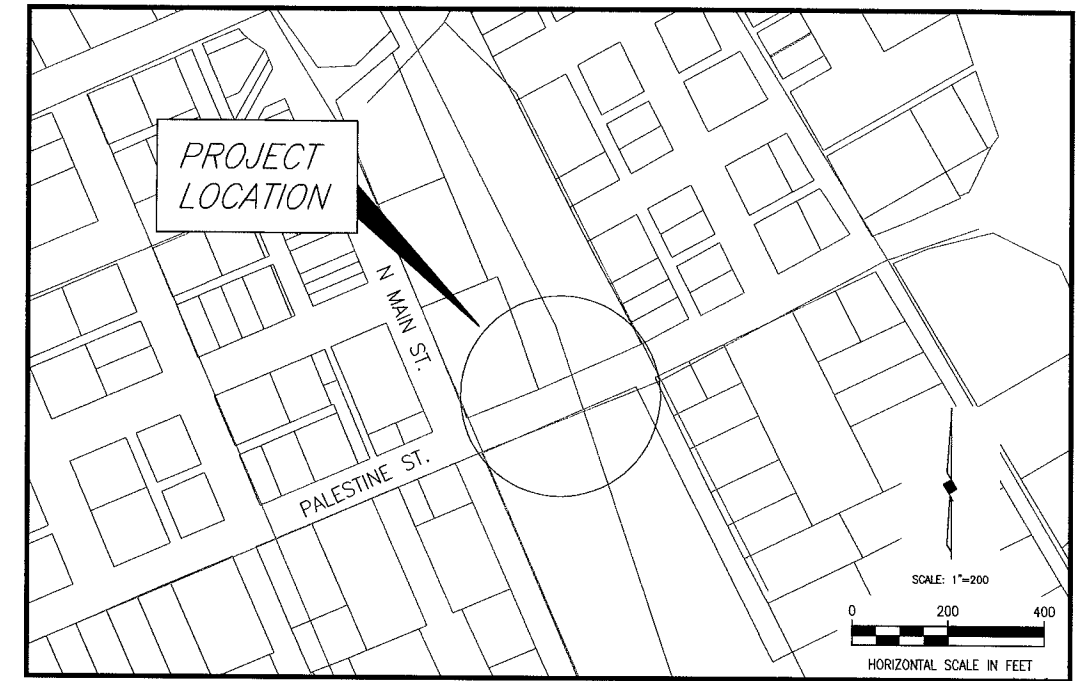


CITY OF HUTCHINS, TEXAS

CONSTRUCTION PLANS FOR:

SIDEWALK IMPROVEMENTS AT UPRR AND PALESTINE STREET



LOCATION MAP

MAYOR

MARIO VASQUEZ

MAYOR PRO TEM

STEVE NICHOLS

CITY COUNCIL

BRENDA CAMPBELL

DOMINIC DIDEHBANI

RAYMOND ELMORE

DEMARCUS ODOM

CITY ADMINSTRATOR

JAMES QUIN

DIRECTOR OF PUBLIC WORKS & COMMUNITY DEVELOPMENT

GREG MCCAFFEY, P.E., CFM



Prepared by:
BIRKHOFF, HENDRICKS & CARTER, L.L.P.

PROFESSIONAL ENGINEERS
TBPE Firm No. 526 TBPLS Firm No. 10031800
11910 Greenville Ave., Suite 600, Dallas, TX 75243
Phone: 214-361-7900

April 2023

These plans and related specifications were prepared for construction of this specific project only. Reuse of these documents is not permitted without written authorization of Birkhoff, Hendricks & Carter, L.L.P. If this drawing is converted to an electronic file, if any discrepancy occurs between the electronic file and the Birkhoff, Hendricks & Carter, L.L.P. original document, the original document will govern in all cases.

EROSION CONTROL & VEGETATION NOTES

- Every soil disturbing activity shall have an accompanying Erosion Control Plan (ECP), and either Construction Site Notice (CSN) for those activities disturbing more than 1 but less than 5 acres, or Notice of Intent (NOI) for those activities disturbing 5 or more acres including those activities less than 5 acres, but are part of a common plan of development totalling 5 or more acres. A copy of the appropriate CSN or NOI shall be provided to the City.
- The CSN or NOI shall be posted in a location viewable to the public until construction is complete and Notice of Termination (NOT) submitted. The Storm Water Pollution Prevention Plan (SW3P) shall be readily available for review by Federal, State, or local officials.
- No soil disturbing activities will occur prior to the SW3P, ECP, and associated Best Management Practices (BMP) being fully implemented. A copy of the SW3P shall be provided to the City prior to the start of construction.
- The contractor shall employ measures as necessary to prevent dirt, mud, debris from being tracked off site. Any dirt, mud, debris tracked offsite shall be cleaned up by the contractor immediately.
- The site shall be reviewed by the operator or his representative weekly, and after any major storm. Adjustments/repairs to the erosion control measure will be made as needed.
- A completed NOT shall be submitted to the State and a copy of this NOT shall be provided to the City prior to final acceptance.

TREE PROTECTION NOTES

- Unless shown on the plans to be removed, all trees within the construction area shall be protected during construction with temporary fencing or other measures as needed including pruning of limbs and roots.
- Protective measures shall be taken prior to the start of any work in the area and shall be maintained throughout the duration of the project.
- Pruning of limbs to provide clearance for construction equipment shall take place before construction begins to prevent damage to trees by ripping and tearing of branches.
- It is anticipated that in some instances trenches will encroach in the drip line of protected trees. Encroachment in these instances is permitted. Fencing will be installed outside the trench in such a manner as to limit the amount of encroachment while allowing all necessary trench safety measures.
- Any roots exposed during construction activities shall be pruned flush with the soil. If exposed root areas are not backfilled with topsoil within two days of initial exposure, they shall be covered with organic material in a manner that reduces the soil temperature and minimizes water loss due to evaporation.
- No topsoil dressing greater than 4 inches shall be permitted within drip line areas.

PEDESTRIAN ACCESSIBILITY (WITHIN PUBLIC R.O.W.)

- All newly constructed sidewalks, curb ramps and crosswalks installed shall be considered a pedestrian access route and shall be considered a pedestrian access route and shall conform to the most current "Draft" Guidelines for Public Rights-of-Way created by the United States Access Board. <http://www.access-board.gov/prowac/draft.htm>
- Curb Ramps shall conform to the City Standard Construction Details.
- Detectable warning surface shall be warning plates.
- The contractor shall provide a clear and safe route for pedestrians adjacent to the site for the duration of construction. A temporary pedestrian route shall be provided when any existing sidewalk is closed due to construction activity.
- Construction materials shall be kept off existing sidewalks and consolidated in areas within the City right-of-way, unless otherwise approved by the City.

PAVING NOTES

- All concrete for all streets shall be in accordance with NCTCOG Class "C" concrete (3,600 p.s.i.) compressive strength @ 28 days) for slip forming, NCTCOG Class "P" concrete (4,000 p.s.i. & compressive strength @ 28 days) for hand pours.
- Reinforcing steel shall be deformed bars No. 3 on 18 inch centers of No. 4 bars on 24 inch centers. Reinforcing shall be in both directions on center. Reinforcing steel shall be in accordance with ASTM 615, 616, & 617.
- All reinforcing steel shall be tied (100%). Reinforcing steel shall be set on plastic chairs. Bar laps be minimum 30 diameters.
- Expansion joints shall be spaced every 200 feet and at all intersections. Alleys shall have a minimum of two expansion joints.

- Sawed transverse dummy joints shall be spaced every 20 feet on paving 8 inches or thicker and every 15 feet for paving thickness less than 8 inches sawing shall occur within 5 to 12 hours after the pour including sealing. Otherwise the section shall be removed and reconstructed, and longitudinal butt joint constructed.
- Subgrade under pavements shall be minimum of 6 inches of lime treated subgrade. Only hydrated lime shall be utilized. Optimum lime shall be achieved. Optimum lime content shall be determined during the excavation by the use of a lime series test. Lime series test shall be taken along the excavation at all changes in soil and a minimum of 300 feet. Lime series shall be completed by an independent laboratory approved by the city.
- Lime treated subgrade shall be compacted to a density of not less than 95 percent of the maximum density as determined by ASTM D 698. Moisture content shall be within -2 to +4 of optimum. Density test results shall be completed by an independent laboratory approved by the city. All results shall be provided to the city.
- Lime trimmings are not acceptable for any use.
- All fill shall be compacted by mechanical methods. Maximum loose lift for compaction shall be 8 inches. All lifts shall be tested for density by an independent laboratory approved by the city. Density requirements shall be as shown on the plans for the type of material called for in the plans.
- All disturbed areas of roadway work shall have grass established immediately. Grass shall meet the requirements of item 3.8, 3.9, 3.10, & 3.11 of NCTCOG.
- No vehicles shall be permitted on concrete pavement without approval from the city. The city will make determination based on concrete break report.

STORM SEWER

- The floor of the excavation for inlet box must provide a firm, level bed for the base section to rest upon.
- Minimum of 6 inches of 1" diameter (maximum) rock or gravel shall be used to prepare the bedding to final grade or in lieu of this, at least 6 inches of 2-sack cement stabilized-sand shall be allowed to set by keeping hole pumped dry.
- After pipe has been laid on proper bedding, backfilling will commence with 8" maximum loose lifts mechanically compacted to 95% standard proctor under roadway or 90% standard proctor outside roadway paving. Maximum size rock in backfill shall not exceed 4 inches in diameter.
- Precast inlets must be approved by the city.
- All concrete shall be in accordance with NCTCOG Class "F" (4,200 p.s.i. compressive strength @ 28 days.)
- Locking device is required on all storm sewer lids.
- "No Dumping" warning plaque to be installed on all standard and recessed inlets.
- Concrete cast-in-place inlets shall have a minimum compressive strength of 4,200 p.s.i. @ 28 days.
- Storm drain tile shall be placed in the center of the inlet, 2 inches from the edge of opening as shown in the drawing. Use PL-200 construction adhesive for application. **TILES CAN BE ORDERED FROM:** Centerline Supply, Inc., 425 Jesse Street, Grand Prairie, Texas 75061-1141, 1-800-321-1731, Metro: 214-647-8300, Fax: 214-641-1221.
- Existing storm sewer pipe and/or laterals shall be located prior to setting of constructing inlet boxes. If adjustment in grade of lateral is required, a revised design by the engineer of records shall be submitted to the city for approval.
- Reinforced concrete pipe class III minimum or high density polyethylene storm sewer pipe is approved within the city.

CITY OF HUTCHINS, TEXAS

STANDARD CONSTRUCTION DETAILS

GENERAL NOTES

Date: JANUARY 2023

Sheet
STD - 03

REVISED: 11/18/22 -- TVASQUEZ H:\Projects\Hutchins\4027\101 -- Standard Details\Hutchins -- General Notes.dwg

BIRKHOFF, HENDRICKS & CARTER, L.L.P.
PROFESSIONAL ENGINEERS
TBPELS Engineer Firm No. 526; Survey Firm No. 10031800
11910 Greenville Ave., Suite 600
Dallas, Texas 75243 (214) 361-7900

THESE DOCUMENTS ARE FOR INTERIM REVIEW
AND ARE NOT INTENDED FOR CONSTRUCTION,
BIDDING, OR PERMIT PURPOSES.

JOHN W. BIRKHOFF
TEXAS P.E. NO. 54137
DATE: April 2023

CITY OF HUTCHINS, TEXAS
SIDEWALK IMPROVEMENTS AT UPRR AND PALESTINE STREET

CITY OF HUTCHINS - GENERAL NOTES 02

BHC
PROJECT NO.
2023-106

April 2023

SHEET NO.

#

REVISED: 4/26/23 -- JJACOBS H:\Projects\Hutchins\2023106 Sidewalks Palestine and UPRR\Sheets\2023106 Gen Notes.dwg

PLOT SCALE: 1:2

PLOT STYLE: 11x17.ctb

PLOTTED BY: JAMES JACOBS ON 4/28/2023

GENERAL CONSTRUCTION NOTES

- All construction, materials and workmanship shall conform to Standard Specifications for Public Works Construction, North Central Texas Council of Governments (NCTCOG Standard Specifications) latest Edition unless otherwise noted.
- The Contractor shall provide temporary drainage measures during construction.
- Bracing of utility poles may be required by utility companies when trenching or excavation is in close proximity to the poles. The cost of bracing poles will borne by the Contractor. There is no separate pay item for this work. The cost shall be considered incidental work.
- The locations, elevations and dimensions of existing utilities shown on the plans were obtained from Dig Tess and/or available utility company records and plans and are considered approximate. It shall be the Contractor's responsibility to verify locations, elevations, and dimensions of adjacent and/or conflicting utilities sufficiently in advance of construction in order that adjustments can be made to provide adequate clearances. The Contractor shall preserve and protect public utilities at all times during construction. Any damage to utilities resulting from Contractor's operations shall be restored at the Contractor's expenses. The City shall be notified when proposed facility grades conflict with existing utility grades.
- The Contractor shall immediately repair or replace any physical damage to private property, including, but not limited to fences, walls, pavement, grass, trees, planters and lawn sprinkler and irrigation systems at no cost to the owner. This work shall be subsidiary to the contract, unless otherwise noted, and is not a separate pay item.
- The Contractor shall cut and plug all irrigation systems located within the easements prior to construction. After construction is complete, the Contractor shall reconnect the systems to original or better condition, at no cost to the owner. All work shall be completed by an irrigator licensed in the State of Texas. The Contractor shall coordinate with the property owner and the City prior to cutting irrigation systems.
- The Contractor shall remove surplus material from the project area. This work shall be subsidiary to the contract and is not a separate pay item. Surplus material shall be properly disposed of.
- The Contractor shall sawcut, remove and dispose of existing pavements, curb and gutter, inlets, driveways and sidewalks. Disposal shall be offsite and in a lawful manner.
- The Contractor shall vegetate all areas disturbed by construction. The Contractor shall provide whatever measures are needed, including temporary irrigation and mowing, to ensure establishment of grass. Unless otherwise noted, private lawn areas and parkways in front of private lawn areas disturbed by construction shall be replaced with block sod of a similar grass to that existing. Contractor to water and establish vegetation twice a day for a period of 4 weeks minimum or until grass is established as determined by the City. Work shall be in accordance with NCTCOG Item 202.
- The Contractor shall protect all trees in the project area and temporary easements during construction. No tree shall be removed unless marked and approved for removal by the City.
- The Contractor shall be responsible for taking measures to minimize damage to tree limbs, tree trunks, and tree roots along the route of the project. All such measures shall be considered incidental work. Contractor shall inspect the work site in advance and arrange to have any tree limbs pruned that might be damaged by equipment operations. The City shall be notified at least 24 hours prior to any tree trimming work. Nothing shall be stored over the tree root system within the drip line limits of any tree. The Contractor shall employ a qualified landscaper for all work required for tree care to ensure utilization of the best agricultural practices and procedures.
- All fences to remain unless otherwise noted.
- It will be the responsibility of the contractor to protect all public utilities in the construction of this project. All manholes, cleanouts, valve boxes, fire hydrants, etc. not shown to be abandoned, must be adjusted to finished grade by the contractor. All utility location and grade adjustment are subsidiary except for those included in the pay items.

SIDEWALK REPLACEMENT NOTE

- Sidewalk removal shall be from joint to joint. Sawcut shall be at existing joint. Connection to existing sidewalk shall be with reflex expansion join material (recycled rubber or equal). Full panel replacement required.

GENERAL NOTES FOR WATER LINES

- Fittings shall be ductile iron and shall be cement lined inside and bituminous coated on the outside. Where connections are made to pipes of dissimilar materials, suitable bond breakers shall be used.
- All ductile iron fittings shall be mechanical joint or slip joint type CL250.
- Pipe joints shall be of the push-on type unless otherwise noted.
- Valves, vault lids, fire hydrants and meter boxes shall be located outside of sidewalk areas.
- All trenching, embedment and backfill will be incidental to the unit cost of pipe.
- Water line sections crossing wastewater mains or laterals shall be a minimum of 18 feet long and shall be centered over the wastewater main or lateral such that the joints of the water line are equidistance and at least nine feet horizontally from the center line of the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral.
- Water Lines shall be AWWA C900 DR18 pressure class.
- All trench backfill shall be placed in maximum 8-inch loose lifts and mechanically compacted. Testing shall be in accordance with NCTCOG as a minimum.
- Work to make connections shall be continuous and shall occur during times of low usage.
- Valves on lines 12-inch and less shall be gate valves. Gate valves on laterals shall be attached to flanged outlet, tee or cross. Gate valves shall conform to AWWA C-509. Butterfly valves shall conform to AWWA C-504.
- Dewatering of water line trench may be required during construction. Dewatering shall be subsidiary to pipe installation.
- Contractor to construct water line to grade shown in the plans. All water lines shall have a minimum cover of 4 feet.
- During water line testing contractor to dechlorinate in accordance with TCEQ requirements prior to releasing water overland and into storm drainage systems.
- Contractor to support all existing utilities as construction of new water line crosses these utilities. No separate pay item. Include in cost of water line.
- Contractor shall field locate pipelines at connection points prior to ordering or fabricating proposed pipe. Contractor shall verify pipe size, type, elevation and horizontal location. Contractor shall make all necessary adjustments to connect to existing line after approval from the engineer and City.
- All new water services shall be AWWA C901, 3/4" minimum DR-9 (250 psi) HDPE poly pipe with PE4710 as specified in ASTM F714, from the service tap to the curb stop, 3/4-inch minimum compression fitting angle stop, and meter box, unless otherwise indicated on the plans. Curb stops will be located within the meter box and facing toward the lot.
- Bolts and nuts for mechanical joints will be of a high-strength low-alloy corrosion resistant steel conforming to ASTM A325 (Type 3).
- Assembly of pipe to be performed as required by pipe manufacturer. Gaskets shall be clear and lubricated. Do not swing or stab the joint. Align the spigot to the bell, insert spigot into bell and contact gasket. The spigot end is marked with insertion mark. Insert pipe to the mark, do not over-insert.
- All valve stacks shall be set at finished grade.
- Contractor to construct waterline to grade as shown in plans.
- All water lines shall be tested and disinfected prior to connections.
- All crossings of sanitary sewer lines must meet current TCEQ requirements.

GENERAL NOTES FOR SANITARY SEWER LINES

- Unless otherwise noted on the plans, all sanitary sewer pipes shall be SDR26 PVC ASTM Designation D2241. Other pipe shall be subject to Approval by the City.
- All residential sanitary sewer laterals shall include a 4" tee wye bend, pipe and stopper. Sewer laterals shall be laid on a minimum slope of +2.00% from the main line to the street right-of-way.
- All sanitary sewer lines and laterals shall be tested by pulling a mandrel, air pressure test, and television video. The video shall be provided to the City in a electronic format (DVD) format.
- All sanitary sewer manholes within flood plains or flood prone areas require Type "S" manhole lids and shall be properly sealed and vented per TCEQ requirements. Outlet of vent shall be minimum 1.5 feet above the 100-year water surface.
- All manholes shall be vacuum tested in accordance to NCTCOG requirements.
- All manhole covers and clean outs shall be set at finished grade unless otherwise noted. In open spaces, the top of the sanitary sewer manhole shall be installed a minimum of 12 inches above the surrounding ground.
- Contractor to construct sewer line to grade shown in the plans.
- Contractor to support all existing utilities as construction of new sewer line crosses these utilities. No separate pay item. Include in cost of sewer line.
- Assembly of pipe to be performed as required by pipe manufacturer. Gaskets shall be clear and lubricated. Do not swing or stab the joint. Align the spigot to the bell, insert spigot into bell and contact gasket. The spigot end is marked with insertion mark. Insert pipe to the mark, do not over-insert.
- Contractor shall field locate pipelines at connection points prior to ordering or fabricating proposed pipe. Contractor shall verify pipe size, type, elevation and horizontal location. Contractor shall make all necessary adjustments to connect to existing line after approval from the engineer.
- All crossings of potable water lines must meet current TCEQ requirements.

BACKFILL NOTE

- All trench backfill shall be placed in maximum 8-inch loose lifts and be mechanically compacted. Density testing shall be in accordance with NCTCOG as a minimum and as directed by the City. The NCTCOG minimum for density testing is once per 300-feet per 1-foot of compacted depth. (NCTCOG Item 504.5.3.2)

GENERAL NOTES FOR TRAFFIC CONTROL

- The temporary traffic control measures shown on these plans are to be considered a minimum. Additional measures shall be furnished when necessary for traffic safety and to meet the latest Texas MUTCD (TMUTCD).
- When the normal function of the roadway is suspended through closure of any portion of the right-of-way, temporary construction work zone traffic control devices shall be installed to effectively guide the motoring public through the area. Consideration for road user safety, worker safety, and the efficiency of road user flow shall be an integral element of every traffic control zone. All traffic control devices shall be in accordance with the latest TMUTCD.
- The contractor shall be responsible for maintaining all traffic control devices on an around-the-clock basis, whether or not work is active. Any deficiencies shall be corrected by the contractor immediately, regardless of time of day.
- Lane closures will not be permitted on arterial roadways before 9:00 am or after 3:00 pm. Violations may result in suspension of all work at the job site for a minimum of 48-hours.
- All temporary traffic control devices shall be removed as soon as practical when they are no longer needed. When work is suspended for short periods of time at the end of the workday, temporary traffic control devices that are no longer appropriate shall be removed or covered. The first violation of this provision will result in a verbal warning to the construction foreman. Subsequent violations will result in suspension of all work at the job site for a minimum of 48-hours.

CITY OF HUTCHINS, TEXAS

STANDARD CONSTRUCTION DETAILS

GENERAL NOTES

Date: JANUARY 2023

Sheet
STD - 02

REVISED: 11/18/22 -- TVASQUEZ H:\Projects\Hutchins\4027\101 - Standard Details\Hutchins - General Notes.dwg

These plans and related specifications were prepared for construction of this specific project only. Reuse of these documents is not permitted without written authorization of Birkhoff, Hendricks & Carter, L.L.P. If this drawing is converted to an electronic file, if any discrepancy occurs between the electronic file and the Birkhoff, Hendricks & Carter, L.L.P. original document, the original document will govern in all cases.

BIRKHOFF, HENDRICKS & CARTER, L.L.P.
PROFESSIONAL ENGINEERS
TBPELS Engineer Firm No. 526; Survey Firm No. 10031800
11910 Greenville Ave., Suite 600
Dallas, Texas 75243 (214) 361-7900

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

JOHN W. BIRKHOFF
TEXAS P.E. NO. 54137
DATE: April 2023

CITY OF HUTCHINS, TEXAS

SIDEWALK IMPROVEMENTS AT UPRR AND PALESTINE STREET

CITY OF HUTCHINS - GENERAL NOTES 01

BHC
PROJECT NO.
2023-106

April 2023

SHEET NO.

2

REVISED: 4/26/23 -- JJACOBS H:\Projects\Hutchins\2023106 Sidewalks Palestine and UPRR\Sheets\2023106 Gen Notes.dwg

PLOT SCALE: 1:2

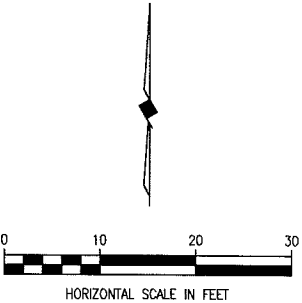
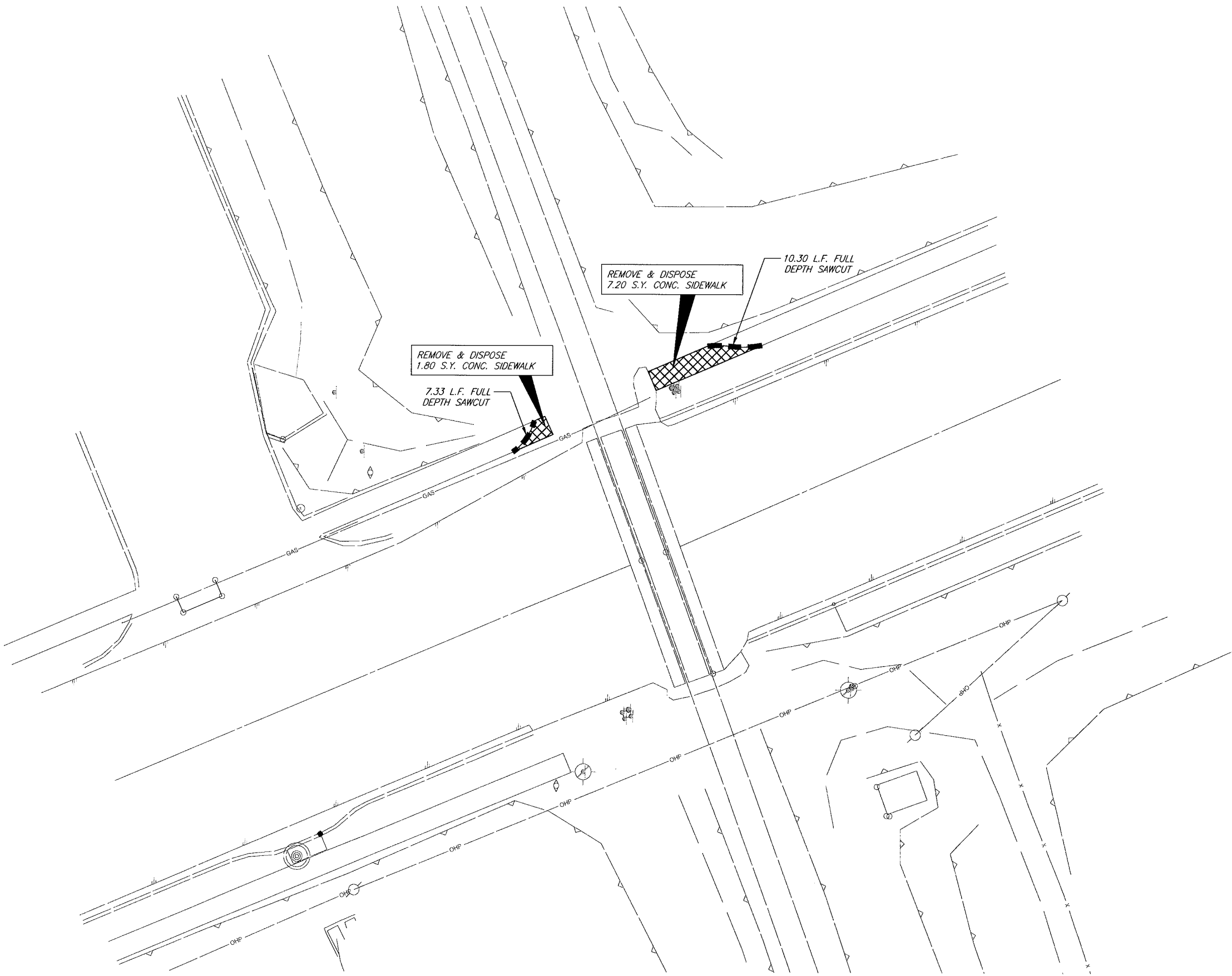
PLOT STYLE: 11x17.ctb

PLOTTED BY: JAMES JACOBS ON 4/28/2023

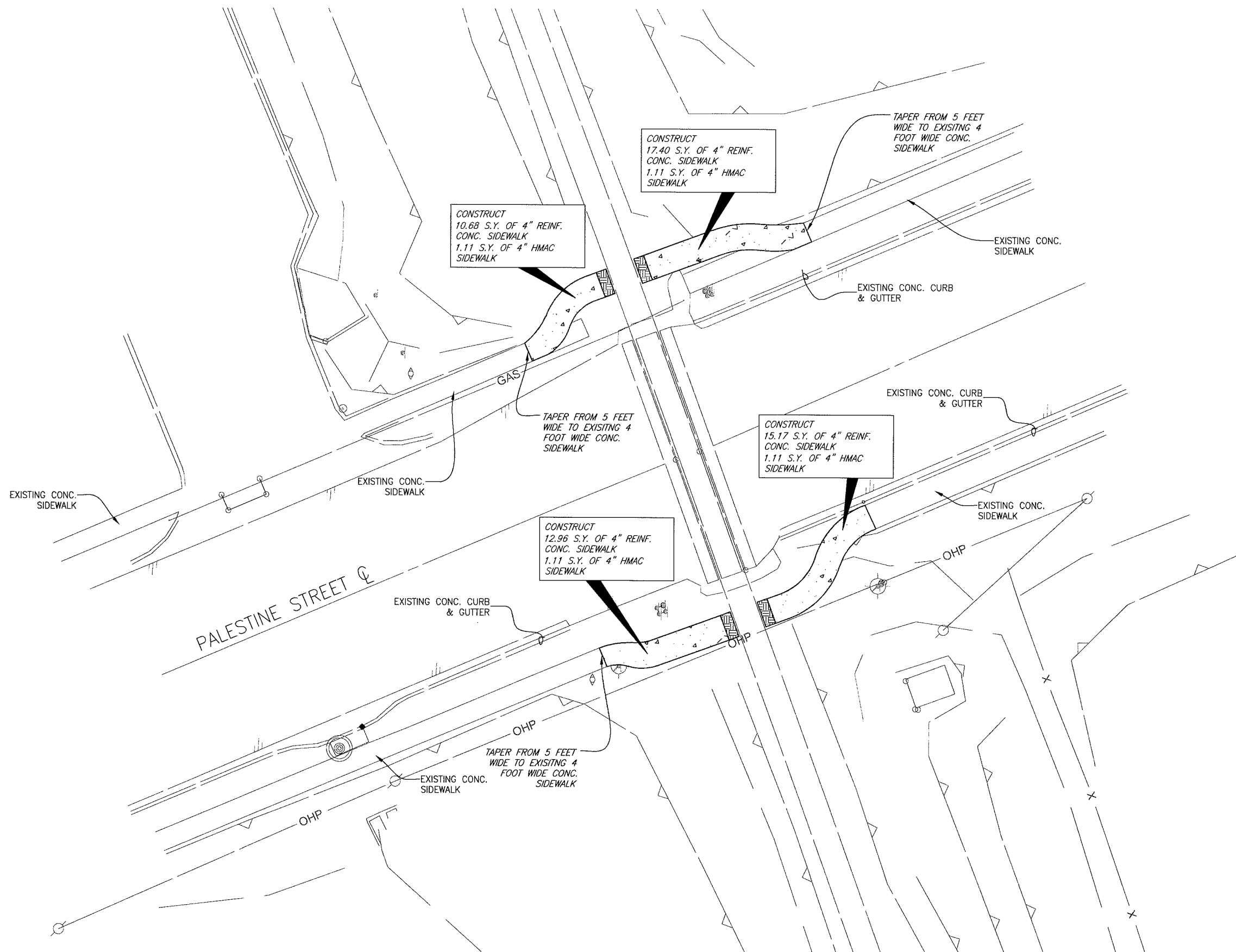
REMOVAL LEGEND:

4' SIDEWALK
(17.63 S.Y.)

FULL DEPTH SAWCUT
(4.1 L.F.)

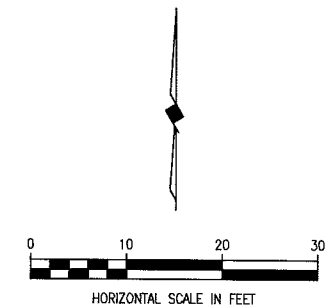


<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	<div> <div>These plans and related specifications were prepared for construction of this specific project only. Reuse of these documents is not permitted without written authorization of Birkhoff, Hendricks & Carter, L.L.P. If this drawing is converted to an electronic file, if any discrepancy occurs between the electronic file and the Birkhoff, Hendricks & Carter, L.L.P. original document, the original document will govern in all cases.</div> </div>	<div> <div>BIRKHOFF, HENDRICKS & CARTER, L.L.P.</div> <div>PROFESSIONAL ENGINEERS</div> <div>TBPE Firm No. 526; TBPLS Firm No. 10031800</div> <div>11910 Greenville Ave., Suite 600</div> <div>Dallas, Texas 75243 (214) 361-7900</div> </div>		<div> <div>THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.</div> <div>JOHN W. BIRKHOFF</div> <div>TEXAS P.E. NO. 54137</div> <div>DATE: April 2023</div> </div>	<div> <div>CITY OF HUTCHINS, TEXAS</div> <div>SIDEWALK IMPROVEMENTS AT UPRR AND PALESTINE STREET</div> <div>DEMOLITION PLAN</div> </div>	<div> <div>BHC</div> <div>PROJECT NO.</div> <div>2023-106</div> <div>April 2023</div> </div>	<div> <div>SHEET NO.</div> <div>4</div> </div>
--	--	--	--	--	--	--	--



LEGEND:

	5' CONCRETE SIDEWALK (56.21)
	5' HMAc SIDEWALK (4.44 S.Y.)



BIRKHOFF, HENDRICKS & CARTER, L.L.P. PROFESSIONAL ENGINEERS TBPE Firm No. 526; TBPLS Firm No. 10031800 11910 Greenville Ave., Suite 600 Dallas, Texas 75243 (214) 361-7900		THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES. JOHN W. BIRKHOFF TEXAS P.E. NO. 54137 DATE: April 2023	CITY OF HUTCHINS, TEXAS SIDEWALK IMPROVEMENTS AT UPRR AND PALESTINE STREET	BHC PROJECT NO. 2023-106	SHEET NO.
			PROPOSED SIDEWALK PLAN	April 2023	5