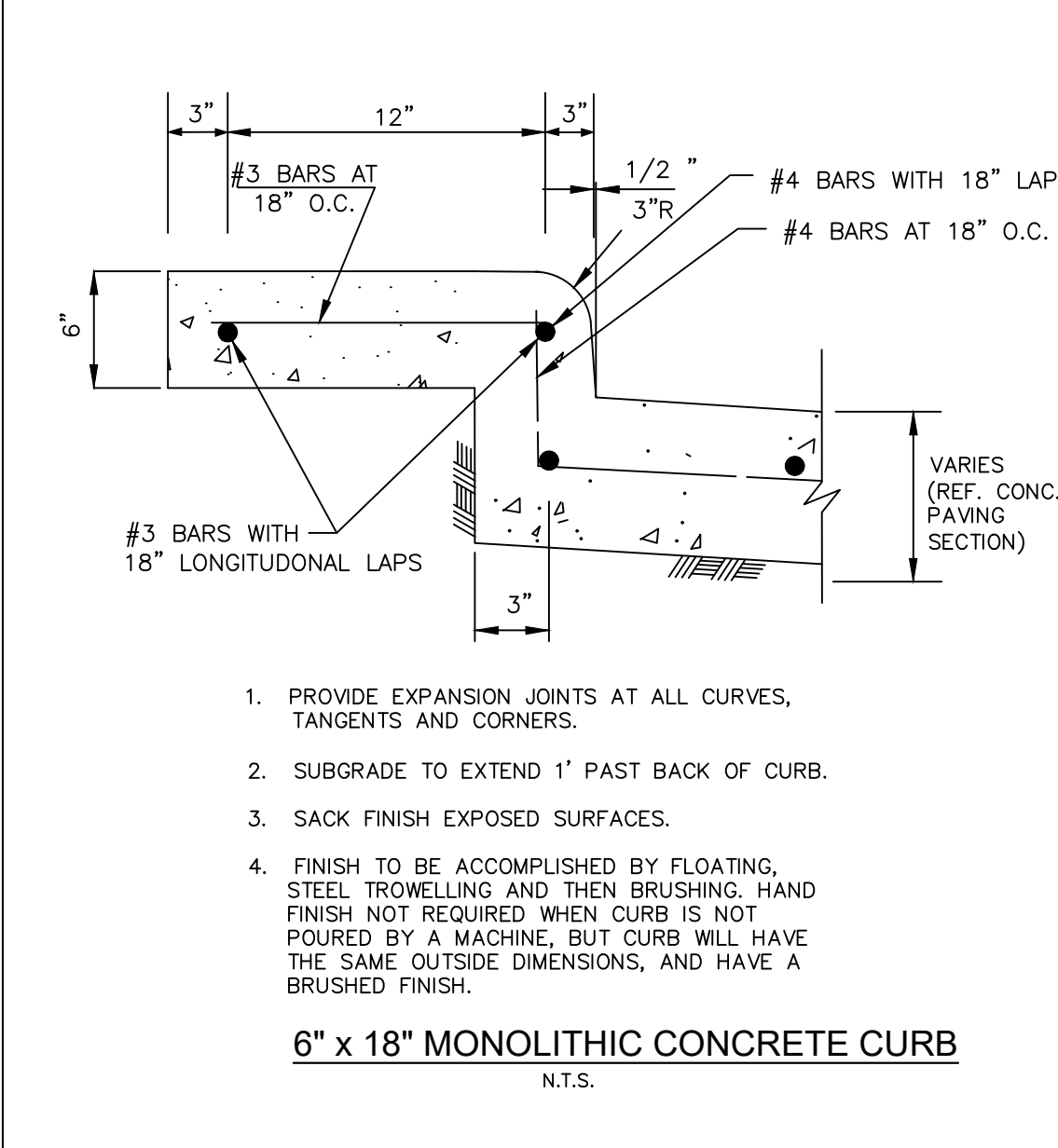
**STANDARD PAVING HEADER**  
N.T.S.



**BAR SCHEMATIC FOR SMALL RADIUS CURVE**  
N.T.S.

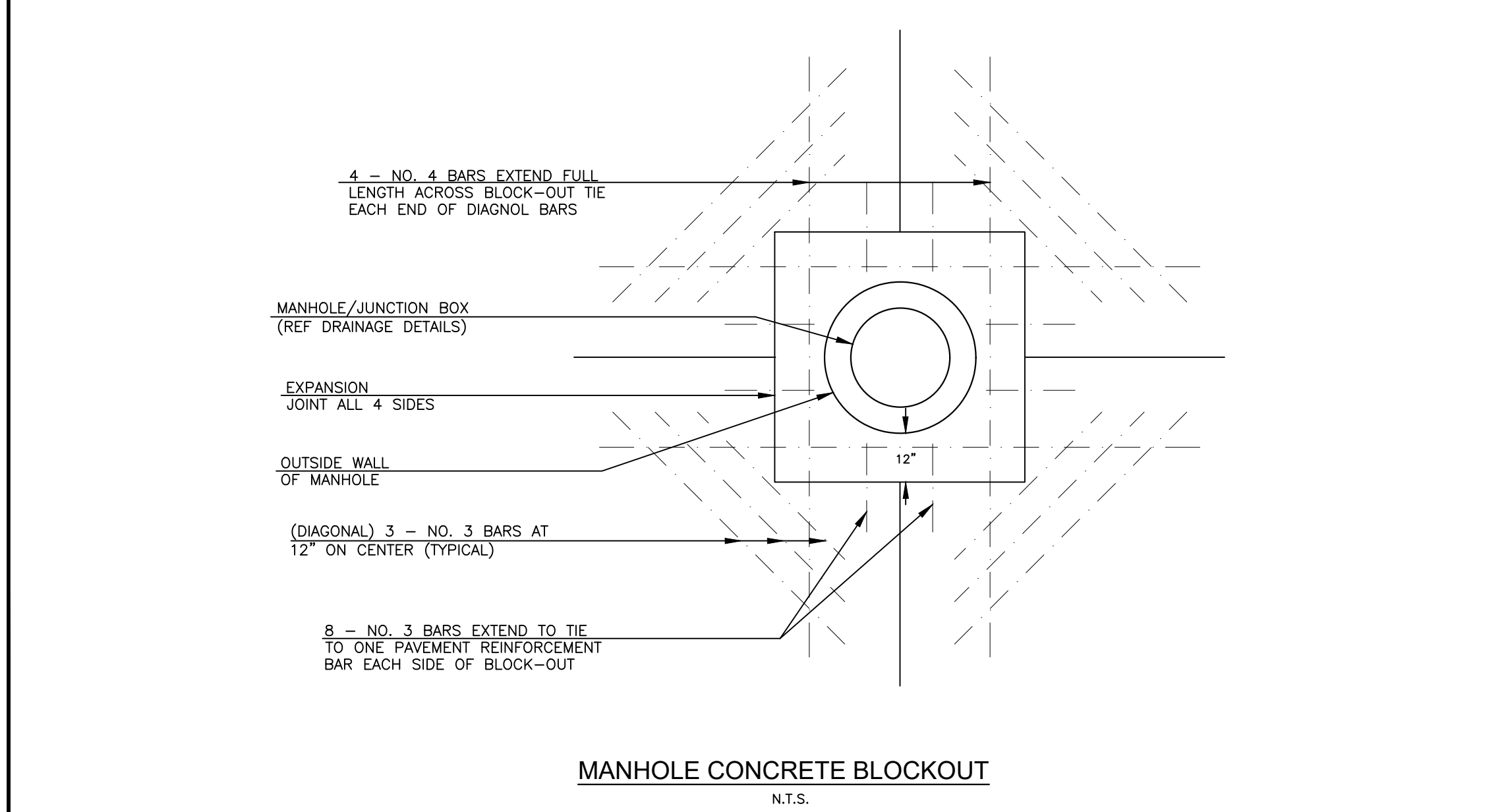
**NOTES:**

- CONTRACTOR TO ADD EXTRA DIAGONAL BAR IF DISTANCE TO NEAREST CORNER EXCEEDS 12".
- FOR RADIUS OVER 10', CONTRACTOR TO PLACE LONG BAR AT 3" FROM BACK OF CURB ALONG ENTIRE RADIUS.

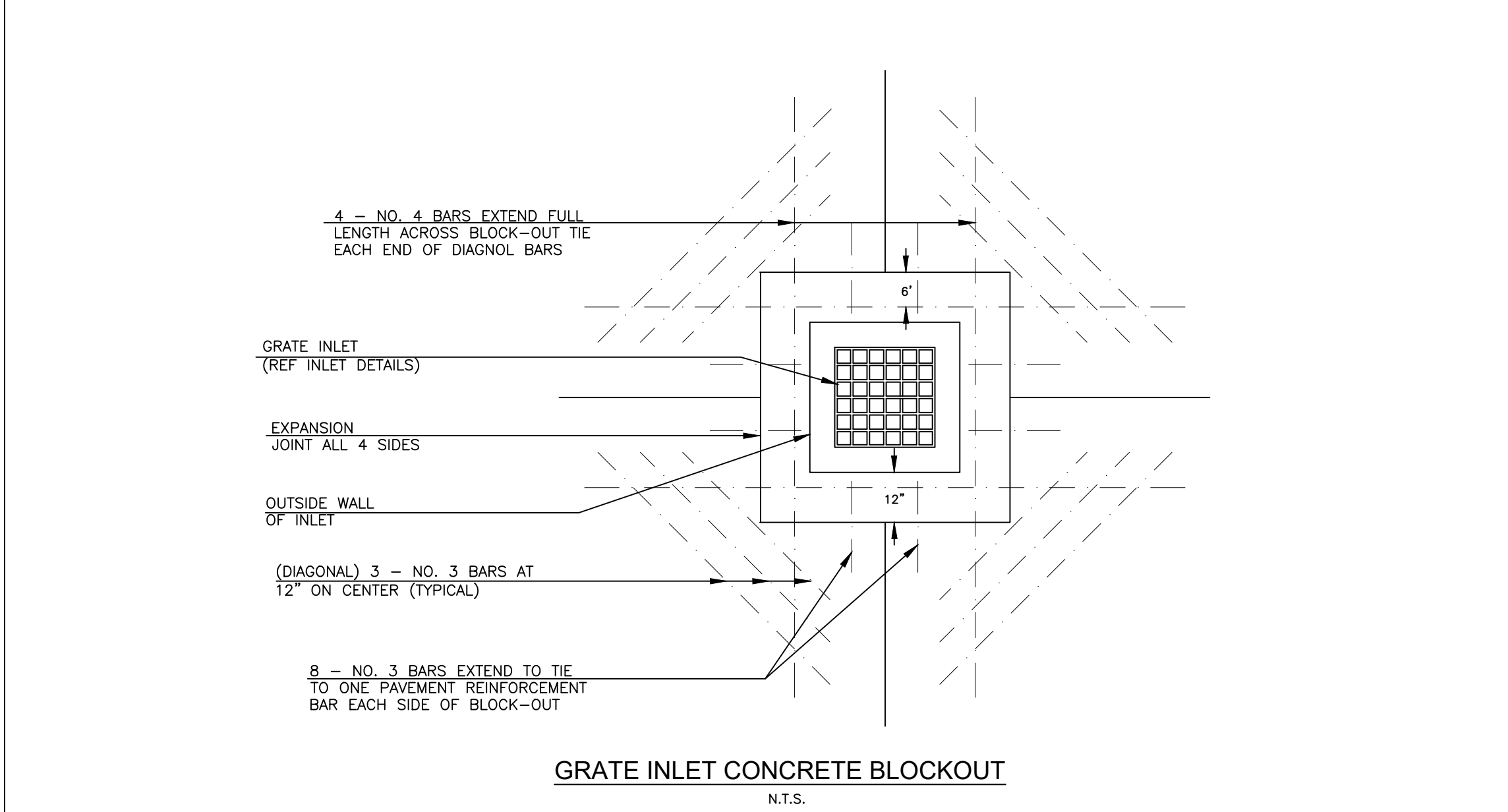


**6\"/>**

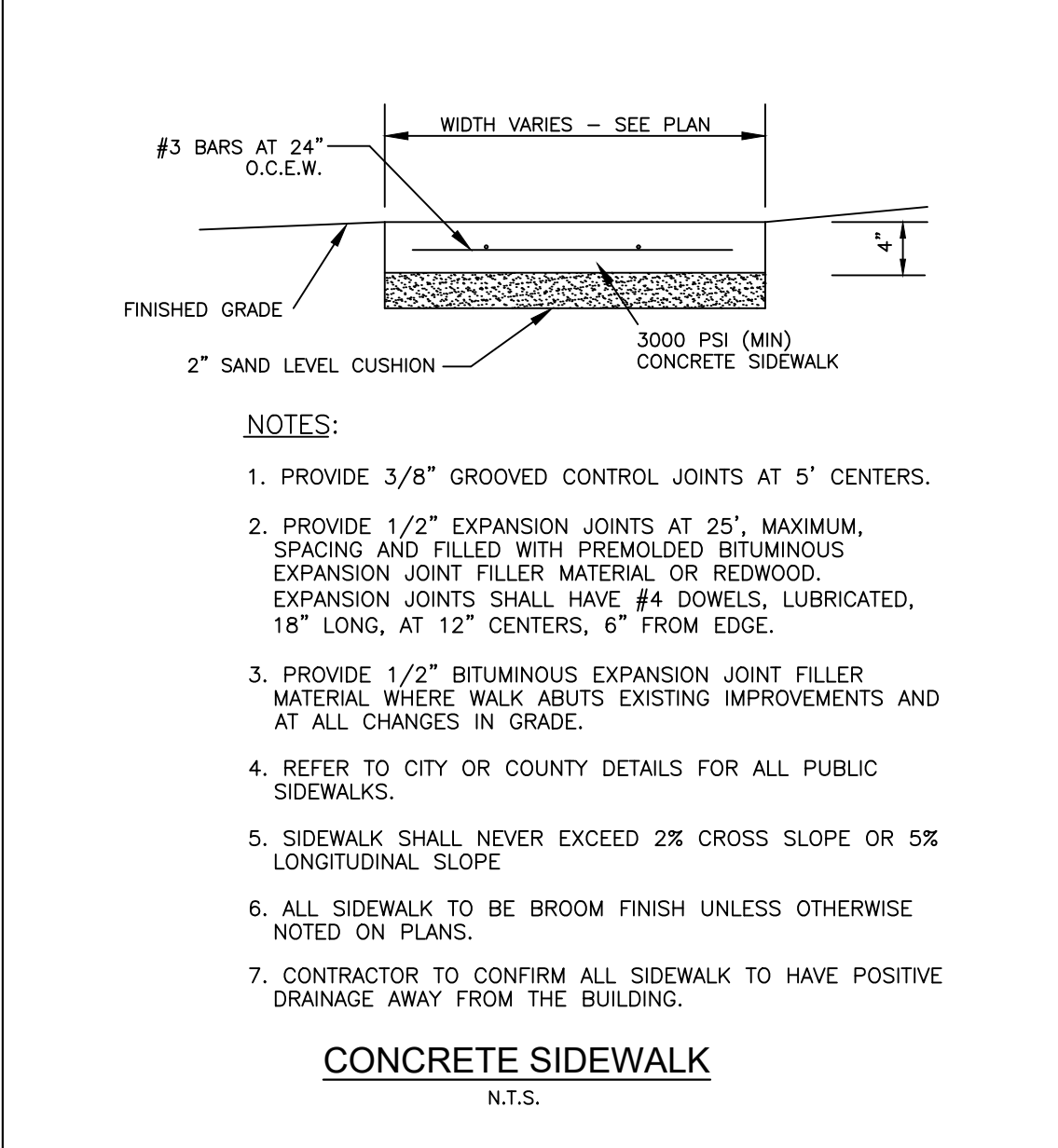
- PROVIDE EXPANSION JOINTS AT ALL CURVES, TANGENTS AND CORNERS.
- SUBGRADE TO EXTEND 1' PAST BACK OF CURB.
- SACK FINISH EXPOSED SURFACES.
- FINISH TO BE ACCOMPLISHED BY FLOATING, STEEL TROWELLING AND THEN BRUSHING. HAND FINISH NOT REQUIRED WHEN CURB IS NOT POURED BY A MACHINE, BUT CURB WILL HAVE THE SAME OUTSIDE DIMENSIONS, AND HAVE A BRUSHED FINISH.



**MANHOLE CONCRETE BLOCKOUT**  
N.T.S.



**GRATE INLET CONCRETE BLOCKOUT**  
N.T.S.



**CONCRETE SIDEWALK**  
N.T.S.

**NOTES:**

- PROVIDE 3/8" GROOVED CONTROL JOINTS AT 5' CENTERS.
- PROVIDE 1/2" EXPANSION JOINTS AT 25', MAXIMUM, SPACING AND FILLED WITH PREMOLDED BITUMINOUS EXPANSION JOINT FILLER MATERIAL OR REDWOOD. EXPANSION JOINTS SHALL HAVE #4 DOWELS, LUBRICATED, 18" LONG, AT 12" CENTERS, 6" FROM EDGE.
- PROVIDE 1/2" BITUMINOUS EXPANSION JOINT FILLER MATERIAL WHERE WALK ABUTS EXISTING IMPROVEMENTS AND AT ALL CHANGES IN GRADE.
- REFER TO CITY OR COUNTY DETAILS FOR ALL PUBLIC SIDEWALKS.
- SIDEWALK SHALL NEVER EXCEED 2% CROSS SLOPE OR 5% LONGITUDINAL SLOPE.
- ALL SIDEWALK TO BE BROOM FINISH UNLESS OTHERWISE NOTED ON PLANS.
- CONTRACTOR TO CONFIRM ALL SIDEWALK TO HAVE POSITIVE DRAINAGE AWAY FROM THE BUILDING.

ALJLindsey  
Civil Engineers  
1885 N. Loop West, Suite 200  
Houston, TX 77057  
281.301.9555  
FRN F-11526

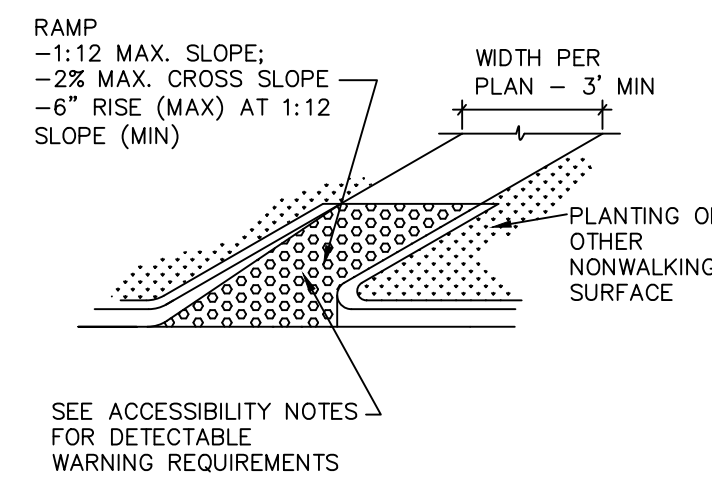
10 MARCH 2026  
BRETT T. MANRAHAN  
REGISTERED PROFESSIONAL ENGINEER  
12908

ALL PROJECT NO. 022-25CV1620  
DATE: MARCH 2026  
SCALE: N/A  
DRAWN BY: SRH  
CHECKED BY: BTH

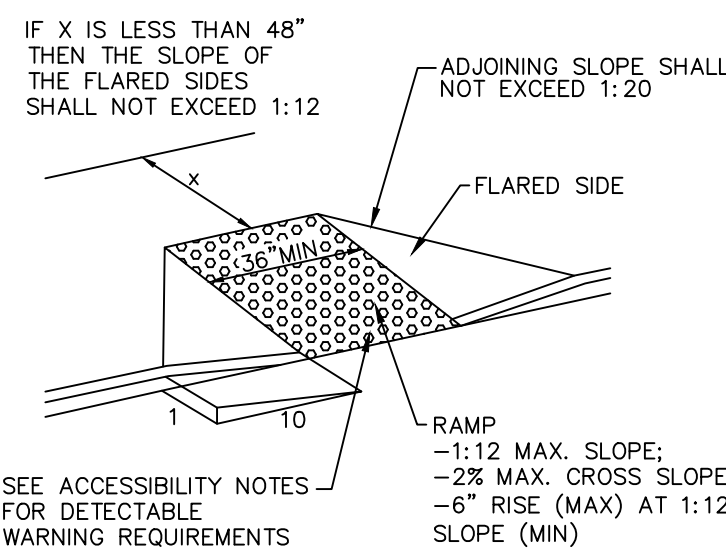
**CONSTRUCTION DETAILS (1 OF 7)**

**BINGLE ROAD RETAIL**  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

NO. \_\_\_\_\_ REVISIONS \_\_\_\_\_ DATE \_\_\_\_\_



**CURB RAMP DETAIL - SQUARE SIDES**  
N.T.S.



**CURB RAMP DETAIL - FLARED SIDES**  
N.T.S.

**ACCESSIBILITY NOTES:**

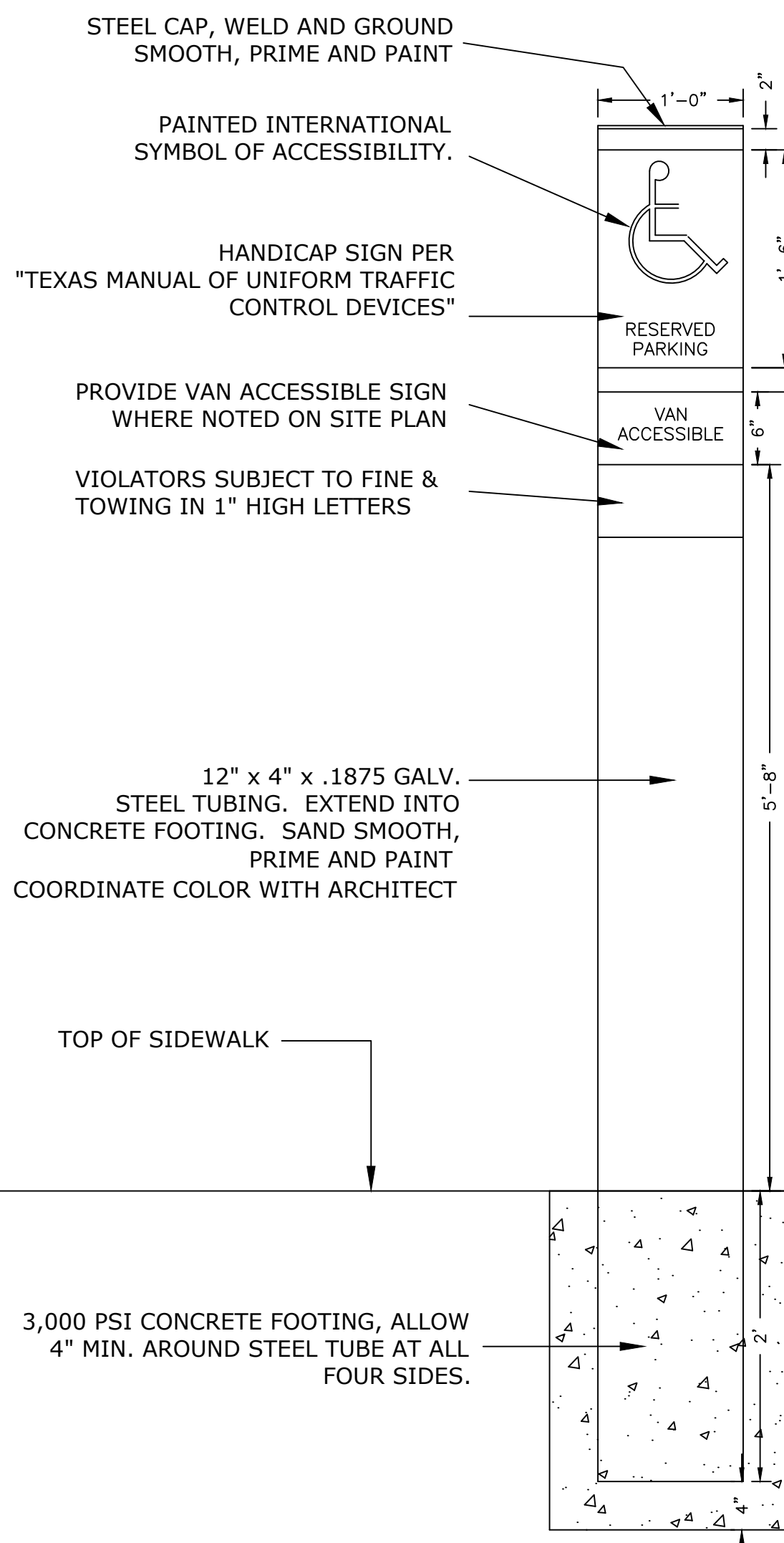
1. ALL ACCESSIBLE SPACES AND ACCESSIBLE ROUTES SHALL COMPLY WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND CITY/COUNTY REQUIREMENTS.
2. ACCESSIBLE PARKING SPACES AND DRIVE AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:48 (2.08%) IN ALL DIRECTIONS. CURB RAMPS SHALL BE PROVIDED AT ALL PASSENGER LOADING ZONES.
3. EACH ACCESSIBLE PARKING SPACE SHALL BE DESIGNATED AS RESERVED BY AN APPROPRIATE SIGN SHOWING THE SYMBOL OF ACCESSIBILITY PER TAS SECTION 216.5. SPACES COMPLYING WITH TAS SECTION 502.6 SHALL HAVE AN ADDITIONAL SIGN "VAN-ACCESSIBLE" MOUNTED BELOW THE SYMBOL OF ACCESSIBILITY.
  - A. SIGNS SHALL BE LOCATED 48" - 80" ABOVE THE GROUND, FLOOR, OR PAVING SURFACE MEASURED TO THE BOTTOM OF THE SIGN SO THEY CANNOT BE OBTURED BY A VEHICLE PARKED IN THE SPACE.
  - B. SIGNS LOCATED WITHIN AN ACCESSIBLE ROUTE SHALL COMPLY WITH TAS SECTION 307.4.
  - C. CHARACTERS AND SYMBOLS ON OVERHEAD SIGNS SHALL COMPLY WITH TAS SECTION 703.5.
4. SLOPES OF CURB RAMPS SHALL COMPLY WITH TAS SECTION 405.2. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. MAXIMUM SLOPES OF ADJOINING GUTTERS, ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP, OR ACCESSIBLE ROUTE SHALL NOT EXCEED 1:20.
5. SURFACES OF CURB RAMPS SHALL COMPLY WITH TAS SECTIONS 405.4 AND 302.1.

**CURB RAMPS IN PUBLIC RIGHT-OF-WAY**  
ALL CURB RAMPS SHALL COMPLY WITH ARCHITECTURAL BARRIERS ADMINISTRATIVE RULE 68.102(B)(2):

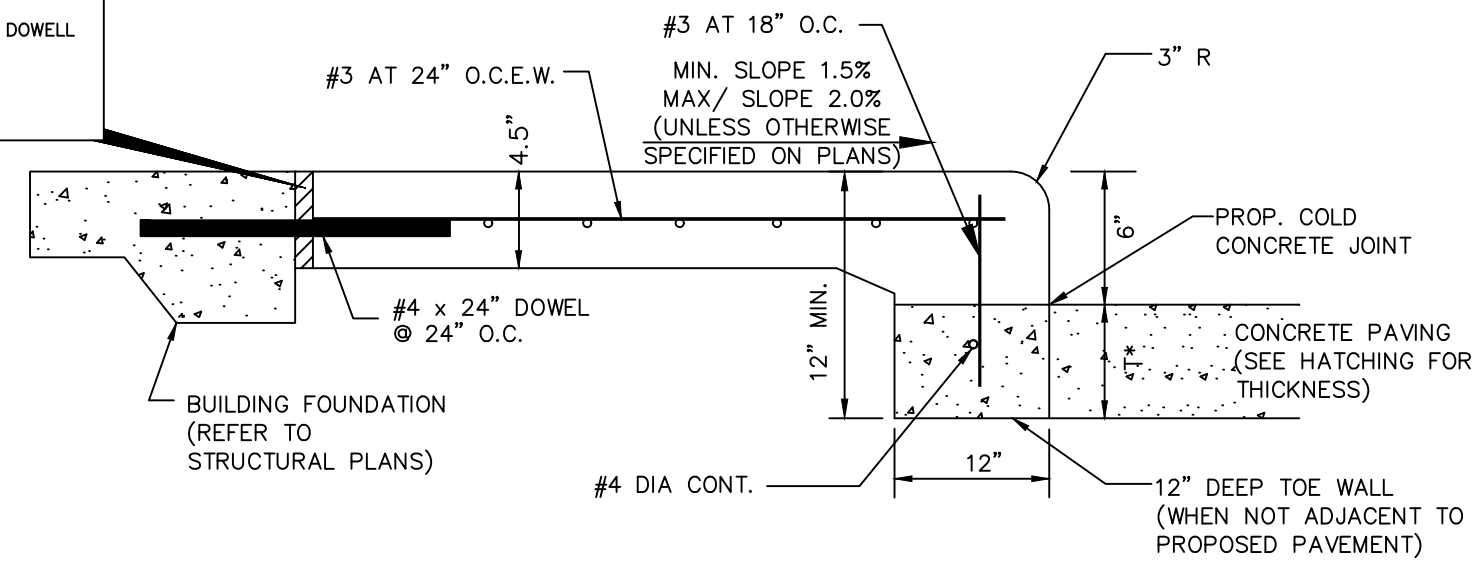
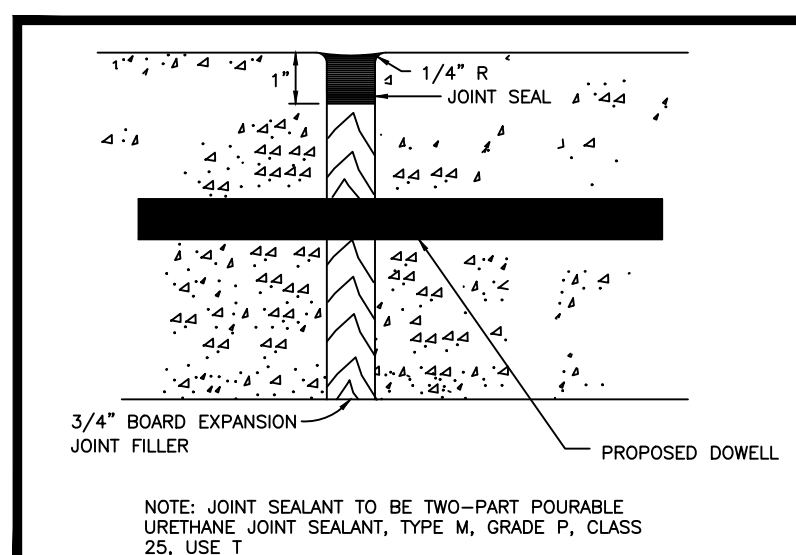
- A. DETECTABLE WARNING STRIP SHALL EXTEND A MINIMUM OF 24" IN DEPTH (IN DIRECTION OF PEDESTRIAN TRAVEL)
- B. DETECTABLE WARNING STRIP SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR LANDING.

**CURB RAMPS NOT IN PUBLIC RIGHT-OF-WAY**  
ALL CURB RAMPS NOT CONSTRUCTED IN PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH TAS 406:

- A. DETECTABLE WARNING STRIPS ARE NOT REQUIRED ON CURB RAMPS NOT IN PUBLIC RIGHT-OF-WAY.

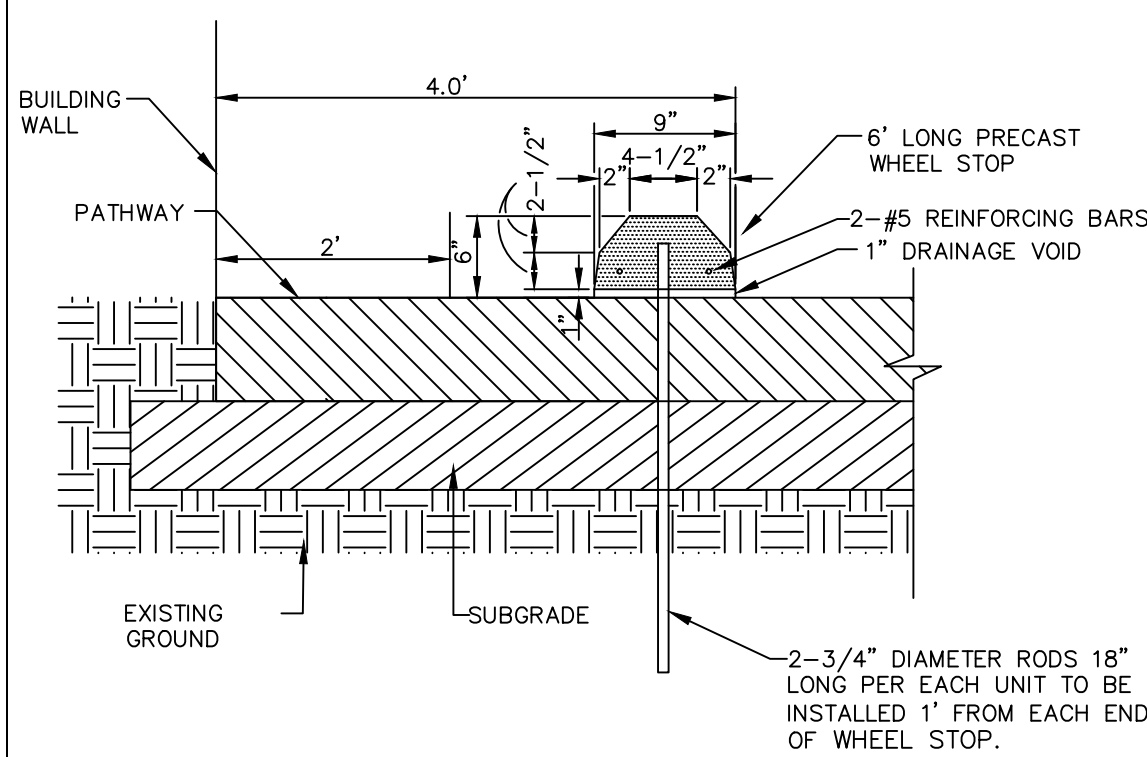


**ACCESSIBLE PARKING SIGN**  
N.T.S.



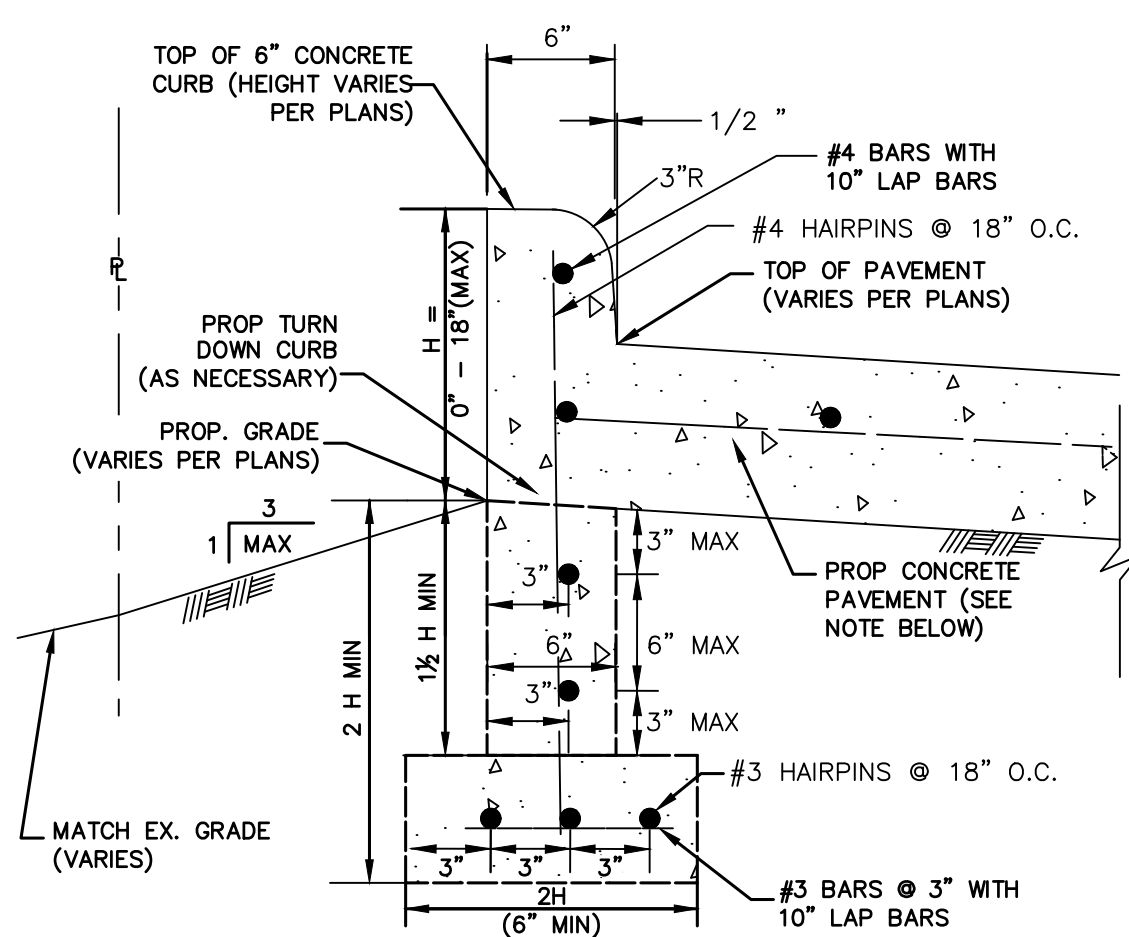
**BUILDING PERIMETER SIDEWALK**  
N.T.S.

\* = FOR REQUIRED PAVEMENT/SUBGRADE THICKNESS. SEE HATCHING ON PLAN. REFERENCE GEOTECHNICAL REPORT FOR SPECIFICATIONS.



**WHEEL STOP WITH PATHWAY**  
N.T.S.

**NOTES:**  
1. CONCRETE USED FOR WHEEL STOP TO HAVE MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI.



1. REFER TO CONCRETE PAVING SECTION DETAIL FOR REINFORCEMENT
2. REFER TO GEOTECH REPORT FOR PAVING THICKNESS

**TYPICAL TURNDOWN CURB DETAIL**  
N.T.S.

NO.	REVISIONS	DATE

**ALJLindsey**  
Civil Engineers  
1885 N. Loop West, Suite 200  
Houston, TX 77057  
281.301.9595  
FRN F-1526

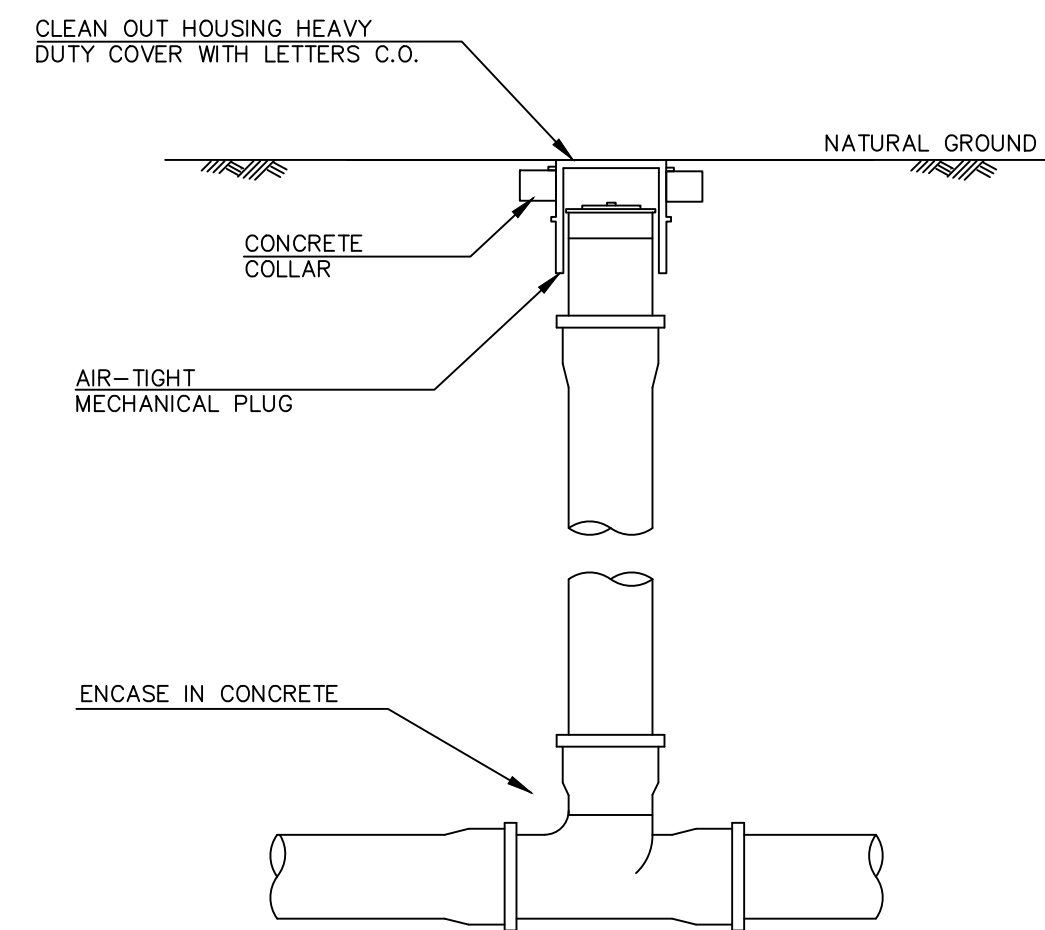
*Brett T. Manrahan*  
SITE OF TEXAS  
BRETT T. MANRAHAN  
REGISTERED PROFESSIONAL ENGINEER  
12908  
10 MARCH 2026

ALL PROJECT NO. 0225CV1620	DATE: MARCH 2026	SCALE: N/A	DRAWN BY: SRH	CHECKED BY: BTH
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**CONSTRUCTION  
DETAILS (2 OF 7)**

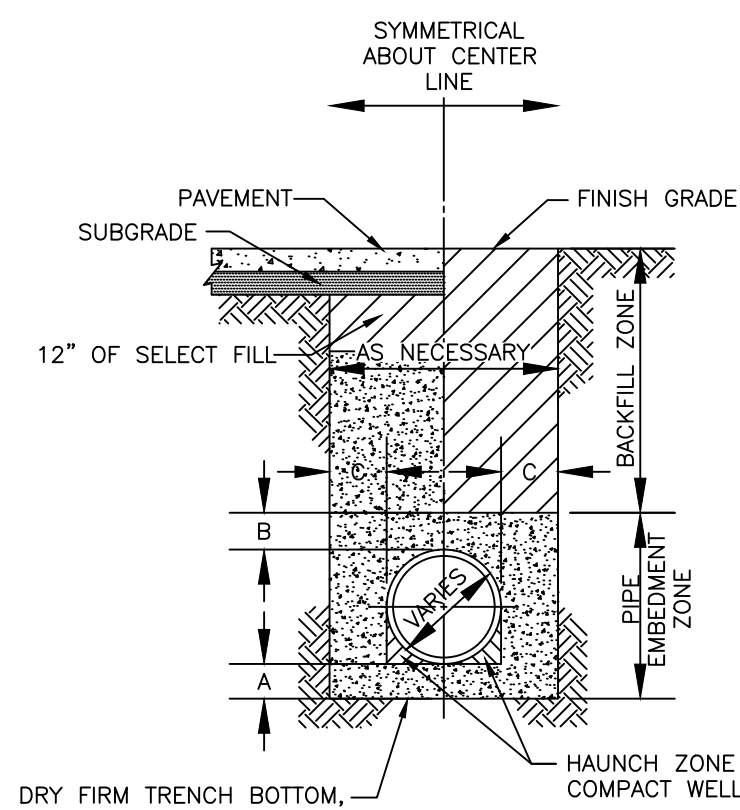
**BINGLE ROAD RETAIL**  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

SHEET  
**C7.1**



CLEANOUT SERIES 8310 MADE BY JOSAM MANUFACTURING CO., OR APPROVED EQUAL WITH SCORIATED COVER AND BRASS INTERNAL PLUG.

**CLEANOUT DETAIL**  
N.T.S.



DRY FIRM TRENCH BOTTOM, SEE COH DETAIL 02317-01 FOR WET TRENCH DETAIL FOR SANITARY AND STORM SEWERS.

**WATER, SANITARY AND STORM BEDDING AND BACKFILL FOR DRY STABLE TRENCH**  
N.T.S.

**DIMENSIONAL REQUIREMENTS**

PIPE SIZE	A	B	C
20" AND SMALLER	6"	12"	9"
21" THRU 48"	6"	12"	12"
54" THRU 66"	9"	12"	15"
72" AND LARGER	12"	18"	15"

**MATERIAL REQUIREMENTS**

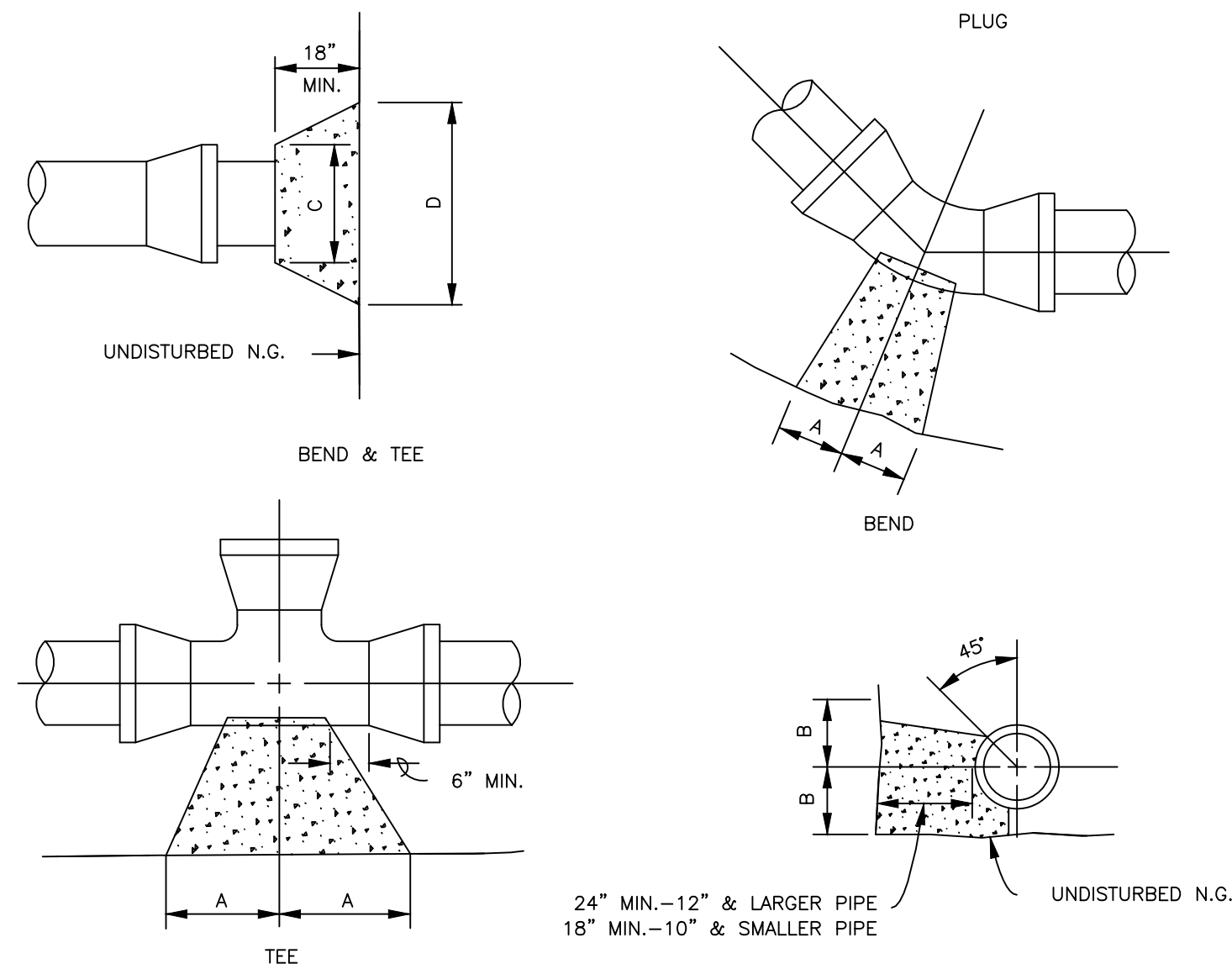
**BACKFILL ZONE**

1. IN PAVED AREAS, USE CEMENT STABILIZED SAND, PLACE IN 8" LIFTS AND COMPACT TO 95% STANDARD PROCTOR DENSITY, TO WITHIN 12" OF SUBGRADE.
2. IN UNPAVED AREAS, USE SOIL EXCAVATED FROM TRENCH, PLACE IN 8" LIFTS AND COMPACT TO 95% STANDARD PROCTOR DENSITY.

**PIPE EMBEDMENT ZONE**

1. FOR STORM AND SANITARY SEWERS, USE CEMENT STABILIZED SAND, PLACE IN 8" LIFTS AND COMPACT TO 95% STANDARD PROCTOR DENSITY.
2. FOR WATER LINES, USE SAND, PLACE IN 8" LIFTS AND COMPACT TO 95% STANDARD PROCTOR DENSITY.

SIZE	90° BEND		45° BEND		22 1/2° BEND		TEES		PLUGS	
	A	B	A	B	A	B	A	B	C	D
2 1/2"	12"	7"	6"	7"	6"	6"	7"	8"	8"	14"
4"	14"	8"	7"	9"	6"	6"	8"	11"	8"	18"
6"	16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"
12"	29"	21"	16"	21"	11"	16"	18"	24"	16"	41"
16"	38"	27"	21"	27"	12"	24"	24"	30"	20"	54"



NOTE:  
THRUST BLOCKS AT TRENCH FACE MUST HAVE A MINIMUM BEARING SURFACE OF 1.0 SQ. FOOT AND THE LEAST DIMENSION SHALL BE NO SMALLER THAN 1.5 TIMES PIPE DIAMETER, BUT NOT LESS THAN 1.0 FT.

**THRUST-BLOCKING**  
N.T.S.

DIMENSIONS AND WEIGHTS			
ID SIZE (in)	1' RISER (in)	3' RISER (in)	W/A/F (lb)
48	5	12	868
60	6	6	1300
72	6	6	1811
84	6	6	2350
96	6	6	3090
120	8	6	3500

**Options:**

- PIPE CONNECTORS (A-LOCK/ROOF)
- BOTTOM
- INVERTS
- STEPS
- EXTENDED LIP BASE
- COATING

**Specifications:**

CONCRETE: Class 1 concrete with of design strength of 4500 PSI at 28 days. Rated for H-20 loading.

REINFORCEMENT: Structural reinforcement conforming to ASTM-C-476.

C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 30.

**PARK ENVIRONMENTAL EQUIPMENT**  
888-611-PARK  
www.park-usa.com

"Expect the Best"

**PRECAST CONCRETE MANHOLE FOR SANITARY SEWER - MODEL PCMHIN - 48" THRU 120"**

SCALE: NONE	DWG. NO. PCMHIN-1	REV. A
DATE: 2010		

3-46

All drawings are available for download at www.park-usa.com in .dwg & .pdf formats

NO.	REVISIONS	DATE

**ALJLindsey**  
Civil Engineers  
1885 N. Loop West, Suite 200  
Houston, TX 77057  
281.301.9555  
PRN F-11526

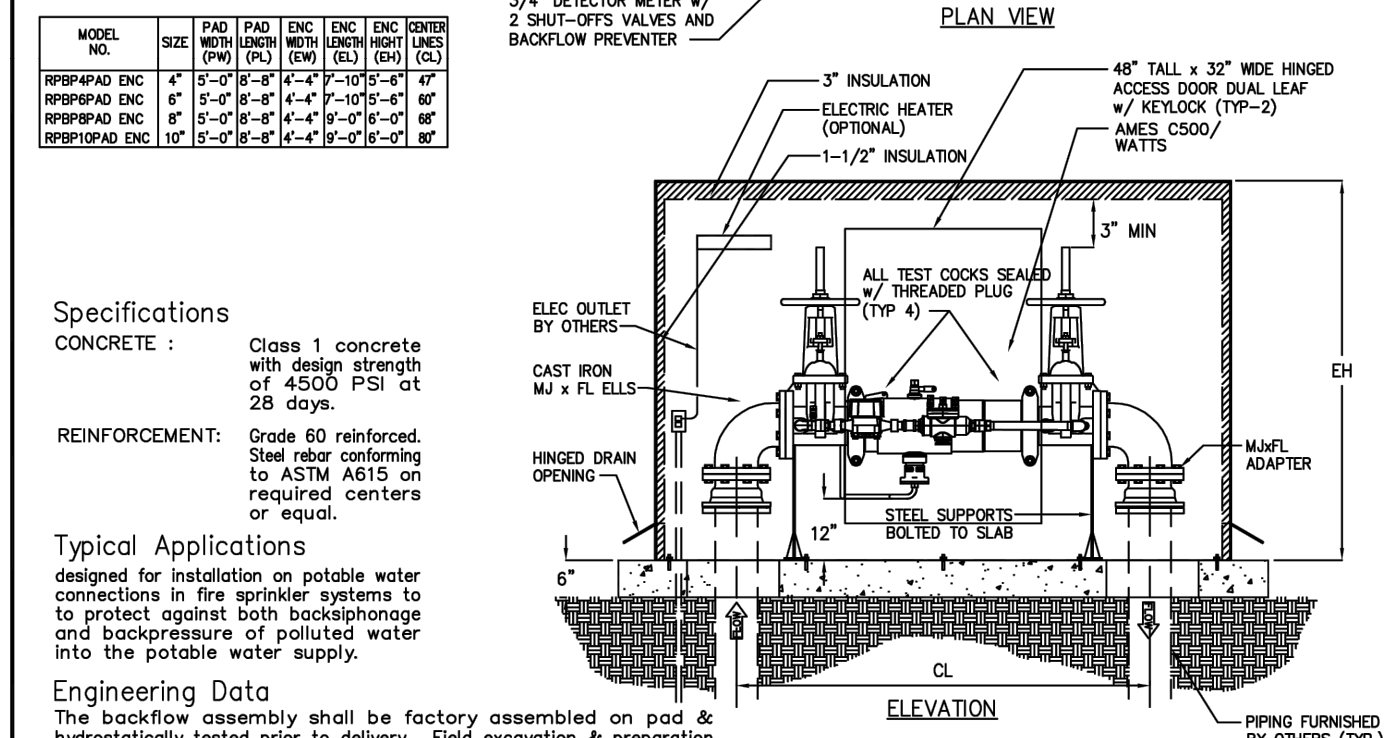
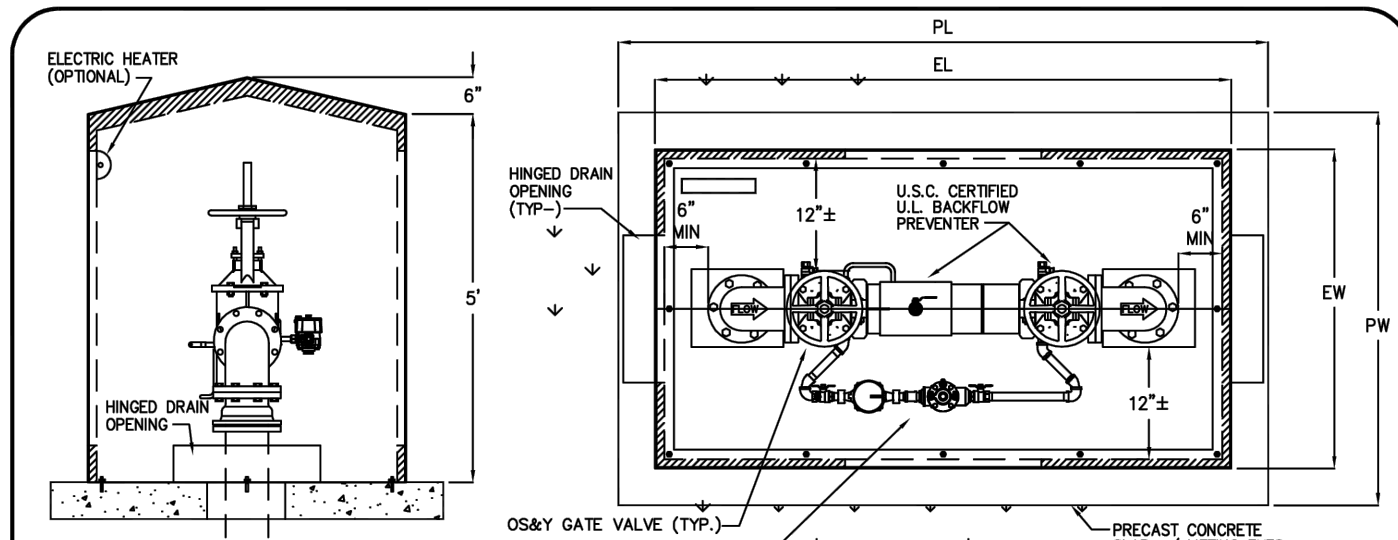
**Brett T. Manrahan**  
SITE OF TEXAS  
BRETT T. MANRAHAN  
12908  
REGISTERED PROFESSIONAL ENGINEER  
10 MARCH 2026

ALL PROJECT NO. 022.25.CV.620	DATE: MARCH 2026	SCALE: N/A	DRAWN BY: SRH	CHECKED BY: BTH
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**CONSTRUCTION DETAILS (3 OF 7)**

**BINGLE ROAD RETAIL**  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

SHEET  
**C7.2**



**Specifications**  
**CONCRETE:** Class 1 concrete with design strength of 4500 PSI at 28 days.  
**REINFORCEMENT:** Grade 60 reinforced steel rebar conforming to ASTM A615 on required centers or equal.  
**Typical Applications**  
 designed for installation on potable water connections in fire sprinkler systems to protect against both backsiphonage and backpressure of polluted water into the potable water supply.  
**Engineering Data**  
 The backflow assembly shall be factory assembled on pad & hydrostatically tested prior to delivery. Field excavation & preparation shall be complete prior to delivery. Pipe, valves and fittings of the assembly shall be approved by one or more of the following associations:

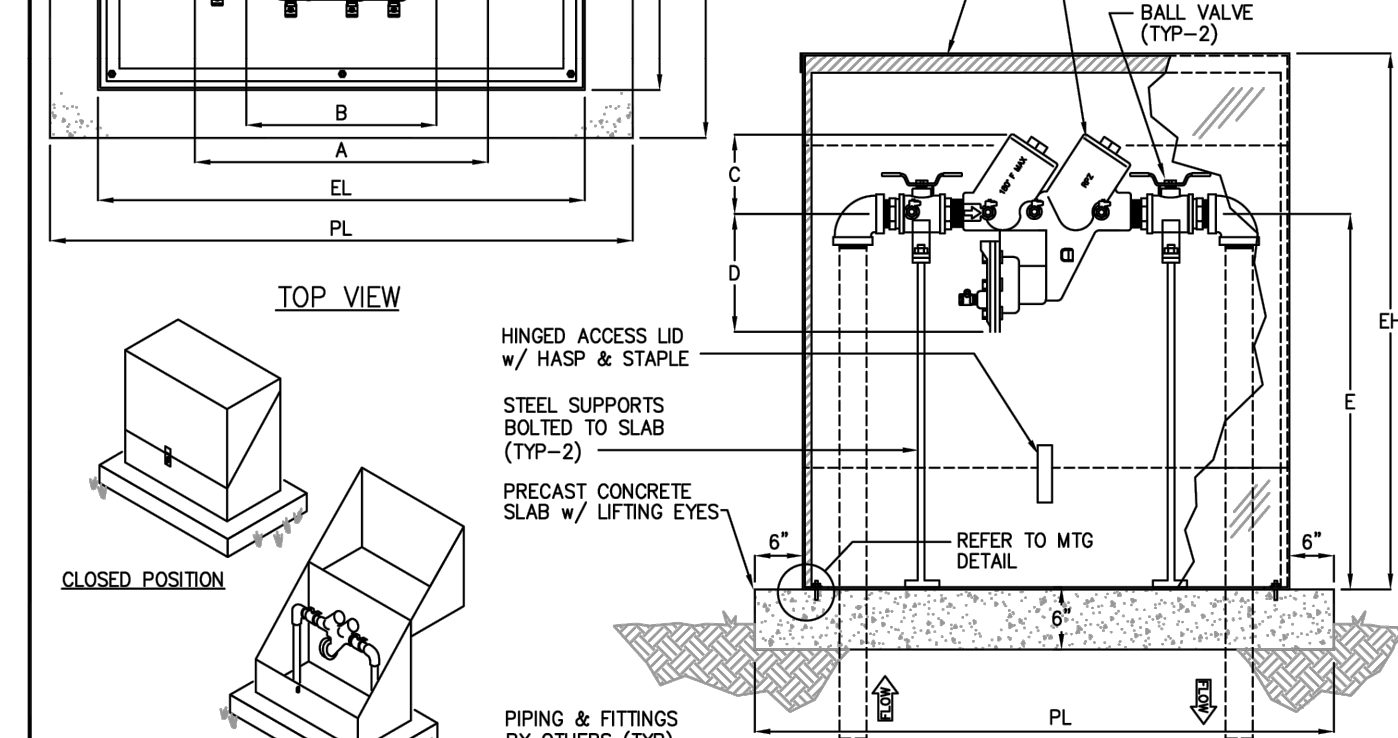
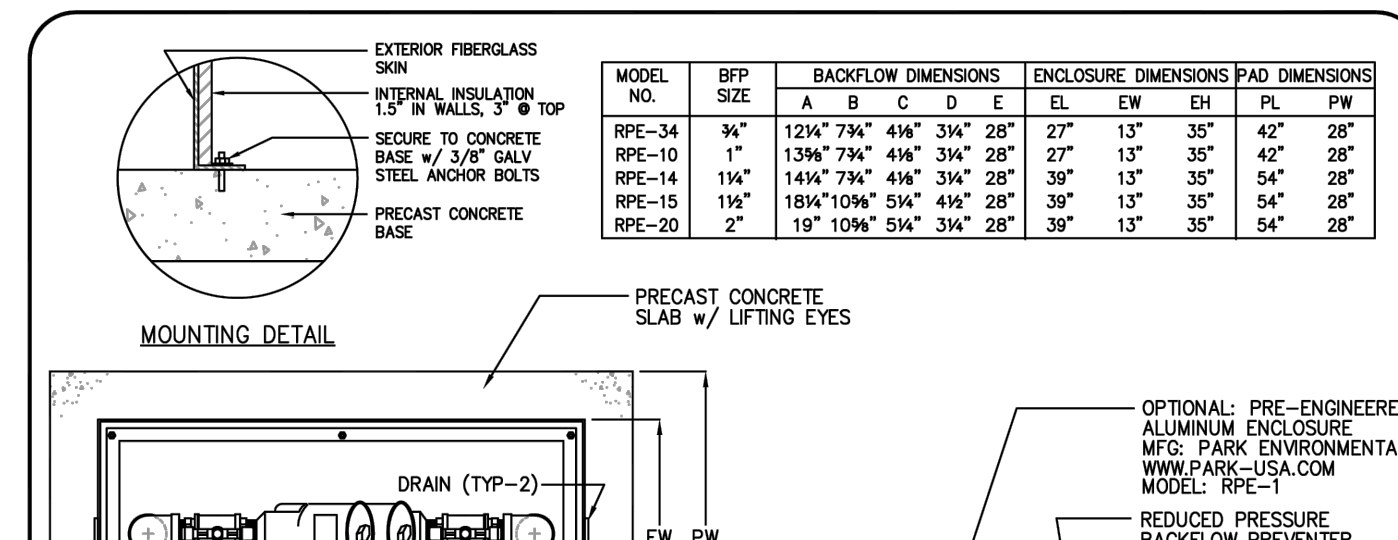
**General**  
 The Model ERP aluminum enclosure is pre engineered to provide protection to backflow preventers, meters, pumps, and other devices installed above ground. These water conveying devices are subject to freezing and vandalism. The enclosure is designed to be installed over the equipment after installation. The enclosure is equipped with access doors to provide adequate access to the equipment.

**Construction**  
 The enclosure shall be manufactured from all new materials. The exterior shall be fabricated with 0.090 aluminum, continuously welded. The access door(s) shall be of the material and hinged with a continuous hinge. The door shall be equipped with a 3-point locking mechanism. The interior of the enclosure shall be structurally lined with high performance, non-wicking insulation.

**Heater (Optional)**  
 Interior heaters (if required) shall be thermostatically controlled and be mounted to the interior wall of the enclosure. A GFI receptacle shall be provided by others to provide power to the electric heater.



PROJECT :	
CUSTOMER :	
ORDER # :	
DATE :	
<b>PARK ENVIRONMENTAL EQUIPMENT</b> 888-611-PARK www.park-usa.com	
<i>"Expect the Best"</i>	
DOUBLE DETECTOR REDUCED PRESSURE ZONE BACKFLOW PREVENTER ON PRECAST CONCRETE PAD W/ ENCLOSURE	
SCALE NONE	DWG. NO. RPZOSY-AMES-C500/
DATE 04/08	WATTS-
	REV. A



**Specifications**  
**CONCRETE:** Class II concrete with design strength of 4500 PSI at 28 days.  
**REINFORCEMENT:** Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.  
**Typical Applications**  
 RP devices are used to protect against high hazard (toxic) fluids in water services to industrial plants, hospital facilities, morgues, mortuaries, and chemical plants. They are also used in irrigation systems, boiler feed, water lines and other installations requiring maximum protection.  
**Engineering Data**  
 The backflow assembly shall be factory assembled on pad & hydrostatically tested prior to delivery. Field excavation & preparation shall be complete prior to delivery. Pipe, valves and fittings of the assembly shall be approved by one or more of the following associations:

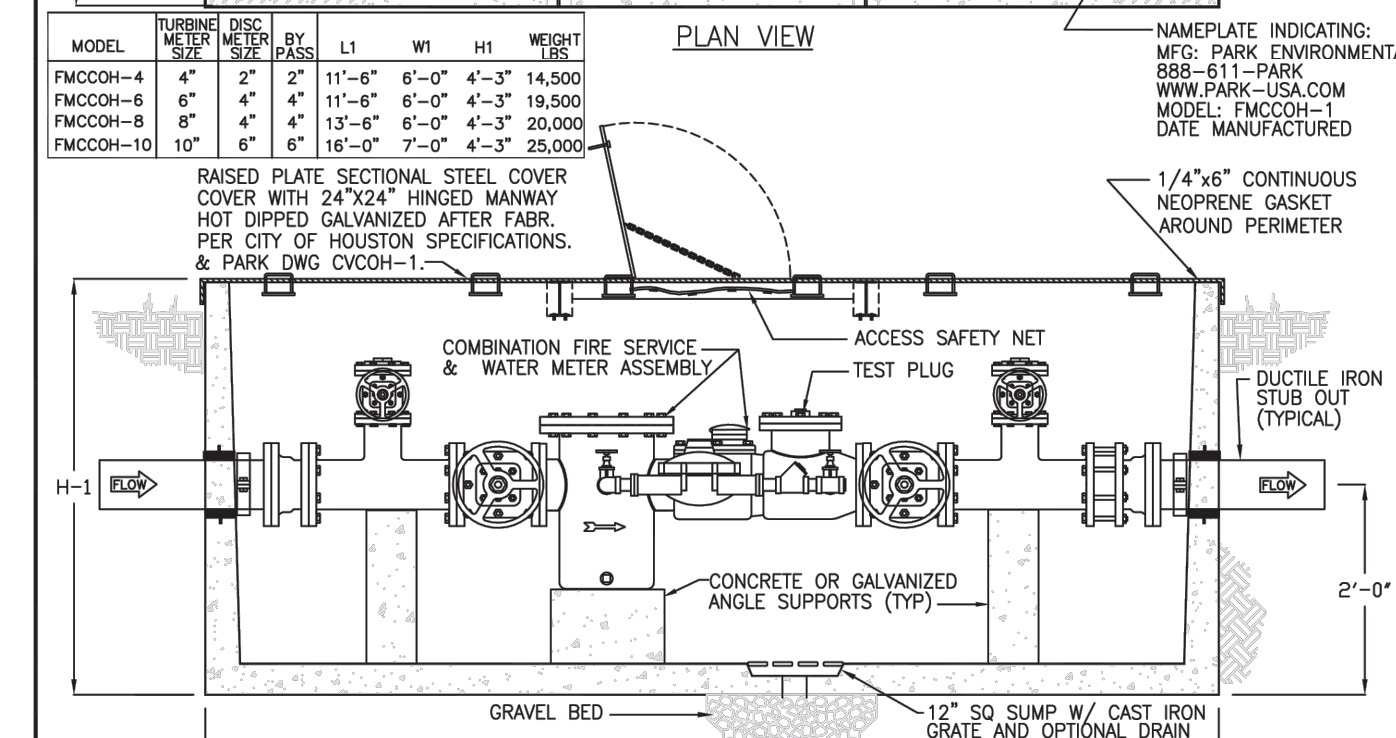
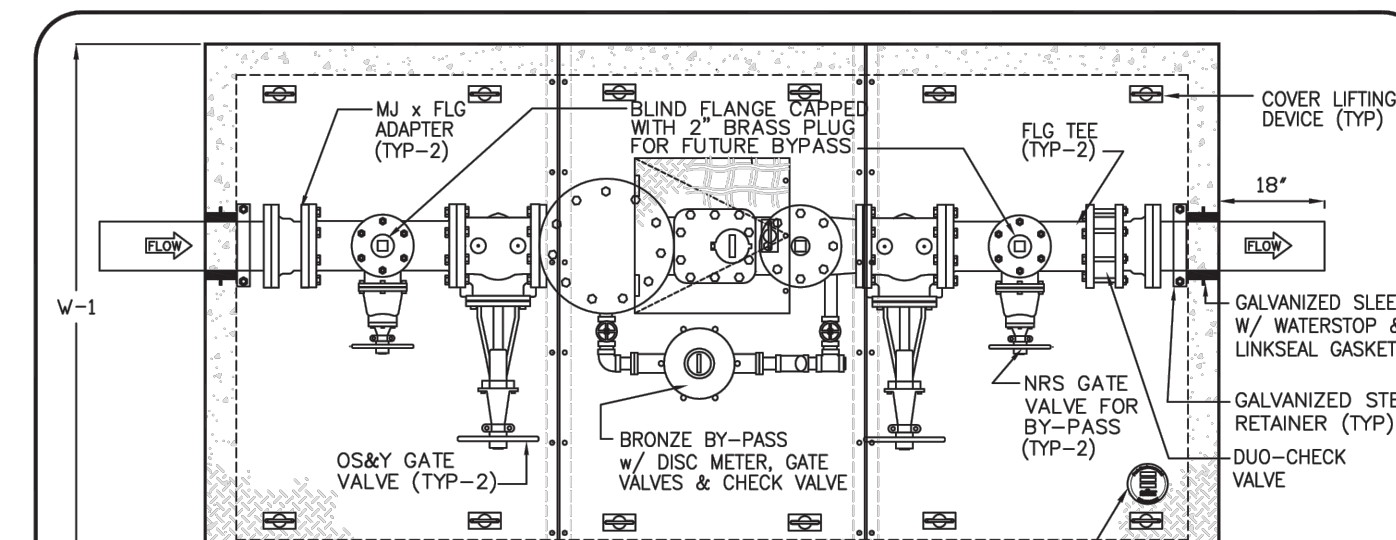
**General**  
 The Model ERP aluminum enclosure is pre engineered to provide protection to backflow preventers, meters, pumps, and other devices installed above ground. These water conveying devices are subject to freezing and vandalism. The enclosure is designed to be installed over the equipment after installation. The enclosure is equipped with access doors to provide adequate access to the equipment.

**Construction**  
 The enclosure shall be manufactured from all new materials. The exterior shall be fabricated with 0.090 aluminum, continuously welded. The access door(s) shall be of the material and hinged with a continuous hinge. The door shall be equipped with a 3-point locking mechanism. The interior of the enclosure shall be structurally lined with high performance, non-wicking insulation.



PROJECT :	
CUSTOMER :	
ARCHITECT :	
ENGINEER :	
ORDER # :	
DATE :	
<b>PARK ENVIRONMENTAL EQUIPMENT</b> 888-611-PARK www.park-usa.com	
<i>"Expect the Best"</i>	
REDUCED PRESSURE BACKFLOW PREVENTER ON PRECAST CONCRETE PAD MODEL RPE - 3/4" THRU 2"	
SCALE NONE	DWG. NO. RPE-1
DATE 2010	REV. A

All drawings are available for download at www.park-usa.com in .dwg & .pdf formats



**Specifications**  
**CONCRETE:** Class II concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth.  
**REINFORCEMENT:** Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.  
**STEEL COVER:** All steel fabrication shall be in accordance to AIA D1.1 Steel shall be ASTM A36 carbon steel, and hot dipped galvanized after fabrication in accordance to ASTM A123. Standard cover is rated for 300 PSF.  
**Engineering Data**  
 The meter assembly shall be factory assembled in vault & hydrostatically tested prior to delivery. Field excavation & preparation shall be complete prior to delivery. Pipe, valves and fittings of the assembly shall be approved by one or more of the following associations:

**General**  
 The Model ERP aluminum enclosure is pre engineered to provide protection to backflow preventers, meters, pumps, and other devices installed above ground. These water conveying devices are subject to freezing and vandalism. The enclosure is designed to be installed over the equipment after installation. The enclosure is equipped with access doors to provide adequate access to the equipment.

**Construction**  
 The enclosure shall be manufactured from all new materials. The exterior shall be fabricated with 0.090 aluminum, continuously welded. The access door(s) shall be of the material and hinged with a continuous hinge. The door shall be equipped with a 3-point locking mechanism. The interior of the enclosure shall be structurally lined with high performance, non-wicking insulation.

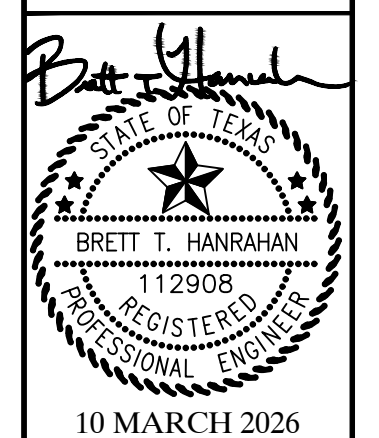


PROJECT :	
CUSTOMER :	
ORDER # :	
DATE :	
<b>PARK ENVIRONMENTAL EQUIPMENT</b> 888-611-PARK www.park-usa.com	
<i>"Expect the Best"</i>	
<b>City of Houston</b>	
FIRE/DOMESTIC COMBINATION METER ASSEMBLY MODEL FMCCOH - 4" THRU 10"	
SCALE NONE	DWG. NO. FMCCOH-1
DATE 2010	REV. A

All drawings are available for download at www.park-usa.com in .dwg & .pdf formats

NO.	REVISIONS	DATE

**ALJ Lindsey**  
 Civil Engineers  
 1885 N. Loop West, Suite 200  
 Houston, TX 77017  
 281.301.9595  
 FRN F-1526

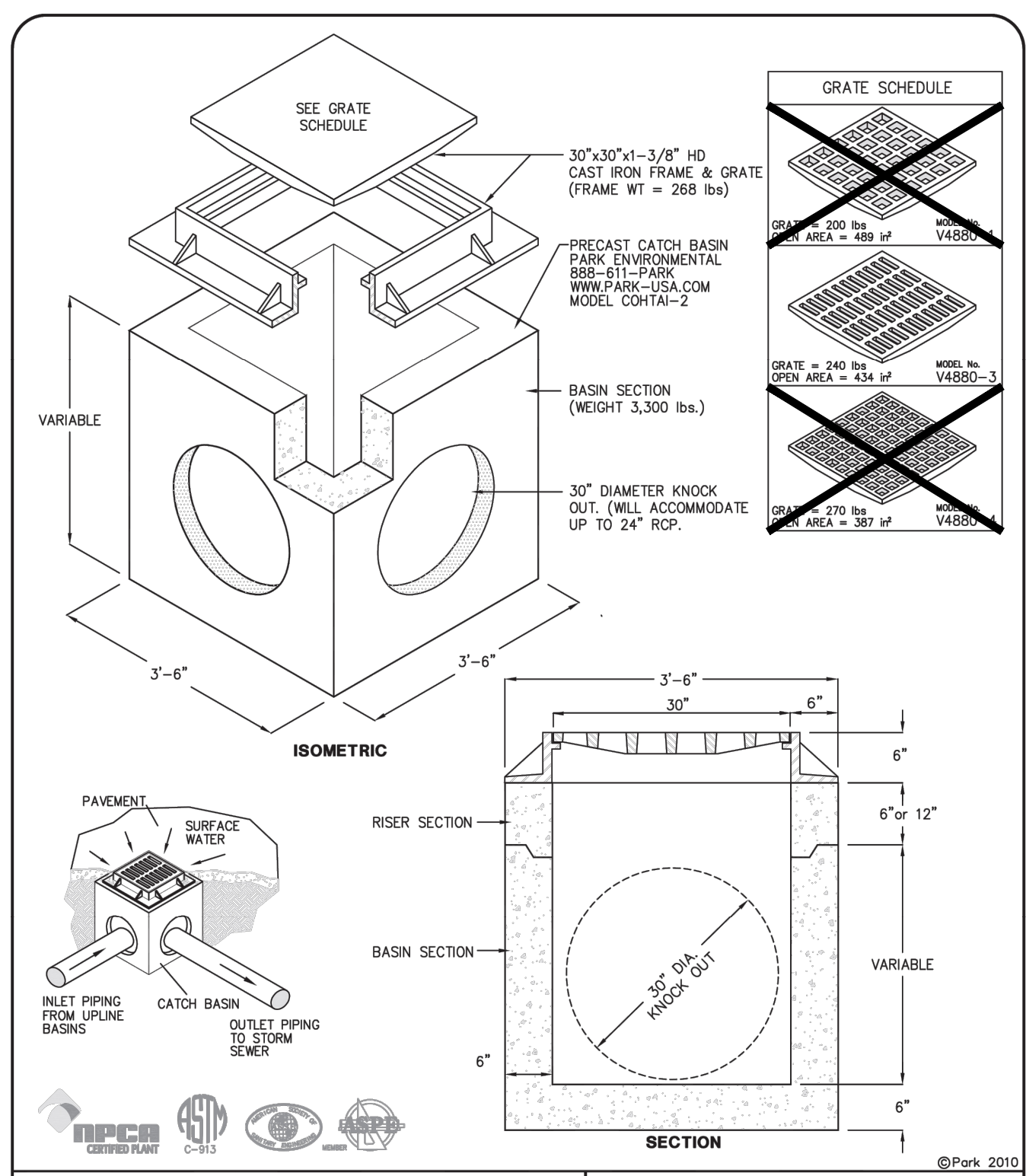


10 MARCH 2026  
 ALL PROJECT NO. 022-25-CV-1620  
 DATE: MARCH 2026  
 SCALE: N/A  
 DRAWN BY: SRH  
 CHECKED BY: BTH

**CONSTRUCTION DETAILS (4 OF 7)**

**BINGLE ROAD RETAIL**  
 1045 BINGLE ROAD  
 HOUSTON, TEXAS 77055

SHEET  
**C7.3**



**GRATE SCHEDULE**

GRATE #	WEIGHT	AREA	MODEL
200	200 lb	485 sq ft	V485B
240	240 lb	534 sq ft	V485B-1
270	270 lb	587 sq ft	V485B

**ISOMETRIC**

**RISER SECTION**

**BASIN SECTION**

**SECTION**

**SPECIFICATIONS**

**CONCRETE:** Class II concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth. Rated for H-20 Loading.

**REINFORCEMENT:** Grade 60 reinforced with steel rebar to conform to ASTM A615 on required centers or equal.

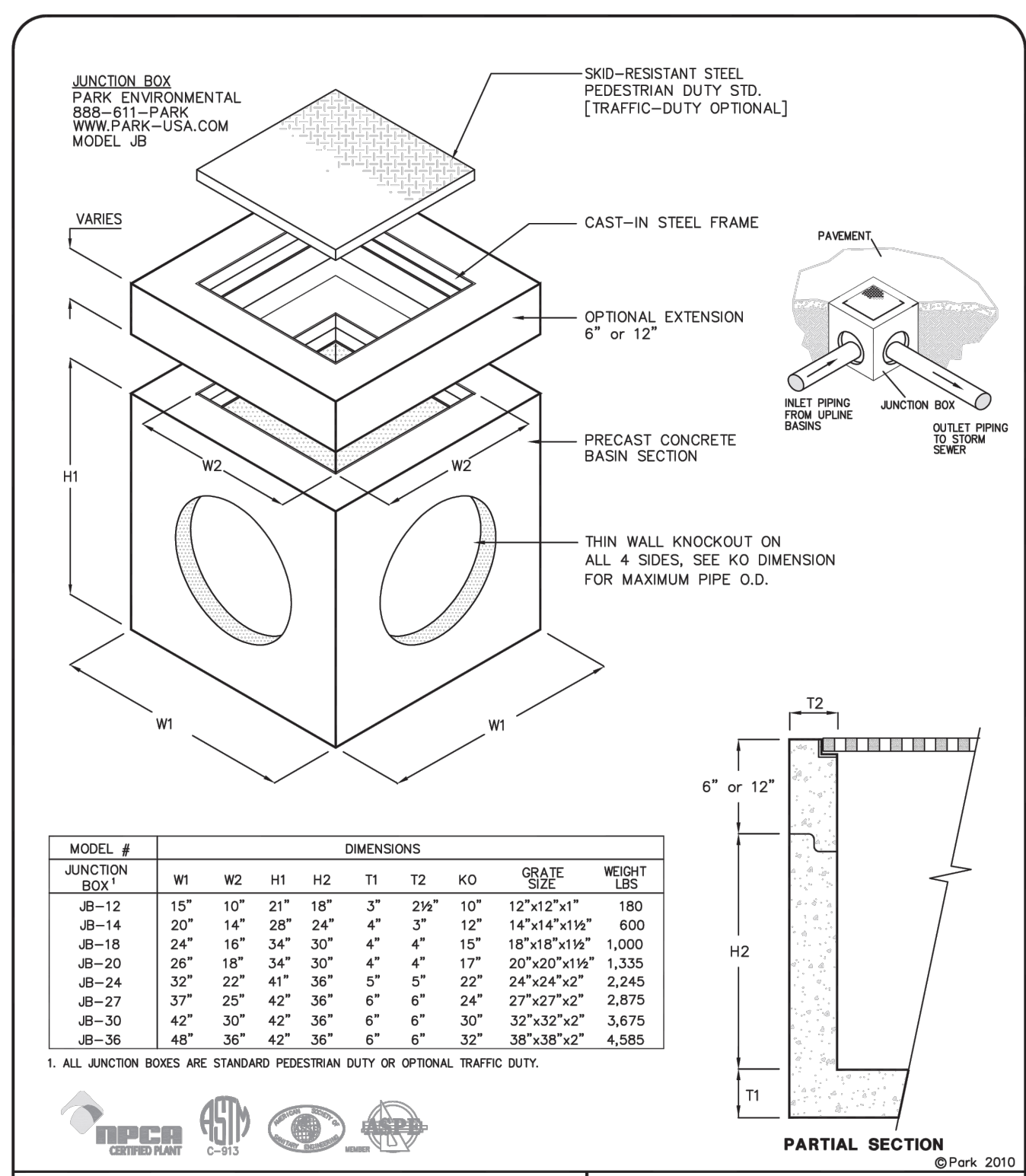
**C.I. CASTINGS:** Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 30.

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www.park-usa.com

**"Expect the Best"**

**TYPE-A GRATE INLET MODEL COHTAI - SIZE 30"**

SCALE: NONE DWG. NO. COHTAI-2 REV. A DATE: 2010



**JUNCTION BOX**  
PARK ENVIRONMENTAL  
888-611-PARK  
WWW.PARK-USA.COM  
MODEL JB

**MODEL #**

JUNCTION BOX #	W1	W2	H1	H2	T1	T2	KO	GRATE SIZE	WEIGHT LBS
JB-12	15"	10"	21"	18"	3"	2 1/2"	10"	12"x12"x1"	180
JB-14	20"	14"	28"	24"	4"	3"	12"	14"x14"x1"	600
JB-18	24"	18"	34"	30"	4"	4"	15"	18"x18"x1 1/4"	1,000
JB-20	26"	18"	34"	30"	4"	4"	17"	20"x20"x1 1/4"	1,335
JB-24	32"	22"	41"	36"	5"	5"	22"	24"x24"x2"	2,245
JB-27	37"	25"	42"	36"	6"	6"	24"	27"x27"x2"	2,875
JB-30	42"	30"	42"	36"	6"	6"	30"	32"x32"x2"	3,675
JB-36	48"	36"	42"	36"	6"	6"	32"	38"x38"x2"	4,585

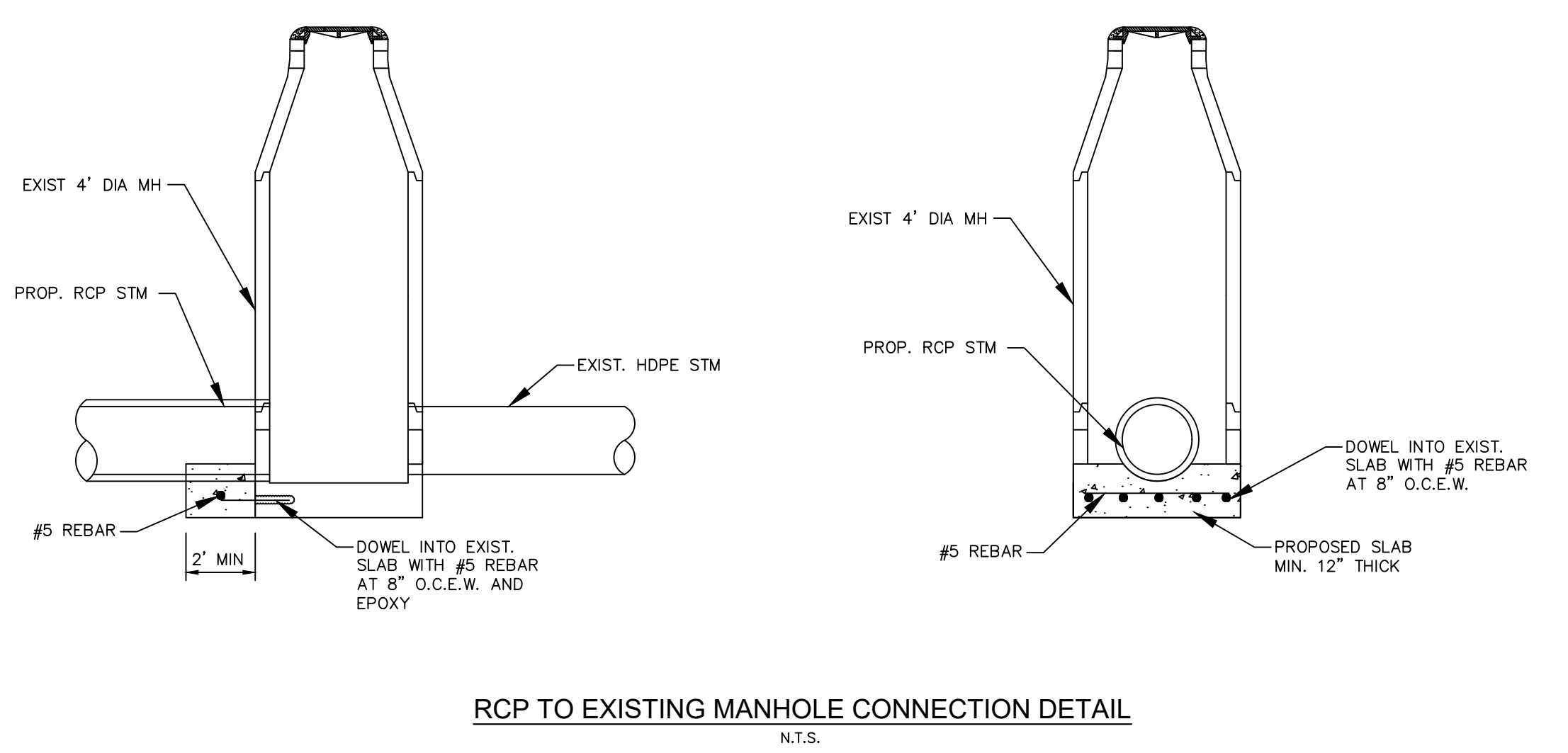
**1. ALL JUNCTION BOXES ARE STANDARD PEDESTRIAN DUTY OR OPTIONAL TRAFFIC DUTY.**

**PARK ENVIRONMENTAL EQUIPMENT**  
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www.park-usa.com

**"Expect the Best"**

**JUNCTION BOX MODEL JB - 12" THRU 36"**

SCALE: NONE DWG. NO. JB-01 REV. A DATE: 2010

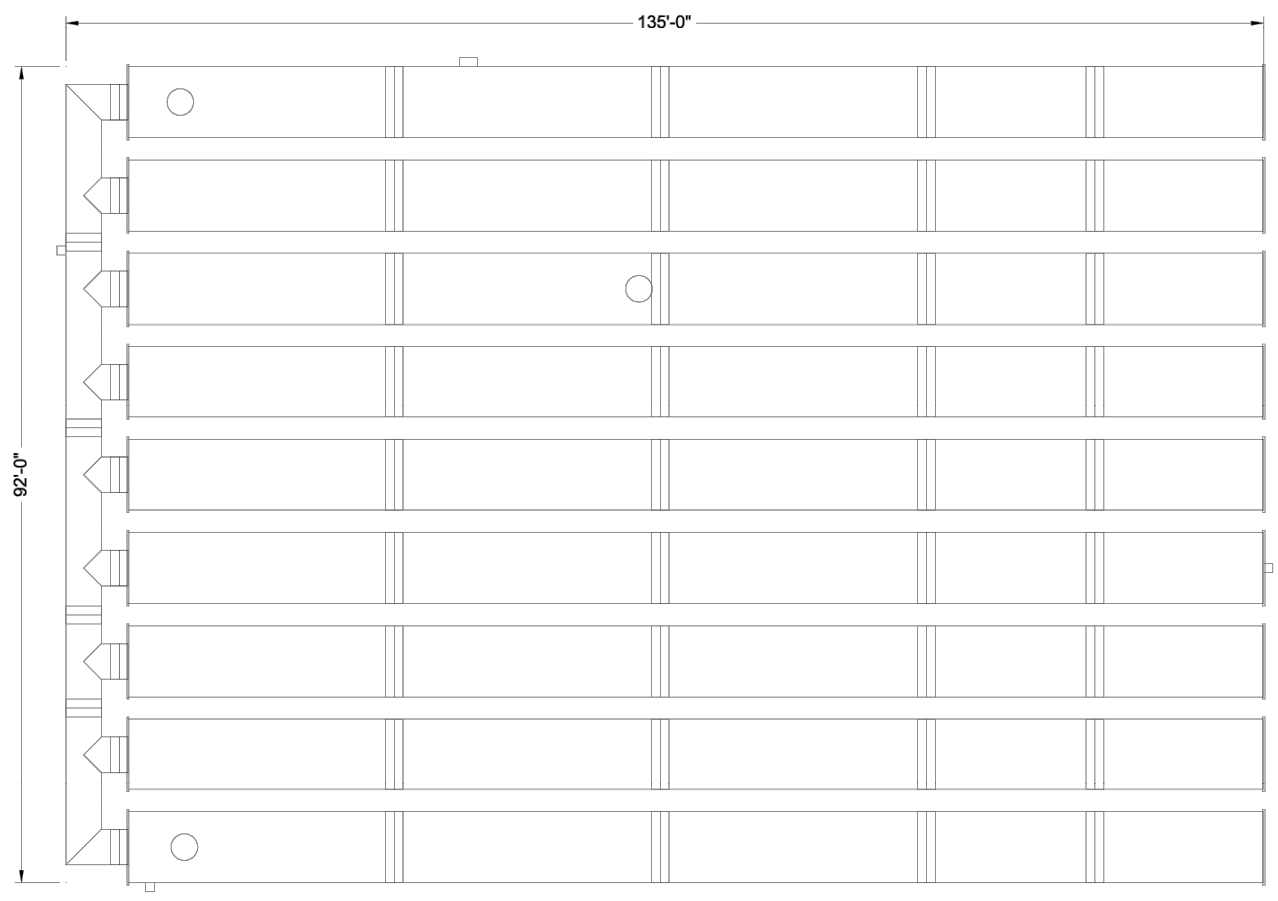


3-14 All drawings are available for download at www.park-usa.com in .dwg & .pdf formats

3-6 All drawings are available for download at www.park-usa.com in .dwg & .pdf formats

**PROJECT SUMMARY**

- CALCULATION DETAILS**
- LOADING = HS20HS25
  - APPROX. LINEAR FOOTAGE = 1,258 LF
- STORAGE SUMMARY**
- STORAGE VOLUME REQUIRED = 58,816 CF
  - PIPE STORAGE VOLUME = 59,236 CF
  - BACKFILL STORAGE VOLUME = 0 CF
  - TOTAL STORAGE PROVIDED = 59,236 CF
- PIPE DETAILS**
- DIAMETER = 96"
  - CORRUGATION = 5x1
  - GAGE = 16
  - COATING = ALT2
  - WALL TYPE = SOLID
  - BARREL SPACING = 30"
- BACKFILL DETAILS**
- WIDTH AT ENDS = 12"
  - ABOVE PIPE = 0"
  - WIDTH AT SIDES = 12"
  - BELOW PIPE = 0"



- NOTES**
- ALL RISERS AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
  - ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A98.
  - ALL RISERS AND STUBS ARE 2 1/2" x 1/2" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
  - RISERS TO BE FIELD TRIMMED TO GRADE.
  - QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
  - BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
  - THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN. QUANTITIES APPROX AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
  - THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

**CONTECH ENGINEERED SOLUTIONS LLC**  
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45380  
930-338-1122 913-645-7000 913-645-7993 FAX

**CONTECH ENGINEERED SOLUTIONS**  
CONTECH DYODS DRAWINGS

**DYO98760 Bingle Road Retail**  
96" Diameter Solid  
Houston, TX  
DETENTION SYSTEM

**PROJECT INFO**

PROJECT NO.	2242	REV. NO.	06/10	DATE	10/9/2008
DESIGNED BY	DYO	DRAWN BY	DYO	CHECKED BY	DYO
APPROVED BY	DYO	DATE			
SHEET NO.		TOTAL SHEETS	1		

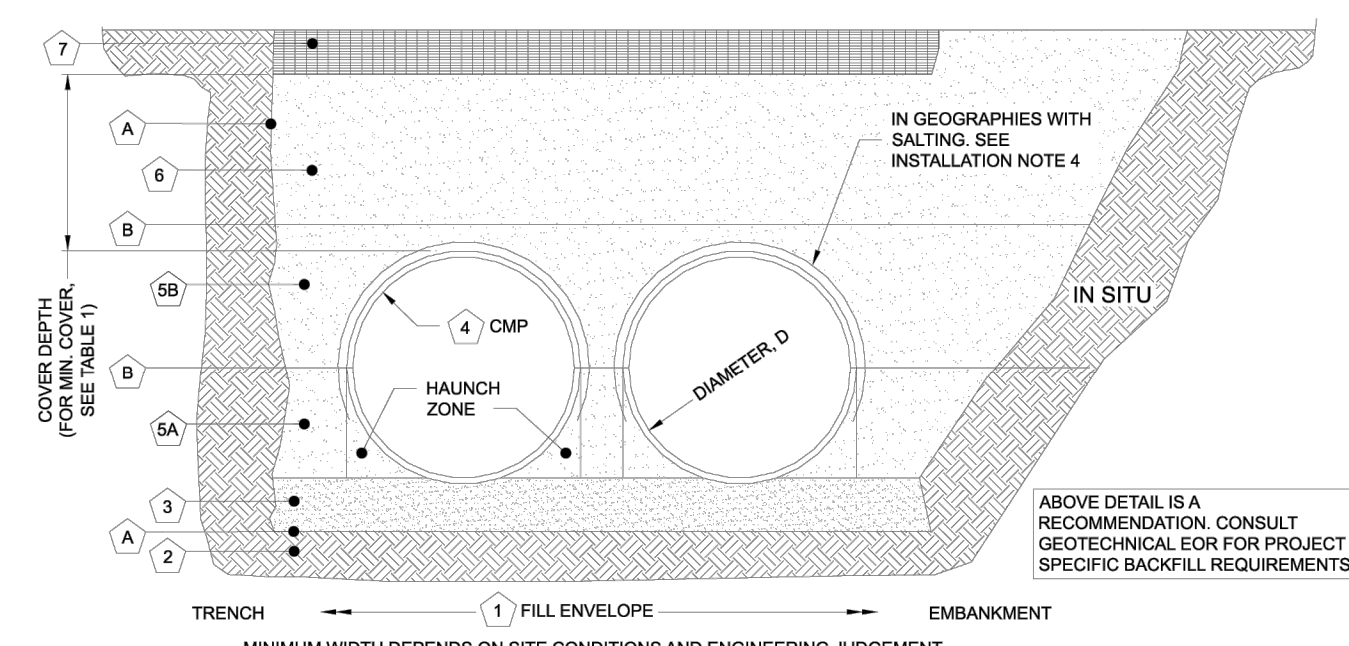
**TABLE 1:**

DIAMETER, D	MIN COVER	CORR. PROFILE
6"-10"	12"	1 1/2" x 1/4"
12"-48"	12"	2 2/3" x 1/2"
>48"-96"	12"	3" x 1", 5" x 1"
>96"	D/8	3" x 1", 5" x 1"

• STRUCTURAL BACKFILL MUST EXTEND TO LIMITS OF THE TABLE

• TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT

• ULTRAFLO ALSO AVAILABLE FOR SIZES 18" - 120" WITH 3/8"x 3/8" x 1/2" CORRUGATION



- INSTALLATION NOTES**
- WHEN PLACING THE FIRST LIFTS OF BACKFILL IT IS IMPORTANT TO MAKE SURE THAT THE BACKFILL IS PROPERLY COMPACTED UNDER AND AROUND THE PIPE HAUNCHES.
  - OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS, AS APPROVED BY SITE ENGINEER.
  - BACKFILL USING CONTROLLED LOW-STRENGTH MATERIAL (CLSM, "FLASH FILL" OR "FLOWABLE FILL") MAY BE USED WHEN THE SPACING BETWEEN THE PIPES WILL NOT ALLOW FOR PLACEMENT AND ADEQUATE COMPACTION OF THE BACKFILL. CONTACT CONTECH FOR FURTHER EVALUATION.
  - IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, A GEOMEMBRANE BARRIER IS RECOMMENDED OVER THE UPPER HALF OF THE PIPE. THE GEOMEMBRANE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM A CHANGE IN THE SURROUNDING ENVIRONMENT OVER A PERIOD OF TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL INFORMATION.

**TABLE 2: SOLID STANDARD**

**CMP DETENTION AND CMP DRAINAGE STANDARD BACKFILL SPECIFICATIONS**

MATERIAL LOCATION	MATERIAL SPECIFICATION	DESCRIPTION
1	FILL ENVELOPE WIDTH	PER ENGINEER OF RECORD
2	FOUNDATION	AASHTO 26.5.2 OR PER ENGINEER OF RECORD
3	BEDDING	AASHTO M 43: 3, 357, 4, 467, 5, 56, 57 (APPROVED REGIONAL EQUIVALENTS INCLUDE CA-7)
4	CRITICAL BACKFILL	AASHTO M 145: A-1, A-2, A-3
5A	BACKFILL	AASHTO M 145: A-1, A-2, A-3
6	COVER MATERIAL	UP TO MIN. COVER - SEE SA AND SB ABOVE ABOVE MIN. COVER - PER ENGINEER OF RECORD
7	RIGID OR FLEXIBLE PAVEMENT (IF APPLICABLE)	PER ENGINEER OF RECORD
A	OPTIONAL SIDE GEOTEXTILE	NONE
B	OPTIONAL GEOTEXTILE BETWEEN LAYERS	NONE

**MANUFACTURER RECOMMENDED BACKFILL**

**NOT TO SCALE**

**CONTECH ENGINEERED SOLUTIONS LLC**  
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45380  
930-338-1122 913-645-7000 913-645-7993 FAX

**CONTECH ENGINEERED SOLUTIONS**  
CONTECH DYODS DRAWINGS

**PROJECT INFO**

PROJECT NO.	2033	REV. NO.	06/10	DATE	02/10/2008
DESIGNED BY	DYO	DRAWN BY	DYO	CHECKED BY	DYO
APPROVED BY	DYO	DATE			
SHEET NO.		TOTAL SHEETS	1		

**CONSTRUCTION DETAILS (5 OF 7)**

**BINGLE ROAD RETAIL**  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

SHEET  
C7.4

**REVISIONS**

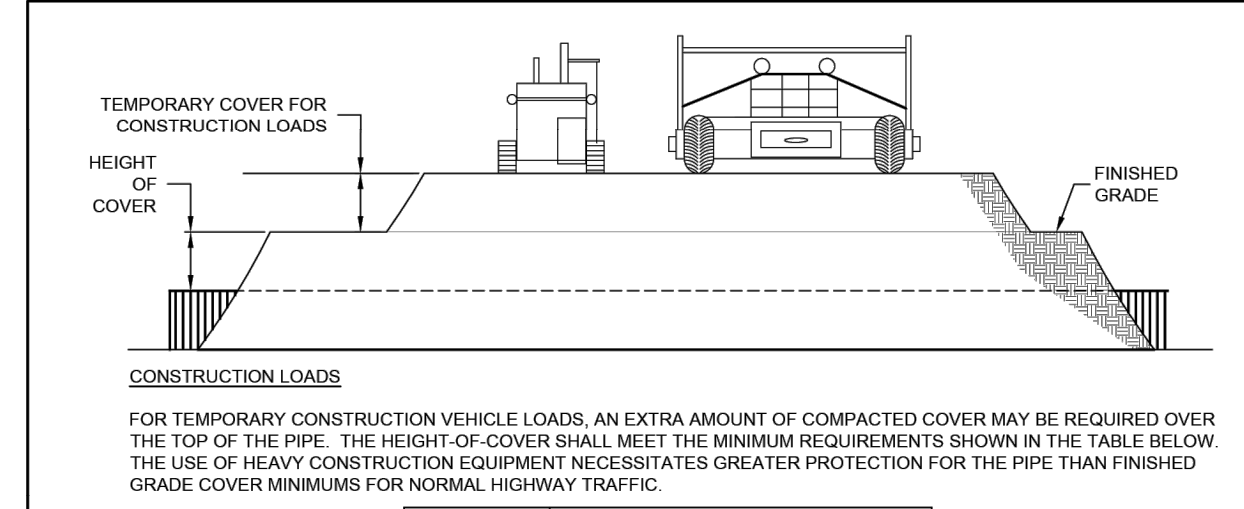
NO.	DATE	DESCRIPTION

**ALJLindsey**  
Civil Engineers  
1885 N. Loop West, Suite 200  
Houston, TX 77058  
281.301.9955  
FRN F-1526

**REGISTERED PROFESSIONAL ENGINEER**  
BRETT T. HANRAHAN  
12908

10 MARCH 2026

ALL PROJECT NO. 022-25-CV-1620  
DATE: MARCH 2006  
SCALE: N/A  
DRAWN BY: SRH  
CHECKED BY: BTH



**CONSTRUCTION LOADING DIAGRAM**  
SCALE: N.T.S.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

\*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

**CONSTRUCTION LOADING DIAGRAM**  
SCALE: N.T.S.

**SPECIFICATION FOR DESIGNED DETENTION SYSTEM**

**SCOPE**  
THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE DESIGNED DETENTION SYSTEM DETAILED IN THE PROJECT PLANS.

**MATERIAL**  
THE MATERIAL SHALL CONFORM TO THE APPLICABLE REQUIREMENTS LISTED BELOW:

**PIPE**  
THE PIPE SHALL BE MANUFACTURED IN ACCORDANCE TO THE APPLICABLE REQUIREMENTS LISTED BELOW.

**ALUMINIZED TYPE 2 STEEL COILS** SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-274 OR ASTM A-92.

**THE GALVANIZED STEEL COILS** SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-219 OR ASTM A-929.

**THE POLYMER COATED STEEL COILS** SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-246 OR ASTM A-742.

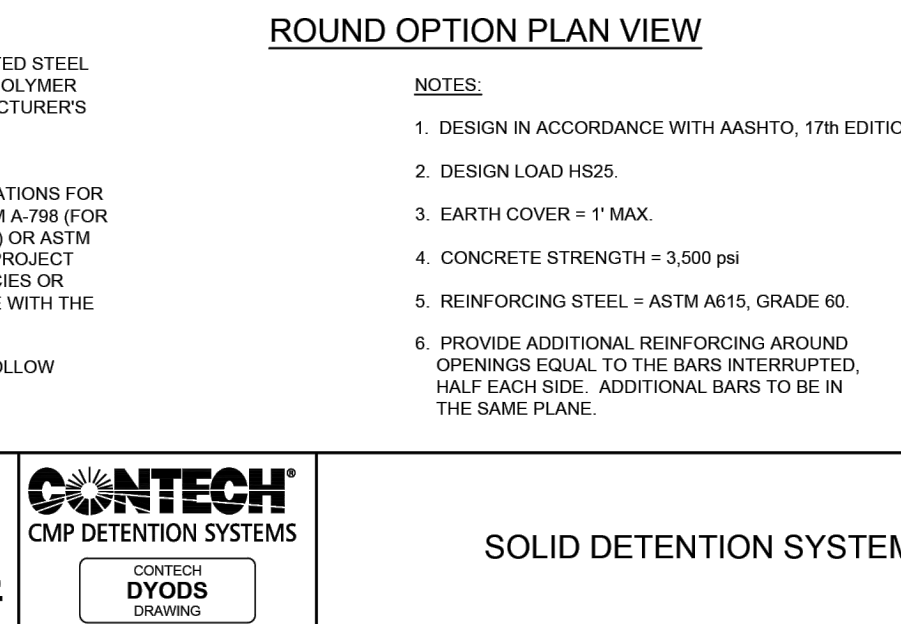
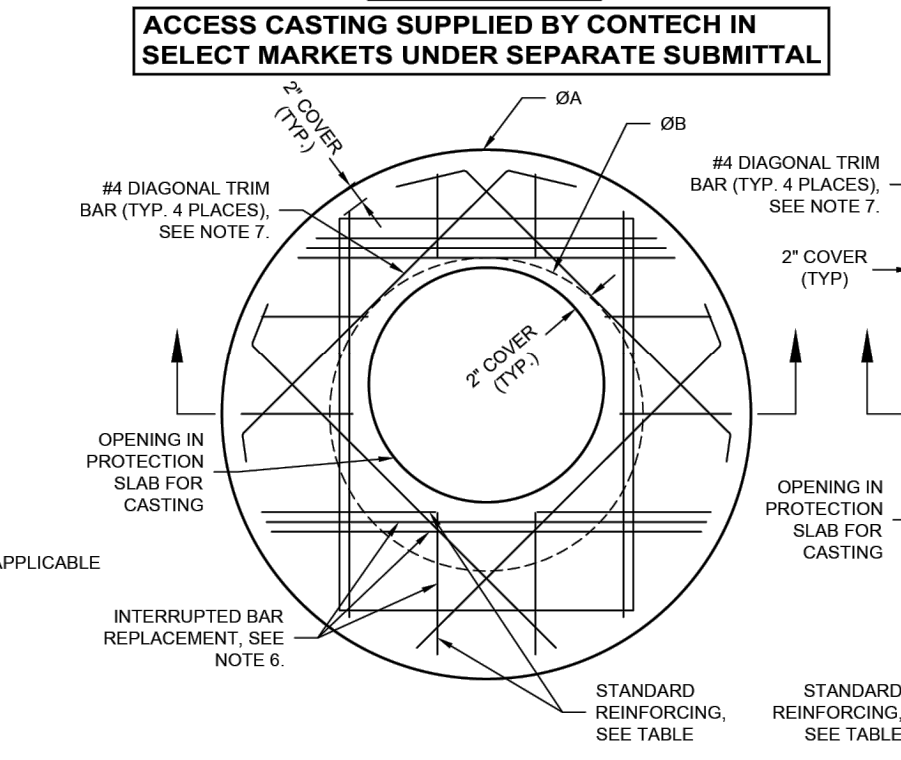
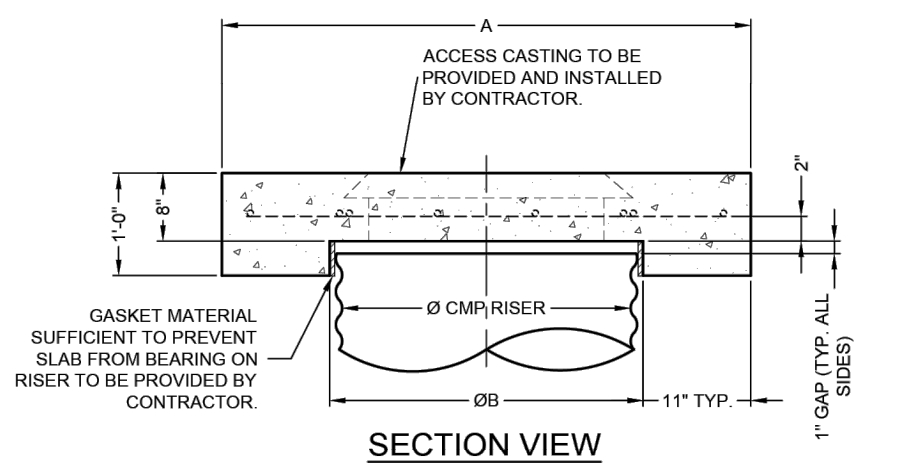
**THE ALUMINUM COILS** SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-197 OR ASTM B-744.

**CONSTRUCTION LOADS**  
CONSTRUCTION LOADS MAY BE HIGHER THAN FINAL LOADS. FOLLOW THE MANUFACTURER'S OR NCSPA GUIDELINES.

**NOTE**  
THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MORE DETAILS.

**REVISIONS**

DATE	REVISION DESCRIPTION	BY



**REINFORCING TABLE**

Ø CMP RISER	A	Ø B	REINFORCING	BEARING PRESSURE (PSF)
24"	Ø 4" 4"x4"	26"	#5 @ 12" OCEW #5 @ 12" OCEW	2,410 1,780
30"	Ø 4" 4"x4"	32"	#5 @ 12" OCEW #5 @ 12" OCEW	2,120 1,520
36"	Ø 5" 5"x 5"	38"	#5 @ 10" OCEW #5 @ 10" OCEW	1,980 1,350
42"	Ø 5" 5"x 5"	44"	#5 @ 10" OCEW #5 @ 10" OCEW	1,720 1,210
48"	Ø 6" 6"x 6"	50"	#5 @ 9" OCEW #5 @ 9" OCEW	1,600 1,100

\*\* ASSUMED SOIL BEARING CAPACITY

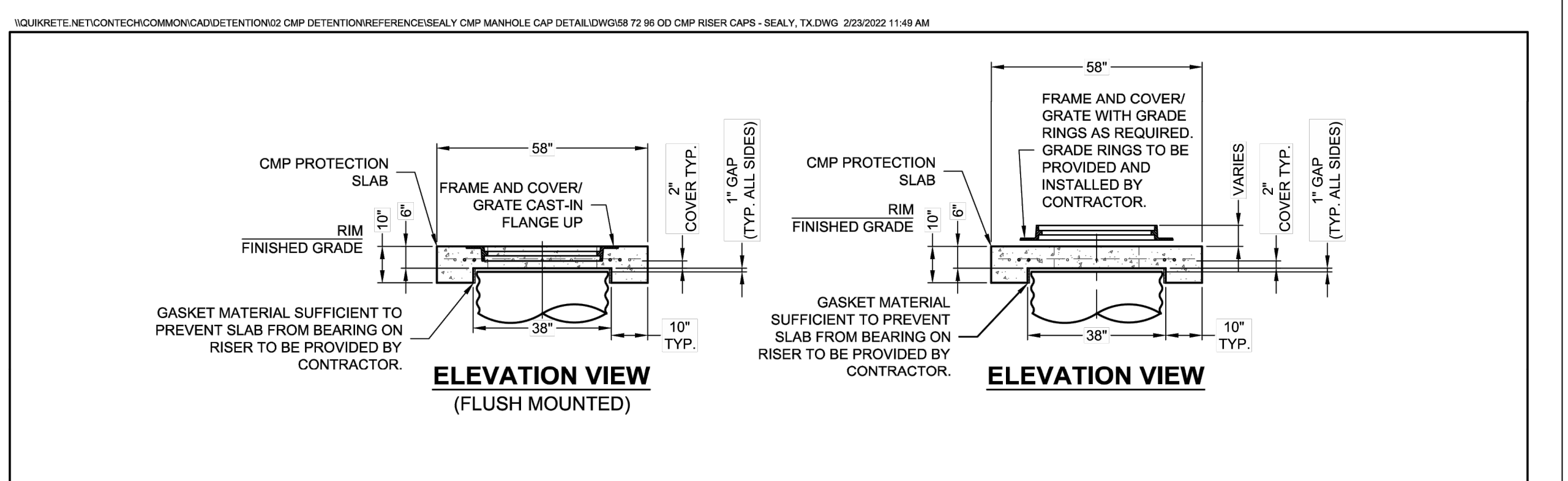
**MANHOLE CAP DETAIL**  
SCALE: N.T.S.

**NOTES:**

- DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION.
- DESIGN LOAD HS25.
- EARTH COVER = 1' MAX.
- CONCRETE STRENGTH = 3,500 psi
- REINFORCING STEEL = ASTM A615, GRADE 60.
- PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
- TRIM OPENING WITH DIAGONAL #4 BARS. EXTEND BARS A MINIMUM OF 12" BEYOND OPENING. RIBBON BARS AS REQUIRED TO MAINTAIN BAR COVER.
- PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
- DETAIL DESIGN BY DELTA ENGINEERING, BINGHAMTON, NY.

**PROJECT INFORMATION:**

PROJECT NO.	DESIGN NO.	DATE
DESIGNED: DTD	DRAWN: DTD	DATE: 04/07/2021
CHECKED: DTD	APPROVED: DTD	SCALE: NONE
SHEET NO:		PROJECT No.:



**FABRICATION NOTES:**

- CONCRETE STRENGTH = 4,000 PSI
- REINFORCING STEEL - ASTM A615, GRADE 60, OR EQUIVALENT WELDED WIRE FABRIC.
- NICE LIGHT BROOM FINISH FOR UNITS W/ CAST-IN FRAME AND COVER
- LIFTERS IN SIDE FOR UNITS W/ CAST-IN FRAME AND COVER AND LIFTERS IN TOP SLAB FOR UNITS W/ SEPARATE COVER

**GENERAL NOTES:**

- DESIGN LOAD HS20/HS25
- EARTH COVER = 1' MAX
- RISER CAP MUST BE ADEQUATELY SUPPORTED WITH PROPER BEDDING AND BEARING PRESSURE OF 3350 PSF AS TO NOT TRANSFER LOADS ONTO RISER.
- HEAVY PICK WEIGHT = 1,900 LBS

**58" OD CMP RISER CAP**  
UP TO 36" RISERS  
PRECASTER: SEALY, TX

**CONTECH**  
CMP DETENTION SYSTEMS

**CMP DETENTION INSTALLATION GUIDE**

PROPER INSTALLATION OF A FLEXIBLE UNDERGROUND DETENTION SYSTEM WILL ENSURE LONG-TERM PERFORMANCE. THE CONFIGURATION OF THESE SYSTEMS OFTEN REQUIRES SPECIAL CONSTRUCTION PRACTICES THAT DIFFER FROM CONVENTIONAL FLEXIBLE PIPE CONSTRUCTION. CONTECH ENGINEERED SOLUTIONS STRONGLY SUGGESTS SCHEDULING A PRE-CONSTRUCTION MEETING WITH YOUR LOCAL SALES ENGINEER TO DETERMINE IF ADDITIONAL MEASURES, NOT COVERED IN THIS GUIDE, ARE APPROPRIATE FOR YOUR SITE.

**FOUNDATION**

CONSTRUCT A FOUNDATION THAT CAN SUPPORT THE DESIGN LOADING APPLIED BY THE PIPE AND ADJACENT BACKFILL WEIGHT AS WELL AS MAINTAIN ITS INTEGRITY DURING CONSTRUCTION.

IF SOFT OR UNSUITABLE SOILS ARE ENCOUNTERED, REMOVE THE POOR SOILS DOWN TO A SUITABLE DEPTH AND THEN BUILD UP TO THE APPROPRIATE ELEVATION WITH A COMPACT BACKFILL MATERIAL. THE STRUCTURAL FILL MATERIAL GRADATION SHOULD NOT ALLOW THE MIGRATION OF FINES, WHICH CAN CAUSE SETTLEMENT OF THE DETENTION SYSTEM OR PAVEMENT ABOVE. IF THE STRUCTURAL FILL MATERIAL IS NOT COMPATIBLE WITH THE UNDERLYING SOILS AN ENGINEERING FABRIC SHOULD BE USED AS A SEPARATOR. IN SOME CASES, USING A STIFF REINFORCING GEOTEXTILE REDUCES OVER EXCAVATION AND REPLACEMENT FILL QUANTITIES.

**BACKFILL PLACEMENT**

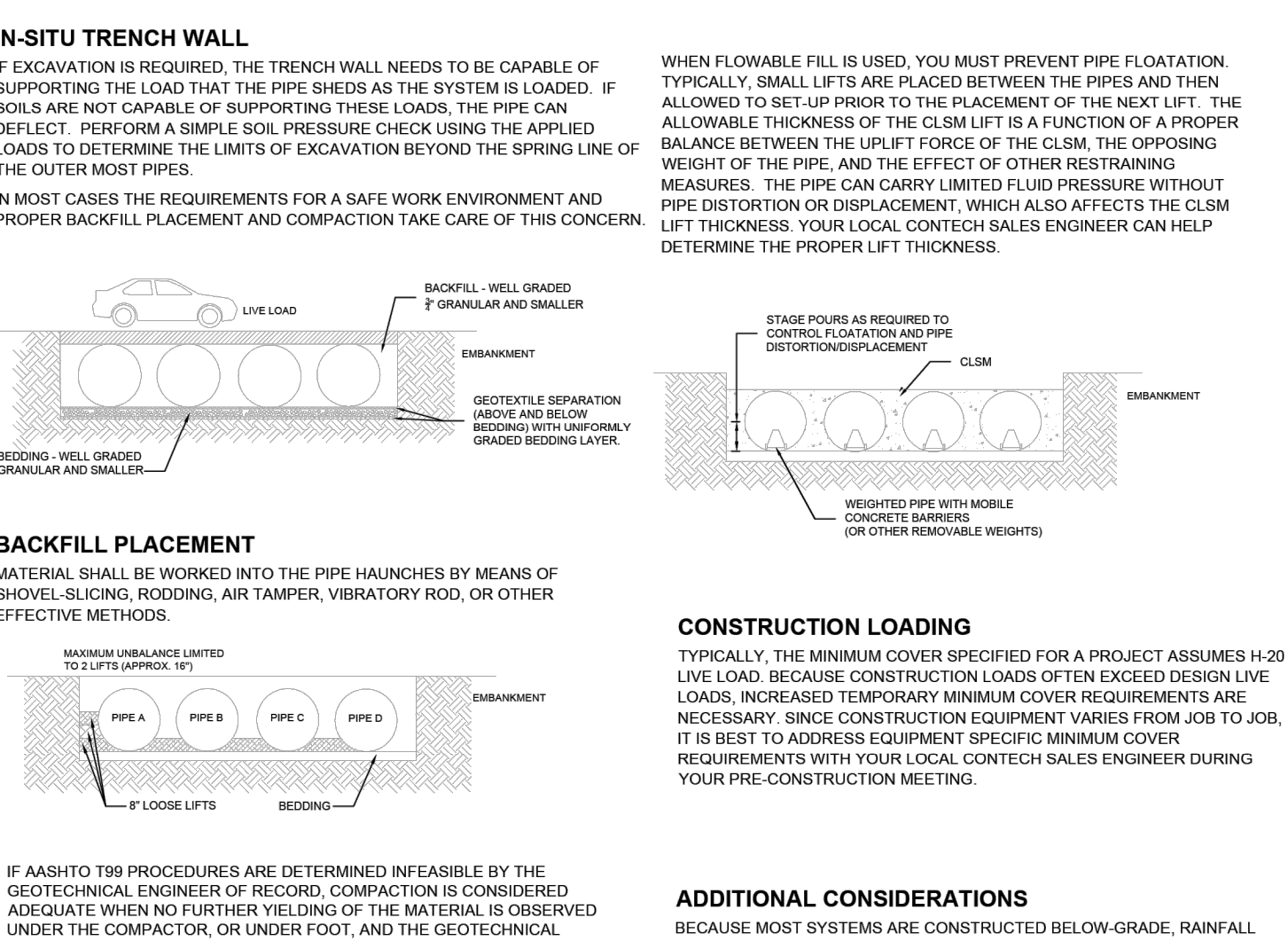
MATERIAL SHALL BE WORKED INTO THE PIPE HAUNCHES BY MEANS OF SHOVEL-SLICING, RODDING, AIR TAMPER, VIBRATORY ROD, OR OTHER EFFECTIVE METHODS.

GRADE THE FOUNDATION SUBGRADE TO A UNIFORM OR SLIGHTLY SLOPING GRADE. IF THE SUBGRADE IS CLAY OR RELATIVELY NON-POROUS AND THE CONSTRUCTION SEQUENCE WILL LAST FOR AN EXTENDED PERIOD OF TIME, IT IS BEST TO SLOPE THE GRADE TO ONE END OF THE SYSTEM. THIS WILL ALLOW EXCESS WATER TO DRAIN QUICKLY, PREVENTING SATURATION OF THE SUBGRADE.

**GEOMEMBRANE BARRIER**

A SITE'S RESISTIVITY MAY CHANGE OVER TIME WHEN VARIOUS TYPES OF SALTING AGENTS ARE USED. SUCH AS ROAD SALTS FOR DEICING HIGHWAYS. IF SALTING AGENTS ARE USED ON OR NEAR THE PROJECT SITE, A GEOMEMBRANE BARRIER IS RECOMMENDED WITH THE SYSTEM. THE GEOMEMBRANE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM THE USE OF SUCH AGENTS INCLUDING PREMATURE CORROSION AND REDUCED ACTUAL SERVICE LIFE.

THE PROJECTS ENGINEER OF RECORD IS TO EVALUATE WHETHER SALTING AGENTS WILL BE USED ON OR NEAR THE PROJECT SITE, AND USE HISHER BEST JUDGEMENT TO DETERMINE IF ANY ADDITIONAL PROTECTIVE MEASURES ARE REQUIRED. BELOW IS A TYPICAL DETAIL SHOWING THE PLACEMENT OF A GEOMEMBRANE BARRIER FOR PROJECTS WHERE SALTING AGENTS ARE USED ON OR NEAR THE PROJECT SITE.



**CMP DETENTION SYSTEM INSPECTION AND MAINTENANCE**

UNDERGROUND STORMWATER DETENTION AND INFILTRATION SYSTEMS MUST BE INSPECTED AND MAINTAINED AT REGULAR INTERVALS FOR PURPOSES OF PERFORMANCE AND LONGEVITY.

**INSPECTION**

INSPECTION IS THE KEY TO EFFECTIVE MAINTENANCE OF CMP DETENTION SYSTEMS AND IS EASILY PERFORMED. CONTECH RECOMMENDS ONGOING, ANNUAL INSPECTIONS. SITES WITH HIGH TRASH LOAD OR SMALL OUTLET CONTROL ORIFICES MAY NEED MORE FREQUENT INSPECTIONS. THE RATE AT WHICH THE SYSTEM COLLECTS POLLUTANTS WILL DEPEND MORE ON SITE SPECIFIC ACTIVITIES RATHER THAN THE SIZE OR CONFIGURATION OF THE SYSTEM.

INSPECTIONS SHOULD BE PERFORMED MORE OFTEN IN EQUIPMENT WASHDOWN AREAS. IN CLIMATES WHERE SANDING AND/OR SALTING OPERATIONS TAKE PLACE, AND IN OTHER VARIOUS INSTANCES IN WHICH ONE WOULD EXPECT HIGHER ACCUMULATIONS OF SEDIMENT OR AIRBORNE/ CORROSIVE CONDITIONS. A RECORD OF EACH INSPECTION IS TO BE MAINTAINED FOR THE LIFE OF THE SYSTEM.

**MAINTENANCE**

CMP DETENTION SYSTEMS SHOULD BE CLEANED WHEN AN INSPECTION REVEALS ACCUMULATED SEDIMENT OR TRASH IS CLOGGING THE DISCHARGE ORIFICE.

ACCUMULATED SEDIMENT AND TRASH CAN TYPICALLY BE EVACUATED THROUGH THE MANHOLE OVER THE OUTLET ORIFICE. IF MAINTENANCE IS NOT PERFORMED AS RECOMMENDED, SEDIMENT AND TRASH MAY ACCUMULATE IN FRONT OF THE OUTLET ORIFICE. MANHOLE COVERS SHOULD BE SECURELY SEATED FOLLOWING CLEANING ACTIVITIES. CONTECH SUGGESTS THAT ALL SYSTEMS BE DESIGNED WITH AN ACCESS/INSPECTION MANHOLE SITUATED AT OR NEAR THE INLET AND THE OUTLET ORIFICE. SHOULD IT BE NECESSARY TO GET INSIDE THE SYSTEM TO PERFORM MAINTENANCE ACTIVITIES, ALL APPROPRIATE PRECAUTIONS REGARDING CONFINED SPACE ENTRY AND OSHA REGULATIONS SHOULD BE FOLLOWED.

ANNUAL INSPECTIONS ARE BEST PRACTICE FOR ALL UNDERGROUND SYSTEMS. DURING THIS INSPECTION, IF EVIDENCE OF SALTING/ICEING AGENTS IS OBSERVED WITHIN THE SYSTEM, IT IS BEST PRACTICE FOR THE SYSTEM TO BE RINSED, INCLUDING ABOVE THE SPRING LINE SOON AFTER THE SPRING THAW AS PART OF THE MAINTENANCE PROGRAM FOR THE SYSTEM.

MAINTAINING AN UNDERGROUND DETENTION OR INFILTRATION SYSTEM IS EASIEST WHEN THERE IS NO FLOW ENTERING THE SYSTEM. FOR THIS REASON, IT IS A GOOD IDEA TO SCHEDULE THE CLEANOUT DURING DRY WEATHER.

THE FOREGOING INSPECTION AND MAINTENANCE EFFORTS HELP ENSURE UNDERGROUND PIPE SYSTEMS USED FOR STORMWATER STORAGE CONTINUE TO FUNCTION AS INTENDED BY IDENTIFYING REQUIRED REGULAR INSPECTION AND MAINTENANCE PRACTICES. INSPECTION AND MAINTENANCE RELATED TO THE STRUCTURAL INTEGRITY OF THE PIPE OR THE SOUNDNESS OF PIPE JOINT CONNECTIONS IS BEYOND THE SCOPE OF THIS GUIDE.

**CONTECH**  
ENGINEERED SOLUTIONS LLC

**CONTECH**  
CMP DETENTION SYSTEMS

**SOLID DETENTION SYSTEM DETAILS**

**PROJECT INFORMATION:**

PROJECT NO.	DESIGN NO.	DATE
DESIGNED: DTD	DRAWN: DTD	DATE: 04/07/2021
CHECKED: DTD	APPROVED: DTD	SCALE: NONE
SHEET NO:		PROJECT No.:

NO. REVISIONS DATE

**ALJLindsey**  
Civil Engineers  
1886 N. Katy Pkwy, Suite 200  
Houston, TX 77077  
281.381.9925  
FRN F-1526

**PROFESSIONAL ENGINEER**  
BRETT T. HANRAHAN  
12908  
REGISTERED PROFESSIONAL ENGINEER

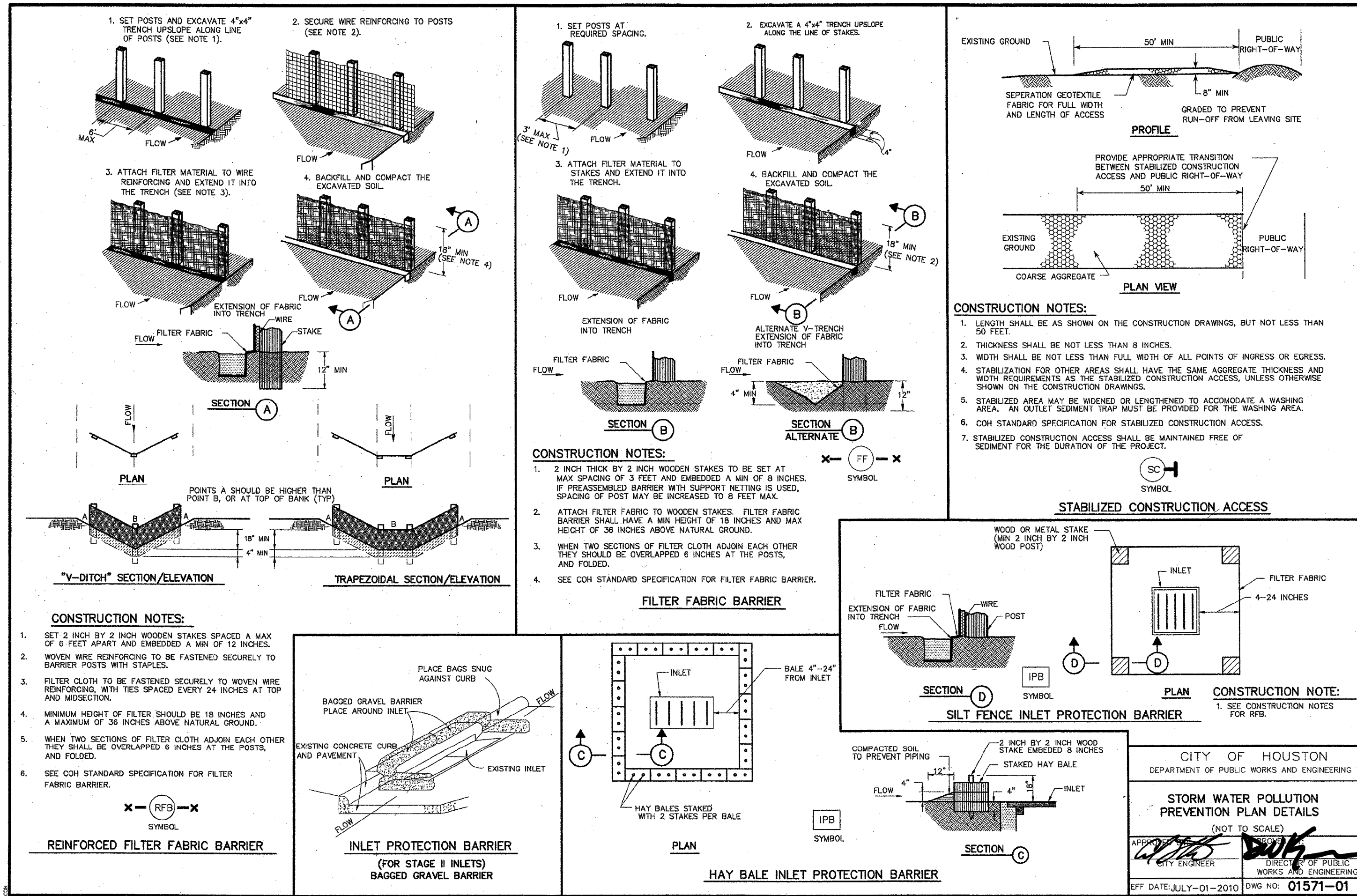
10 MARCH 2026

**CONSTRUCTION**  
DETAILS (6 OF 7)

**BINGLE ROAD RETAIL**  
1045 BINGLE ROAD  
HOUSTON, TEXAS 77055

SHEET  
C7.5

ALL PROJECT NO.: 022-25-CV-1620  
DATE: MARCH 2026  
SCALE: N/A  
DRAWN BY: SRH  
CHECKED BY: BTH



**SWPPP NOTES**

- 1) POTENTIAL POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION SITE:  
 -ADHESIVES, PESTICIDES, DETERGENTS, PAINTS, FUELS, SOLVENTS, SEALANTS, FERTILIZERS, OILS, HERBICIDES, CLEANING SOLUTIONS, CONCRETE/CEMENT/PLASTER
- 2) STORM WATER QUALITY MEASURE IMPLEMENTATION RELATIVE TO LAND DISTURBING ACTIVITIES:
- A) PRIOR TO CONSTRUCTION: SILT FENCING SHALL BE INSTALLED IN ALL LOCATIONS SHOWN ON SITE MAP THAT WILL NOT BE DISTURBED DURING THE INITIAL GRADING PROCESS. THE STABILIZED CONSTRUCTION EXIT SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
- B) DURING CONSTRUCTION:
- o) IMMEDIATELY AFTER PAVING CONSTRUCTION IS COMPLETE, INLET PROTECTION TRAPS WILL BE INSTALLED ON ALL NEWLY CONSTRUCTED INLETS.
- b) WHEN EXISTING SILT FENCING NEEDS TO BE REMOVED FOR CONSTRUCTION OR ACCESS PURPOSES, IT WILL BE REPLACED AS SOON AS POSSIBLE AFTER CONSTRUCTION IN THE VICINITY OF THE REMOVED FENCE IS COMPLETE.
- c) AS SOON AS PRACTICABLE AFTER SITE GRADING IS COMPLETE, FINAL STABILIZATION PROCEDURES SUCH AS TURF ESTABLISHMENT AND INSTALLATION OF PLANT MATERIAL WILL BE COMMENCED.
- C) AFTER CONSTRUCTION: AFTER CONSTRUCTION ACTIVITY AND SITE STABILIZATION PROCEDURES ARE COMPLETE, STRUCTURAL EROSION AND SEDIMENT CONTROLS WILL BE REMOVED. SOIL DISTURBED BY THE REMOVAL OF CONTROLS WILL BE STABILIZED.
- 3) PERMANENT STORM WATER CONTROLS: AFTER CONSTRUCTION ACTIVITY IS COMPLETE, AREAS NOT COVERED BY CONCRETE PAVEMENT OR BY STRUCTURES WILL BE LANDSCAPED AND IRRIGATED. ONCE ESTABLISHED, THIS VEGETATION WILL HELP PREVENT SEDIMENT RUNOFF IN THE FUTURE STORM EVENTS. NEWLY GRADED AREA WILL BE TEXTURED TO REDUCE FLOW VELOCITY.
- 4) MATERIAL HANDLING AND SPILL PREVENTION PLAN:
- A) HAZARDOUS MATERIALS WILL BE STORED AND USED IN CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS. DISPOSAL WILL BE PERFORMED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION, AND IN ACCORDANCE WITH STATE AND LOCAL LAWS AND REGULATIONS.
- B) THE FOLLOWING PROCEDURES WILL BE FOLLOWED FOR CONTAINMENT AND CLEAN-UP OF SPILLS:
- o) ALL SPILLS WILL BE CLEANED UP AND PROPERLY REMOVED IN ACCORDANCE WITH STATE REGULATIONS AND LOCAL ORDINANCES.
- b) SOIL AND SPILLED MATERIALS WILL BE COLLECTED UNTIL NO VISIBLE EVIDENCE OF SPILLED MATERIAL REMAINS
- c) THE TYPE OF MATERIAL AND QUANTITY OF RELEASE SHALL BE IDENTIFIED, AND APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) SHALL BE WORN AS RECOMMENDED BY THE PRODUCT-SPECIFIC MSDS.
- d) SPILL CONTAINMENT MAY BE INCLUDE CONSTRUCTION OF EARTH DIKES AROUND THE SPILL AREA, DEPLOYMENT OF ABSORBENT MATERIALS, OR USE OF COMMERCIALY AVAILABLE KITS.
- e) CONTAMINATED SOIL AND SPILLED MATERIAL WILL BE STORED IN APPROPRIATE AND PROPERLY LABELED CONTAINERS, AND DISPOSED OF IN ACCORDANCE WITH STATE, LOCAL, AND FEDERAL RULES AND REGULATIONS.
- 5) GENERAL PERMIT MAINTENANCE REQUIREMENTS (FROM GENERAL PERMIT):
- A) ALL PROTECTIVE MEASURES IDENTIFIED IN THIS SWPPP MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION. IF, THROUGH INSPECTION OR OTHER MEANS, THE PERMITEE DETERMINES THAT BMP'S ARE NOT OPERATING EFFECTIVELY, THEN THE PERMITEE SHALL PERFORM MAINTENANCE AS NECESSARY TO MAINTAIN THE CONTINUED EFFECTIVENESS OF STORM WATER CONTROLS, AND PRIOR TO THE NEXT RAIN EVENT, IF FEASIBLE. IF MAINTENANCE PRIOR TO THE NEXT ANTICIPATED STORM EVENT IS IMPRACTICABLE, THE REASON SHALL BE DOCUMENTED IN THE SWPPP AND MAINTENANCE MUST BE SCHEDULED AND ACCOMPLISHED AS SOON AS PRACTICABLE. EROSION AND SEDIMENT CONTROLS THAT HAVE BEEN INTENTIONALLY DISABLED, RUN-OVER, REMOVED, OR OTHERWISE RENDERED INEFFECTIVE MUST BE REPLACED OR CORRECTED IMMEDIATELY UPON DISCOVERY.
- B) IF PERIODIC INSPECTIONS OR OTHER INFORMATION INDICATES A CONTROL HAS BEEN USED INCORRECTLY, IS PERFORMING INADEQUATELY, OR IS DAMAGED, THEN THE OPERATOR MUST REPLACE OR MODIFY THE CONTROL AS SOON AS PRACTICABLE AFTER MAKING THE DISCOVERY.
- C) SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAPS AND SEDIMENTATION PONDS NO LATER THAN THE TIME THAT DESIGN CAPACITY HAS BEEN REDUCED BY 50%. FOR PERIMETER CONTROLS SUCH AS SILT FENCES, BERMS, ETC., THE TRAPPED SEDIMENT MUST BE REMOVED BEFORE IT REACHES 50% OF THE ABOVE GROUND HEIGHT.
- D) IF SEDIMENT ESCAPES THE SITE, ACCUMULATIONS MUST BE REMOVED AT A FREQUENCY THAT MINIMIZES OFF-SITE IMPACTS, AND PRIOR TO THE NEXT RAIN EVENT, IF FEASIBLE. IF THE PERMITEE DOES NOT OWN THE OFFSITE CONVEYANCE, THEN THE PERMITEE MUST WORK WITH THE OWNER OR OPERATOR OF THE PROPERTY TO REMOVE THE SEDIMENT.
- 6) EROSION AND SEDIMENT CONTROLS:
- A) THE FOLLOWING NON-STRUCTURAL EROSION AND SEDIMENT CONTROLS WILL BE UTILIZED ON THE PROJECT SITE:
- o) WHERE PRACTICAL, CARE WILL BE TAKEN TO PROTECT NATURAL VEGETATION THAT DOES NOT NEED TO BE REMOVED FOR CONSTRUCTION PURPOSES.
- b) PLACEMENT OF CONCRETE PARKING AND DRIVEWAY AREAS WILL BE PERFORMED AS SOON AS POSSIBLE AFTER SUB-GRADE STABILIZATION, TO MINIMIZE THE AMOUNT OF TIME DISPOSED SOIL IS EXPOSED TO THE ELEMENTS. THIS PRACTICE WILL REDUCE THE FREQUENCY THAT MAINTENANCE IS REQUIRED ON THE STRUCTURAL BMP'S.
- c) THE GENERAL PERMIT REQUIRES THAT EROSION AND STABILIZATION MEASURES MUST BE INITIATED WITHIN 14 DAYS IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED. IF CONSTRUCTION ACTIVITY IS SCHEDULED TO RESUME WITHIN 21 DAYS FROM THE CESSATION OF CONSTRUCTION ACTIVITY, EROSION AND STABILIZATION MEASURES ARE NOT REQUIRED FOR THAT PORTION OF THE SITE.
- e) STABILIZATION PROCEDURES SUCH AS TURF ESTABLISHMENT AND INSTALLATION OF PLANT MATERIAL SHOULD BE COMMENCED AS SOON AS PRACTICABLE AFTER SITE GRADING IS COMPLETE AND FINAL.
- B) THE FOLLOWING STRUCTURAL EROSION AND SEDIMENT CONTROLS WILL BE UTILIZED ON THE PROJECT SITE:
- o) A) STABILIZED CONSTRUCTION EXIT WILL BE INSTALLED AT THE LOCATION WHERE CONSTRUCTION TRAFFIC EXITS THE PROJECT SITE
- b) INLET PROTECTION TRAPS WILL BE INSTALLED AT ALL INLETS IMMEDIATELY AFTER CONCRETE PAVEMENT IS PLACED
- c) SILT FENCING (FILTER FABRIC FENCE OR REINFORCED FILTER FABRIC FENCE) WILL BE INSTALLED ALONG THE PROPERTY BOUNDARY AND ADJACENT TO EXISTING DITCHES, BAYOUS, STREAMS, RIVERS, AND/OR CHANNELS.
- d) ANY SEDIMENT THAT ENTERS THE STORM SEWER SYSTEM WILL BE REMOVED IMMEDIATELY (NOT FLUSHED).
- e) SINCE ALL PROPOSED INLETS DRAIN LESS THAN 10-ACRES, SEDIMENT BASINS ARE NOT REQUIRED FOR THIS SITE.
- f) WHERE PRACTICAL, CARE WILL BE TAKEN TO PROTECT NATURAL VEGETATION THAT DOES NOT NEED TO BE REMOVED FOR CONSTRUCTION PURPOSES.

DATE: \_\_\_\_\_

REVISIONS: \_\_\_\_\_

NO. \_\_\_\_\_

**ALJ Lindsey**  
 Civil Engineers  
 1885 N. Loop West, Suite 200  
 Houston, TX 77057  
 281-301-9595  
 FRN F-1526

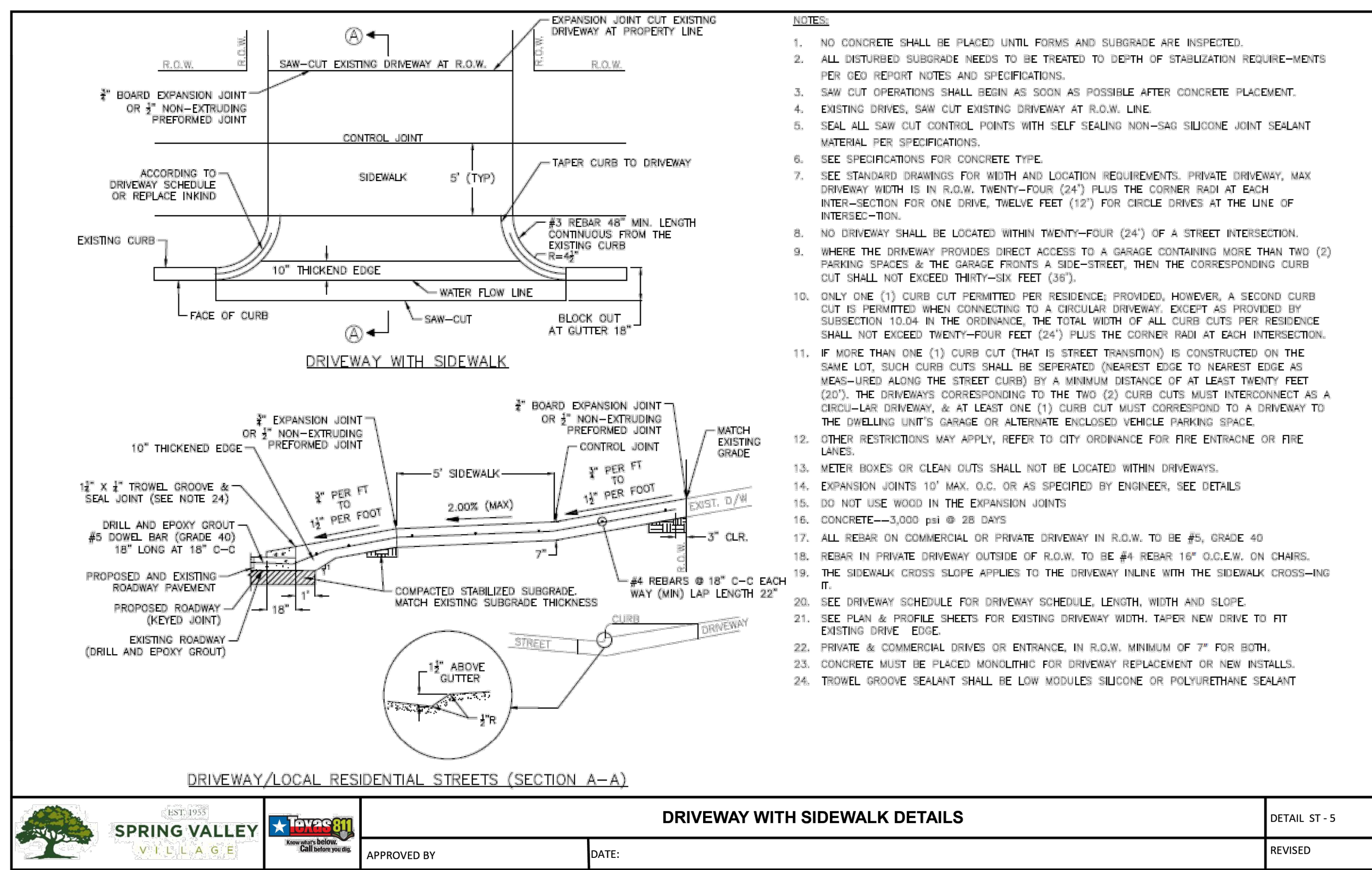
**Professional Engineer**  
 BRETT T. HANRAHAN  
 12908  
 10 MARCH 2026

ALL PROJECT NO. 022-2501620  
 DATE: MARCH 2026  
 SCALE: N/A  
 DRAWN BY: SRH  
 CHECKED BY: BTH

**CONSTRUCTION DETAILS (7 OF 7)**

**BINGLE ROAD RETAIL**  
 1045 BINGLE ROAD  
 HOUSTON, TEXAS 77055

SHEET C7.6



**DRIVEWAY WITH SIDEWALK DETAILS**

DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_

REVISOR: \_\_\_\_\_

DETAIL ST-5

REVISED: \_\_\_\_\_

**SPRING VALLEY VILLAGE**

**TOYOS 81**