ADDITIONAL INFO & UPDATED DATES

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AWH Silver Line Regional Rail Project Construction Activity (CA) Notification

Construction Activity (CA) Details

Notification Date: Thursday, April 11, 2024

Note: Dates are subject to change

Construction Activity Start Date: **Monday, May 6, 2024**

Construction Activity Work Time: 1. 7A until 9P - Weekdays
2. 9A until 7P - Saturdays

Contractor Information:

Contractor | Contact: Archer Western Herzog (AWH) | Marvin Jackson, AWH PI/CR Manager

Construction Activity Location: Sugar Cane Way at Coit Road near the DART Guideway

Address (If Applicable): N.A.

City, State Zip: Dallas, Texas

Scope of Construction Activity:

CONSTRUCTION SUMMARY:

AWH and subcontractors to start construction activities on Sugar Cane Way near the DART Silver Line Guideway for University Place Detention Dewatering. Double Right Lane Closure of Sugar Cane Way to begin **Monday, May 6, 2024 and last until Friday, June 14, 2024** as approved by City of Dallas.

CONSTRUCTION SCHEDULE:

Step 1: Geotechnical borings - **Monday, May 6, 2024 until Friday, May 10, 2024**.
Step 2: Build temporary roads - **Monday, May 13, 2024 until Tuesday, May 14, 2024**.
Step 3: Dewater detention ponds - **Wednesday, May 15, 2024 until Wednesday, May 22, 2024**.
Step 4: Build access into multi-box culvert - **Thursday, May 23, 2024 until Monday May 27, 2024**.
Step 5: Prep for inspection - **Tuesday, May 28, 2024 until Wednesday, May 29, 202**4.
Step 6: Jacobs inspections - **Thursday, May 30, 2024 until Wednesday, June 5, 2024**.
Step 7: Remove Crane Mats and Sand bags - **Thursday, June 6, 2024 until Friday, June 7, 2024**.
Step 8: Restore University Place Property - **Monday, June 10, 2024 until Friday, June 14, 2024**.

Once complete, crews to clean-up and prepare for follow-on activities. As a part of the clean up activities, the contractor will maintain street sweeping required through-out the scope of their work.

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AWH Silver Line Regional Rail Project Construction Activity (CA) Notification

Construction Activity (CA) Details	
Permit number:	**TC-2023-416114**

AWH Contractor Contacts:

AWH Safety Mgr. Brandie DeVries (972) 440-9910

AWH QC Mgr. Jim Grady, (817) 823-8846

AWH CA Mgr. Marvin Jackson, (214) 585-7308 **Construction Hotline** 972.833.2856

Report Prepared by: Marvin Jackson, AWH **Title:** CBRR CR&PI Manager

Report Title: 20240411 - CA0218-R1_-_Sugar_Cane_Way_Lane_Closure_Start_-_Dallas

SEE ATTACHMENT

Silver Line Regional Rail Design-Build

University Place Detention Dewatering Narrative

Purpose:

Due to the proposed Coit Road changes, the existing multi-box culvert (MBC) in the University Place development, on Sugar Cane Way, will require additional backfill over the existing MBC. Through a City of Dallas Memorandum, dated July 26, 2023, the City has requested AWH and the EOR perform a structural review of the existing MBC.

Below is AWH's step by step plan to structurally inspect the existing MBC.

Step 1:

AWH to be granted access by University Place to access the detention ponds and existing MBC. AWH will provide a 3-week notification to the City of Dallas and University Place HOA prior to starting work. Additionally, we will request that the University Place HOA turn off both water fountains in the detention ponds. Additionally, AWH will call in locates for the existing 12" water main, 12" wastewater main and 10" wastewater force main prior to any work.

Estimated Duration –3 Days

Step 2:

Build temporary access to the MBC from Coit. AWH will need to strip the existing grass within UP's ROW and install a 10' wide all weather access road into the detention ponds. This access will be used by AWH personnel and equipment to dewater the detention ponds, install sandbags and clean out the MBC. Please reference Exhibit A attached.

Estimated Duration – 2 Days

Step 3:

Dewater the existing detention ponds with a 6" diesel pump. Water will be pumped into the new constructed weir inlet adjacent to the MBC in question and into the enclosed City of Dallas drainage system that outfalls on the NW quadrant of the Coit and DART Railroad crossing. Pumps will run 24/7 until the ponds are low enough to access the box culverts. For any future rain events, the pumps will be used as needed. Pump will be located 200 LF+ from closest house and is 87 dbs from 30'. The pump will sound like a diesel truck running along Coit. AWH will follow SWPPP plan for pumping water controls.

Estimated Duration – 1 Week

Step 4:

Once the detention ponds are pumped, sandbags will need to be installed to keep any additional water from infiltrating the MBC while the MBC is being cleaned and inspected. Additionally, crane mats walkways will be installed for accessibility into the box culverts in question. The crane mats will be used solely to provide mud free access through the pond and into the MBC.

Please Note: AWH will need to set these crane mats from the Sugar Cane WB Roadway. For 1-day, AWH will need to divert Sugar Cane traffic to the EB side of road with 2-way traffic.

Estimated Duration – 3 Days

Step 5:

Once the access is built and water is being diverted away from the MBC, an AWH crew will clean out the MBC for Jacobs to perform their inspection. Any equipment used in this operation will be stored outside of the MBC or detention pond in the event of a rain/flooding event overnight or on the weekends.

Estimated Duration – 2 Days

Step 6:

Jacobs Culvert Inspections:

1. Visual Inspection with Structural Engineers
2. Rebar Verification
    a. Jacobs will need AWH to provide access to a 6" x 6" square area to verify the top slab of reinforcement steel.
    b. This will verify the AS5 bars used were designed for < 2' fill over the box. Jacobs will extrapolate what fill height was used for the culvert design to verify culverts are adequate for the proposed design.
    c. AWH would follow the TxDOT Concrete repair manual to patch this test location. See Chapter 2, Section 5 attached.
3. Concrete Strength Confirmation
    a. Jacobs will take 2 core samples on either the side walls or floor to confirm the concrete strength of the culvert box.
    b. AWH would follow the TxDOT Concrete repair manual to patch these test locations. See Chapter 3, Section 3 attached.
4. Additional Geotechnical Borings
    a. Jacobs' Geotechnical Engineer will drill additional geotechnical borings adjacent to the MBC to confirm any subgrade improvements during the installation of the MBC.

Once inspections are completed, Jacobs will update the White Paper Memo with their findings.

Estimated Duration – 1 Week

Please Note: AWH will need to divert Sugar Cane traffic to the EB side of road with 2-way traffic while performing the above-mentioned drilling and inspections.

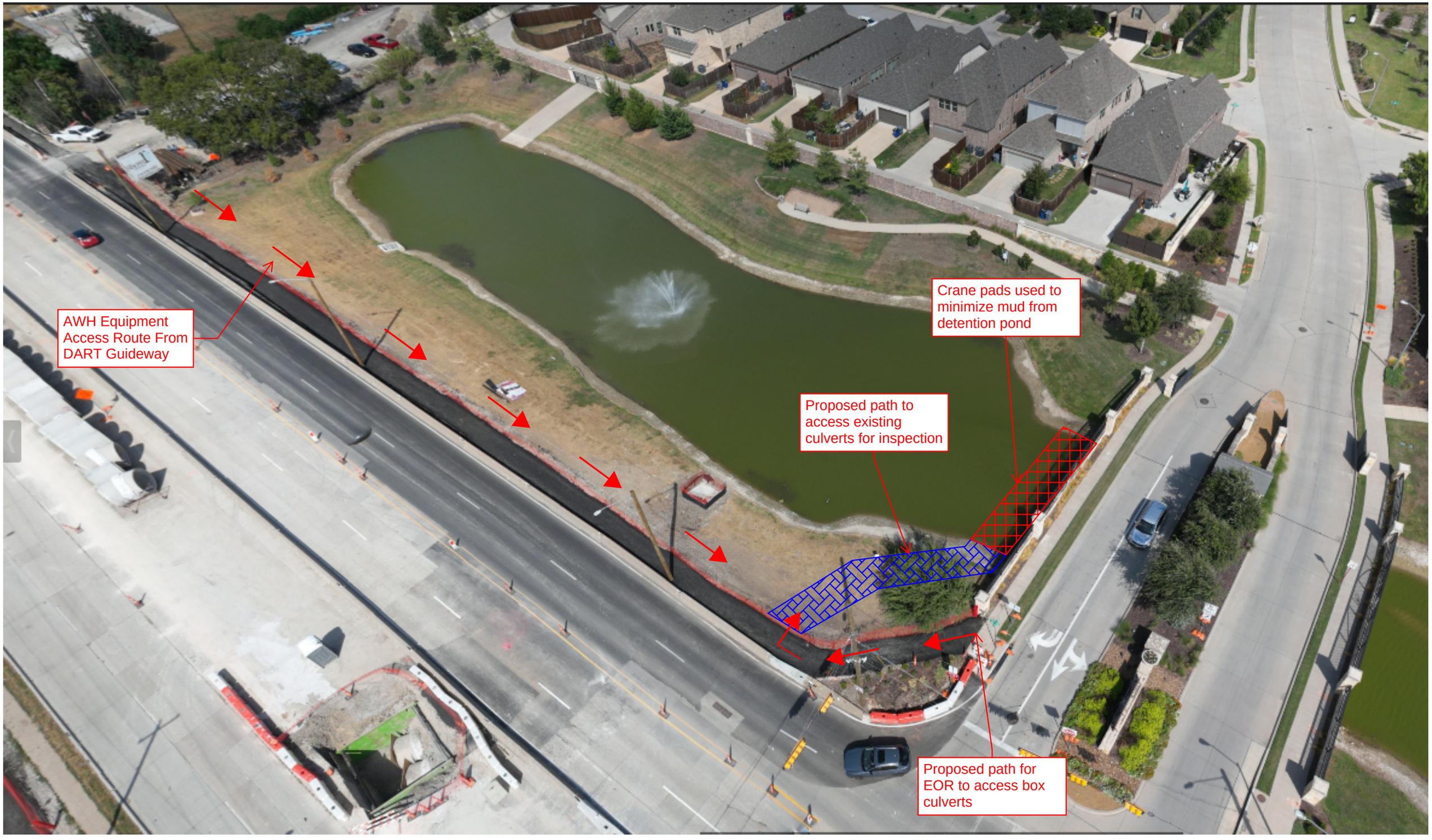
Step 7:

Remove sandbags, crane mats and restore any University Place property affected by this work.

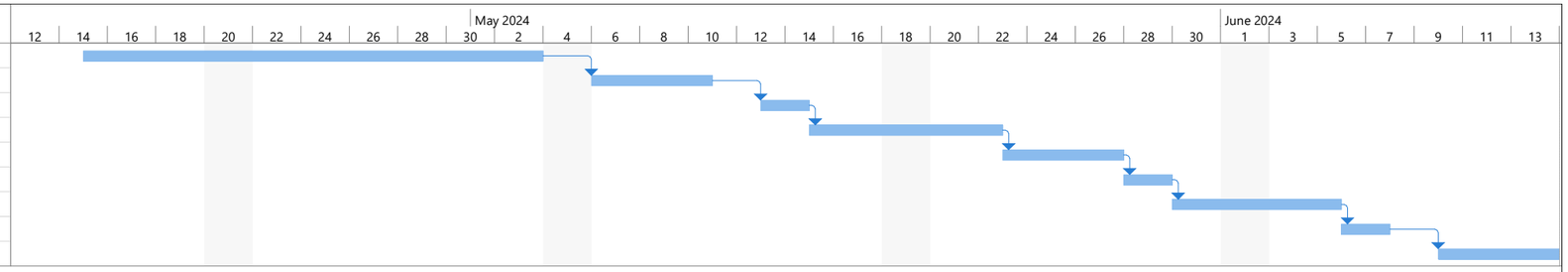
Please Note: AWH will need to remove the crane mats from the Sugar Cane WB Roadway. For half a day, AWH will need to divert Sugar Cane traffic to the EB side of road with 2-way traffic.

Estimated Duration – 1 Week

EXHIBIT A - UNIVERISTY PLACE DETENTION DEWATERING SITE MAP

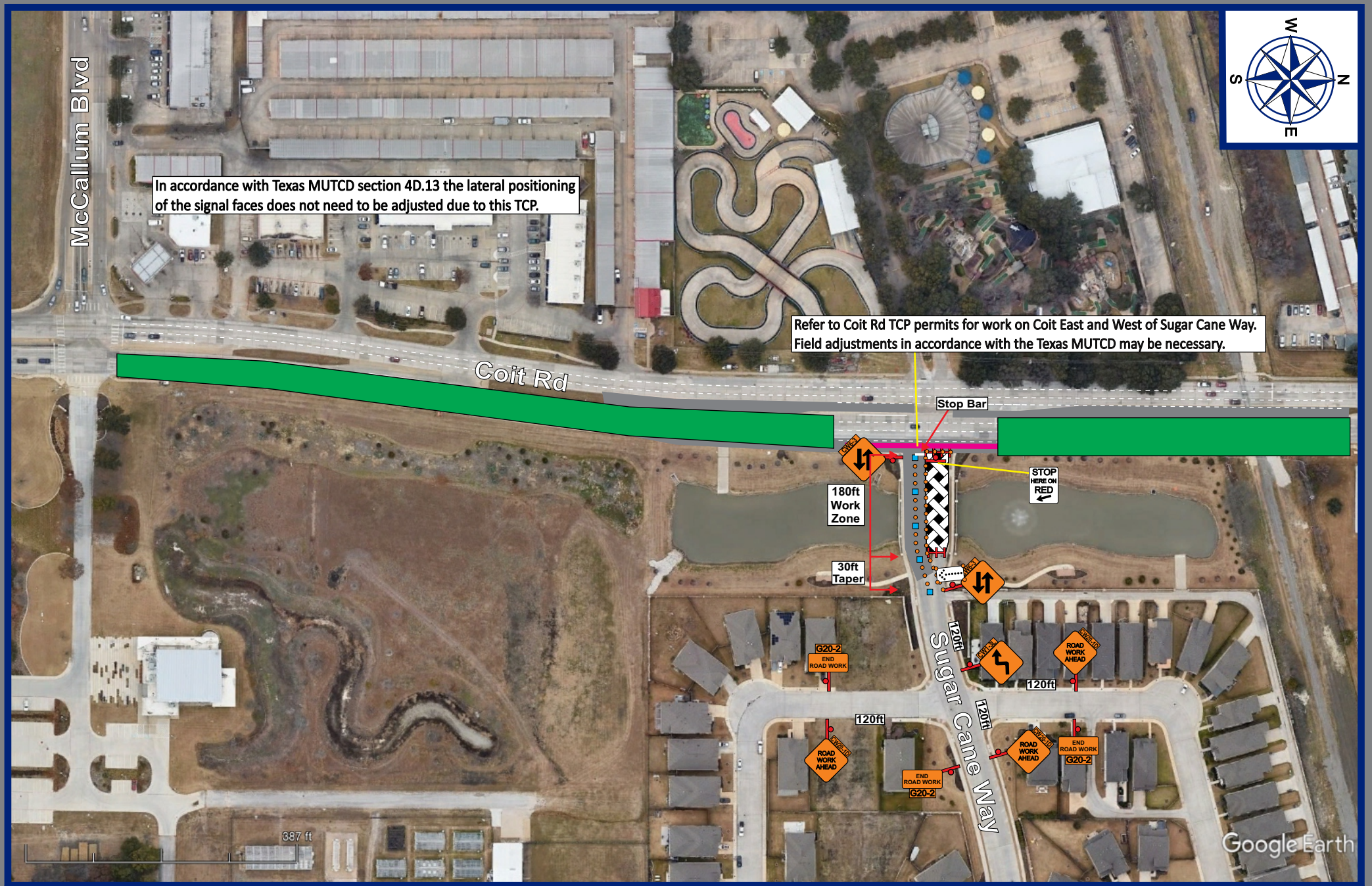


ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		3-Week Notification Period	15 days	Mon 4/15/24	Fri 5/3/24	
2		Geotechnical Borings	5 days	Mon 5/6/24	Fri 5/10/24	1
3		Build Temp Roads	2 days	Mon 5/13/24	Tue 5/14/24	2
4		Dewater Detention Ponds	6 days	Wed 5/15/24	Wed 5/22/24	3
5		Build Access Into MBC	3 days	Thu 5/23/24	Mon 5/27/24	4
6		Prep MBC for Inspections	2 days	Tue 5/28/24	Wed 5/29/24	5
7		Jacobs Inspections	5 days	Thu 5/30/24	Wed 6/5/24	6
8		Remove Crane Mats and Sand Bags	2 days	Thu 6/6/24	Fri 6/7/24	7
9		Restore University Place Property	5 days	Mon 6/10/24	Fri 6/14/24	8



Project: UP Dewatering Plan Sch
Date: Thu 4/11/24

Task	Summary	Inactive Milestone	Duration-only	Start-only	External Milestone	Manual Progress
Split	Project Summary	Inactive Summary	Manual Summary Rollup	Finish-only	Deadline	
Milestone	Inactive Task	Manual Task	Manual Summary	External Tasks	Progress	



SALESMAN EXECUTIVE

Cole Benton

TCP DESIGNER

Reedie Lea

THIS PLAN IS FOR ILLUSTRATIVE PURPOSES ONLY AND IS NOT INTENDED TO RELIEVE THE CONTRACTOR FROM THE REQUIREMENTS SET FORTH BY RELATED CONTRACT DOCUMENTS, THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) OR THE OVERALL RESPONSIBILITY TO TRAFFIC CONTROL SAFETY.

LEGEND

Phase 3

- Navigators
- Type 3 Barricade
- Flashing Electronic Arrow Board
- 2-Way Traffic Vertical Panel

NOTES

CONTACT: Niko Cantu

CONTACT NUMBER: 214-284-5400

DATE: 11/30/2023

Devices spaced on 20ft centers
Posted speed limit 30MPH

CONTRACTOR: Archer Western Herzog

CITY: Dallas

JOB NAME: DART Silverline

LOCATION: Coit Rd & Sugar Cane Way

SCOPE OF WORK: Crossover

BUYERS BARRICADES

UP Detwatering Plan Step 6.2 Repair Procedure

Section 3 — Major Spall Repair and Concrete Replacement

Description

Use batched concrete for `repairing` large spalls and defects in concrete members, or when removing and replacing large concrete components. Using batched concrete ensures that the repair material properties will be the same or similar to the parent concrete.

Batched concrete is required in structural applications because it becomes more critical that the repair material have similar material properties as the parent concrete. Proprietary bagged mixes may only be used in structural applications if specifically authorized by the Engineer.

Material

For new construction, make the repair material using the same concrete mix design that was utilized when the damaged member was originally cast. This applies to precast fabrication yards and construction sites where new structures are being built.

In remedial applications, the Engineer will specify which class of concrete should be utilized per Item 421. For repairs, the Engineer should select concrete mixes that closely match the parent material when such information is available via design documents or construction records.

Repair Procedure

- Surface preparation.
  - Remove any damaged or loose concrete prior to proceeding.
    - Avoid damage to sound concrete that is to remain in place.
    - Unless otherwise approved by the Engineer, use only hand tools or power-driven chipping hammers (15-lb. class maximum) to remove concrete.
- If more than 1/2 the perimeter of any mild reinforcement is exposed or if the exposed bar exhibits significant corrosion, remove the concrete from around the entire bar.
  - Provide ¾-inch clearance or 1.5 times the largest sized aggregate in the repair material, whichever is greater, between the steel and surrounding concrete to permit adequate flow of the repair material.

NOTE: A good rule of thumb is that adequate clearance is attained when you are able to wrap your fingers around the bar. Ensuring that you can grab the bar is a simple but highly effective method of ensuring there is adequate clearance to permit the repair material to flow around the exposed bar.

- The Engineer may require that the steel be coated or that corrosion inhibitor be added to the repair material when reinforcing steel has been exposed.
- Do not chip around prestressing strand that is exposed anywhere away from the immediate end of the member. Consult the Engineer when `repairing` an area in which prestressing strands have been exposed. When repair dictates that chipping occur around exposed strands, the Contractor must avoid striking the strands directly or otherwise causing damage that could lead to wire or strand breaks.
- Use abrasive blasting to remove rust from exposed steel surfaces.

◆ Square the `repair` perimeters to eliminate feathered edges and to ensure that the repair material will be applied in depths no less than 1/2 inch.

- Handheld grinders or saws may be used to square the `repair` perimeters.
- Do not over-cut the `repair` perimeters at the corners of the repair areas.
- When practical, undercut the `repair` perimeter at an approximate angle of 30 degrees such that the profile will help hold the `repair` material in place.

◆ Roughen the substrate to ensure that there will be a mechanical bond between the `repair` material and the parent concrete. Though difficult to quantify and measure, Contractor should attempt to attain a minimum surface roughness profile of 1/8 inch or CSP (Concrete Surface Profile) 6 per ICRI.

◆ If the damage occurs at the end of a member and prestressing strand has been exposed, recess the strands a minimum 3/8 inch using a torch or other approved method. Do not overheat or damage the surrounding concrete.

NOTE: In the past some Fabricators have opted not to recess prestressing strands in spalled areas so they can serve as dowels for the `repair` material. While the strands would serve well as dowels in those circumstances, they could be exposed to moisture and chlorides if the repair fails over the life of the structure. For that reason it is more important that the strand be completely recessed. Anchors should be installed to hold the repair material in place.

◆ For practically all batched concrete repairs there will be an adequate amount of exposed steel to provide sufficient mechanical anchorage to the parent material. If the Engineer requires that Contractor install additional ties or dowels, select material and install in accordance with the requirements in Section 3.2 for Intermediate Spall Repair.

◆ Adhesive Anchors.

- The Engineer will identify anchor or reinforcing steel type in plans.
- Anchor the bars using a preapproved Type III anchoring adhesive. `Ensure the Contractor has either small volume anchoring adhesive cartridges or an injection system for bulk volume anchoring adhesive.`

- Drill a hole 1/8 to 1/4 inch greater than the bar diameter. Make the hole deep enough to permit a minimum 6-inch embedment of the bar.
- Remove any contaminants from the hole, including laitance, oil, dust, debris, or other foreign particles.
- Just prior to installing the anchor, clean the hole using a high-pressure air compressor equipped with filters to remove all oil from the compressed air.
- Dry the concrete surface inside the hole prior to installing the dowel.
- Fill the hole approximately 1/3 full with anchoring adhesive. Twist the bar as it is inserted. For u-shaped bars that cannot be twisted fill the holes approximately ½ full with adhesive prior to insertion.
  - Ensure that the space between the dowel and the concrete is completely filled with adhesive.
  - Remove all adhesive from the concrete surface that leaks from the hole after the dowel is inserted.
- Where supplemental reinforcement is installed, ensure minimum cover of 1 ½ inch.
- Substrates must be clean and sound. Remove any contaminants, including laitance, oil, dust, debris, or other foreign particles.
- Just prior to `repairing`, blast the repair area using a high-pressure air compressor equipped with filters to remove all oil from the compressed air.

◆ Mixing.

Produce repair material in accordance with the approved methods for batching concrete. In order to ensure an adequate mix, batch a minimum of one cubic yard of concrete to repair the damaged area even if less volume is required to complete the repair.

Ensure that concrete is workable enough when it is placed that it can be adequately consolidated around reinforcing steel, anchors, and other tight places inside the forms.

```
Ensure the maximum coarse aggregate does not exceed 1/3 of the
smallest dimension, including reinforcement clearance. Remove
large aggregate by wet sieving when necessary.
```

◆ Application.

Hot and cold weather application.

- The temperature of the repair material and the concrete substrate at the time of application must be between 40°F and 95°F.
- Do not apply repair material when the ambient temperature in the shade is below 40°F and falling. Repair material may be placed when the ambient temperature in the shade is 35°F and rising or above 40°F.
- Shade the repair material components and the repair substrate if the ambient temperature is above 100°F.

Convey the material to the repair area using approved concrete delivery equipment.

Apply the repair material over an SSD substrate.

Obtain an SSD condition using the following methods:

- Several minutes before repairing, apply high-pressure water blast to the surface for a brief period (`15 minutes` depending on the porosity of the concrete). An SSD condition is achieved when the surface remains damp after being exposed for 15 minutes.

Surface may be damp, but must be free of standing water. Remove all free (ponded) water just before placing repair material.

Do not use a proprietary epoxy bonding layer in lieu of an SSD substrate unless approved by the Engineer. If use of a proprietary bonding agent is authorized, mix it in accordance with the manufacturer's requirements. Use only TxDOT approved Type V or Type VII material (refer to DMS 6100 – *Epoxies and Adhesives*).

◆ Forms.

Prepare and install the forms prior to mixing the repair material.

Ensure that forms are tight enough to prevent grout leakage.

Place the repair material in the forms while the concrete substrate is still SSD. If the parent concrete is no longer SSD, remove the forms and re-spray the surface with a high-pressure water blast.

Consolidate the material `adequately`. Do not over-vibrate the mix. `Do not vibrate self-consolidating concrete.`

If required by the Engineer, make concrete test cylinders to determine the compressive strength of the repair material. If the same concrete mix is being used for production work in another location, the results of compressive strength testing for that work may be used.

◆ Curing.

Cure batched concrete repairs for a minimum of 72 hours. For most batched concrete applications, the material should be cured by leaving the forms in place during the entire curing period. Place wet mats on exposed sections and over the openings used to place the material.

Do not allow concrete surfaces to become dry during the specified moist curing period. Ensure that wet mats are kept wet during the entire cycle.

Insulate the repair material to ensure that there is adequate heat for curing if ambient temperature is expected to fall below 50°F. If using artificial heating methods, do not heat the repair material to above 130°F.

After curing, the repair area will be inspected visually for cracking and sounded by the inspector with firm hammer blows to ensure the repair has adequate bond without cracking and

is free of soft or other unsound material. Acceptance of the repair will be based on the findings of this inspection.

Commentary

Batched concrete is typically the best choice when repairing deep spalls and in structural applications. Particularly in new construction, mix designs can be selected to ensure that the material properties will closely match the substrate.

Failures at the bond line between the repair material and parent concrete are a common problem due to stresses that develop as a result of loading, differential thermal expansion, drying shrinkage and contraction between the repair and parent material.

To that end, using repair material that has a comparable coefficient of thermal expansion and a comparable or lower modulus of elasticity is critical for the long-term success of a repair when significant stresses are likely to develop.

Typically, it is not feasible to determine the modulus of elasticity and coefficient of thermal expansion in a member that has already been cast. The best solution is to use the same mix design for the repair material as that used when the damaged member was originally cast, ensuring that the material properties will be similar.

UP Detwatering Plan Step 6.3 Repair Procedure

Section 5 — Taking Cores and Patching Core Holes

Description

Cores may be taken from concrete members for a variety of reasons, including verification of compressive strength, investigation of potential concrete material problems (e.g. segregation or bleeding), or examination of specific defects (e.g. cracks or cold joints). This section covers proper taking and marking of cores, and patching of the core holes.

Selection Criteria

Select core locations and have them approved by the Engineer. Check fabrication sheets so, cores are taken with minimum impact to mild reinforcement. Check design sheets or shop drawings to ensure that cores are not taken through prestressing strands unless specifically approved by the Engineer. For prestressing strands use GPR and other NDE methods to locate the strands.

Take four-inch outside diameter cores when feasible. When approved by the Engineer, take smaller cores in highly congested areas to avoid impact to mild reinforcement or prestressed strands.

Taking Cores to Check Compressive Strength

- Take at least two cores from a member if companion cylinders reveal a potential deficiency in the required 28-day compressive strength.
- Evenly space the cores along the member(s) in question. Typically, take the cores through the webs or sidewalls of prestressed concrete girders.
- There can be no mild reinforcement or prestressed strands in the cores if they will be used for testing compressive strength.

Taking Cores to Investigate Specific Defects

- Take cores directly through the problem areas when investigating specific damage or defects. It typically will not be necessary to take control cores in these types of situations.
- If investigating a cold joint, take the sample such that approximately half the core is above the joint and half is below the joint.

Marking Cores

When cores are not taken from a horizontal surface, draw two arrows on the core locations BEFORE a core is taken. Point both arrows straight up, and draw them on each side (left and right)

of the core. In most cases the petrographer will need to cut in the vertical orientation, so it is important that the core be marked such that both sides will indicate the "up" direction after cutting.

After a core has been taken, write additional information on each side (left and right) of the sample. Include the following information:

- Structure No. (existing structure) or CSJ (new construction).
- For new construction, name of Prime Contractor if at jobsite or Fabricator if in Precast Concrete Plant.
- Member ID and location.
- Core number. Also, take photographs and notes indicating from where in the member the core was taken and why.
- Top and bottom surfaces for full depth cores.

Again, most cores are cut vertically. Write all of the above information on both sides of the core so each part of the sample can be properly identified if it is cut.

Include a standard TxDOT Form 202 for each set of cores taken from a member. Request that the TxDOT Inspectors fill out Form 202 as needed so hard copies of the completed forms can be sent directly with the samples. Also send copies of applicable concrete mix design worksheets, batch tickets, and strength data with the cores when they are available.

Patching Core Holes

As with all large patches, utilize preapproved bagged cementitious repair material or batched concrete to patch core holes when feasible. Follow the requirements set forth in the section on Intermediate Spall Repair for implementing the work.