



August 14, 2024

J. Stacy Slawinski, P.E.  
Fort Bend County Engineering  
301 Jackson, 4th Floor  
Richmond, TX 77469

On behalf of:

Fort Bend County, Texas  
Precinct 4

Re: Application for Encroachment – Atmos Pipeline Line V4  
(18" high-pressure gas transmission pipeline)  
Project Title: Harlem Road Reconstruction from Travis High School to Morton Road  
Fort Bend County Project No. 17402  
IDS Project No. 0570-006-00  
Location: Richmond, Texas in Fort Bend County

Dear Mr. Slawinski,

It is Atmos Energy Corporation's (Atmos Energy) understanding that Fort Bend County – Precinct 4 is proposing road improvements, as part of Fort Bend County Project No. 17402, that will cross Atmos Energy assets.

The project includes the installation of a permanent protective air bridge that will encroach upon Atmos Pipeline Line V4 (18" high-pressure gas transmission pipeline) at approximate pipeline station 803+65 as shown in plans titled **2B. Harlem Road FBC 17402 - Construction Drawings (Atmos Crossing Sheets)**, dated August 2023, and detailed further in sheets 66, 68, 245-250.

These plans indicate that the proposed air bridge is designed for HL93 loading and shall be able to withstand AASHTO HS20 truck load or tandem load.

**For any construction equipment crossing the Atmos Energy pipelines, a timber matting air-bridge per Atmos Standard 11-100-00 shall be utilized.**

It is recommended that the contractor also exercise caution when working around the existing pipeline easement to avoid any direct loading on Line V4 per Atmos Energy requirements.

Contractor shall follow all Atmos Energy requirements and comply with construction procedures with regards to any excavation and/or compaction near LineV4.

Any excavation and/or compaction within the pipeline easement shall comply with the additional criteria mentioned below.

Based on the plans submitted, Atmos Energy has determined that the proposed developments will not present a significant conflict provided that this letter is executed and returned prior to the commencement of the construction and the following additional criteria are followed:

1. Please contact Texas 811 for line locates 72 hours prior to excavation. A representative with the Atmos Energy Damage Prevention team will then contact you to schedule an onsite meeting in advance of excavation activities within the vicinity of Atmos Energy facilities.
2. **Atmos Energy's facilities must be exposed, and their elevations field verified prior to starting any construction activity.** In the event that Atmos Energy's facilities were inaccurately represented in the proposed design, construction will not be allowed to continue in Atmos Energy's easement until the field-verified location(s) of Atmos Energy facilities have been incorporated into the project design and resubmitted to Atmos Energy for re-review and approval.
3. Atmos Energy's pipeline must be potholed with vacuum excavation or some other nonmechanized method.
4. Atmos Energy's pipeline must be visually identified through potholing as referenced above prior to any mechanical excavation. Mechanical excavation (and/or compaction), with the exception of the potholing procedure mentioned above, is not allowed within three (3') of any direction of the circumference of the Atmos Energy pipeline.
5. **Excavation (and / or compaction) within three feet (3') of any direction of the circumference of the Atmos Energy pipeline must be done by vacuum excavation or hand digging.**
6. Atmos Energy requires utility and road crossings to occur at or near 90-degree angles.
7. All underground utility lines must be installed in a substantially straight line parallel to grade under Atmos Energy's facilities and maintain a minimum vertical separation of 24 inches between the bottom of Atmos Energy's facilities and top of third-party line.
8. Positive drainage must be maintained within Atmos Energy's easement. Placement of any additional fill within the easement is not permitted without the prior written approval of Atmos Energy.
9. At no time may cover be removed from the easement or right-of-way without the prior written approval of Atmos Energy and in no case may cover over Atmos Energy's facilities be reduced to less than 24 inches (top of grade to top of pipe).
10. Equipment crossing the easement or right-of-way during construction must be evaluated by Atmos Energy for external loads to determine if additional cover or other protective measures over the facilities are required.
11. Atmos Energy's easement will be protected from washing and erosion during construction and/or repairs.
12. Equipment, materials, or excess dirt will not be stored on the easement during construction without the prior written approval of Atmos Energy.

- 13. Atmos Energy will not be responsible for damage to any allowed encroachments.
- 14. Atmos Energy reserves the right for future uses of this easement, including but not limited to, ingress and egress, reconstructing, removing, relocating, maintaining, operating, etc., of any of its facilities.
- 15. Impact/conflict analysis was based on and is limited to drawings and documents submitted to Atmos Energy, as referenced above. ANY change in scope of work contained in these drawings must be resubmitted for re-review and approval.

**You are not authorized to commence work until we have received a signed copy of this letter acknowledging receipt.**

If you have any questions or if I may be of additional assistance, please feel free to contact Korey LeMond, at 979-286-4939, or myself, at 469-548-3404.

Sincerely,



Marco Delira

Manager of Engineering Services  
Atmos Energy Corporation  
297 N Earl Rudder  
Bryan, TX 77802

cc:  
Korey LeMond (Atmos Energy Engineering)  
Tyler Skaggs (Atmos Energy ROW Agent)  
John Pearson (Atmos Energy Operations)  
Kayleen Jones (Atmos Energy Damage Prevention)

Signature: \_\_\_\_\_

Name: KP George

Company: Fort Bend County

Title: County Judge

Date: \_\_\_\_\_



**FORT BEND COUNTY CONSTRUCTION NOTES**

- FORT BEND COUNTY MUST BE INVITED TO THE PRE-CONSTRUCTION MEETING.
- CONTRACTOR SHALL NOTIFY FORT BEND COUNTY ENGINEERING DEPARTMENT 48 HOURS PRIOR TO COMMENCING CONSTRUCTION AND 48 HOURS NOTICE TO ANY CONSTRUCTION ACTIVITY WITHIN THE LIMITS OF THE PACING AT CONSTRUCTION @ FBCTX.GOV
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FROM FORT BEND COUNTY PRIOR TO COMMENCING CONSTRUCTION OF ANY IMPROVEMENTS WITHIN COUNTY ROAD RIGHT OF WAY.
- ALL PAVING IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FORT BEND COUNTY "RULES REGULATIONS AND REQUIREMENTS" RELATING TO THE APPROVAL AND ACCEPTANCE OF IMPROVEMENTS IN SUBDIVISIONS AS CURRENTLY AMENDED.
- ALL ROAD WIDTHS, CURB RADII AND CURB ALIGNMENT SHOWN INDICATE BACK OF CURB.
- A CONTINUOUS LONGITUDINAL REINFORCING BAR SHALL BE USED IN THE CURB.
- ALL CONCRETE PAVEMENT SHALL BE 5 1/2 SACK CEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS. TRANSVERSE EXPANSION JOINTS SHALL BE INSTALLED AT EACH CURB RETURN AND AT A MAXIMUM SPACING OF 60 FEET.
- ALL WEATHER ACCESS TO ALL EXISTING STREETS AND DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES.
- 4" X 12" REINFORCED CONCRETE CURB SHALL BE PLACED IN FRONT OF SINGLE FAMILY LOTS ONLY. ALL OTHER AREAS SHALL BE 6" REINFORCED CONCRETE CURB.
- CURB HEADERS ARE REQUIRED AT CURB CONNECTIONS TO HANDICAP RAMPS, WITH NO CONSTRUCTION JOINT WITHIN 5' OF RAMPS.
- GUIDELINES ARE SET FORTH IN THE TEXAS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", AS CURRENTLY AMENDED, SHALL BE OBSERVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE FLAGMEN, SIGNING, STRIPING AND WARNING DEVICES, ETC. DURING CONSTRUCTION BOTH DAY AND NIGHT.
- ALL R1-1 STOPS SIGNS SHALL BE A MINIMUM OF 36"x36" WITH DIAMOND GRADE SHEETING PER TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- STREET NAME SIGNAGE SHALL BE ON A 9" HIGH SIGN FLAT BLADE W/ REFLECTIVE GREEN BACKGROUND. STREET NAMES SHALL BE UPPER AND LOWERCASE LETTERING WITH UPPERCASE LETTERS OF 6" MINIMUM AND LOWERCASE LETTERS OF 4.5" MINIMUM. THE LETTERS SHALL BE REFLECTIVE WHITE. STREET NAME SIGNS SHALL BE MOUNTED ON STOP SIGN POST.
- A BLUE DOUBLE REFLECTORIZED BUTTON SHALL BE PLACED AT ALL FIRE HYDRANT LOCATIONS. THE BUTTON SHALL BE PLACED 12 INCHES OFF OF THE CENTERLINE OF THE STREET ON THE SAME SIDE AS THE HYDRANT.
- THE PROJECT AND ALL PARTS THEREOF SHALL BE SUBJECT TO INSPECTION FROM TIME TO TIME BY INSPECTORS DESIGNATED BY FORT BEND COUNTY AND FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY. NO SUCH INSPECTIONS SHALL RELIEVE THE CONTRACTOR OF ANY OF ITS OBLIGATIONS HEREUNDER. NEITHER FAILURE TO INSPECT NOR TO DISCOVER OR REJECT ANY OF THE WORK AS NOT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, REQUIREMENTS AND SPECIFICATIONS OF FORT BEND COUNTY OR ANY PROVISION OF THIS PROJECT SHALL BE CONSTRUED TO IMPLY AN ACCEPTANCE OF SUCH WORK OR TO RELIEVE THE CONTRACTOR OF ANY OF ITS OBLIGATIONS HEREUNDER.
- STABILIZED SUBGRADE: DETERMINE THE THICKNESS OF THE STABILIZED SUBGRADE AFTER CURING AND COMPACTION. IF THE SUBGRADE DEPTH IS GREATER THAN THE PROPOSED THICKNESS BY 20% OR MORE, THE CMT LAB MUST PROVIDE VERIFICATION OF PERCENTAGE OF MATERIAL BEING USED TO STABILIZE THE SUBGRADE MEETS OR EXCEEDS PROJECT REQUIREMENTS. TEST RESULTS REQUIRED.

**NOTE: FORT BEND COUNTY NOTES SUPERSEDE ANY CONFLICTING NOTES.**

**CERTAIN CONSTRUCTION EVENTS NOTE:**

- CONTRACTOR SHALL NOTIFY THE ENGINEER'S REPRESENTATIVE AT LEAST 24 HOURS IN ADVANCE OF CERTAIN CONSTRUCTION EVENTS DEFINED BELOW:
- BACKFILL OF UTILITY CROSSINGS AT STREETS
  - BACKFILL OF UTILITIES WHERE EDGE OF TRENCH IS WITHIN 1 FOOT OF PAVEMENT SUBGRADE
  - PROOF ROLL OF SUBGRADE
  - SUBGRADE STABILIZATION
  - COMPLETION OF REINFORCED STEEL PLACEMENT FOR PAVEMENT
  - CONCRETE PAVEMENT POURS
  - COMPLETION OF REINFORCED STEEL PLACEMENT FOR CURB
  - CONCRETE CURB POURS

**GENERAL CONSTRUCTION NOTES**

- CONTRACTOR IS TO FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. IF A CONFLICT EXISTS BETWEEN WHAT IS SHOWN ON THE PLANS AND WHAT EXISTS IN THE FIELD, CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY.
- CONTRACTOR TO INFORM THE ENGINEER OF ANY DISCREPANCY IN FLOWLINES, LID, AND GRATE ELEVATIONS PRIOR TO CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR HIS OWN HORIZONTAL & VERTICAL CONTROL, REFERENCE POINTS, AND CONSTRUCTION STAKING AS INCIDENTAL TO THE PROJECT.
- ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL REQUEST THE EXACT LOCATION OF THESE FACILITIES BY CALLING THE ONE-CALL NOTIFICATION SYSTEM. CONTRACTOR SHALL GIVE NOTICE TO TEXAS811 (TELEPHONE NUMBER 811) REQUESTING THE LOCATION OF UNDERGROUND FACILITIES AND UTILITY LINES AT EACH EXCAVATION SITE AS REQUIRED BY TEXAS UTILITIES CODE, CHAPTER 251, NOT EARLIER THAN THE 14TH DAY BEFORE THE DATE THE EXCAVATION IS TO BEGIN OR LATER THAN THE 48 HOUR BEFORE THE TIME THE EXCAVATION IS TO BEGIN, EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH OCCUR DUE TO HIS FAILURE TO REQUEST THE LOCATION AND PRESERVATION OF THESE UNDERGROUND FACILITIES. CONTRACTOR SHALL COORDINATE ALL CONFLICTS WITH THE APPROPRIATE GOVERNING AGENCY. NO SEPARATE PAY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING WATER, WASTEWATER AND STORM DRAINAGE LINES. DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH FORT BEND COUNTY SPECIFICATIONS AND STANDARDS AT NO ADDITIONAL COST.
- ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION, AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER.
- CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL ~~OSHA REGULATIONS~~ BUT IS NOT LIMITED TO COMPLIANCE WITH THE LATEST EDITION OF OSHA REGULATIONS AND THE STATE OF TEXAS LAWS CONCERNING EXCAVATION AND CLEARANCES FROM OVERHEAD POWER LINES.
- EXISTING PAVEMENTS, CURBS, SIDEWALKS, AND DRIVEWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED TO FORT BEND COUNTY STANDARDS.
- CONDITION OF THE ROAD AND/OR RIGHT-OF-WAY, UPON COMPLETION OF JOB, SHALL BE AS GOOD AS OR BETTER THAN THE CONDITION PRIOR TO STARTING WORK.
- CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS AND TREES ALONG THE AREA OF EXCAVATION, UNLESS OTHERWISE NOTED TO BE REMOVED. ANY TREES NOT NOTED FOR REMOVAL SHALL BE PROTECTED IN PLACE.
- CONTRACTOR SHALL HYDROMULCH SEED ALL DISTURBED AREAS UNLESS OTHERWISE SHOWN.
- CONTRACTOR SHALL GIVE NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PRIVATE AND PUBLIC UTILITIES OR RAILROADS AFFECTED BY HIS OPERATIONS PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL ASSURE HIMSELF THAT ALL CONSTRUCTION PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF WORK. REQUIRED PERMITS THAT CAN BE ISSUED TO CONTRACTOR WILL BE OBTAINED AT HIS EXPENSE.
- CONTRACTOR TO REMOVE PLUGS AND CONNECT TO EXISTING UTILITY LINES AS INDICATED ON PLANS. NO SEPARATE PAY.
- ALL UTILITY TRENCHES TO BE BACKFILLED TO 95 PERCENT STANDARD PROCTOR DENSITY UNLESS OTHERWISE NOTED.
- AT THE END OF ALL CONSTRUCTION PROJECTS, THE CONTRACTOR SHALL RESTORE THE EXISTING FACILITIES AND ANY SPOIL MATERIAL, VEGETATION & DEBRIS SHALL BE HAULED & DISPOSED OF OFF-SITE, I.E. THE PROPERTY SHALL BE MADE EQUAL TO OR BETTER THAN THE EXISTING SITE CONDITION PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL PREPARE A SET OF "AS-BUILT" DRAWINGS WITH ANY FIELD CHANGES MADE TO THE APPROVED ENGINEERING PLANS AND SUBMIT TO THE ENGINEER AND OWNER UPON COMPLETION OF CONSTRUCTION.
- ALL WORK MUST TAKE PLACE BETWEEN THE HOURS OF 9:00 A.M. AND 4:00 P.M. MONDAY THROUGH FRIDAY. ONE MOVING LANE OF TRAFFIC IN EACH DIRECTION MUST BE MAINTAINED DURING WORK HOURS.
- OFF DUTY UNINFORMED POLICE OFFICER(S) REQUIRED TO DIRECT TRAFFIC WHERE TRAFFIC LANES ARE BLOCKED.
- CONTRACTOR SHALL CONTACT THE FOLLOWING A MINIMUM OF 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.  
TEXAS 811 811  
FORT BEND COUNTY ENGINEERING OFFICE. CONSTRUCTION@FORTBENDCOUNTYTX.GOV

**STORM SEWER CONSTRUCTION NOTES**

- STORM SEWERS AND LEADS SHALL BE REINFORCED CONCRETE PIPE, C-76, CLASS III WITH RUBBER GASKETED JOINTS, AND SHALL BE INSTALLED, BEDDED AND BACKFILLED IN ACCORDANCE WITH HARRIS COUNTY SPECIFICATIONS AND STANDARDS, AS APPLICABLE UNLESS OTHERWISE SHOWN ON DRAWINGS.
- ALL GRAVITY STORM SEWERS SHALL BE CONSTRUCTED STARTING AT THE OUTFALL POINT OR AT THE ULTIMATE POINT OF CONNECTION AND THEN CONSTRUCTED MOVING UPSTREAM.
- ALL PROPOSED PIPE STUB OUTS FROM MANHOLES OR INLETS ARE TO BE PLUGGED WITH 8-INCH BRICK WALLS UNLESS OTHERWISE NOTED.
- ALL CEMENT STABILIZED SAND FOR STORM SEWER CONSTRUCTION TO MEET HARRIS COUNTY SPECIFICATIONS AND STANDARDS WITH EXCEPTION THAT A MINIMUM 1 1/2 SACK CEMENT PER TON OF DRY SAND SHALL BE PROVIDED.
- ALL SEWER TRENCHES, INCLUDING TRENCHES FOR LEADS AND STUBS, UNDER OR WITHIN ONE (1) FOOT OF PROPOSED OR FUTURE PAVEMENT SHALL BE BACKFILLED WITH MIN. 1.5 SACK CEMENT PER TON STABILIZED SAND UP TO ONE (1) FOOT BELOW THE PAVING SUBGRADE. BACKFILL SHALL BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING NO. FBC-050, UNLESS WET/UNSTABLE SOIL CONDITIONS EXIST AS DESCRIBED BELOW. INCLUDE COST OF CEMENT STABILIZED SAND BACKFILL IN UNIT PRICE BID PER LINEAR FOOT FOR STORM SEWER LINE, INCLUDING LEADS, IN APPROPRIATE SIZES. THE REMAINING DEPTH OF TRENCH SHALL BE BACKFILLED WITH SUITABLE EARTH MATERIAL IN 6-INCH LAYERS, WITH TEST TAKEN AT 100 FOOT INTERVALS ON EACH LIFT AND MECHANICALLY COMPACTED TO 95% STANDARD PROCTOR DENSITY PER ASTM D698/AASHTO T99.
- SPECIAL NOTES FOR WET SAND CONSTRUCTION:
  - WHEN TRENCH CONDITIONS REQUIRE THE USE OF WELL POINTS, SHEETING, AND BRACING, OR SEAL SLAB OR CRUSHED STONE PER HARRIS COUNTY SPECIFICATIONS AND STANDARDS. THESE ARE TO BE REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER'S REPRESENTATIVE.
  - NOT USED.
  - WELL POINTING SHALL BE PAID FOR SEPARATELY.
- ALL STORM SEWER INLETS TO BE BACKFILLED WITH CEMENT STABILIZED SAND TO BOTTOM OF PAVEMENT UNDER PROPOSED PAVEMENT. INCLUDE COST OF CEMENT STABILIZED SAND BACKFILL IN UNIT PRICE BID PER INLET.
- ALL MANHOLES SHALL BE IN ACCORDANCE WITH FORT BEND COUNTY DETAILS UNLESS OTHERWISE NOTED.
- PROVIDE A MINIMUM OF 1' (ONE FOOT) CLEARANCE AT STORM SEWER AND WATER LINE CROSSINGS.
- ALL STORM SEWER MANHOLE RIMS SHALL BE FLUSH WITH PAVEMENT OR 2 INCHES ABOVE THE FINISHED GRADE IN NON-PAVED AREAS.
- BETWEEN THE TIME THAT STORM SEWER IS PLACED AND MANHOLES AND INLETS ARE BUILT, ALL PIPE OPENINGS SHALL BE SUFFICIENTLY PLUGGED PER FORT BEND COUNTY SPECIFICATIONS AND STANDARDS TO KEEP SEDIMENT FROM ACCUMULATING IN THE PIPE.
- ALL DITCHES SHALL BE REGRADED TO PROPOSED ELEVATIONS TO INSURE PROPER DRAINAGE. ALL OUTFALLS SHALL BE PROPERLY BACKFILLED AND COMPACTED. ALL DISTURBED AREAS SHALL BE GRADED, SEEDED, AND FERTILIZED.

**CENTERPOINT ENERGY NOTES**

**CAUTION: UNDERGROUND GAS FACILITIES**

- THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-6005 OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN SERVICE LINES FIELD LOCATED.
- WHEN CENTERPOINT ENERGY PIPE LINE MARKINGS ARE NOT VISIBLE, CALL 713-207-5463 OR 713-945-8037 (7:00 A.M. TO 4:30 P.M.) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.
  - WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF CENTERPOINT ENERGY FACILITIES, ALL EXCAVATION MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES.
  - WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPING.
  - FOR EMERGENCIES REGARDING GAS LINES CALL 713-659-3552 OR 713-207-4200.

THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

**WARNING: OVERHEAD ELECTRICAL FACILITIES**

- OVERHEAD LINES MAY EXIST ON THE PROPERTY. THE LOCATION OF OVERHEAD LINES HAS NOT BEEN SHOWN ON THESE DRAWINGS AS THE LINES ARE CLEARLY VISIBLE, BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING ANY CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH & SAFETY CODE FORBIDS ACTIVITIES THAT OCCUR IN CLOSE PROXIMITY TO HIGH VOLTAGE LINES, SPECIFICALLY:
- ANY ACTIVITY WHERE PERSON OR THINGS MAY COME WITHIN SIX (6) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES; AND
  - OPERATING A CRANE, DERRICK, POWER SHOVEL, DRILLING RIG, PILE DRIVER, HOISTING EQUIPMENT, OR SIMILAR APPARATUS WITHIN 10 FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES.

PARTIES RESPONSIBLE FOR THE WORK, INCLUDING CONTRACTORS, ARE LEGALLY RESPONSIBLE FOR THE SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR REMOVED CALL CENTERPOINT ENERGY AT (713) 207-2222.

**ACTIVITIES ON OR ACROSS CENTERPOINT ENERGY FEE OR EASEMENT PROPERTY**

NO APPROVAL TO USE, CROSS OR OCCUPY CENTERPOINT FEE OR EASEMENT PROPERTY IS GIVEN. IF YOU NEED TO USE CENTERPOINT PROPERTY, PLEASE CONTACT OUR SURVEYING & RIGHT OF WAY DIVISION AT 713-207-6348 OR 713-207-5769.

**GEOTECHNICAL NOTES:**

- ALL GRADING, BACKFILL, SUBGRADE PREPARATION, COMPACTION AND PAVING SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND ANY ADDENDUMS THERETO AS PREPARED BY HTS, INC. CONSULTANTS , DATED MAY 2020, PROJECT NO. 20-5-190.
- EARTH BACKFILL SHALL BE MADE BY MECHANICAL MEANS TO PRODUCE A DENSITY EQUAL TO THAT OF THE SURROUNDING UNDISTURBED SOIL.
- ALL AREA TO BE FILLED SHALL BE FREE OF VEGETATION, DEBRIS, PONDING WATER, LOOSE SOILS, MUD & MUCK. CLEARING, GRUBBING, STRIPPING & PROOF ROLLING SHALL BE PER THE GEOTECHNICAL REPORT.

**ABBREVIATIONS**

MH - MANHOLE	LT. - LEFT
SAN. - SANITARY	C.L. - CENTER LINE
STM. - STORM	T.C. - TOP OF CURB
EXIST. - EXISTING	E.P. - EDGE OF PAVEMENT
E.G. - EXISTING GROUND	W.L. - WATER LINE
STA. - STATION	W - WEST
B.L. - BASELINE OR BUILDING LINE	E - EAST
SWR. - SEWER	S - SOUTH
DIA. - DIAMETER	N - NORTH
EL. - ELEVATION	F.V. - FLUSHING VALVE
R.O.W. - RIGHT-OF-WAY	CONC. - CONCRETE
L.F. - LINEAR FEET	P.V.M.T. - PAVEMENT
N.G. - NATURAL GROUND	F.L. - FLOW LINE
RT. - RIGHT	G.V. - GATE VALVE
RP - RADIUS POINT	PC - POINT OF CURVATURE
S.S.E. - SANITARY SEWER EASEMENT	PT - POINT OF TANGENCY
W.L.E. - WATER LINE EASEMENT	R - RADIUS
U.E. - UTILITY EASEMENT	E.O.P. - END OF PROJECT
D.E. - DRAINAGE EASEMENT	P.R.C. - POINT OF REVERSE CURVE
RED - REDUCER	P.O.C. - POINT ON CURVE
B/F - BLIND FLANGE	O.P.R.R.P. - OFFICIAL PUBLIC RECORDS OF REAL PROPERTY.
S/O - SLIP ON	S.S. - SIDE SLOPE
P.V.T. - PRIVATE	MOD. - MODIFIED
B.W. - BOTTOM WIDTH	N.F.V. - NOT FIELD VERIFIED
B.O.V. - BLOW OFF VALVE	P.A.E./P.U.E. - PUBLIC ACCESS EASEMENT PUBLIC UTILITY EASEMENT
P.C.C. - POINT OF COMPOUND CURVATURE	M.C.R.P.R. - MONTGOMERY COUNTY REAL PROPERTY RECORDS
ESMT. - EASEMENT	CMP - CORRUGATED METAL PIPE
R.J.P. - RESTRAINED JOINT PIPE	CPP - CORRUGATED PLASTIC PIPE
AB - ALL BELL	B.O. w/BOX - BLOW OFF VALVE WITH BOX
M.C.D.R. - MONTGOMERY COUNTY DEED RECORDS	L.T.D. - LOAD TRANSFER DEVICE
ELEC - ELECTRICAL	M.C.M.R. - MONTGOMERY COUNTY MAP RECORDS
	T.P. - TOP PAVEMENT

**EXISTING SYMBOL LEGEND**

	ADVERTISEMENT SIGN		FLAG POLE		SANITARY CLEAN OUT
	ASPHALT		GAS LAMP		SERVICE POLE
	'B' INLET		GAS METER		SIGN STANDARD
	'B-B' INLET		GAS SERVICE LINE MARKER		S.W.B.T. M H
	BRICK PILLAR		GAS VALVE		STORM M H
	BUSH		GATE		STREET BARRICADE
	'C' INLET (ALL)		GREASE TRAP		STREET LIGHT STANDARD
	CABLE TV JUNCTION BOX		GUY WIRE		TELEPHONE POLE
	CABLE TV MARKER		CENTERPOINT MANHOLE		TELEPHONE JUNCTION BOX
	CABLE TV UND.G. MARKER		CENTERPOINT TOWER LEG		TRAFFIC SIGN
	CATCH BASIN		CENTERPOINT UND.G. CABLE MARKER		TRAFFIC SIGNAL CONTROL BOX
	CENTER LINE OF STREET		LIGHT		TRAFFIC LIGHT STANDARD
	CORE BORE		MAIL BOX		TRANSFORMER BOX
	'E' INLET		METAL POST (BOLLARD)		TREE
	ELECTRICAL JUNCTION BOX		NOT FIELD VERIFIED - FROM RECORD DRAWINGS		UNDG. TELE. CABLE MARKER
	EXIST. SANITARY M H		OVERHEAD POWER LINES		VENT PIPE
	FENCE CORNER		PIPELINE MARKER		WATER METER
	FENCE LINE(CHAIN LINK)		POWER POLE		WATER VALVE
	FENCE LINE(WOOD)		PUBLIC PHONE		WATER WELL
	FIRE HYDRANT		RADIO RELAY MAST		WELLHEAD

TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT ENERGY AT 713-207-2222.

NOTICE: For your safety, you are required by Texas Law to call 811 at least 48 hours before you dig so that underground line can be marked. This Verification does not fulfill your obligation to call 811.

**VERIFICATION OF PRIVATE UTILITY LINES**

Date: \_\_\_\_\_  
CenterPoint Energy/Natural Gas Facilities Verification ONLY. (This Signature verifies that you have shown CNP Natural Gas lines correctly -not to be used for conflict verification.) (Gas service lines are not shown.) Signature Valid for six months.

Date: \_\_\_\_\_  
CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities -not to be used for conflict verification.) Signature Valid for six months.

Date: \_\_\_\_\_  
Approved for AT&T Texas/SWBT underground conduit facilities only. Signature valid for one year

APPROVED	RAF	DATE	AUGUST 2023
DESIGNED BY:	JH	DRAWN BY:	AA
		JOB NO.	0570-006-00

**BENCHMARK:**  
ALL SURVEY WORK DEPICTED HERON IS REFERENCED TO THE TEXAS COORDINATES SYSTEM OF 1983, SOUTH CENTRAL ZONE AND WAS DETERMINED BY GLOBAL POSITIONING SYSTEMS METHODS. ALL BEARINGS AND COORDINATES LISTED ARE SURFACE AND CAN BE BROUGHT TO GRID BY APPLYING A COMBINED PROJECT SCALE FACTOR = 0.99987872081.

ELEVATION REFERENCE - N.G.S. A-1212 [1973] [PID A14725] - FOUND BRASS DISK ON TOP OF WEST END OF NORTH CONCRETE HEADWALL ON BOX CULVERT UNDER U.S. HIGHWAY NO. 90-A WEST-BOUND LANES AT WEST SIDE OF HARLEM ROAD. ELEVATION = 78.18' (NAVD88)

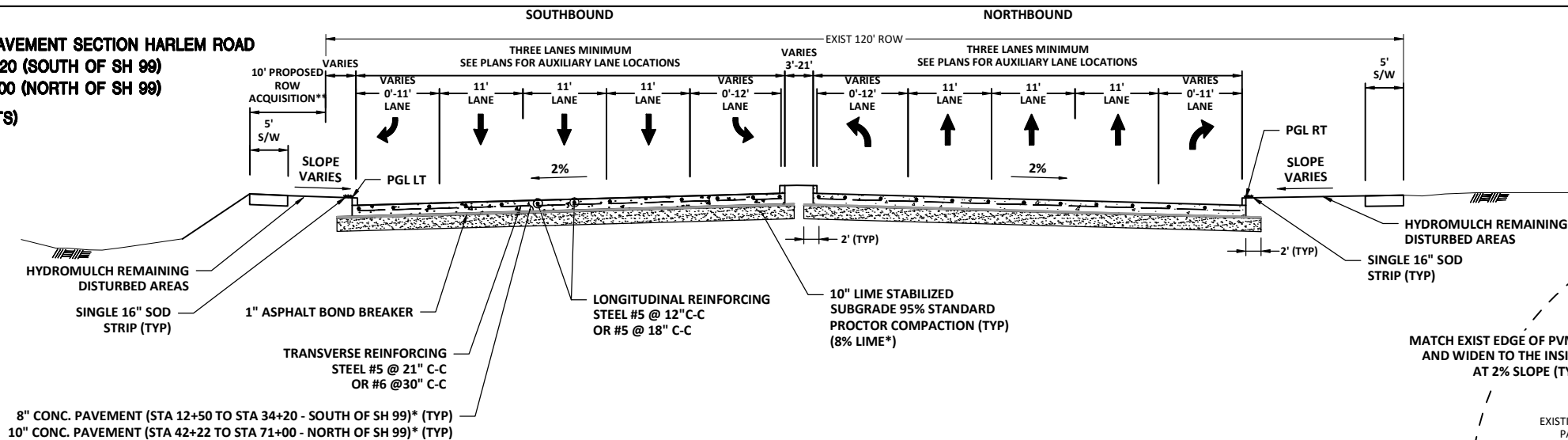
**HARLEM ROAD RECONSTRUCTION**

**CONSTRUCTION NOTES**

FILE NO:	
DRAWING SCALE	
HORIZ: N/A	
VERT: N/A	
SHEET No: 4 OF 285	

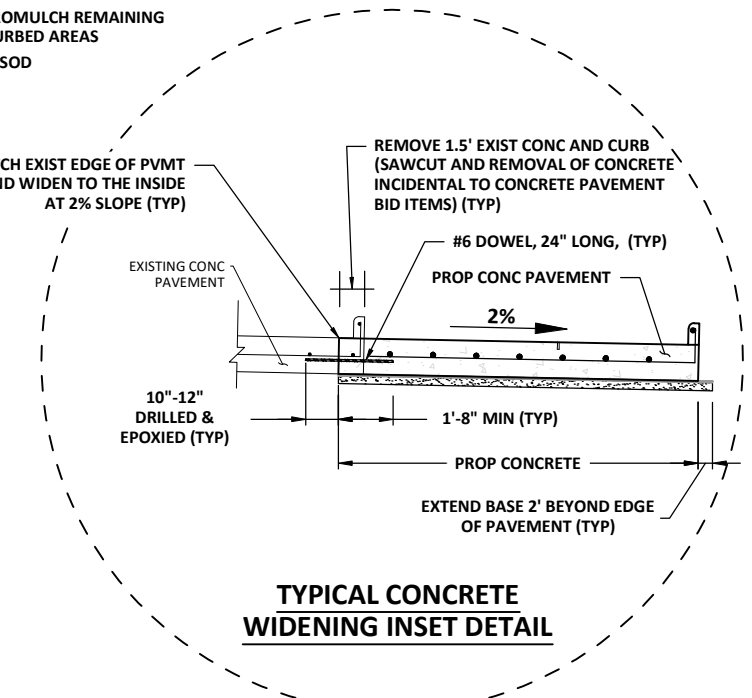
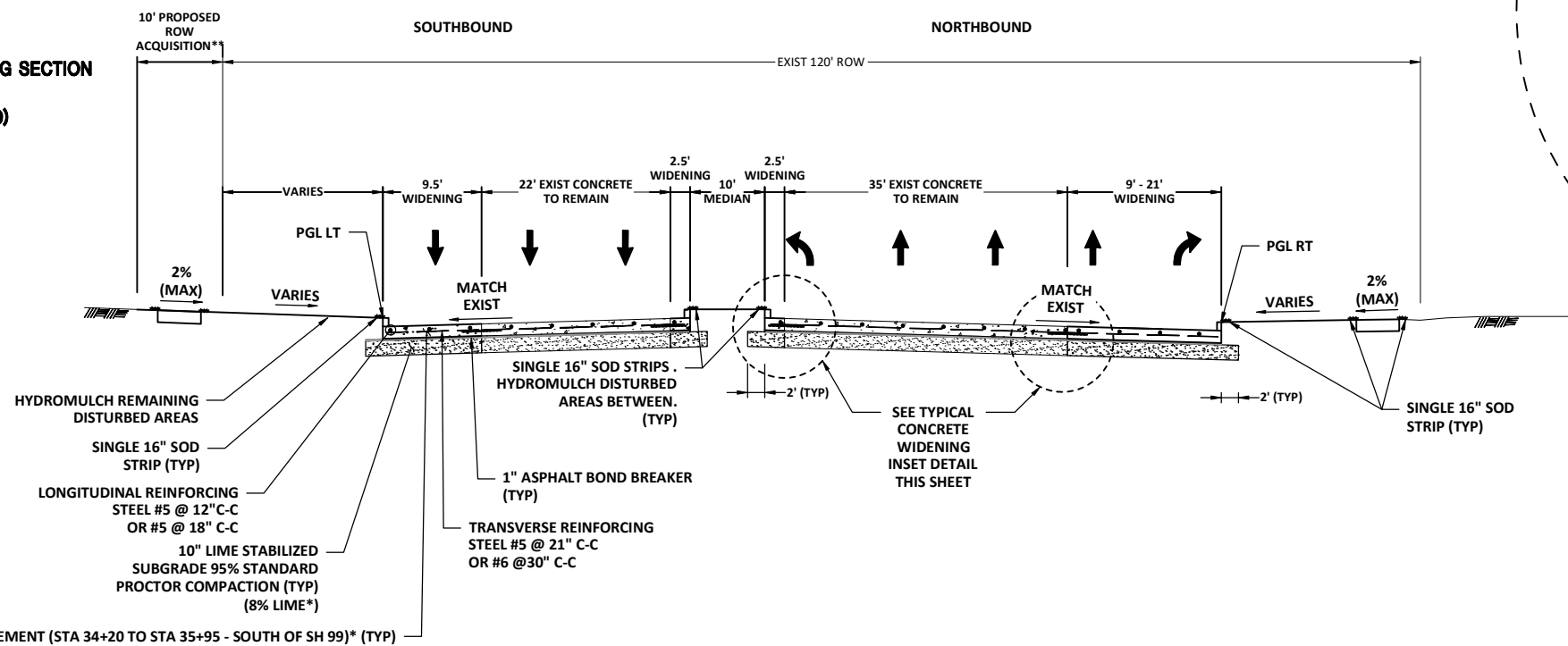
\\ids\g.com\MyProjects\0500\05700600 Harlem Road - FBC 2017\Mobility Projects\CAD\DWG\CNOTES.dwg:13 CONSTRUCTION NOTES (Plotted Aug 04, 2023 at 11:55am by dwallace) (Last Saved by: dwallace)

**PROPOSED TYPICAL CONCRETE PAVEMENT SECTION HARLEM ROAD**  
**STA 12+50 TO STA 34+20 (SOUTH OF SH 99)**  
**STA 42+22 TO STA 71+00 (NORTH OF SH 99)**  
 (NTS)

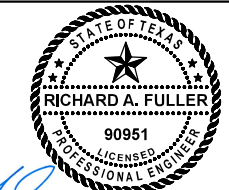
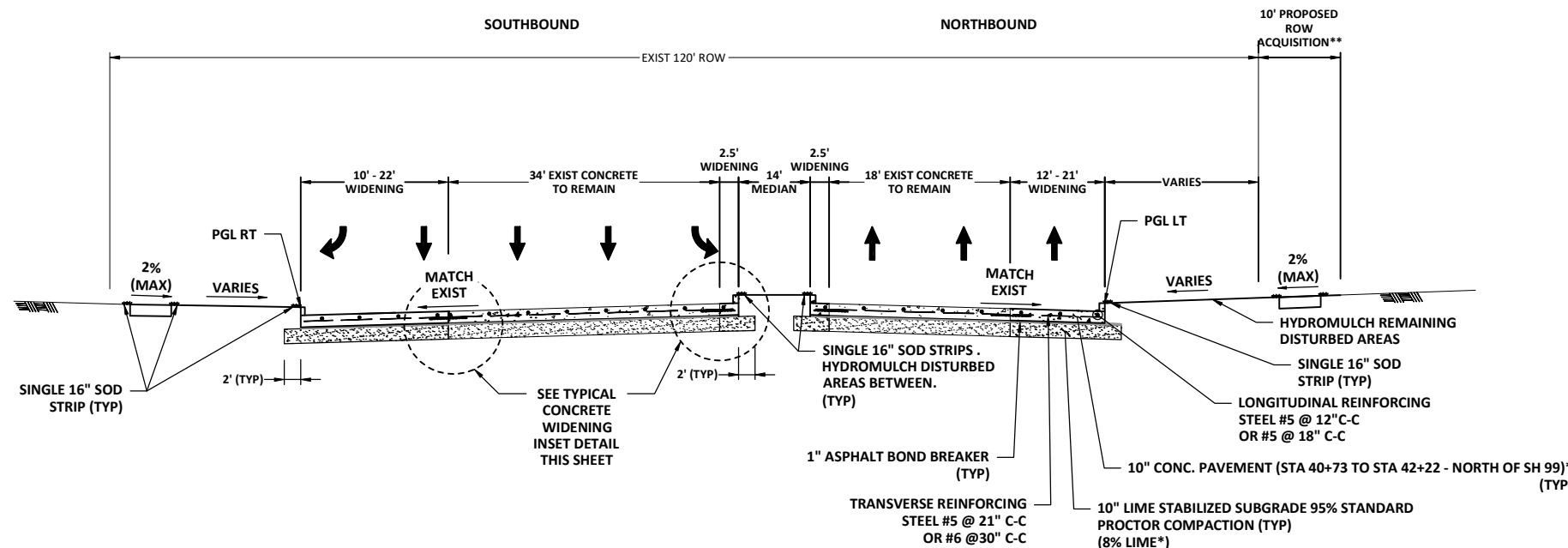


\* WHERE FAST TRACK CONCRETE PAVEMENT SPECIFIED IN THE PLANS, THE DEPTH OF CONCRETE SHALL BE A MINIMUM OF 13" THICK WITH NO BASE. (SEE HOUSTON TxDOT STANDARD CRCP-FT)  
 \*\* SEE PLANS FOR AREAS OF ROW ACQUISITION

**PROPOSED TYPICAL CONCRETE PAVEMENT WIDENING SECTION HARLEM ROAD**  
**STA 34+20 TO STA 35+95 (SOUTH OF SH 99)**  
 (NTS)



**PROPOSED TYPICAL CONCRETE PAVEMENT WIDENING SECTION HARLEM ROAD**  
**STA 40+73 TO STA 42+22 (NORTH OF SH 99)**  
 (NTS)



*Richard A. Fuller*  
 08/04/2023

**IDS Engineering Group**  
 13430 NW, Freeway Suite 700  
 Houston, Tx 77040  
 713.462.3178  
 Teling Firm 2726  
 Telsury Firm 10110700

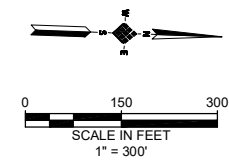
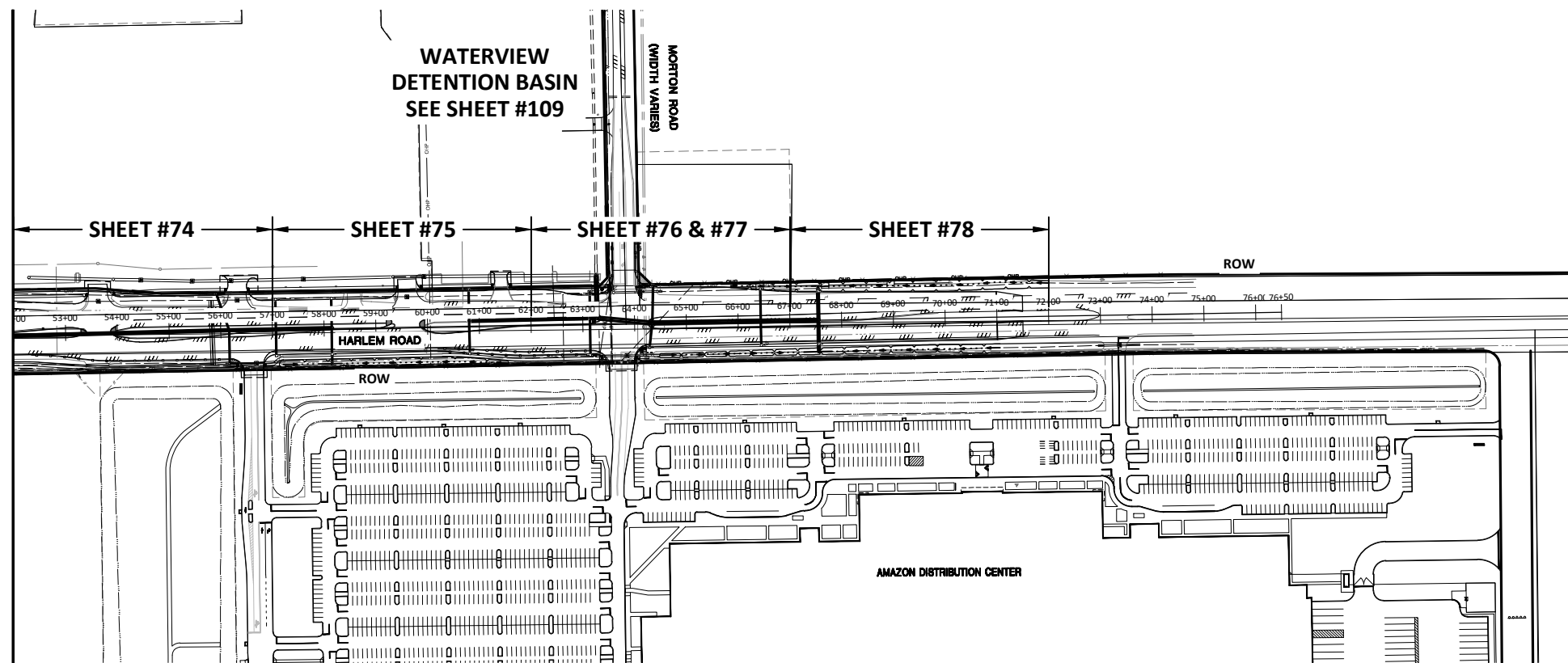
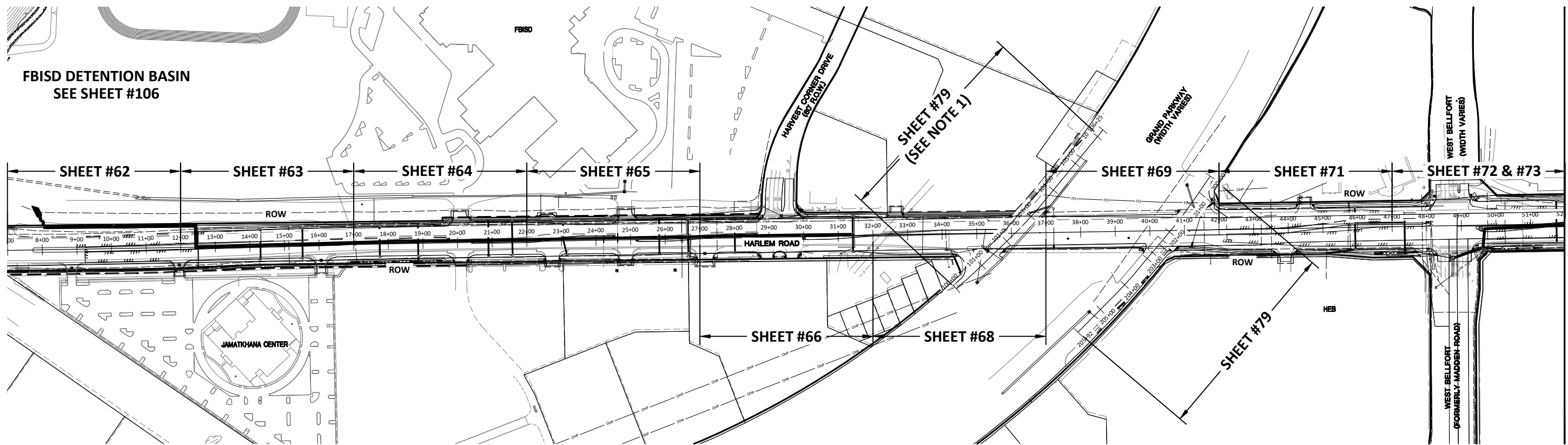
APPROVED: RAF DATE: AUGUST 2023  
 DESIGNED BY: JH DRAWN BY: AA JOB NO.: 0570-006-00

**BENCHMARK:**  
 ALL SURVEY WORK DEPICTED HEREON IS REFERENCED TO THE TEXAS COORDINATES SYSTEM OF 1983, SOUTH CENTRAL ZONE AND WAS DETERMINED BY GLOBAL POSITIONING SYSTEMS METHODS. ALL BEARINGS AND COORDINATES LISTED ARE SURFACE AND CAN BE BROUGHT TO GRID BY APPLYING A COMBINED PROJECT SCALE FACTOR = 0.99987872081.  
**ELEVATION REFERENCE:** - N.G.S. A-1212 (1973) [PID A44725] - FOUND BRASS DISK ON TOP OF WEST END OF NORTH CONCRETE HEADWALL ON BOX CULVERT UNDER U.S. HIGHWAY NO. 90-A WEST-BOUND LANES AT WEST SIDE OF HARLEM ROAD. ELEVATION = 78.18' (NAVD88)

**HARLEM ROAD RECONSTRUCTION**

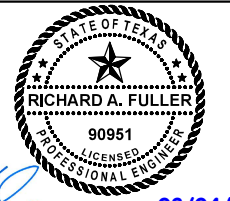
**PROPOSED TYPICAL SECTION (SHEET 1 OF 2)**

FILE NO:	
DRAWING SCALE:	
HORZ: N/A	
VERT: N/A	
SHEET No: <b>8 OF 285</b>	



**NOTES:**

1. CONTRACTOR SHALL NOT START CONSTRUCTION FOR THIS RIGHT TURN LANE UNTIL ROW IS ACQUIRED.



*Richard A. Fuller*  
08/04/2023

**IDS Engineering Group**  
13430 NW, Freeway Suite 700  
Houston, Tx 77040  
713.462.3178  
Tel: 713.462.3178  
Fax: 713.462.3178  
Toll Free: 1-800-451-7272

APPROVED	RAF	DATE:	AUGUST 2023
DESIGNED BY:	JH	DRAWN BY:	AA
		JOB NO.:	0570-006-00

**BENCHMARK:**  
ALL SURVEY WORK DEPICTED HEREON IS REFERENCED TO THE TEXAS COORDINATE SYSTEM OF 1983, SOUTH CENTRAL ZONE AND WAS DETERMINED BY GLOBAL POSITIONING SYSTEMS METHODS. ALL BEARINGS AND COORDINATES LISTED ARE SURFACE AND CAN BE BROUGHT TO GRID BY APPLYING A COMBINED PROJECT SCALE FACTOR = 0.99987872081.

ELEVATION REFERENCE - N.G.S. A-1212 (1973) [PID A47425] - FOUND BRASS DISK ON TOP OF WEST END OF NORTH CONCRETE HEADWALL ON BOX CULVERT UNDER U.S. HIGHWAY NO. 90-A WEST-BOUND LANES AT WEST SIDE OF HARLEM ROAD. ELEVATION = 78.18' (NAVD88)

**HARLEM ROAD RECONSTRUCTION**

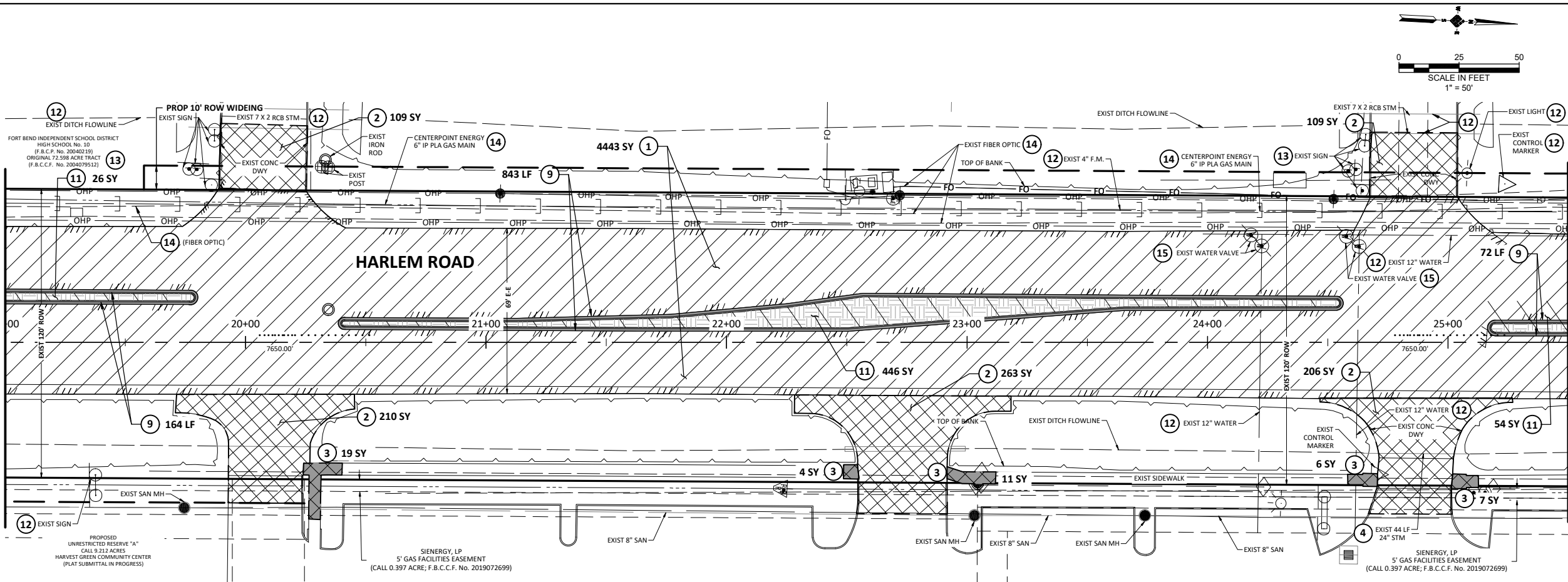
**PROJECT LAYOUT**

FILE NO:	
DRAWING SCALE:	
HORIZ:	1"=300'
VERT:	N/A
SHEET No.:	<b>11 OF 285</b>

\\ids\eng\1\Projects\0500\057000600 Harlem Road - FRC 2017\Mobility\Projects\CAD\DWG\CALAYOUT.dwg (Project Layout) Plotted Aug 04, 2023 at 11:57am by cvalleja (Last Saved by: malajid)

No.	Date	Revisions

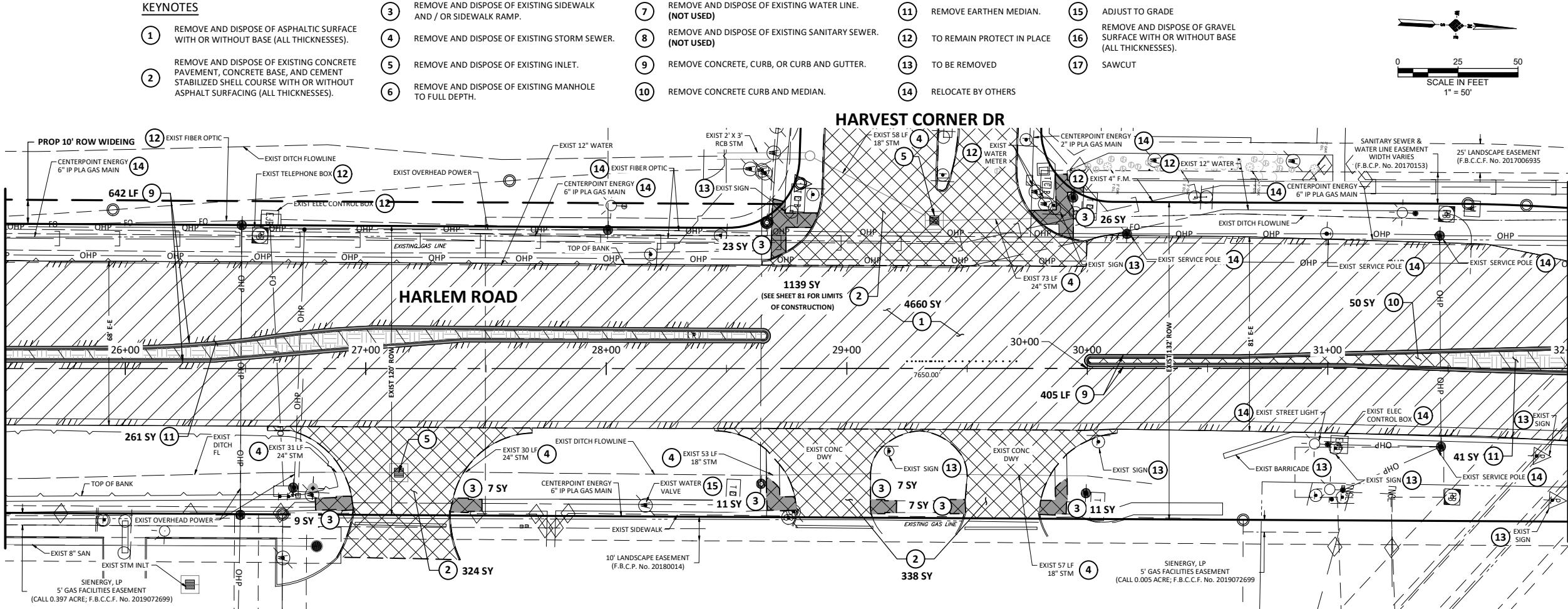
MATCHLINE B.L. STA. 19+00  
SEE SHEET 41



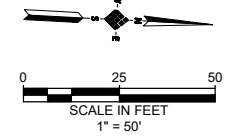
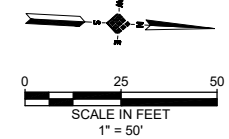
**KEYNOTES**

- |   |  |   |   |   |   |   |   |  |                                     |                           |                               |                  |                       |                    |   |           |
|---|--|---|---|---|---|---|---|--|-------------------------------------|---------------------------|-------------------------------|------------------|-----------------------|--------------------|---|-----------|
| 1 REMOVE AND DISPOSE OF ASPHALTIC SURFACE WITH OR WITHOUT BASE (ALL THICKNESSES). | 2 REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT, CONCRETE BASE, AND CEMENT STABILIZED SHELL COURSE WITH OR WITHOUT ASPHALT SURFACING (ALL THICKNESSES). | 3 REMOVE AND DISPOSE OF EXISTING SIDEWALK AND / OR SIDEWALK RAMP. | 4 REMOVE AND DISPOSE OF EXISTING STORM SEWER. | 5 REMOVE AND DISPOSE OF EXISTING INLET. | 6 REMOVE AND DISPOSE OF EXISTING MANHOLE TO FULL DEPTH. | 7 REMOVE AND DISPOSE OF EXISTING WATER LINE. (NOT USED) | 8 REMOVE AND DISPOSE OF EXISTING SANITARY SEWER. (NOT USED) | 9 REMOVE CONCRETE, CURB, OR CURB AND GUTTER. | 10 REMOVE CONCRETE CURB AND MEDIAN. | 11 REMOVE EARTHEN MEDIAN. | 12 TO REMAIN PROTECT IN PLACE | 13 TO BE REMOVED | 14 RELOCATE BY OTHERS | 15 ADJUST TO GRADE | 16 REMOVE AND DISPOSE OF GRAVEL SURFACE WITH OR WITHOUT BASE (ALL THICKNESSES). | 17 SAWCUT |
|---|--|---|---|---|---|---|---|--|-------------------------------------|---------------------------|-------------------------------|------------------|-----------------------|--------------------|---|-----------|

MATCHLINE B.L. STA. 25+50  
SEE ABOVE



MATCHLINE B.L. STA. 32+00  
SEE SHEET 43

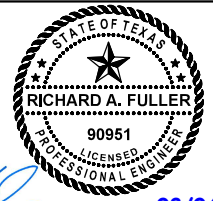


**LEGEND**

- REMOVE EXIST ASPHALT PAVEMENT
- REMOVE EARTHEN AREA OF MEDIAN AND UNDERLYING PAVEMENT
- REMOVE EXIST CONCRETE CURB AND GUTTER
- MILL ASPHALT PAVEMENT
- REMOVE EXIST CONCRETE AND CURB
- REMOVE EXIST GRAVEL DRIVE
- REMOVE AND DISPOSE OF EXISTING SIDEWALK AND / OR SIDEWALK RAMP.
- PROP SAWCUT FOR EXIST CONCRETE

**NOTE:**

SEE SIGNING AND STRIPING SHEETS FOR SIGN REMOVAL.



*Richard A. Fuller* 08/04/2023



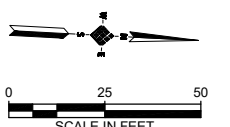
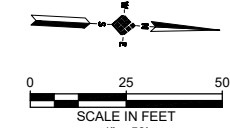
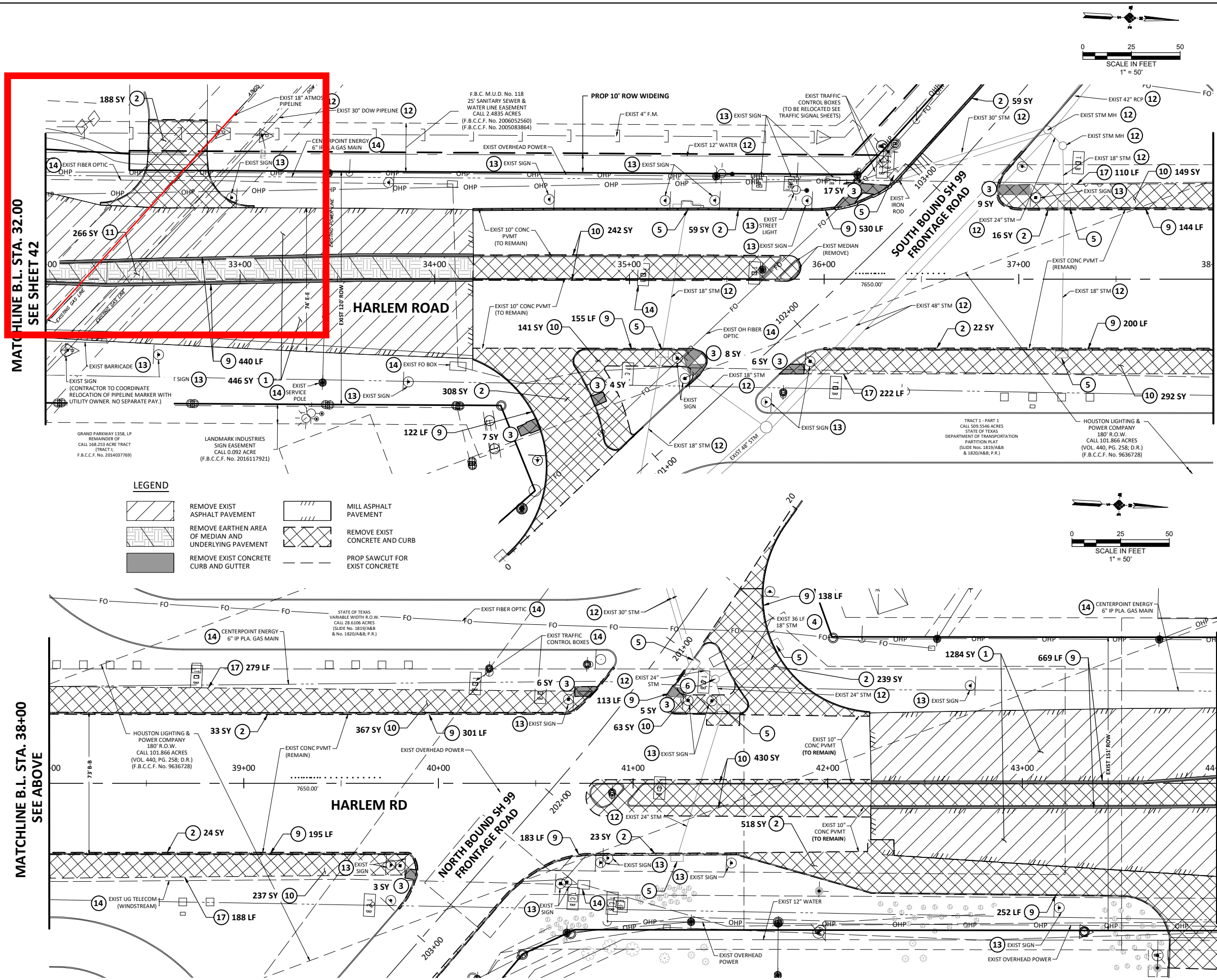
APPROVED: RAF DATE: AUGUST 2023  
DESIGNED BY: JH DRAWN BY: AA JOB NO.: 0570-006-00

**BENCHMARK:**  
ALL SURVEY WORK DEPICTED HEREON IS REFERENCED TO THE TEXAS COORDINATES SYSTEM OF 1983, SOUTH CENTRAL ZONE AND WAS DETERMINED BY GLOBAL POSITIONING SYSTEMS METHODS. ALL BEARINGS AND COORDINATES LISTED ARE SURFACE AND CAN BE BROUGHT TO GRID BY APPLYING A COMBINED PROJECT SCALE FACTOR = 0.99987872081.  
ELEVATION REFERENCE - N.G.S. A-1212 (1973) [PID A14725]- FOUND BRASS DISK ON TOP OF WEST END OF NORTH CONCRETE HEADWALL ON BOX CULVERT UNDER U.S. HIGHWAY NO. 90-A WEST-BOUND LANES AT WEST SIDE OF HARLEM ROAD. ELEVATION = 78.18' (NAVD88).

**HARLEM ROAD RECONSTRUCTION**

**DEMOLITION PLAN (SHEET 2 OF 7)**

FILE NO:	
DRAWING SCALE:	
HORZ: AS NOTED	
VERT:	
SHEET No: 42 OF 285	



**LEGEND**

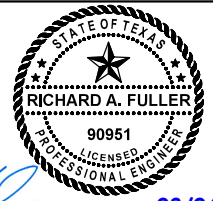
	REMOVE EXIST ASPHALT PAVEMENT		MILL ASPHALT PAVEMENT
	REMOVE EARTHEN AREA OF MEDIAN AND UNDERLYING PAVEMENT		REMOVE EXIST CONCRETE AND CURB
	REMOVE EXIST CONCRETE CURB AND GUTTER		PROP SAWCUT FOR EXIST CONCRETE

**KEYNOTES**

- 1 REMOVE AND DISPOSE OF ASPHALTIC SURFACE WITH OR WITHOUT BASE ( ALL THICKNESSES ).
- 2 REMOVE AND DISPOSE OF EXISTING CONCRETE PAVEMENT, CONCRETE BASE, AND CEMENT STABILIZED SHELL COURSE WITH OR WITHOUT ASPHALT SURFACING ( ALL THICKNESSES ).
- 3 REMOVE AND DISPOSE OF EXISTING SIDEWALK AND / OR SIDEWALK RAMP.
- 4 REMOVE AND DISPOSE OF EXISTING STORM SEWER.
- 5 REMOVE AND DISPOSE OF EXISTING INLET.
- 6 REMOVE AND DISPOSE OF EXISTING MANHOLE TO FULL DEPTH.
- 7 REMOVE AND DISPOSE OF EXISTING WATER LINE.
- 8 REMOVE AND DISPOSE OF EXISTING SANITARY SEWER. (NOT USED)
- 9 REMOVE CONCRETE, CURB, OR CURB AND GUTTER. (NOT USED)
- 10 REMOVE CONCRETE CURB AND MEDIAN.
- 11 REMOVE EARTHEN MEDIAN.
- 12 TO REMAIN PROTECT IN PLACE
- 13 TO BE REMOVED
- 14 RELOCATE BY OTHERS
- 15 ADJUST TO GRADE
- 16 REMOVE AND DISPOSE OF GRAVEL SURFACE WITH OR WITHOUT BASE ( ALL THICKNESSES ).
- 17 SAWCUT

**NOTE:**

SEE SIGNING AND STRIPING SHEETS FOR SIGN REMOVAL.



*Richard A. Fuller*  
 08/04/2023

**IDS Engineering Group**  
 13430 NW, Freeway Suite 700  
 Houston, Tx. 77040  
 713.462.3178  
 Teling Firm 2726  
 TeSurvey Firm 10110700

APPROVED	RAF	DATE	AUGUST 2023
DESIGNED BY:	JH	DRAWN BY:	AA
		JOB NO.	0570-006-00

**BENCHMARK:**  
 ALL SURVEY WORK DEPICTED HEREON IS REFERENCED TO THE TEXAS COORDINATES SYSTEM OF 1983, SOUTH CENTRAL ZONE AND WAS DETERMINED BY GLOBAL POSITIONING SYSTEMS METHODS. ALL BEARINGS AND COORDINATES LISTED ARE SURFACE AND CAN BE BROUGHT TO GRID BY APPLYING A COMBINED PROJECT SCALE FACTOR = 0.99987872081.

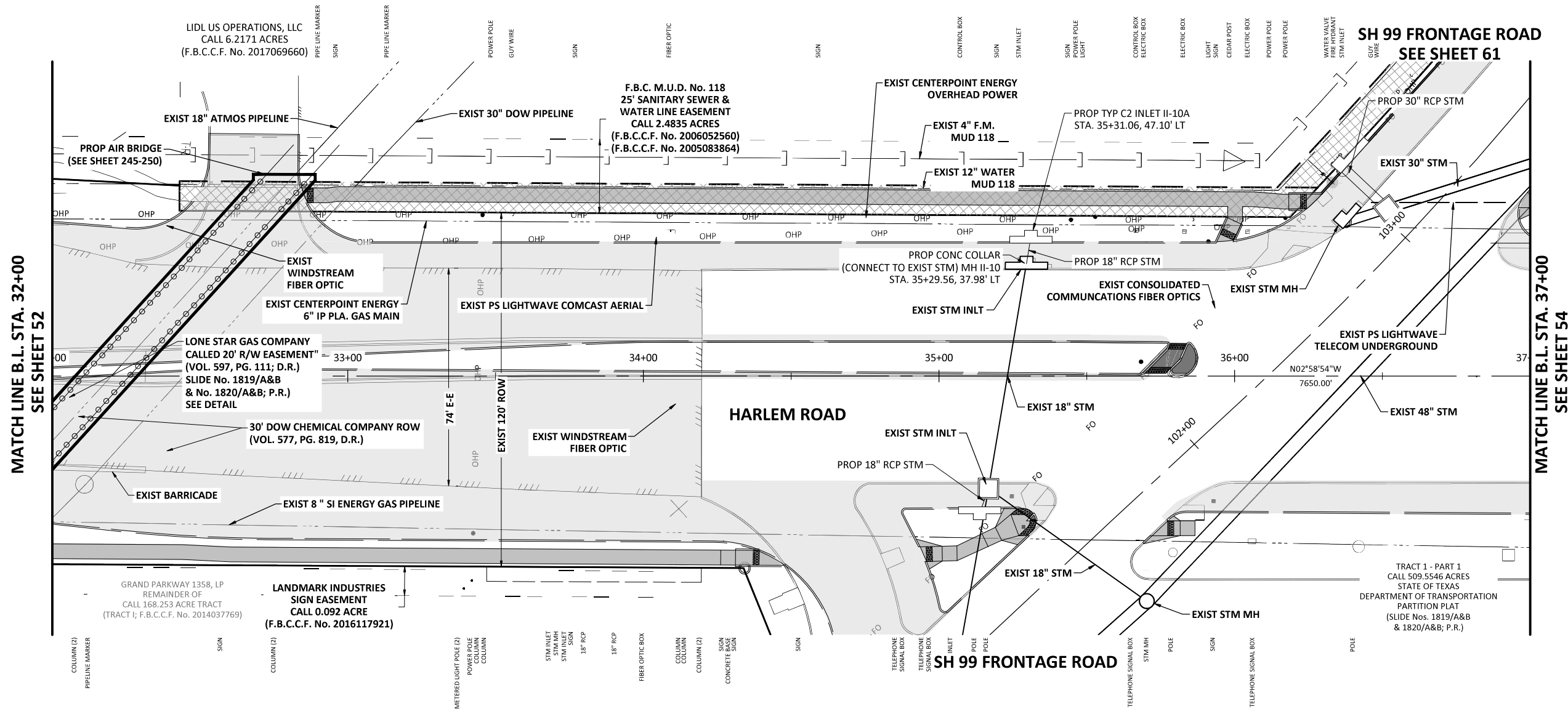
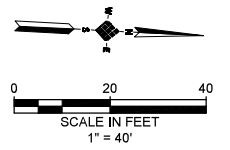
ELEVATION REFERENCE - N.G.S. A-1212 (1973) [PID A14725]- FOUND BRASS DISK ON TOP OF WEST END OF NORTH CONCRETE HEADWALL ON BOX CULVERT UNDER U.S. HIGHWAY NO. 90-A WEST-BOUND LANES AT WEST SIDE OF HARLEM ROAD. ELEVATION = 78.18' (NAVD88)

**HARLEM ROAD RECONSTRUCTION**

**DEMOLITION PLAN (SHEET 3 OF 7)**

FILE NO:	
DRAWING SCALE:	
HORZ:	AS NOTED
VERT:	
SHEET No:	43 OF 285





**LEGEND**

- PROPOSED ROADWAY
- PROPOSED SIDEWALK

**NOTE:**

- DEPTH OF COMMUNICATION LINES NOT FIELD VERIFIED

STATE OF TEXAS  
 RICHARD A. FULLER  
 90951  
 LICENSED PROFESSIONAL ENGINEER  
 08/04/2023

**IDS Engineering Group**  
 13430 NW, Freeway Suite 700  
 Houston, Tx. 77040  
 713.462.3178  
 Teling Firm 2726  
 TxSurv Firm 18110700

APPROVED	RAF	DATE	AUGUST 2023
DESIGNED BY	JH	DRAWN BY	AA
		JOB NO.	0570-006-00

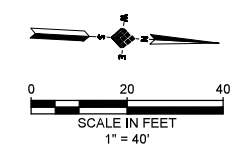
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ELEVATION REFERENCE - N.G.S. A-1212 (1973) [PID AW4725] - FOUND BRASS DISK ON TOP OF WEST END OF NORTH CONCRETE HEADWALL ON BOX CULVERT UNDER U.S. HIGHWAY NO. 90-A WEST-BOUND LANES AT WEST SIDE OF HARLEM ROAD. ELEVATION = 78.18' (NAVD88)

**HARLEM ROAD RECONSTRUCTION**

**EXISTING UTILITY PLAN HARLEM ROAD STA 32+00 TO STA 37+00**

FILE NO:	
DRAWING SCALE:	
HORZ:	1" = 40'
VERT:	1" = 4'
SHEET No:	53 OF 285



**KEY NOTES**

- 1 PROP BI-DIRECTIONAL RAMP (SEE DETAIL SHEET 207)
- 2 PROP TYPE 7 CURB RAMP (SEE DETAIL SHEET 207)
- 3 PROP TYPE 5 CURB RAMP (SEE DETAIL SHEET 207)
- 4 PROP TYPE 22 CURB RAMP (SEE DETAIL SHEET 207)

**LEGEND**

- REMOVE AND DISPOSE OF EXIST CONCRETE PAVEMENT WITH OR WITHOUT CURB.
- DIRECTION OF DRAINAGE FLOW
- PROPOSED RIGHT OF WAY TAKING
- SAWCUT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE PAVING

TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT ENERGY AT 713-207-2222.

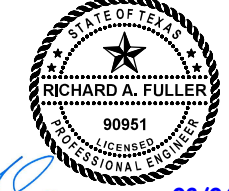
NOTICE: For your safety, you are required by Texas Law to call 811 at least 48 hours before you dig so that underground lines can be marked. This Signature does not fulfill your obligation to call 811.

**VERIFICATION OF PRIVATE UTILITY LINES**

Date: \_\_\_\_\_  
CenterPoint Energy/Natural Gas Facilities Verification ONLY. (This Signature verifies that you have shown CNP Natural Gas lines correctly - not to be used for conflict verification.) (Gas service lines are not shown.) Signature Valid for six months.

Date: \_\_\_\_\_  
CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities - not to be used for conflict verification.) Signature Valid for six months.

Date: \_\_\_\_\_  
Approved for AT&T Texas/SWBT underground conduit facilities only. Signature valid for one year.



**IDS Engineering Group**  
13430 NW, Freeway Suite 700  
Houston, TX 77040  
713.462.3178  
Texas Firm 08110700

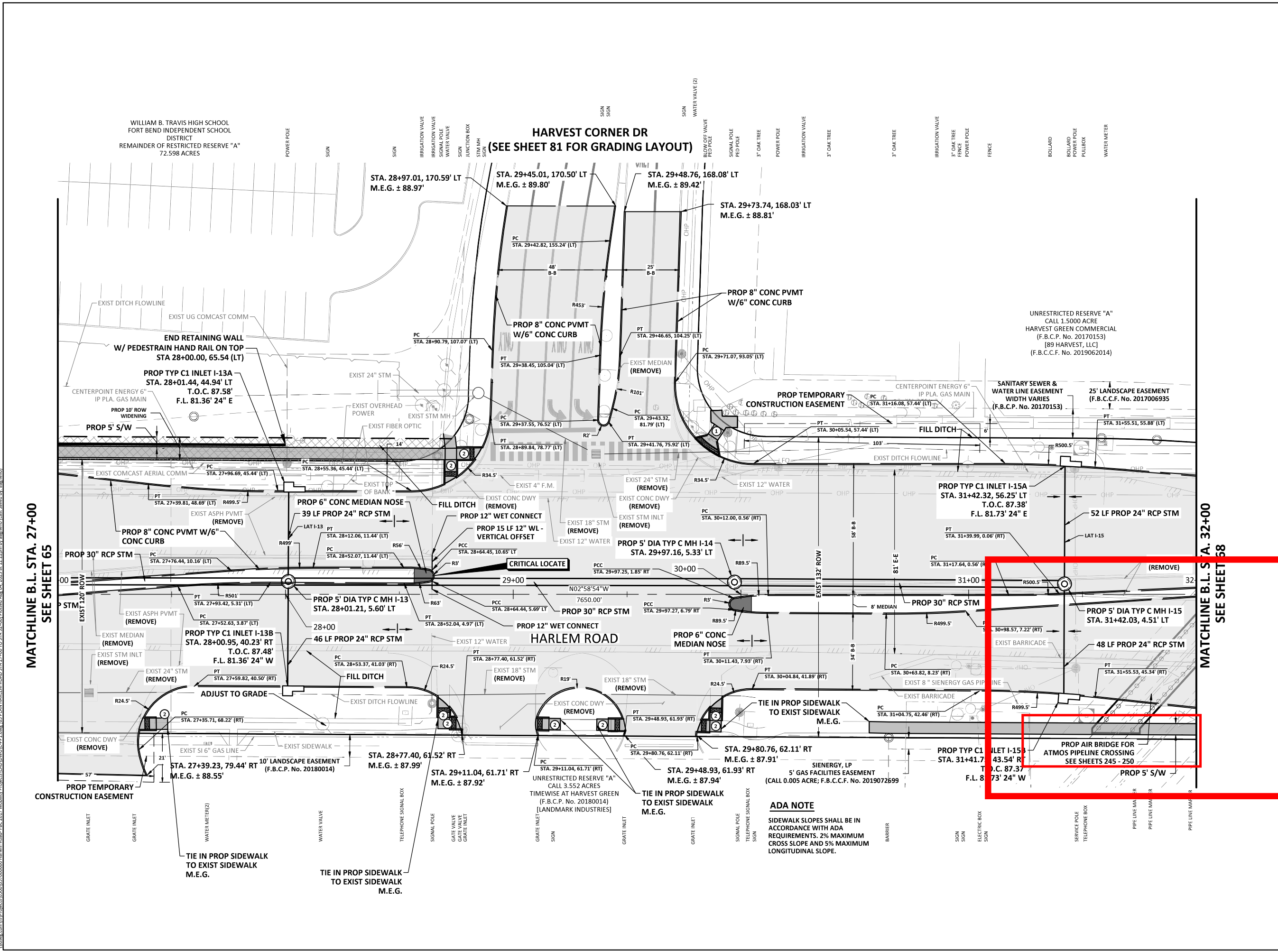
APPROVED	RAF	DATE	AUGUST 2023
DESIGNED BY	JH	DRAWN BY	AA
		JOB NO.	0570-006-00

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ALL SURVEY WORK DEPICTED HEREON IS REFERENCED TO THE TEXAS COORDINATES SYSTEM OF 1983, SOUTH CENTRAL ZONE AND WAS DETERMINED BY GLOBAL POSITIONING SYSTEMS METHODS. ALL BEARINGS AND COORDINATES LISTED ARE SURFACE AND CAN BE BROUGHT TO GRID BY APPLYING A COMBINED PROJECT SCALE FACTOR = 0.99987872081.  
ELEVATION REFERENCE = N.G.S. A-1212 (1973) [PID AW4725] - FOUND BRASS DISK ON TOP OF WEST END OF NORTH CONCRETE HEADWALL ON BOX CULVERT UNDER U.S. HIGHWAY NO. 90-A WEST-BOUND LANES AT WEST SIDE OF HARLEM ROAD. ELEVATION = 78.18' (NAVD83)

**HARLEM ROAD RECONSTRUCTION**

**PLAN AND PROFILE HARLEM ROAD STA 27+00 TO STA 32+00**

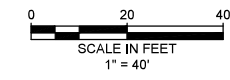
FILE NO:	
DRAWING SCALE:	
HORZ:	1" = 40'
VERT:	1" = 4'
SHEET No:	66 OF 285



MATCHLINE B.L. STA. 27+00 SEE SHEET 65

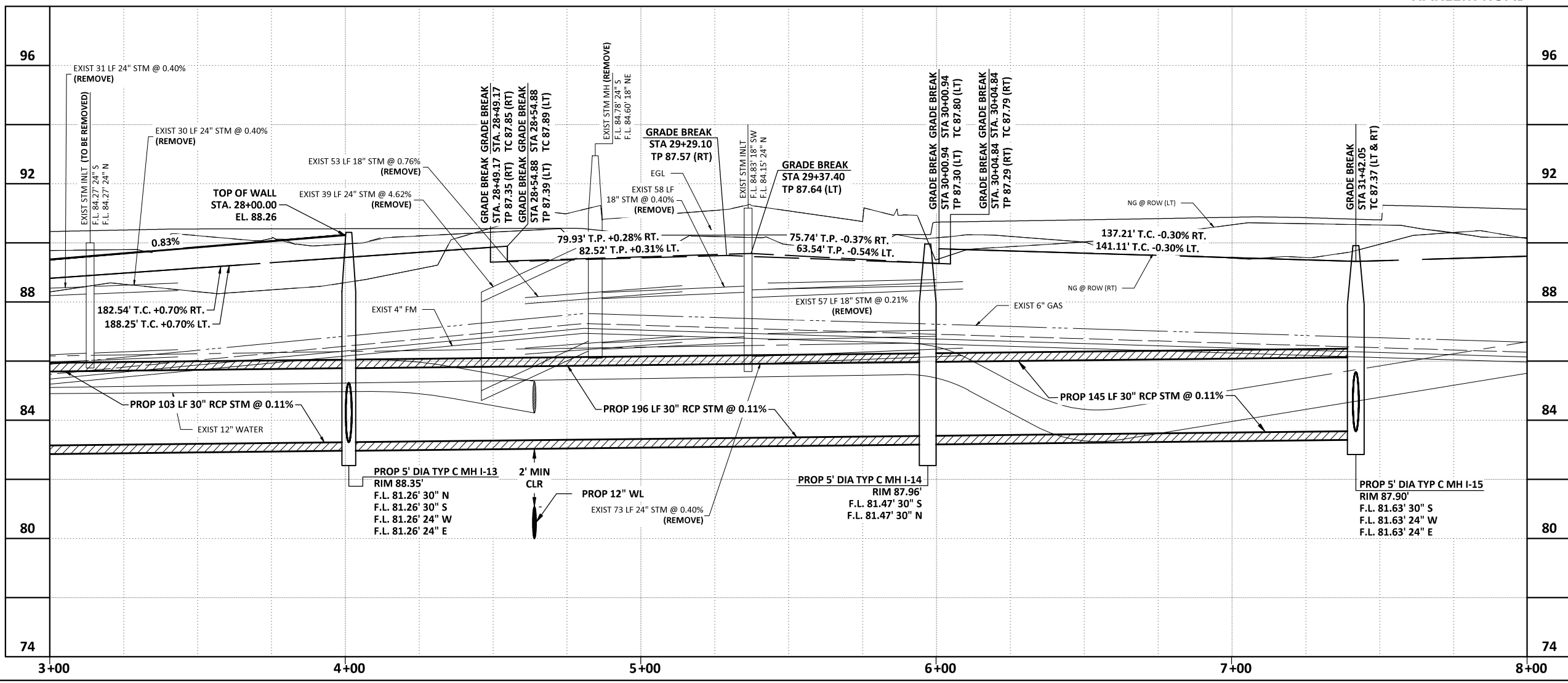
MATCHLINE B.L. STA. 32+00 SEE SHEET 58

\\idseng.com\Projects\0500\057000600 Harlem Road - FBC 2017\Mobility\Projects\CADD\DWG\C-P1.dwg (65 PLAN HARLEM ROAD STA. 27+00 TO STA. 32+00) Plotted Aug 04, 2023 at 12:22pm by asaguelo



App.	
Revisions	
No.	Date

**HARLEM ROAD**



TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT ENERGY AT 713-207-2222.

NOTICE: For your safety, you are required by Texas Law to call 811 at least 48 hours before you dig so that underground lines can be marked. This Verification does not fulfill your obligation to call 811.

**VERIFICATION OF PRIVATE UTILITY LINES**

Date: \_\_\_\_\_  
CenterPoint Energy/Natural Gas Facilities Verification ONLY. (This signature verifies that you have shown CNP Natural Gas lines correctly -not to be used for conflict verification.) (Gas service lines are not shown.) Signature Valid for six months.

Date: \_\_\_\_\_  
CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities -not to be used for conflict verification.) Signature Valid for six months.

Date: \_\_\_\_\_  
Approved for AT&T Texas/SWBT underground conduit facilities only. Signature valid for one year.

**IDS Engineering Group**  
13430 NW, Freeway Suite 700  
Houston, Tx. 77040  
713.462.3178  
Tolling Firm 2726  
TexSurv Firm 10110700

APPROVED	RAF	DATE	AUGUST 2023
DESIGNED BY	JH	DRAWN BY	AA
		JOB NO.	0570-006-00

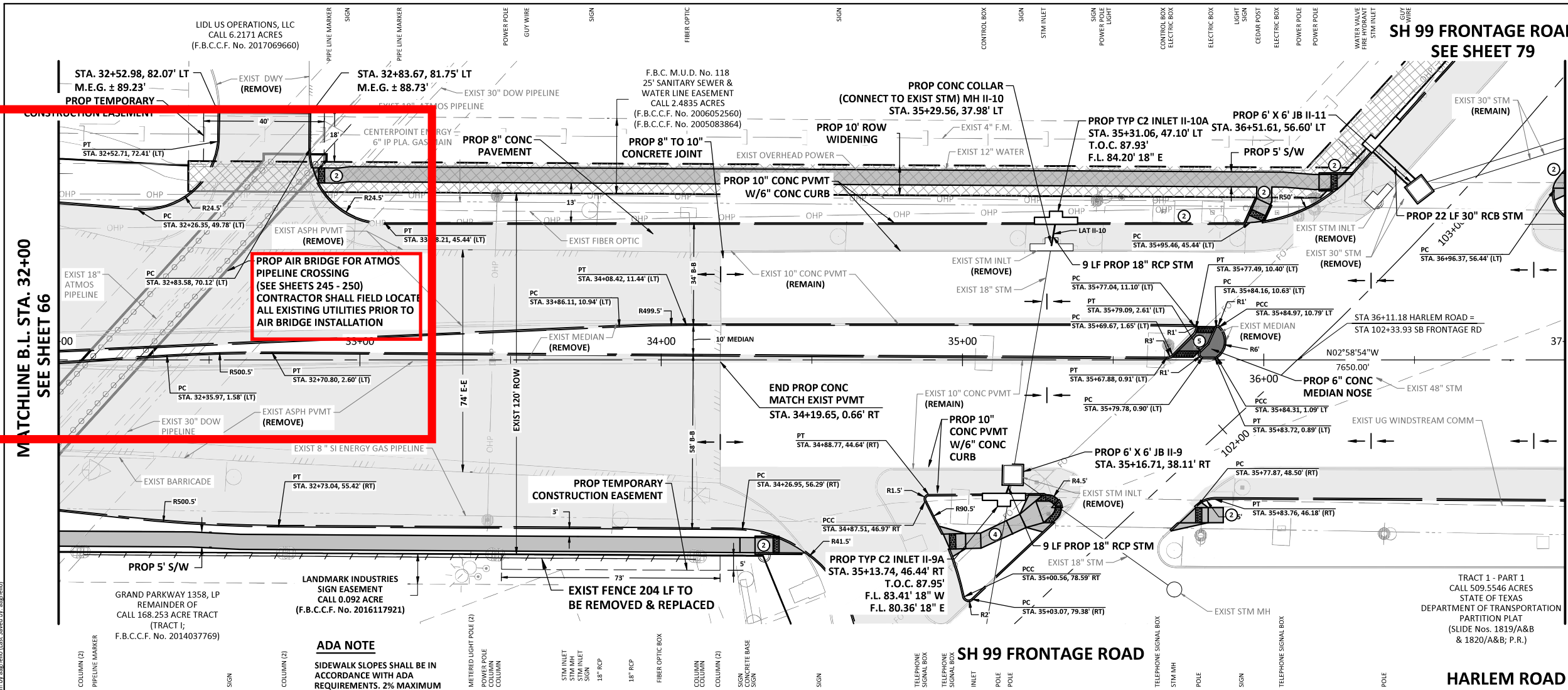
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ELEVATION REFERENCE - N.G.S. A-1212 (1973) [PID AW4725] - FOUND BRASS DISK ON TOP OF WEST END OF NORTH CONCRETE HEADWALL ON BOX CULVERT UNDER U.S. HIGHWAY NO. 90-A WEST-BOUND LANES AT WEST SIDE OF HARLEM ROAD. ELEVATION = 78.18' (NAVD88)

**HARLEM ROAD RECONSTRUCTION**

**SIGNAGE AND STRIPING PLAN  
HARLEM ROAD  
STA 1+00 TO STA 5+00**

FILE NO:	
DRAWING SCALE:	
HORZ:	1" = 40'
VERT:	1" = 4'
SHEET No:	67 OF 285

\\idsa.com\MyProjects\0500\057000600 Harlem Road\_FBC 2017\Mobility Projects\CADD\DWG\C-PEI.dwg, 666 PROFILE HARLEM ROAD STA 27+00 TO STA 32+00, Plotted Aug. 04, 2023 at 12:22pm by aangelio (Last Saved by aangelio)



- KEY NOTES**
1. PROP BI-DIRECTIONAL RAMP (SEE DETAIL SHEET 207)
  2. PROP TYPE 7 CURB RAMP (SEE DETAIL SHEET 207)
  3. PROP TYPE 5 CURB RAMP (SEE DETAIL SHEET 207)
  4. PROP TYPE 22 CURB RAMP (SEE DETAIL SHEET 207)
  5. PROP TYPE 21 CURB RAMP (SEE DETAIL SHEET 207)

- LEGEND**
- REMOVE AND DISPOSE OF EXIST CONCRETE PAVEMENT WITH OR WITHOUT CURB.
  - DIRECTION OF DRAINAGE FLOW
  - PROPOSED RIGHT OF WAY TAKING
  - SAWCUT
  - PROPOSED CONCRETE SIDEWALK
  - PROPOSED CONCRETE PAVING

**PROP AIR BRIDGE FOR ATMOS PIPELINE CROSSING (SEE SHEETS 245 - 250)**  
 CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO AIR BRIDGE INSTALLATION

- NOTE:**
1. CONTRACTOR TO NOTIFY ATMOS & DOW PIPELINE OWNERS 2 WEEKS PRIOR TO MOBILIZING WORK IN THIS AREA.
- ATMOS CONTACT - (979) 286 - 4939  
 DOW CONTACT - (281) 804 - 5330

TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED, CALL CENTERPOINT ENERGY AT 713-207-2222.

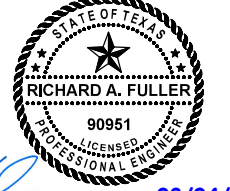
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Date: \_\_\_\_\_  
 CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities - not to be used for conflict verification.) Signature Valid for six months.

Date: \_\_\_\_\_  
 Approved for AT&T Texas/SWBT underground conduit facilities only. Signature valid for one year.



08/04/2023



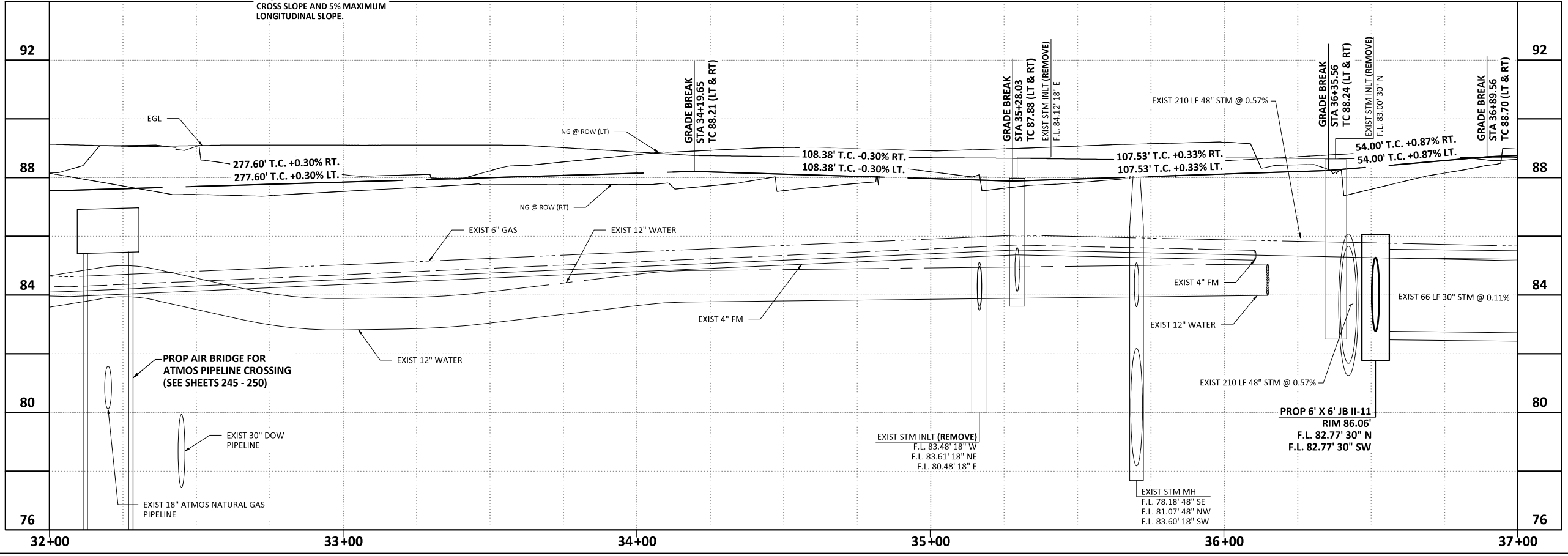
APPROVED: RAF DATE: AUGUST 2023  
 DESIGNED BY: JH DRAWN BY: AA JOB NO: 0570-006-00

**BENCHMARK:**  
 ALL SURVEY WORK DEPICTED HEREON IS REFERENCED TO THE TEXAS COORDINATES SYSTEM OF 1983, SOUTH CENTRAL ZONE AND WAS DETERMINED BY GLOBAL POSITIONING SYSTEMS METHODS. ALL BEARINGS AND COORDINATES LISTED ARE SURFACE AND CAN BE BROUGHT TO GRID BY APPLYING A COMBINED PROJECT SCALE FACTOR = 0.99987872081.

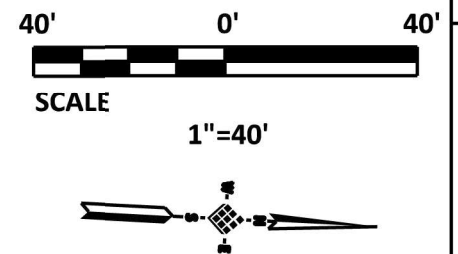
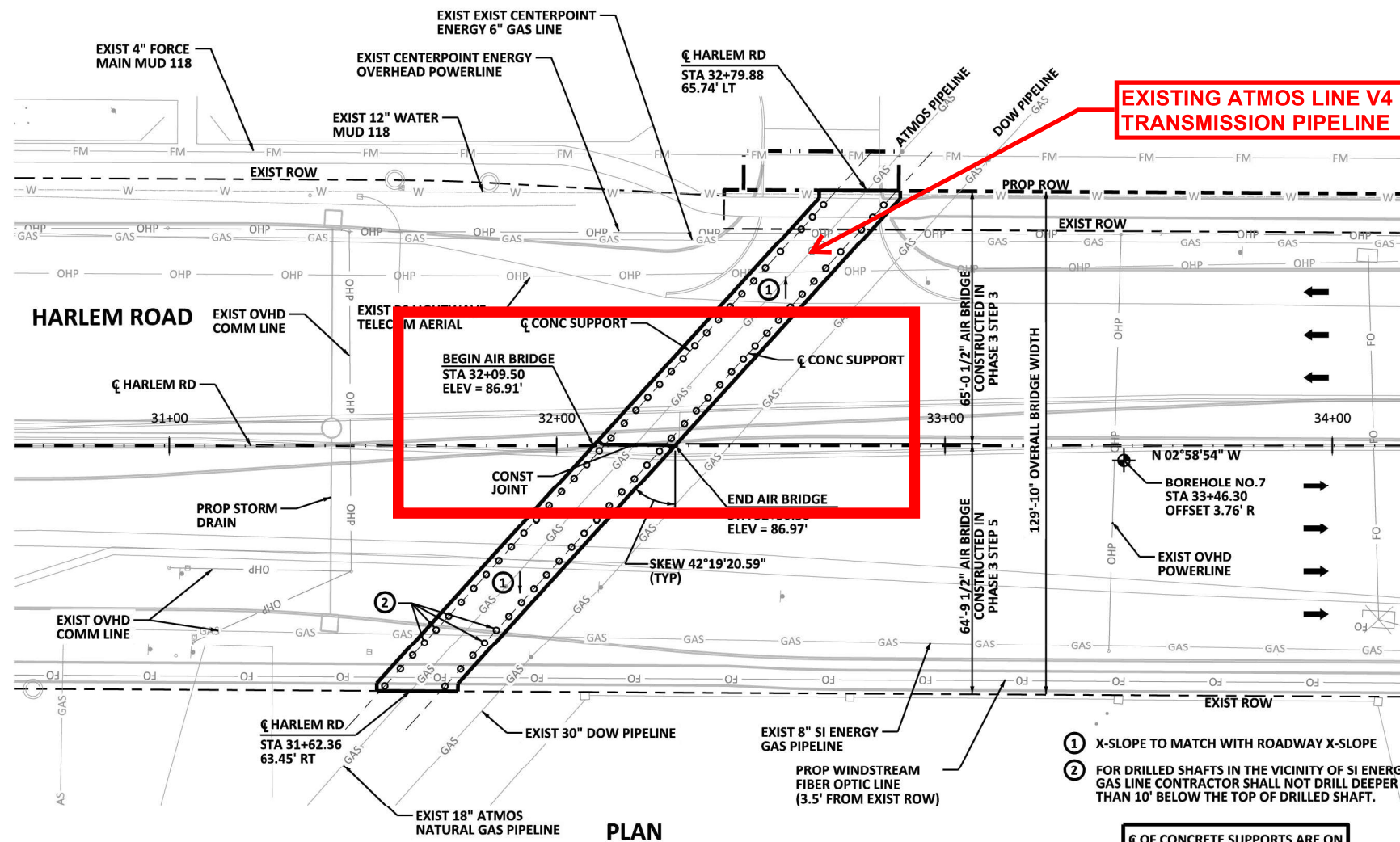
ELEVATION REFERENCE - N.G.S. A-1212 (1973) [PID AW4725] - FOUND BRASS DISK ON TOP OF WEST END OF NORTH CONCRETE HEADWALL ON BOX CULVERT UNDER U.S. HIGHWAY NO. 90-A WEST-BOUND LANES AT WEST SIDE OF HARLEM ROAD. ELEVATION = 78.18' (NAVD88)

**HARLEM ROAD RECONSTRUCTION**  
**PLAN AND PROFILE HARLEM ROAD STA 32+00 TO STA 37+00**

FILE NO:	
DRAWING SCALE:	
HORIZ: 1" = 40'	
VERT: 1" = 4'	
SHEET No: 68 OF 285	



\\dcsa.com\Projects\0500\05700600 Harlem Road - FBC 2017 Mobility Projects\CADD\WG\C-PT.dwg 655 PLAN AND PROFILE HARLEM ROAD STA 32+00 TO STA 37+00 Plotted Aug 04, 2023 at 12:23pm by ragnello (Last Saved by: ragnello)



- NOTES:**
1. THE CONTRACTOR WILL VERIFY THE LOCATION AND ELEVATION OF ATMOS NATURAL GAS PIPELINE AND ALL EXISTING UTILITIES CROSSING OVER ATMOS PIPELINE PRIOR TO ANY EXCAVATION OVER PIPELINE AND DRILLED SHAFT INSTALLATION. SEE ROADWAY PLAN & PROFILE SHEET FOR MORE INFORMATION.
  2. THE CONTRACTOR WILL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES TO THE EXISTING PUBLIC AND PRIVATE UTILITY LINES DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO PIPELINE, POWER LINE, COMMUNICATION LINES, WATER LINES, FORCE MAIN AND WASTE WATER COLLECTION SYSTEMS. ALL DAMAGES WILL BE REPAIRED IN ACCORDANCE WITH FORT BEND COUNTY, CITY OF RICHMOND AND TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) REQUIREMENTS, WITH NO COST TO THE OWNER OF THE UTILITY.
  3. AIR BRIDGE SHALL BE CONSTRUCTED IN STAGES TO CORRESPOND WITH PROJECT TRAFFIC CONTROL PLANS. UPON BEGIN OF EXCAVATION OVER ATMOS PIPELINE, ALL TRAFFIC, INCLUDING CONSTRUCTION EQUIPMENT, ARE PROHIBITED FROM CROSSING OVER ATMOS PIPELINE UNTIL THE PERMANENT AIR BRIDGE IS COMPLETED. WITH PRIOR APPROVAL FROM ATMOS, A TEMPORARY TIMBER AIR BRIDGE MAY BE USED FOR HEAVY CONSTRUCTION EQUIPMENT CROSSING OVER ATMOS PIPELINE UNTIL PERMANENT AIR BRIDGE IS INSTALLED.
  4. PROPOSED 18" DRILLED SHAFTS MUST HAVE AT LEAST 1.5 FT. HORIZONTAL CLEARANCE FROM EXISTING UTILITIES AT UTILITY CROSSINGS. THE TYPICAL SPACING OF DRILLED SHAFTS MAY BE EXTENDED TO 8.0 FT MAX. SPACING AT CROSSING OF EXISTING UTILITIES. DRILLED SHAFT LOCATIONS IN VICINITY OF UTILITIES MUST BE FIELD STAKED AND LOCATIONS APPROVED PRIOR TO DRILLED SHAFT PLACEMENT.
  5. PER TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAY, STREETS, AND BRIDGES, ALL REINFORCED CONCRETE SHALL BE CLASS C, 3600 PSI COMPRESSIVE STRENGTH. ALL REINFORCEMENT STEEL SHALL BE GRADE 60.
  6. PROPOSED RELOCATION OF UTILITIES SHALL BE COORDINATED WITH PHASED CONSTRUCTION OF THE AIR BRIDGE. DRILLED SHAFTS SHALL BE INSTALLED PRIOR TO ANY PROPOSED UTILITY RELOCATIONS. RELOCATIONS OF UTILITIES SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF AIR BRIDGE SLAB.
  7. VIBRATORY COMPACTION EQUIPMENT ARE PROHIBITED FROM OPERATING WITHIN 25 FEET OF ALL PIPELINE CROSSINGS.

- ① X-SLOPE TO MATCH WITH ROADWAY X-SLOPE
- ② FOR DRILLED SHAFTS IN THE VICINITY OF SI ENERGY GAS LINE CONTRACTOR SHALL NOT DRILL DEEPER THAN 10' BELOW THE TOP OF DRILLED SHAFT.

FOR EPS15 GEOFOAM CONTACT UNIVERSAL CONSTRUCTION FOAM PHONE: 1(410)-498-0000 FAX: 1(410)-498-0300 EMAIL: SALES@UNIVERSALFOAM.COM

☉ OF CONCRETE SUPPORTS ARE ON BEARING N 45°18'14.59"

HL93 LOADING

CIVILCORP, LLC  
FIRM REGISTRATION NUMBER: 10283

7/28/2023

**CivilCorp**  
ENGINEERS - SURVEYORS  
2825 WILCREST DRIVE, SUITE 100, HOUSTON, TEXAS 77042  
TEL: 713-785-9815 FAX: 713-782-6922 TXENG FIRM 10283

APPROVED	RW	DATE	JULY 2023
DESIGNED BY	MV	DRAWN BY	SG
		FIRM NO.	0570-006-00

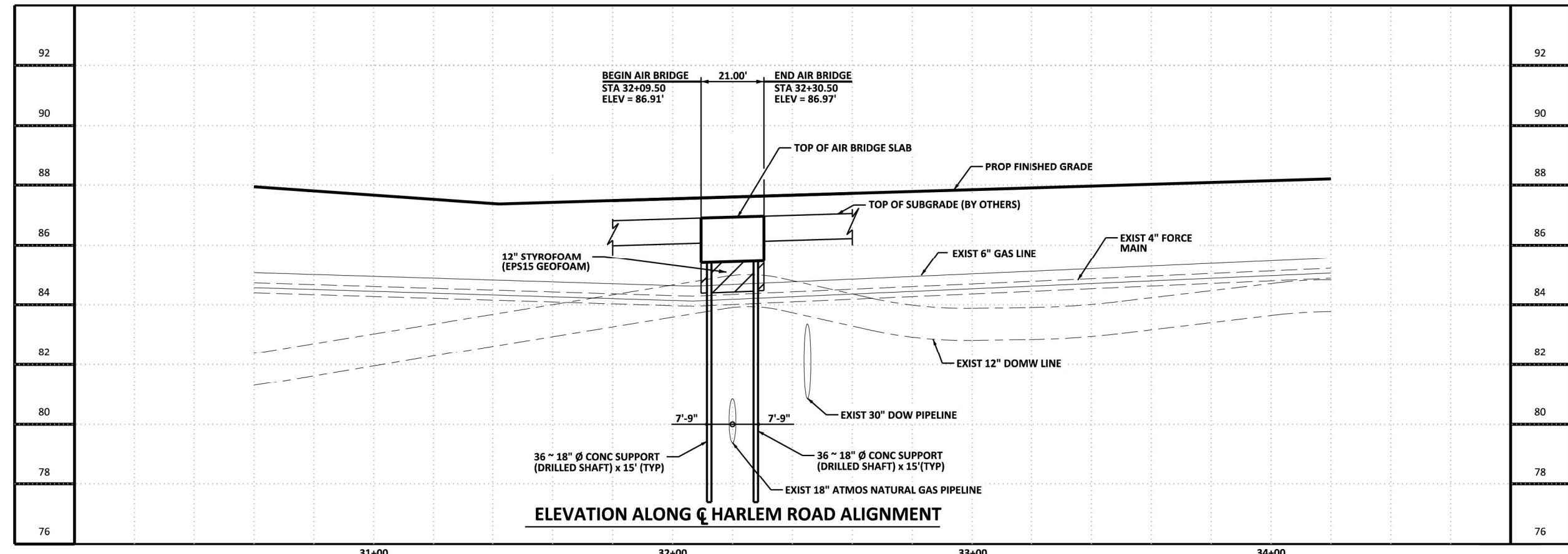
**BENCHMARK:**  
ALL SURVEY WORK DEPICTED HEREON IS REFERENCED TO THE TEXAS COORDINATES SYSTEM OF 1983, SOUTH CENTRAL ZONE AND WAS DETERMINED BY GLOBAL POSITIONING SYSTEMS METHODS. ALL BEARINGS AND COORDINATES LISTED ARE SURFACE AND CAN BE BROUGHT TO GRID BY APPLYING A COMBINED PROJECT SCALE FACTOR = 0.9998782081.

**ELEVATION REFERENCE -** N.G.S. A-1212 (1973) (PID AW4725) - FOUND BRASS DISK ON TOP OF WEST END OF NORTH CONCRETE HEADWALL ON BOX CULVERT UNDER U.S. HIGHWAY NO. 90-A WEST-BOUND LANES AT WEST SIDE OF HARLEM ROAD. ELEVATION = 78.18' (NAVD88)

**HARLEM ROAD RECONSTRUCTION**

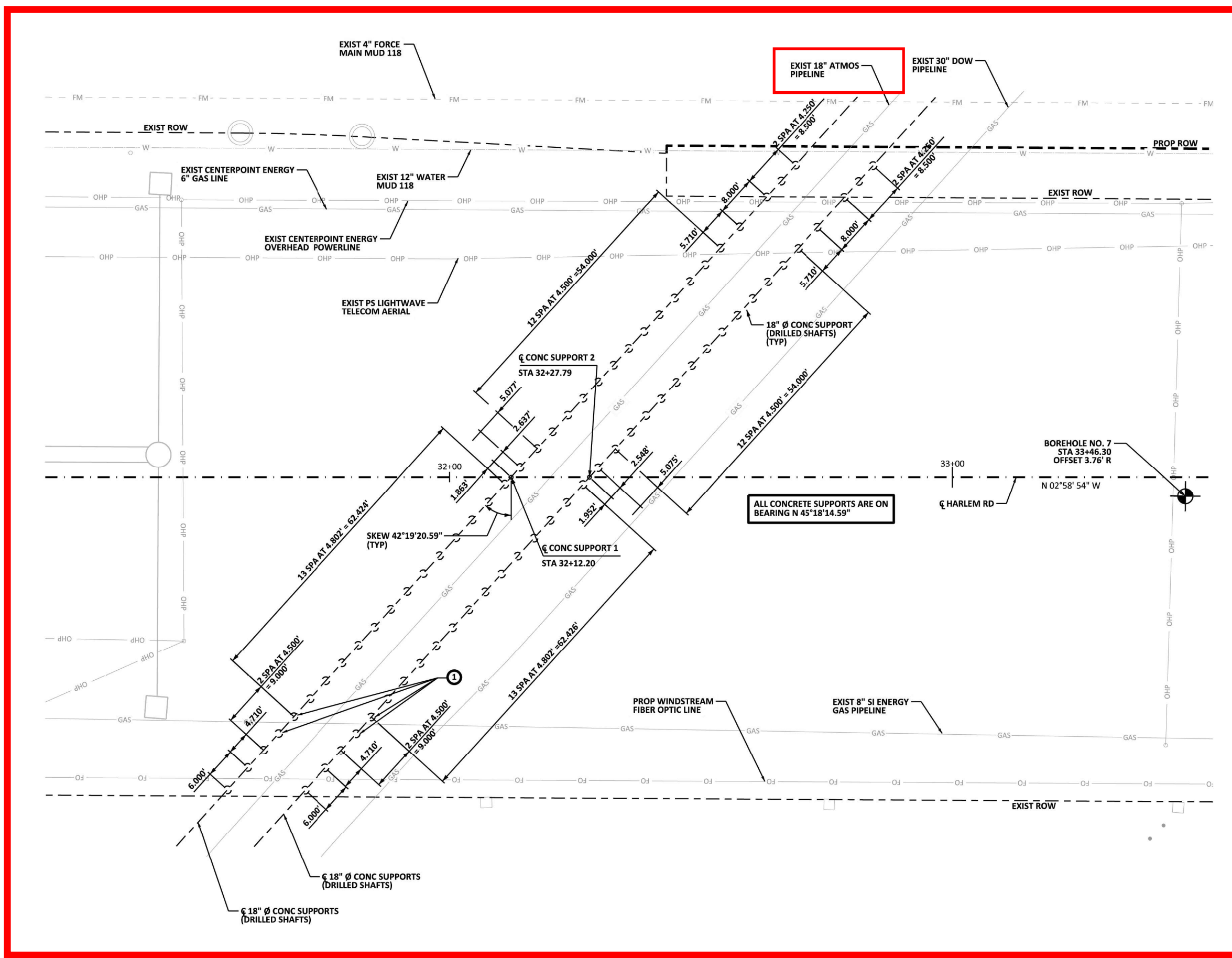
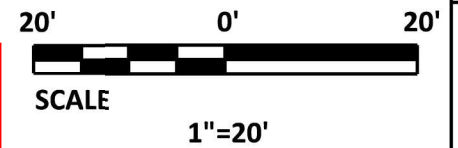
**AIR BRIDGE LAYOUT**

FILE NO:	
DRAWING SCALE:	
HORZ:	1"=40'
VERT:	1"=4'
SHEET No:	245 OF 285



H:\Matthew.Lum\TBD-TITLE BLOCK\hlm\msi.dwg (Model) Plotted: May 25, 2022 at 10:21 am by ssnrow (Last Saved by: ssnrow)





- NOTES:
- SEE AIR BRIDGE LAYOUT FOR NOTES.
- 1 FOR DRILLED SHAFTS IN THE VICINITY OF SI ENERGY GAS LINE CONTRACTOR SHALL NOT DRILL DEEPER THAN 10' BELOW TOP OF DRILLED SHAFT.

HL93 LOADING

CIVILCORP, LLC  
FIRM REGISTRATION NUMBER: 10283

WIRAT WANICHAKORN  
96609  
LICENSED PROFESSIONAL ENGINEER  
7/28/2023

**CivilCorp**  
ENGINEERS - SURVEYORS  
2825 WILCREST DRIVE, SUITE 100, HOUSTON, TEXAS 77042  
TEL: 713-785-9815 FAX: 713-782-6922 TXENG FIRM 10283

APPROVED	RW	DATE	JULY 2023
DESIGNED BY	MV	DRAWN BY	SG
		FIRM NO.	0570-006-00

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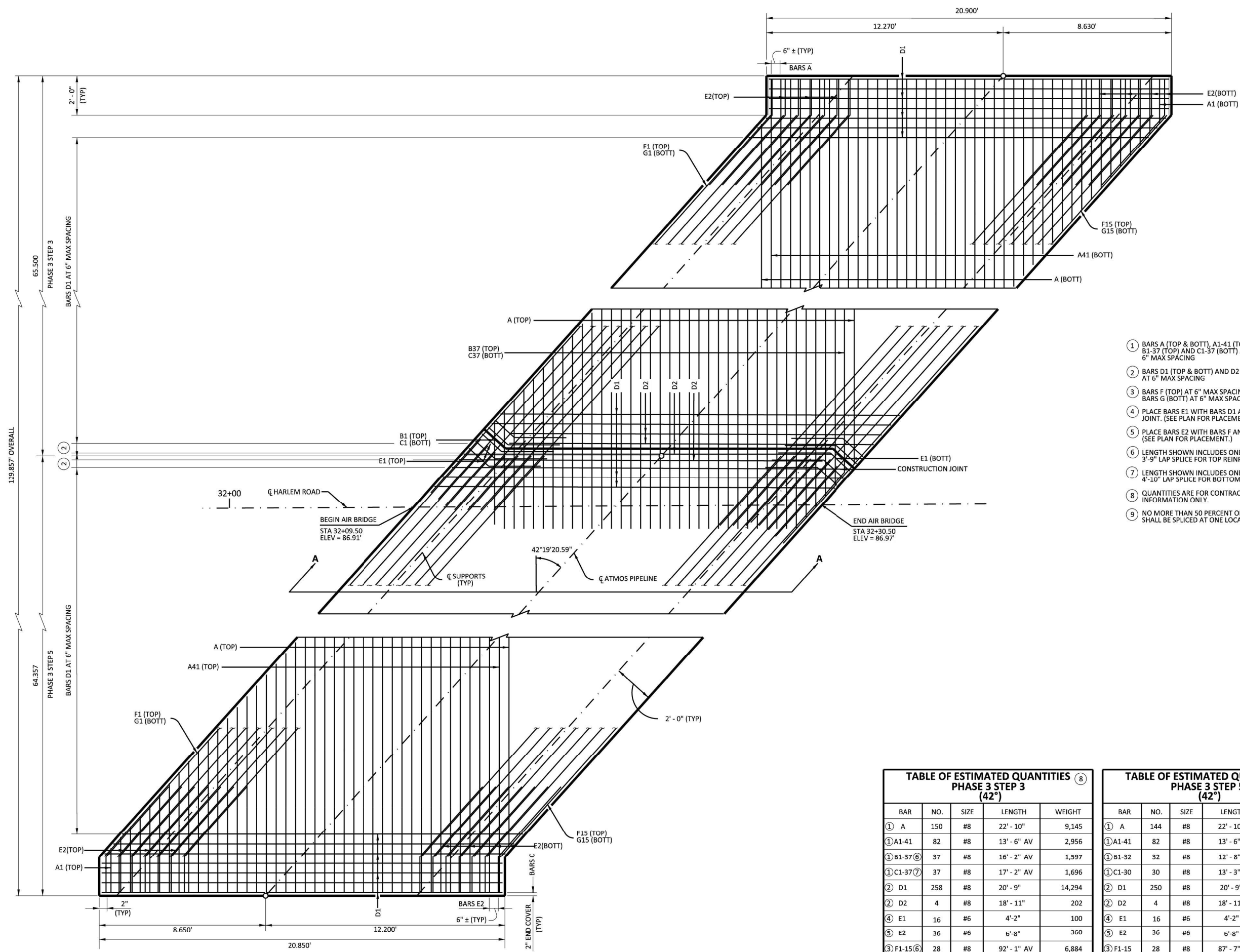
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**HARLEM ROAD RECONSTRUCTION**

**AIR BRIDGE FOUNDATION LAYOUT**

FILE NO:	
DRAWING SCALE:	
HORZ: 1"=20'	
VERT: N/A	
SHEET No. 247 OF 285	

H:\Matthew.Lum\TBD-TITLE BLOCK\hlm\msi.dwg (Model) Plotted: Mon, 25, 2023, at 10:21am by ssnow (Last Saved by: aamelle)



**GENERAL NOTES:**  
DESIGNED ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

**MATERIAL NOTES:**  
PROVIDE CLASS C CONCRETE (F<sub>c</sub> = 3,600 PSI).  
PROVIDE GRADE 60 REINFORCING STEEL.  
REINFORCEMENT OF CONCRETE SLAB SHALL CONFORM TO ITEM 440 "REINFORCEMENT FOR CONCRETE" AS PER TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES.  
BOTTOM OF CONCRETE SLAB SHALL NOT BE IN DIRECT CONTACT WITH SOIL. PROVIDE 12-INCH DEEP STYROFOAM (ESP15 GEOFOAM) BETWEEN BOTTOM OF SLAB AND TOP OF SOIL UNDER THE BRIDGE. 12-INCH STYROFOAM (ESP15 GEOFOAM) WILL NOT BE PAID FOR DIRECTLY. IT WILL BE INCIDENTAL TO THE INSTALLATION OF 18-INCH REINFORCED CONCRETE SLAB.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE. REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.

- 1 BARS A (TOP & BOTT), A1-41 (TOP & BOTT), B1-37 (TOP) AND C1-37 (BOTT) AT 6" MAX SPACING
- 2 BARS D1 (TOP & BOTT) AND D2 (TOP & BOTT) AT 6" MAX SPACING
- 3 BARS F (TOP) AT 6" MAX SPACING  
BARS G (BOTT) AT 6" MAX SPACING
- 4 PLACE BARS E1 WITH BARS D1 AND D2 AT CONSTRUCTION JOINT. (SEE PLAN FOR PLACEMENT.)
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- 6 LENGTH SHOWN INCLUDES ONE 3'-9" LAP SPLICE FOR TOP REINFORCEMENT.
- 7 LENGTH SHOWN INCLUDES ONE 4'-10" LAP SPLICE FOR BOTTOM REINFORCEMENT.
- 8 QUANTITIES ARE FOR CONTRACTORS INFORMATION ONLY.
- 9 NO MORE THAN 50 PERCENT OF REINFORCEMENT SHALL BE SPLICED AT ONE LOCATION.

**HL93 LOADING**

CIVILCORP, LLC  
FIRM REGISTRATION NUMBER: 10283



**CivilCorp**  
ENGINEERS - SURVEYORS  
2825 WILCREST DRIVE, SUITE 100, HOUSTON, TEXAS 77042  
TEL: 713-785-9815 FAX: 713-782-6922 TXENG FIRM 10283

APPROVED	RW	DATE	JULY 2023
DESIGNED BY	MV	DRAWN BY	SG
		SUB NO.	0570-006-00

**HARLEM ROAD RECONSTRUCTION**

**AIR BRIDGE SLAB PLAN (1 OF 2)**

FILE NO:	
DRAWING SCALE:	
HORZ:	NTS
VERT:	N/A
SHEET No:	248 OF 285

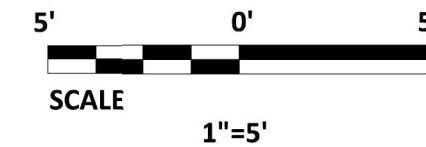
**TABLE OF ESTIMATED QUANTITIES PHASE 3 STEP 3 (42')**

BAR	NO.	SIZE	LENGTH	WEIGHT
1 A	150	#8	22' - 10"	9,145
1 A1-41	82	#8	13' - 6" AV	2,956
1 B1-37	37	#8	16' - 2" AV	1,597
1 C1-37	37	#8	17' - 2" AV	1,696
2 D1	258	#8	20' - 9"	14,294
2 D2	4	#8	18' - 11"	202
4 E1	16	#6	4' - 2"	100
5 E2	36	#6	6' - 8"	360
3 F1-15	28	#8	92' - 1" AV	6,884
3 G1-15	28	#8	95' - 0" AV	7,102
REINFORCING STEEL		LB		44,336
CLASS "C" CONCRETE		CY		76.00

**TABLE OF ESTIMATED QUANTITIES PHASE 3 STEP 5 (42')**

BAR	NO.	SIZE	LENGTH	WEIGHT
1 A	144	#8	22' - 10"	8,779
1 A1-41	82	#8	13' - 6" AV	2,956
1 B1-32	32	#8	12' - 8" AV	1,082
1 C1-30	30	#8	13' - 3" AV	1,061
2 D1	250	#8	20' - 9"	13,851
2 D2	4	#8	18' - 11"	202
4 E1	16	#6	4' - 2"	100
5 E2	36	#6	6' - 8"	360
3 F1-15	28	#8	87' - 7" AV	6,548
3 G1-15	28	#8	88' - 8" AV	6,629
REINFORCING STEEL		LB		41,568
CLASS "C" CONCRETE		CY		75.00

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**GENERAL NOTES:**

DESIGNED ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

**MATERIAL NOTES:**

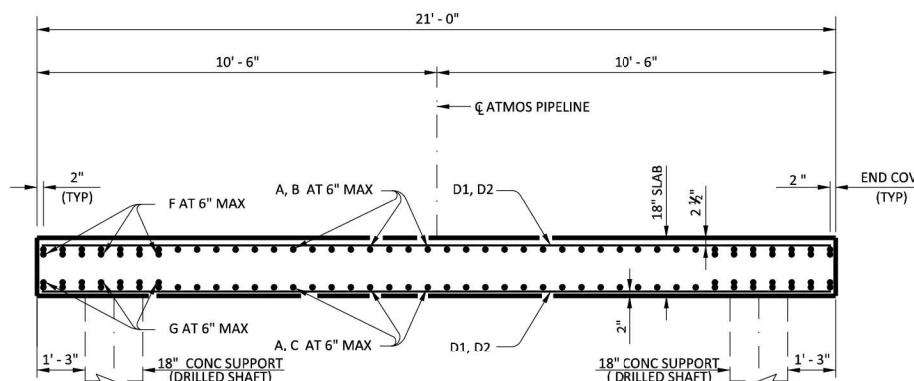
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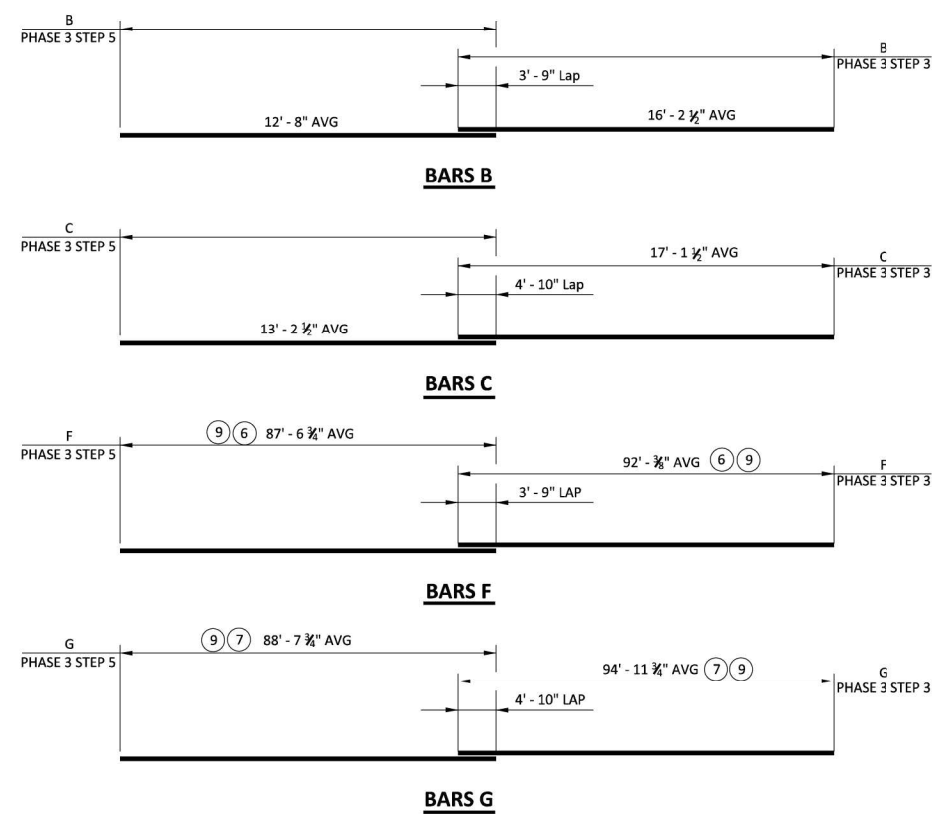
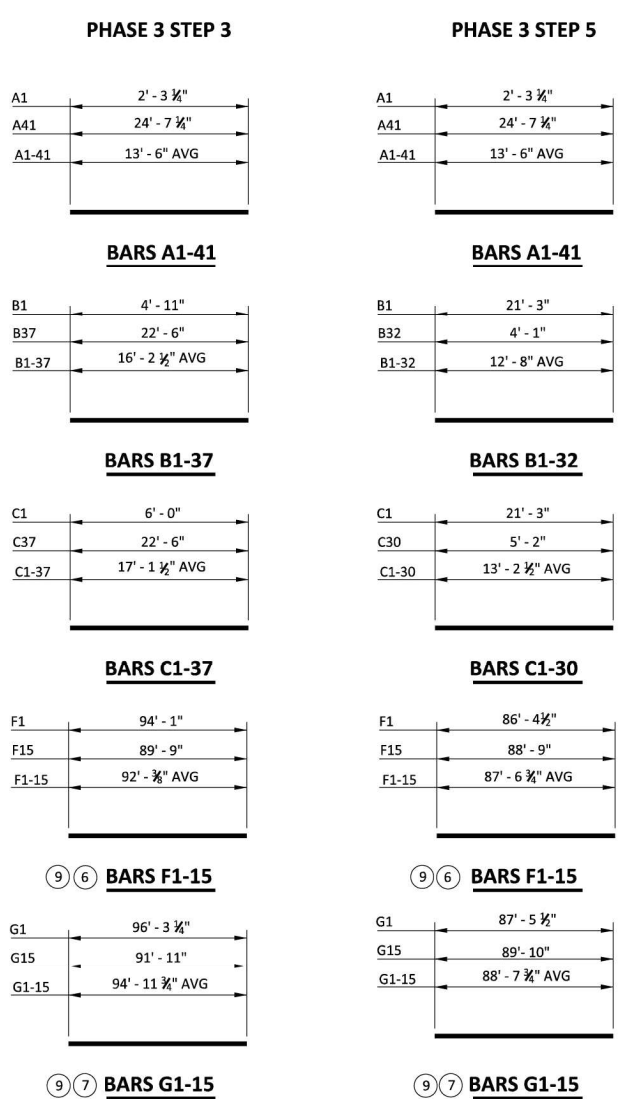
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**SECTION A-A**

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3G1-15	28	#8	88' - 8" AV	6,629
REINFORCING STEEL		LB		41,568
CLASS "C" CONCRETE		CY		75.00

**HL93 LOADING**

CIVILCORP, LLC  
FIRM REGISTRATION NUMBER: 10283

7/28/2023

**CivilCorp**  
ENGINEERS - SURVEYORS  
2825 WILCREST DRIVE, SUITE 100, HOUSTON, TEXAS 77042  
TEL: 713-785-9815 FAX: 713-782-6922 TXENG FIRM 10283

APPROVED	RW	DATE	JULY 2023
DESIGNED BY:	MV	DRAWN BY:	SG
		SUB NO.	0570-006-00

**BENCHMARK:**  
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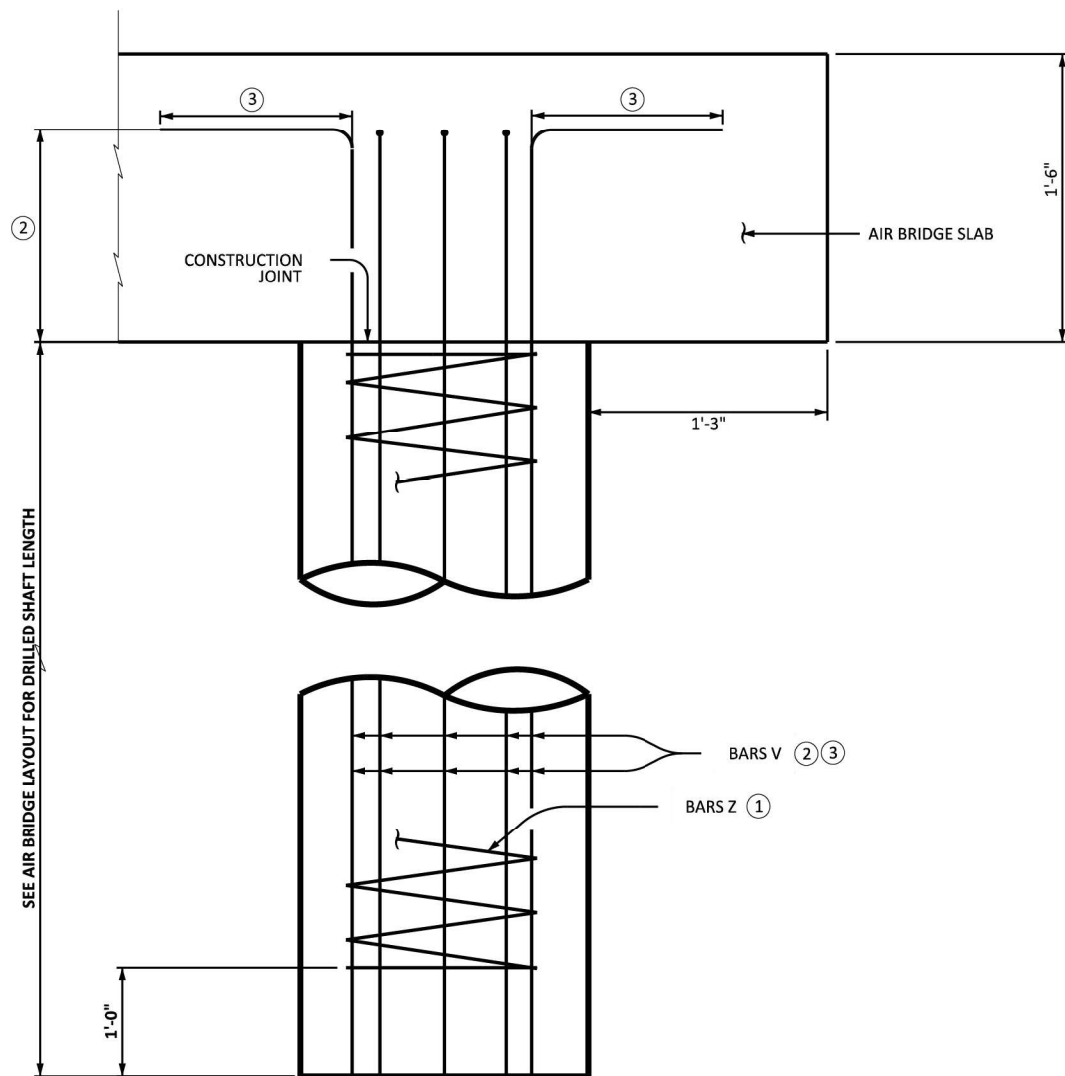
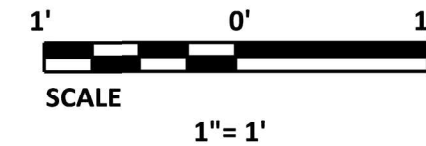
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**HARLEM ROAD RECONSTRUCTION**

**AIR BRIDGE SLAB PLAN (2 OF 2)**

FILE NO:	
DRAWING SCALE:	
HORZ:	NTS
VERT:	N/A
SHEET No:	249 OF 285

H:\Matthew Lumb\TBD-TITLE BLOCK\hlm\msi.dwg (Model) Plotted: May 25, 2023 at 10:21am by ssnow (Last Saved by: aarnelle)



**AIR BRIDGE DRILLED SHAFT DETAIL**

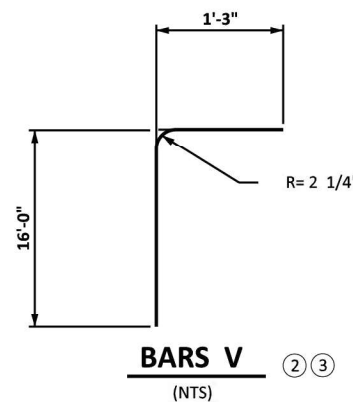
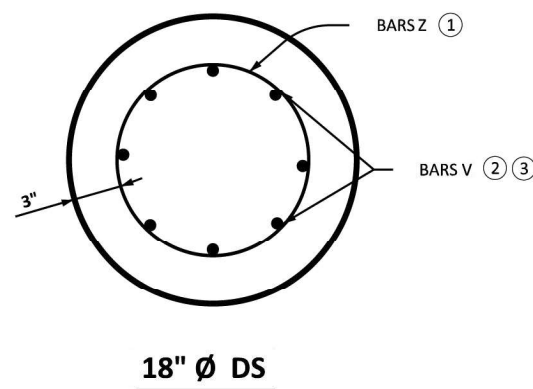


TABLE OF SUPPORT QUANTITIES				
ONE 18" Ø DS				
BAR	NO.	SIZE	LENGTH	WEIGHT
V	8	#6	17'-3"	207
Z	1	#3	90'-6"	34
REINFORCING STEEL			LB	241
CLASS "C" CONCRETE			CY	0.98

**MATERIAL NOTES :**

PROVIDE CLASS C CONCRETE ( $f'_c = 3,600$  PSI), UNLESS SHOWN OTHERWISE.  
 PROVIDE GRADE 60 REINFORCING STEEL.

CONCRETE FOR DRILLED SHAFTS SHALL CONFORM TO ITEM 416 " DRILLED SHAFT FOUNDATIONS" AS PER TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES.

**GENERAL NOTES :**

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.  
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.

DESIGNED ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

**DESIGNER NOTES :**

- ① #3 SPIRAL AT 6" PITCH (ONE AND A HALF FLAT TURNS TOP AND BOTTOM).
- ② MIN EXTENSION INTO SUPPORTED ELEMENT FOR "V" BARS IS 1'-0"
- ③ 1'-3" FOR "V" BARS

HL93 LOADING

CIVILCORP, LLC  
 FIRM REGISTRATION NUMBER: 10283



**CivilCorp**  
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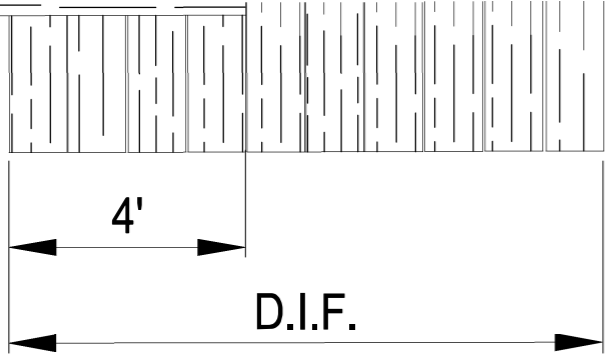
APPROVED	RW	DATE	JULY 2023
DESIGNED BY:	MV	DRAWN BY:	SG
		JOB NO.	0570-006-00

**HARLEM ROAD RECONSTRUCTION**

**AIR BRIDGE CONC SUPPORT (DRILLED SHAFT) DETAILS**

FILE NO:	
DRAWING SCALE	
HORZ :	1" : 1'
VERT :	N/A
SHEET No:	250 OF 285

H:\Matthew.Lynn\TBD-TITLE BLOCK\ghl\moss.dwg (Model) Plotted May 25, 2023 at 10:21am by ssnov (Last Saved by: sagnello)

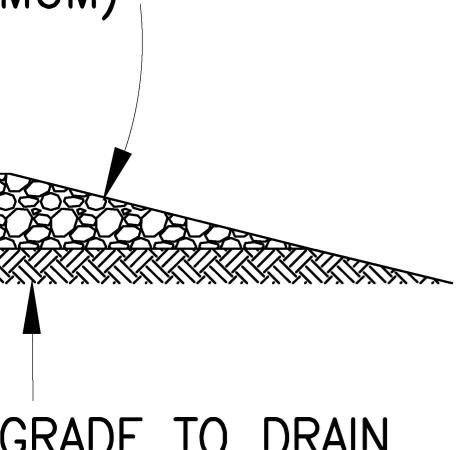


DEPTH (d) (FT)	SPAN (FT)
1 OR LESS	8
2	8
3	10
4	10
5 OR MORE	N/A

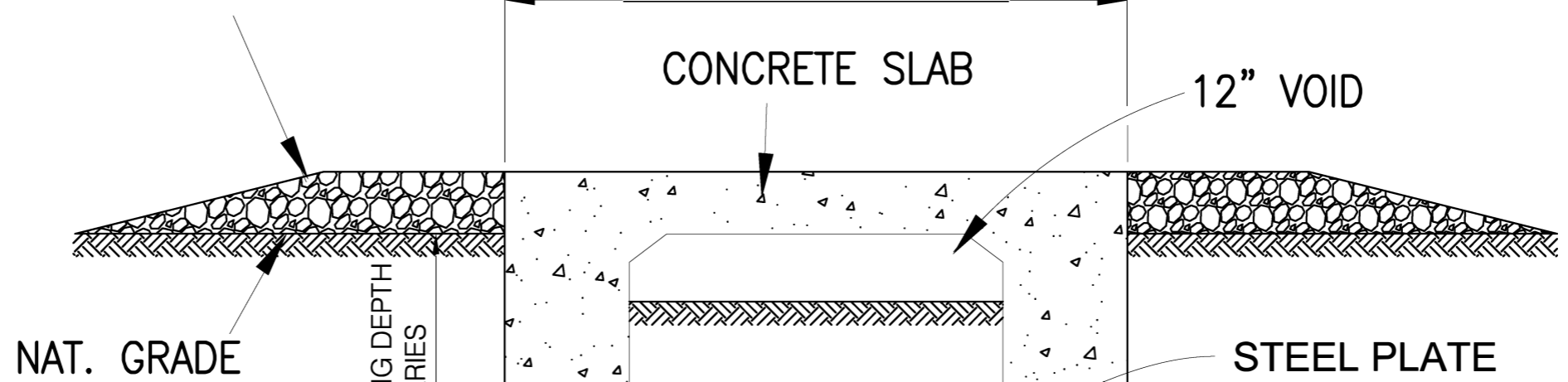
PROFESSIONAL ENGINEER.

### OPTION 3 PERMANENT

GRADE AS REQUIRED TO  
ACCOMMODATE SCRAPER  
UNDER CLEARANCE (4:1  
MINIMUM)



PLACE AND COMPACT 12"  
THICK LAYER OF 4" MINIMUM  
DIAMETER CRUSHED  
AGGREGATE THIS AREA TO  
PREVENT RUTTING OF SOIL  
AND SHIFTING OF SLAB



PLACE AND COMPACT  
12" THICK LAYER OF 4" MINIMUM  
DIAMETER CRUSHED AGGREGATE  
THIS AREA TO PREVENT RUTTING  
OF SOIL AND SHIFTING OF SLAB



**Certificate Of Completion**

Envelope Id: BF846051715C4D8DAB35A0B6D2D9EB91	Status: Completed
Subject: Complete with DocuSign: LONO Harlem Road_NoObjectionLetter.pdf	
Source Envelope:	
Document Pages: 21	Signatures: 0
Certificate Pages: 1	Initials: 0
AutoNav: Enabled	Envelope Originator:
Envelope Stamping: Enabled	Korey LeMond
Time Zone: (UTC-08:00) Pacific Time (US & Canada)	5420 LBJ Freeway, Suite 1600
	Dallas, TX 75240
	Korey.LeMond@atmosenergy.com
	IP Address: 163.116.253.60

**Record Tracking**

Status: Original	Holder: Korey LeMond	Location: DocuSign
8/21/2024 12:37:27 PM	Korey.LeMond@atmosenergy.com	

Signer Events	Signature	Timestamp
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In Person Signer Events	Signature	Timestamp
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Editor Delivery Events	Status	Timestamp
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Agent Delivery Events	Status	Timestamp
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Intermediary Delivery Events	Status	Timestamp
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Certified Delivery Events	Status	Timestamp
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Carbon Copy Events	Status	Timestamp
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Jose Ramirez joramirez@lja.com Security Level: Email, Account Authentication (None)		Sent: 8/21/2024 12:46:08 PM Viewed: 8/26/2024 10:07:58 AM
<b>Electronic Record and Signature Disclosure:</b> Not Offered via DocuSign		

Witness Events	Signature	Timestamp
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Notary Events	Signature	Timestamp
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Envelope Summary Events	Status	Timestamps
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Envelope Sent	Hashed/Encrypted	8/21/2024 12:46:08 PM
Certified Delivered	Security Checked	8/21/2024 12:46:08 PM
Signing Complete	Security Checked	8/21/2024 12:46:08 PM
Completed	Security Checked	8/21/2024 12:46:08 PM

Payment Events	Status	Timestamps
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