

T:\PROJECTS\890 - RTA Interim Downtown Transit Hub Drawings\Drawings\Sheets\Design (Phase 2)\Title Sheet\_Ph.2.dwg

## STAKEHOLDERS INFO.

NEW ORLEANS REGIONAL TRANSIT AUTHORITY (RTA)  
2817 CANAL STREET  
NEW ORLEANS, LA 70119  
(504) 248-3900

CITY OF NEW ORLEANS DEPARTMENT OF PUBLIC WORKS (DPW)  
1300 PERDIDO STREET SUITE 6W03  
NEW ORLEANS, LA 70112  
(504) 658-8040

NEW ORLEANS PUBLIC LIBRARY (NOPL)  
5120 SAINT CHARLES AVENUE  
NEW ORLEANS, LA 70115  
(504) 596-2625

TULANE UNIVERSITY  
6823 SAINT CHARLES AVENUE  
NEW ORLEANS, LA 70118  
(504) 865-5000

### INDEX OF SHEETS

#### SHT # DESCRIPTION

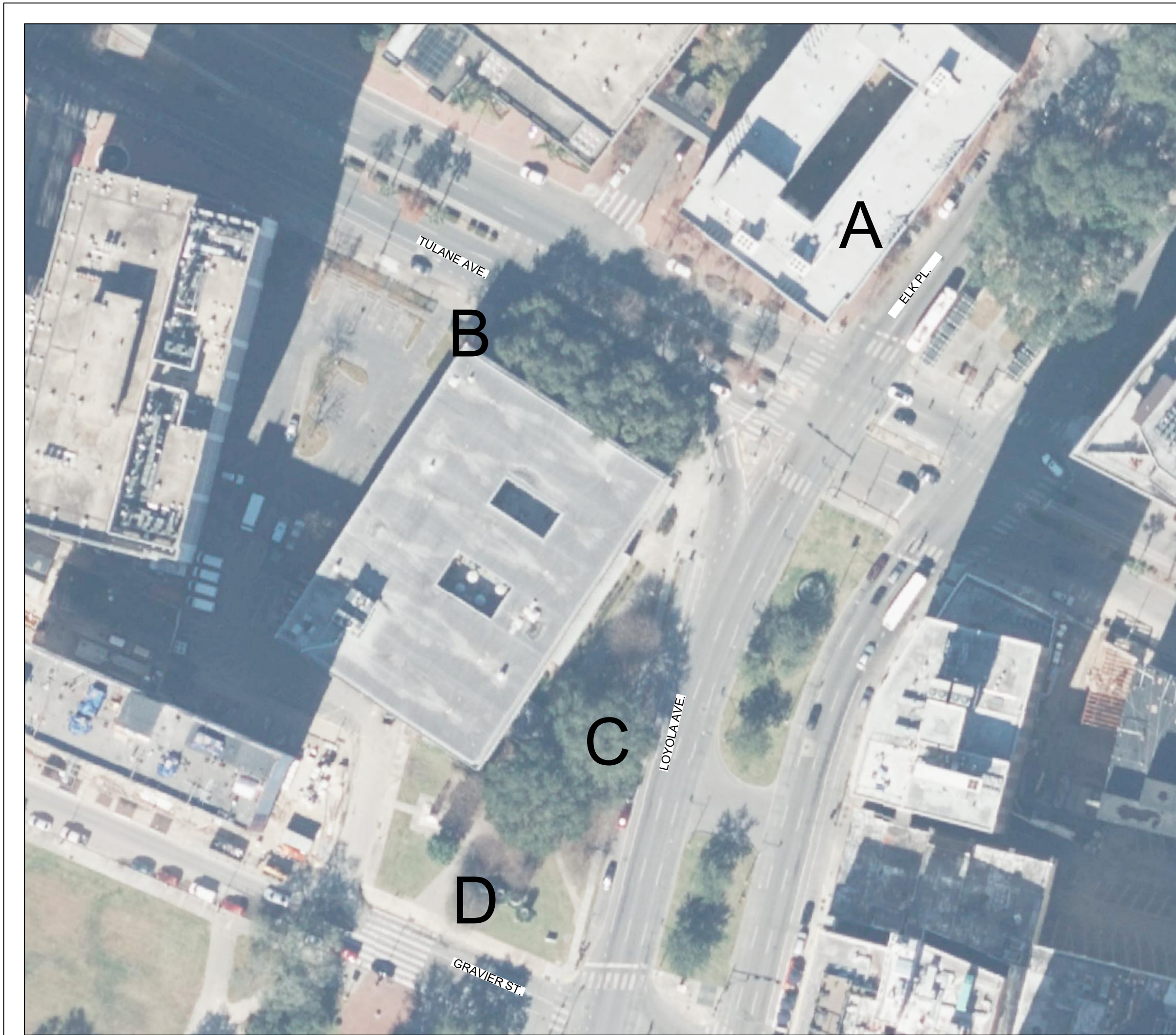
T-100	TITLE SHEET
C-100	DEMOLITION PLAN
C-101	PAVING & GRADING PLAN
C-102	DIMENSIONAL LAYOUT
C-103	CONSTRUCTION DETAILS
L-100	LANDSCAPE PLANTING PLAN
L-101	TREE PROTECTION PLAN
L-102	LANDSCAPING DETAILS
E-100	ELECTRICAL SITE PLAN
E-200	ELECTRICAL DETAILS
E-300	ELECTRICAL SPECIFICATION NOTES

# NEW ORLEANS REGIONAL TRANSIT AUTHORITY

## INTERIM DOWNTOWN TRANSIT HUB - PHASE 2

### JANUARY 2024

## CONSTRUCTION DRAWINGS



VICINITY MAP

SCALE: 1" = 60'

### RTA INTERIM DOWNTOWN TRANSIT HUB

SITE A: ELK PLACE FOR NEW ORLEANS EAST BUSES

SITE B: TULANE AVENUE (RIVERBOUND) FOR WESTBANK  
BUS ROUTES

SITE C: LOYOLA AVENUE FOR GENTLY/MIDCITY AND  
THROUGH ROUTES

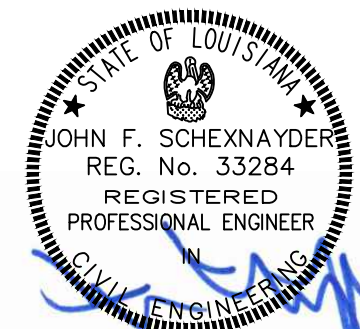
SITE D: GRAVIER STREET

APPROVED BY:

GOTECH, INC.

DATE

1/26/2024



Project No.: 890  
Sheet No.: T-100

NEW ORLEANS RTA  
INTERIM DOWNTOWN TRANSIT HUB - PHASE 2

TITLE SHEET

REVISIONS

DATE

NO.

G O T E C H , I N C .

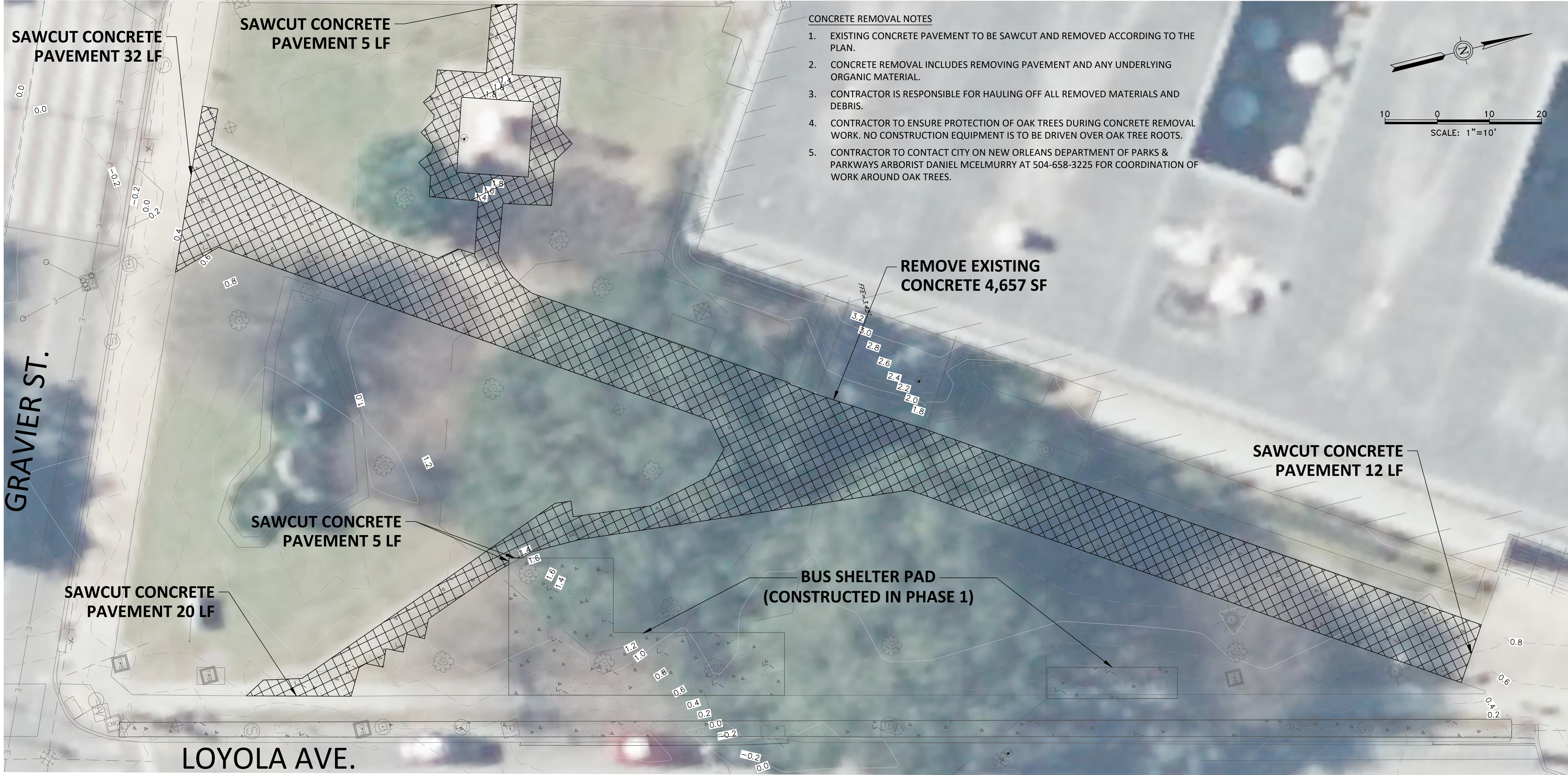
CONSULTING ENGINEERS | 8383 BLUEBONNET BLVD. | BATON ROUGE, LA 70810

PHONE: (225)766-5358 | FAX: (225)766-5879

DESIGNED:	JFS
DRAWN:	HJS
CHECKED:	JAW
APPROVED:	JFS
SCALE:	N/A
DATE:	JANUARY 26, 2024

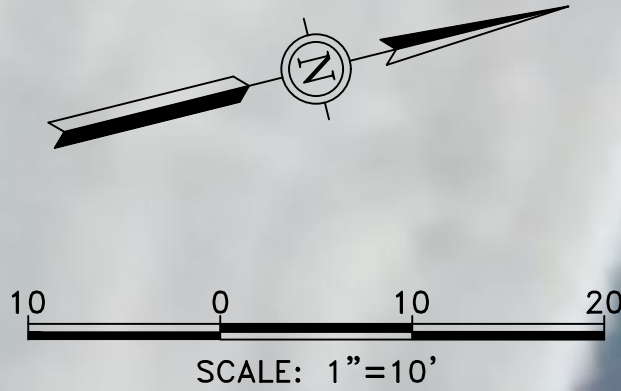


T:\PROJECTS\890 - RTA Interim Downtown Transit Hub Drawings\Sheets\Design (Phase 2)\Demolition Plan\_Ph.2.dwg



#### CONCRETE REMOVAL NOTES

- EXISTING CONCRETE PAVEMENT TO BE SAWCUT AND REMOVED ACCORDING TO THE PLAN.
- CONCRETE REMOVAL INCLUDES REMOVING PAVEMENT AND ANY UNDERLYING ORGANIC MATERIAL.
- CONTRACTOR IS RESPONSIBLE FOR HAULING OFF ALL REMOVED MATERIALS AND DEBRIS.
- CONTRACTOR TO ENSURE PROTECTION OF OAK TREES DURING CONCRETE REMOVAL WORK. NO CONSTRUCTION EQUIPMENT IS TO BE DRIVEN OVER OAK TREE ROOTS.
- CONTRACTOR TO CONTACT CITY ON NEW ORLEANS DEPARTMENT OF PARKS & PARKWAYS ARBORIST DANIEL MCELMURRY AT 504-658-3225 FOR COORDINATION OF WORK AROUND OAK TREES.



## 1 DEMOLITION PLAN

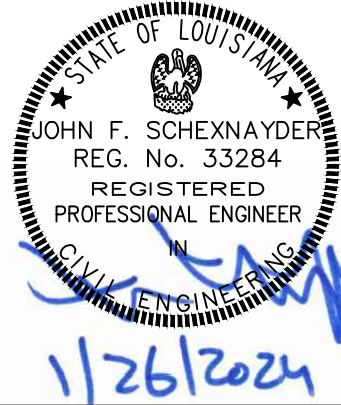
Scale = 1"=10'

#### GENERAL DEMOLITION NOTES

- IF NOT SHOWN ON THE DEMOLITION DRAWINGS, CONTRACTOR SHALL REMOVE ALL EXISTING MATERIALS AS NECESSARY TO COMPLETE ALL NEW WORK AS REQUIRED.
- THE EXISTING UTILITIES, BOTH ABOVE GROUND AND SUBSURFACE, WERE DETERMINED BY FIELD SURVEYS AND AVAILABLE FILES AND RECORDS. THE LOCATIONS, SIZE, EXISTENCE OR NONEXISTENCE OF UTILITIES IS NOT WARRANTED BY THE ENGINEER. THE EXACT LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO CONSTRUCTION. ALL DAMAGES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS REQUIRED TO VISIT SITE PRIOR TO BID AND NOTIFY ENGINEER OF ANY INCONSISTENCIES.
- CONTRACTOR TO ENSURE THAT UTILITIES SERVICES SERVING NEARBY FACILITIES ARE NOT INTERRUPTED UNLESS PERMITTED AND APPROVED BY OWNER, OR ARRANGEMENTS HAVE BEEN MADE TO PROVIDE TEMPORARY UTILITY SERVICES.
- ALL DEMOLITION QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR TO VERIFY ALL QUANTITIES.
- OWNER ASSUMES NO RESPONSIBILITY FOR ACTUAL CONDITION OF BUILDINGS AND STRUCTURES TO BE DEMOLISHED.
- CONDITIONS EXISTING AT TIME OF INSPECTION FOR BIDDING PURPOSE WILL BE MAINTAINED BY OWNER AS FAR AS PRACTICAL.
- CONTRACTOR TO MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING DEMOLITION OPERATIONS.

- DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY GOVERNING REGULATIONS AND/OR OWNER.
- USE OF EXPLOSIVES WILL NOT BE PERMITTED.
- USE WATER MIST, TEMPORARY ENCLOSURES, AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS.
- DO NOT CREATE HAZARDOUS OR OBJECTIONABLE CONDITIONS SUCH AS ICE, FLOODING, AND POLLUTION WHEN USING WATER. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
- PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE.
- DO NOT BURN DEMOLISHED MATERIALS. HAUL OFF AND DISPOSE. CONTRACTOR IS REASONABLE FOR ALL DUMPING AND WASTE DISPOSAL COSTS.
- CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE PATTERNS DURING DEMOLITION ACTIVITIES AND SHALL NOT INCREASE FLOODING POTENTIAL TO SURROUNDING AREAS OR FACILITIES.
- CONTRACTOR TO ENSURE THAT NO DIRT, MUD, DEBRIS, OR OTHER POLLUTION IS TRACKED THROUGH PARKING LOT DURING CONSTRUCTION.

LEGEND	
	DRAIN MH
	FIRE HYDRANT
	GENERAL LIGHT
	GAS METER
	GAS VALVE
	MECHANICAL POINT
	POWER TRANSFORMER
	POWER VAULT
	POWERPOLE
	SEWER MANHOLE
	SEWER CLEANOUT
	SIGN
	WATER VALVE
	TREE
	SEWER LINE
	ELECTRIC LINE (BELOW GRD)
	ELECTRIC LINE (ABOVE GRD)
	DRAINAGE LINE (8" DIA. AND BELOW)
	DRAINAGE LINE (10" DIA. AND ABOVE)
	GAS LINE
	WATER LINE
	FENCE LINE
	PROPOSED SPOT GRADE
	BUS SHELTER PAD (CONSTRUCTED IN PHASE 1)
	CONCRETE REMOVAL



Project No.: 890  
Sheet No.: C-100

NEW ORLEANS RTA  
INTERIM DOWNTOWN TRANSIT HUB - PHASE 2

DEMOLITION PLAN

NO.	DATE	REVISIONS

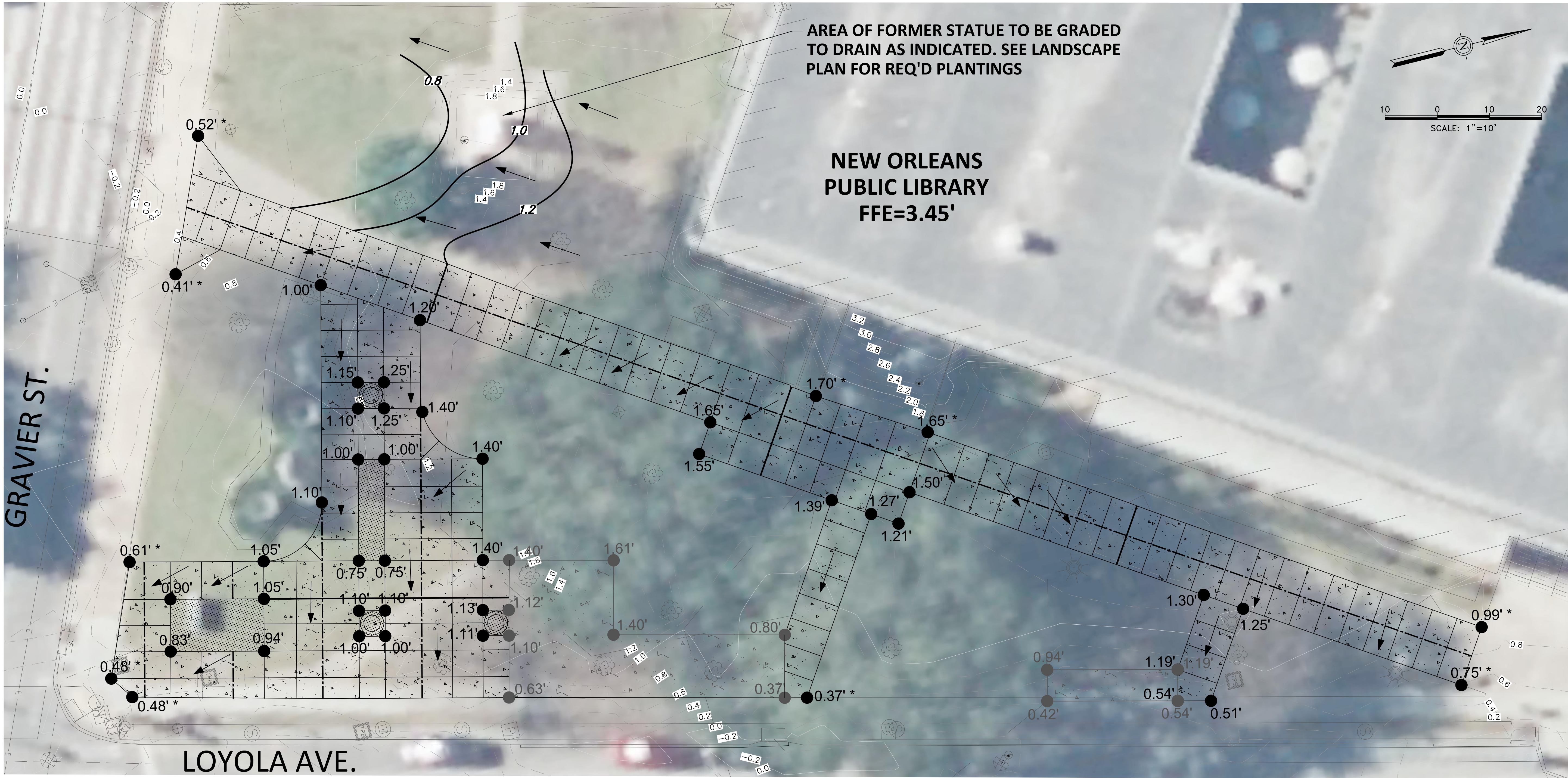
G O T E C H , I N C .

CONSULTING ENGINEERS | 8383 BLUEBONNET BLVD. | BATON ROUGE, LA. 70810

PHONE: (225)766-5358 | FAX: (225)766-5679

DESIGNED:	JFS
DRAWN:	HJS
CHECKED:	JAW
APPROVED:	JFS
SCALE:	1" = 10'
DATE:	JANUARY 26, 2024





\* APPROXIMATE ELEVATION SHOWN. ACTUAL TOP OF PAVEMENT TO MATCH EXISTING BACK OF CURB.

GRADING NOTES

- LOUISIANA LAW REQUIRES A MINIMUM OF 48 HOURS NOTICE TO UNDERGROUND UTILITY OWNERS BEFORE YOU PERFORM ANY DIGGING OR DEMOLITION AS REQUIRED BY THE "LOUISIANA UNDERGROUND FACILITIES DAMAGE PREVENTION LAW". CONTRACTORS SHALL CALL LOUISIANA ONE CALL AT 1-800-272-3020.
- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING UTILITIES WITHIN WORK AREAS PRIOR TO EXCAVATION.
- ALL PAVEMENT GRADES SHOWN ARE TOP OF CONCRETE UNLESS OTHERWISE NOTED.
- SLOPE OF PAVING SHALL NOT EXCEED 2%.
- ALL AREAS WITHIN PROTECT WORK AREA TO BE GRADED FOR POSITIVE DRAINAGE TO AN INLET.
- CONTRACTOR MUST HAVE WRITTEN APPROVAL FROM THE ENGINEER BEFORE ANY CHANGE IN DESIGN IS MAKE.
- ALL LANDSCAPED AND PLANTER AREAS ARE TO BE GRADED TO DRAIN ONTO CONCRETE PAVEMENT.
- CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE THROUGHOUT THE COURSE OF CONSTRUCTION. CONTRACTOR SHALL NOT CAUSE ANY INCREASE IN RISK OF FLOODING TO ANY SURROUNDING PROPERTIES DURING THE COURSE OF CONSTRUCTION.
- CONTRACTOR TO ENSURE PROTECTION OF OAK TREES DURING CONCRETE REMOVAL WORK. NO CONSTRUCTION EQUIPMENT IS TO BE DRIVEN OVER OAK TREE ROOTS.
- CONTRACTOR TO CONTACT CITY OF NEW ORLEANS DEPARTMENT OF PARKS & PARKWAY ARBORIST DANIEL MCELMURRAY AT 504-658-3225 FOR COORDINATION OF WORK AROUND OAK TREES.
- ALL SIDEWALKS TO BE CONSTRUCTED PER CITY OF NEW ORLEANS DEPARTMENT OF PUBLIC WORKS MISCELLANEOUS DETAILS FOR STREET CONSTRUCTION - MC1.

1 PAVING & GRADING PLAN  
Scale = 1"=10'

LEGEND			
	DRAIN MH		POWER VAULT
	FIRE HYDRANT		POWERPOLE
	GENERAL LIGHT		SEWER MANHOLE
	GAS METER		SEWER CLEANOUT
	GAS VALVE		SIGN
	MECHANICAL POINT		WATER VALVE
	POWER TRANSFORMER		TREE
	SEWER LINE		ELECTRIC LINE (BELOW GRD)
	ELECTRIC LINE (ABOVE GRD)		DRAINAGE LINE (8" DIA. & BELOW)
	DRAINAGE LINE (10" DIA. & ABOVE)		GAS LINE
	WATER LINE		FENCE LINE
	CONSTRUCTION JOINT (RE: 2 C105)		EXPANSION JOINT (RE: 3 C105)
	LONGITUDINAL JOINT (RE: 4 C105)		EXISTING CONTOURS
	PROPOSED CONTOURS		PROPOSED SPOT GRADE
	BUS SHELTER PAD (CONSTRUCTED IN PHASE 1)		PLANTED AREA - SEE LANDSCAPE PLAN
	REQ'D GRADING DIRECTION		



Project No.: 890

Sheet No.: C-101

NEW ORLEANS RTA

INTERIM DOWNTOWN TRANSIT HUB - PHASE 2

PAVING & GRADING PLAN

REVISIONS

DATE

NO.

G O T E C H , I N C .

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DESIGNED: JFS

DRAWN: HJS

CHECKED: JAW

APPROVED: JFS

SCALE: 1" = 10'

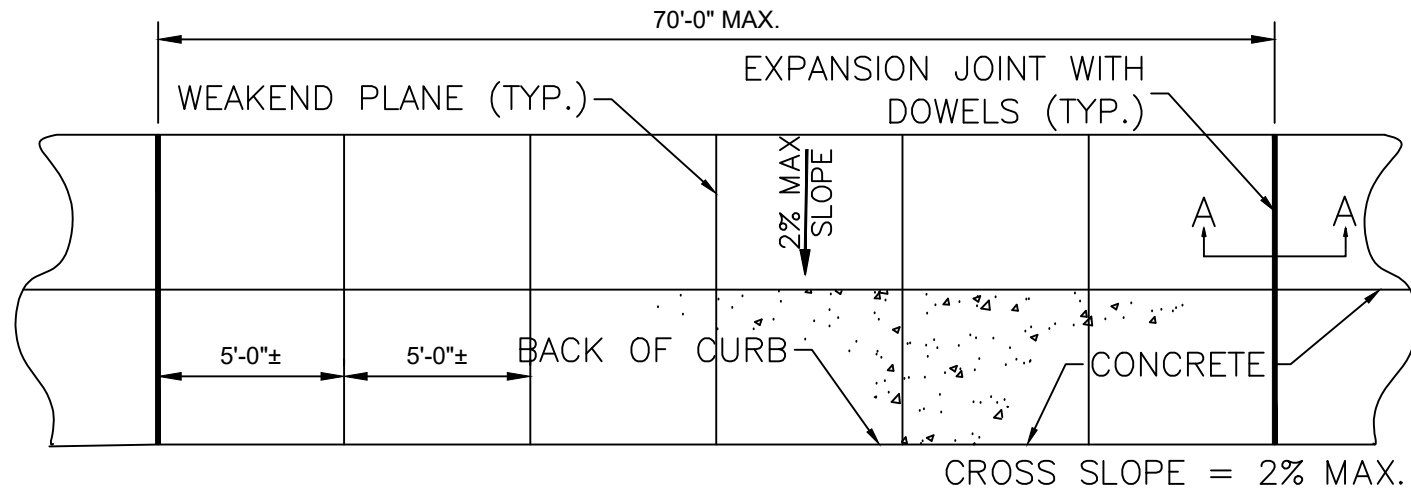
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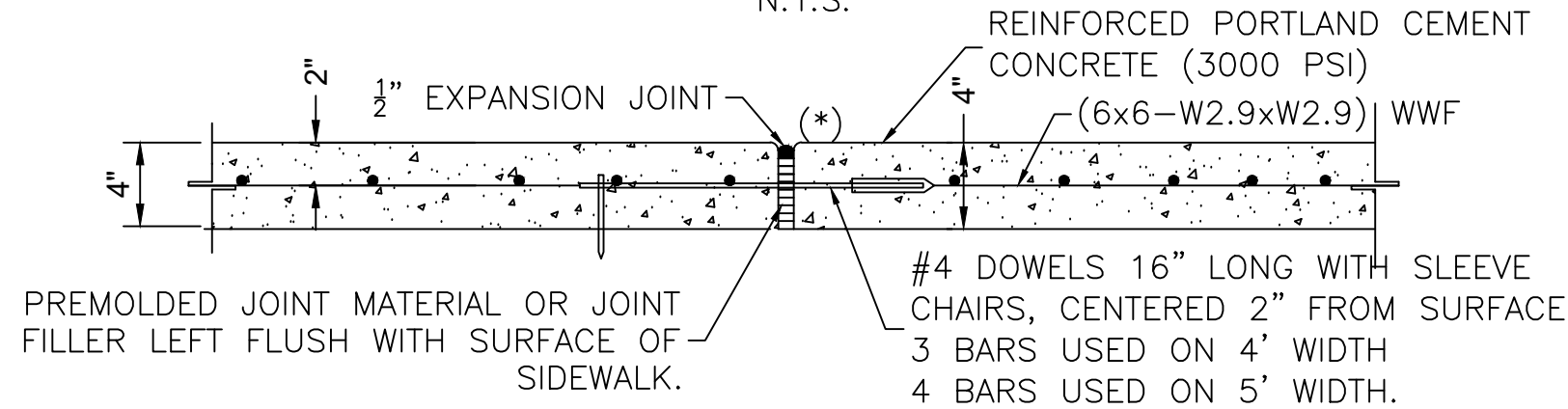


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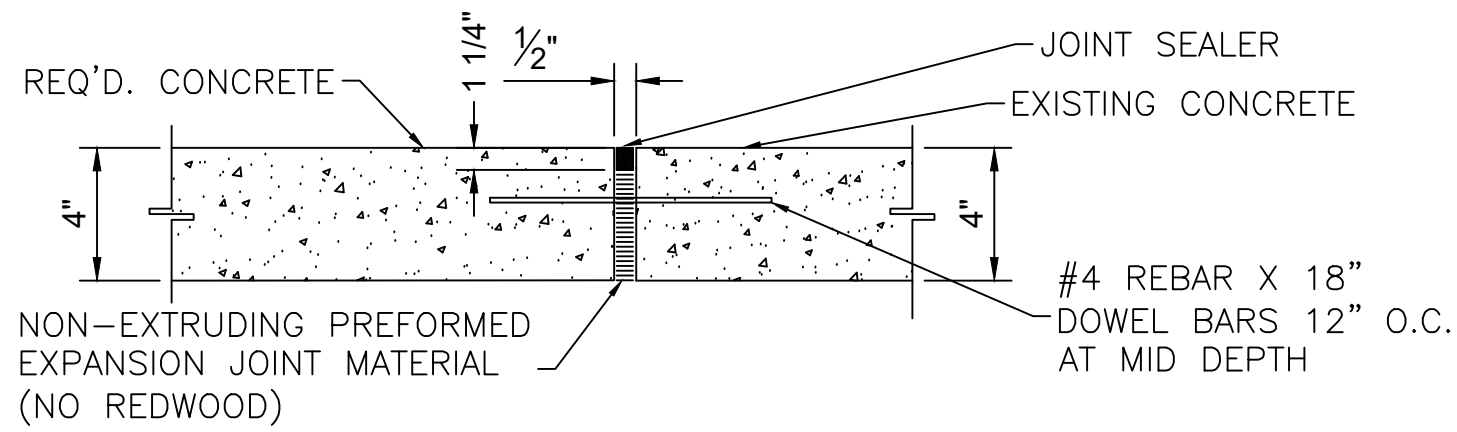
PLAN PORTLAND CEMENT CONCRETE SIDEWALK PAVEMENT (FULL)

N.T.S.



SECTION A-A  
N.T.S.

(\*) THIS HALF OF DOWEL SHALL BE GREASED



NOTE:

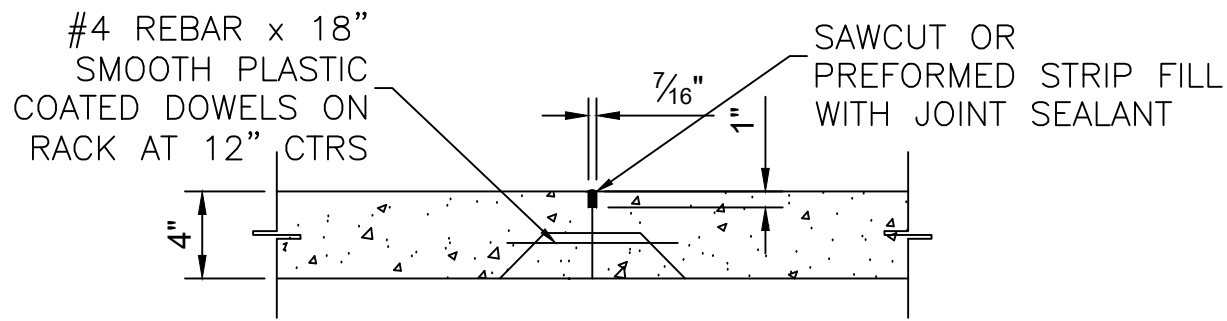
- CONSTRUCTION JOINT TO BE PLACED ALONG ALL EDGES OF NEW CONCRETE PAVEMENT PLACED AT EXISTING CONCRETE PAVEMENT.

NEW CONCRETE AT EXISTING CONCRETE

N.T.S.

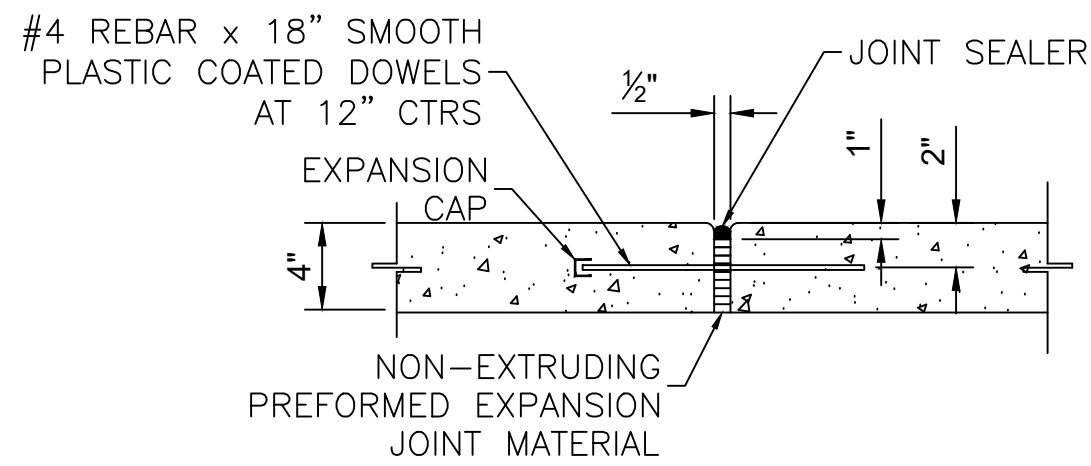
# 1 CONCRETE PAVING DETAIL

Scale = N.T.S.



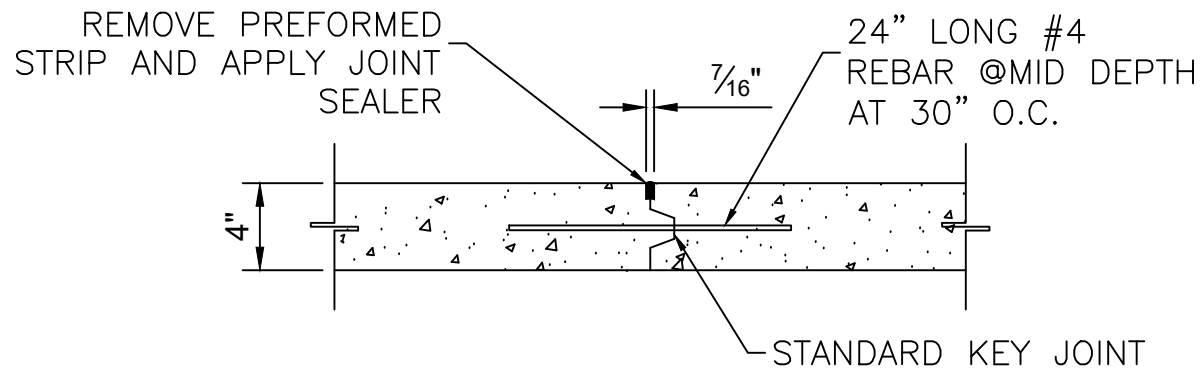
## 2 CONTRACTION JOINT

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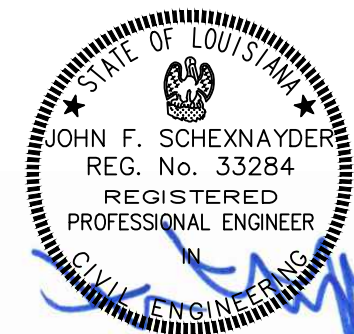
## 3 EXPANSION JOINT

Scale = N.T.S.



## 4 LONGITUDINAL (KEY) JOINT

Scale = N.T.S.



1/26/2024

Project No.: 890  
Sheet No.: C-103

NEW ORLEANS RTA  
INTERIM DOWNTOWN TRANSIT HUB - PHASE 2  
CONSTRUCTION DETAILS

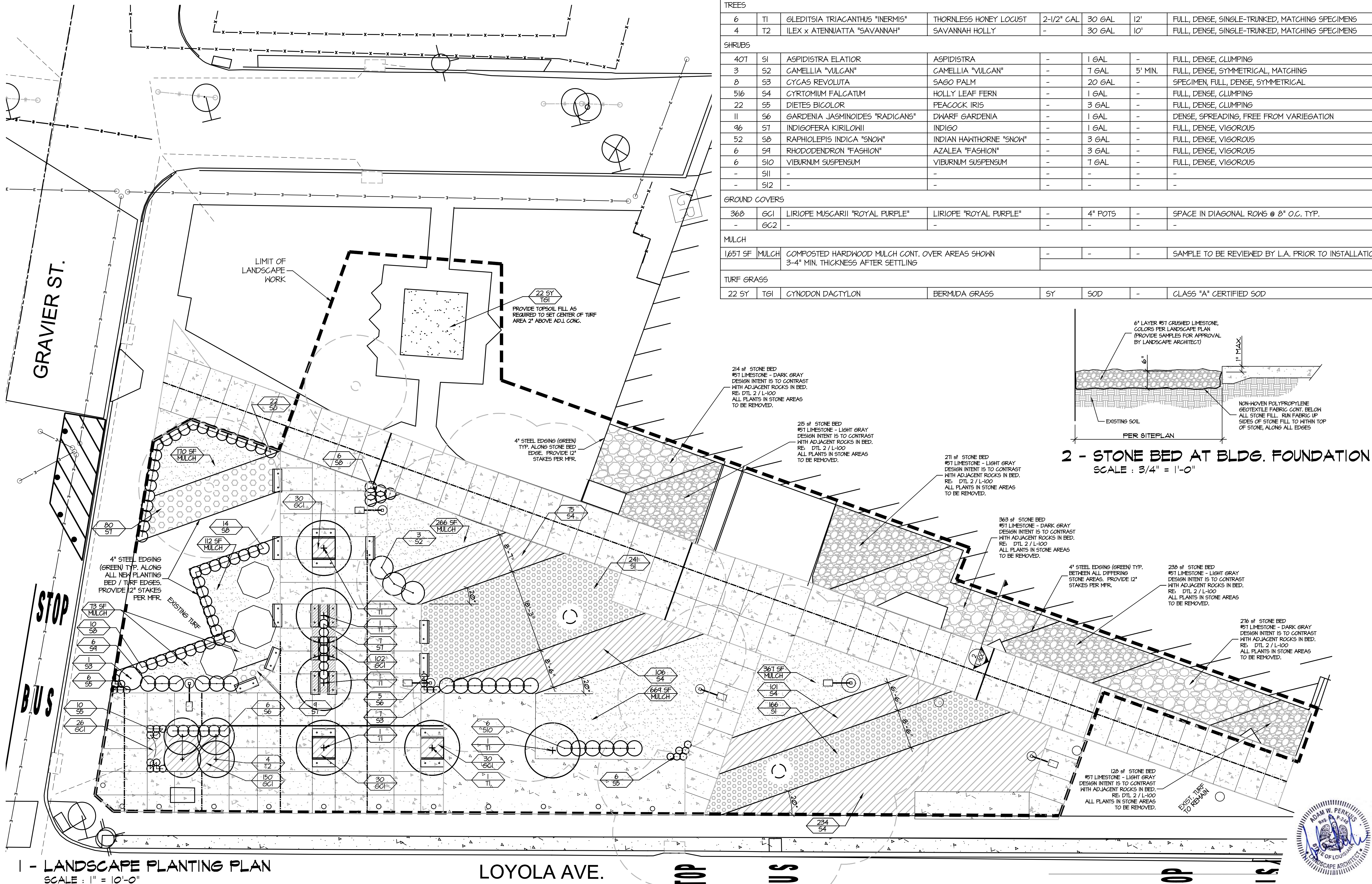
NO.	DATE	REVISIONS

G O T E C H , I N C .  
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DRAWN: HJS  
CHECKED: JAW  
APPROVED: JFS  
SCALE: N.T.S.  
DATE: JANUARY 26, 2024



QUANTITY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	HEIGHT	REMARKS
TREES							
6	T1	GLEDITSIA TRIACANTHUS "INERMIS"	THORNLESS HONEY LOCUST	2-1/2" GAL	30 GAL	12'	FULL, DENSE, SINGLE-TRUNKED, MATCHING SPECIMENS
4	T2	ILEX x ATENUJATTA "SAVANNAH"	SAVANNAH HOLLY	-	30 GAL	10'	FULL, DENSE, SINGLE-TRUNKED, MATCHING SPECIMENS
SHRUBS							
40T	S1	ASPIDISTRA ELATIOER	ASPIDISTRA	-	1 GAL	-	FULL, DENSE, CLUMPING
3	S2	CAMELLIA "VULCAN"	CAMELLIA "VULCAN"	-	7 GAL	5' MIN.	FULL, DENSE, SYMMETRICAL, MATCHING
8	S3	CYCAS REVOLUTA	SAGO PALM	-	20 GAL	-	SPECIMEN, FULL, DENSE, SYMMETRICAL
516	S4	CYTOMIUM FALCATUM	HOLLY LEAF FERN	-	1 GAL	-	FULL, DENSE, CLUMPING
22	S5	DIETES BICOLOR	PEACOCK IRIS	-	3 GAL	-	FULL, DENSE, CLUMPING
11	S6	GARDENIA JASMINOIDES "RADICANS"	DWARF GARDENIA	-	1 GAL	-	DENSE, SPREADING, FREE FROM VARIATION
96	S7	INDIGOFERA KIRILOWII	INDIGO	-	1 GAL	-	FULL, DENSE, VIGOROUS
52	S8	RAPHIOLEPS INDICA "SNOW"	INDIAN HAWTHORNE "SNOW"	-	3 GAL	-	FULL, DENSE, VIGOROUS
6	S9	RHODODENDRON "FASHION"	AZALEA "FASHION"	-	3 GAL	-	FULL, DENSE, VIGOROUS
6	S10	VIBURNUM SUSPENSUM	VIBURNUM SUSPENSUM	-	7 GAL	-	FULL, DENSE, VIGOROUS
-	S11	-	-	-	-	-	-
-	S12	-	-	-	-	-	-
GROUND COVERS							
368	GC1	LIRIOPE MUSCARI "ROYAL PURPLE"	LIRIOPE "ROYAL PURPLE"	-	4" POTS	-	SPACE IN DIAGONAL ROWS @ 8" O.C. TYP.
-	GC2	-	-	-	-	-	-
MULCH							
1657 SF	MULCH	COMPOSTED HARDWOOD MULCH CONT. OVER AREAS SHOWN 3-4" MIN. THICKNESS AFTER SETTLING		-	-	-	SAMPLE TO BE REVIEWED BY L.A. PRIOR TO INSTALLATION
TURF GRASS							
22 5Y	TG1	CYNODON DACTYLON	BERMUDA GRASS	5Y	SOD	-	CLASS "A" CERTIFIED SOD





TREE PROTECTION ZONE ACCESS:

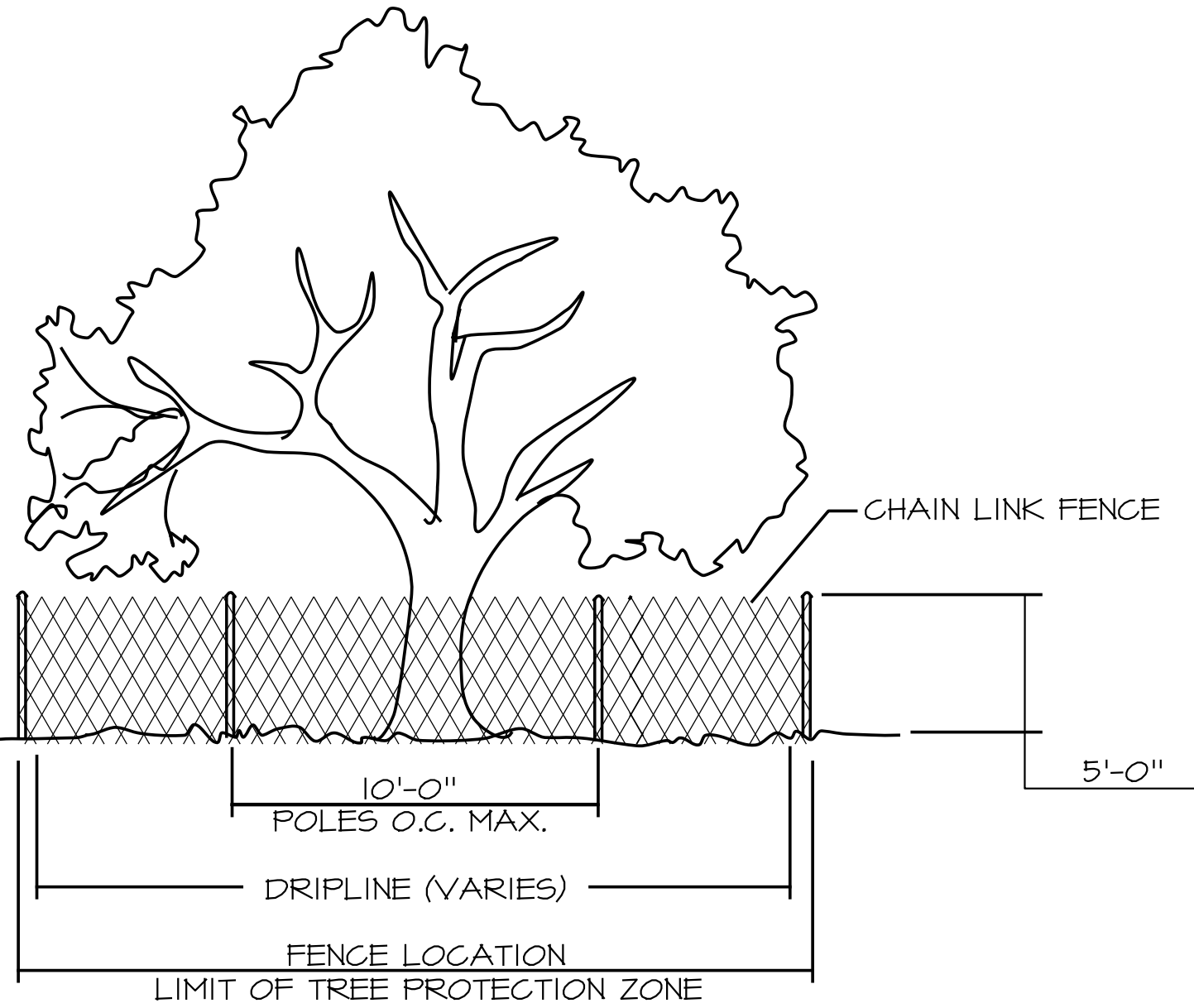
- A. NO ACCESS INSIDE TREE PROTECTION ZONE FENCING IS ALLOWED UNLESS UNDER THE SUPERVISION OF THE PROJECT ARBORIST.
- B. NO STORAGE OF MATERIALS, EQUIPMENT, TOOLS, OR DEBRIS IS ALLOWED WITHIN THE TREE PROTECTION ZONE.
- C. NO FOOT TRAFFIC WITHIN FENCED TREE PROTECTION ZONE IS ALLOWED.

REGRADING:

- A. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SITE DRAINAGE DURING EXCAVATION AND CONSTRUCTION.
- B. SILT FENCING SHALL BE INSTALLED WHEN SOIL IS EXPOSED, TO PREVENT SOIL FROM WASHING ONTO STREETS AND/OR BUSINESSES.
- C. NO PONDING OF WATER IS ALLOWED WITHIN TREE PROTECTION ZONES. CONSULT WITH PROJECT ARBORIST SHOULD THIS OCCUR, TO PROVIDE REMEDY AND REMOVAL OF WATER.
- D. MAINTAIN POSITIVE DRAINAGE WITHIN TREE PROTECTION ZONES DURING CONSTRUCTION.

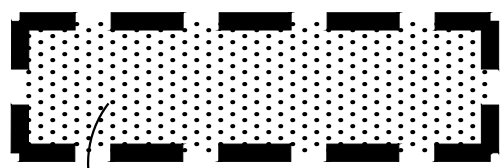
EXCAVATION AND TRENCHING  
WITHIN TREE PROTECTION ZONES:

- A. WHERE EXCAVATION IS REQUIRED WITHIN THE TREE PROTECTION ZONES, EXCAVATE UNDER OR AROUND TREE ROOTS BY HAND OR AIRSPADE, OR TUNNEL UNDER THE ROOTS BY AUGERING, DRILLING, OR PIPEJACKING (ONLY UNDER DIRECT SUPERVISION OF THE PROJECT ARBORIST). DO NOT CUT LATERAL TREE ROOTS OR TAPROOTS, ARBORIST SHALL CUT ONLY ROOTS 1" DIA. OR LESS THAT INTERFERE WITH THE INSTALLATION OF UTILITIES. IF EXCAVATING BY HAND (THE PREFERRED METHOD) USE NARROW-TINE SPADING FORKS TO COMB SOILS AND EXPOSE ROOTS.
- B. IF ROOTS OVER 1" DIAMETER ARE ENCOUNTERED DURING EXCAVATION, CONSULT WITH PROJECT ARBORIST. DO NOT CUT, DAMAGE, OR PRUNE.
- C. DO NOT ALLOW EXPOSED ROOTS TO DRY OUT BEFORE PLACING PERMANENT BACKFILL. PROVIDE TEMPORARY EARTH COVER OR PACK WITH PEATMOSS. WATERING AND MAINTAINANCE OF TREES DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- D. ROOTPRUNING SHALL ONLY BE DONE BY THE PROJECT ARBORIST, OR AS DIRECTED UNDER THEIR SUPERVISION.
- E. IF THERE IS DAMAGE TO A ROOT, STOP WORK AND CONTACT THE PROJECT ARBORIST IMMEDIATELY.



TREE PROTECTION FENCING

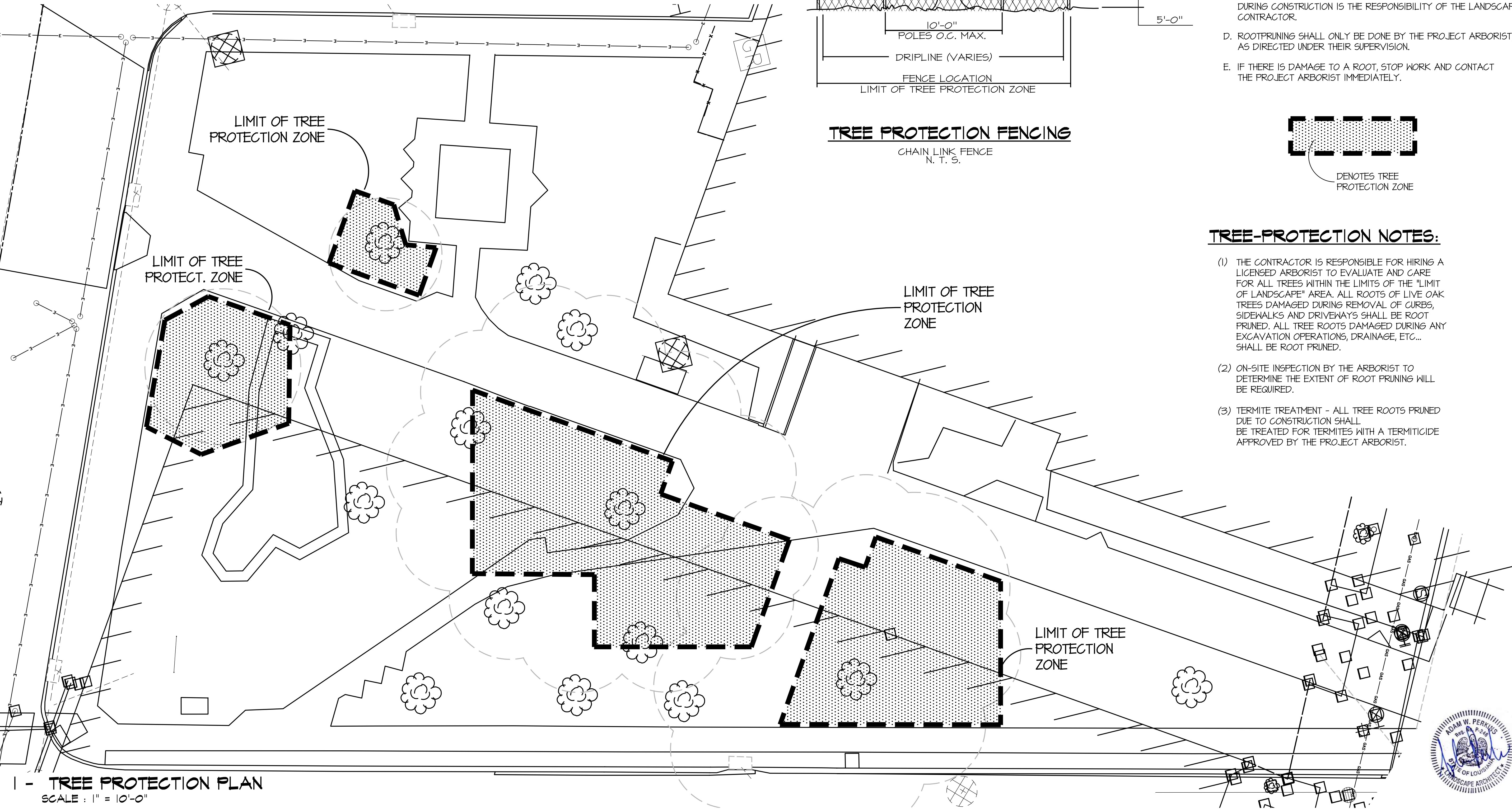
CHAIN LINK FENCE  
N. T. S.



DENOTES TREE  
PROTECTION ZONE

TREE-PROTECTION NOTES:

- (1) THE CONTRACTOR IS RESPONSIBLE FOR HIRING A LICENSED ARBORIST TO EVALUATE AND CARE FOR ALL TREES WITHIN THE LIMITS OF THE "LIMIT OF LANDSCAPE" AREA. ALL ROOTS OF LIVE OAK TREES DAMAGED DURING REMOVAL OF CURBS, SIDEWALKS AND DRIVEWAYS SHALL BE ROOT PRUNED. ALL TREE ROOTS DAMAGED DURING ANY EXCAVATION OPERATIONS, DRAINAGE, ETC... SHALL BE ROOT PRUNED.
- (2) ON-SITE INSPECTION BY THE ARBORIST TO DETERMINE THE EXTENT OF ROOT PRUNING WILL BE REQUIRED.
- (3) TERMITE TREATMENT - ALL TREE ROOTS PRUNED DUE TO CONSTRUCTION SHALL BE TREATED FOR TERMITES WITH A TERMITICIDE APPROVED BY THE PROJECT ARBORIST.



1 - TREE PROTECTION PLAN  
SCALE : 1" = 10'-0"

Project No.: 890  
Sheet No.: L101

NEW ORLEANS RTA  
INTERIM DOWNTOWN TRANSIT HUB - PHASE 2

REVISIONS

DATE

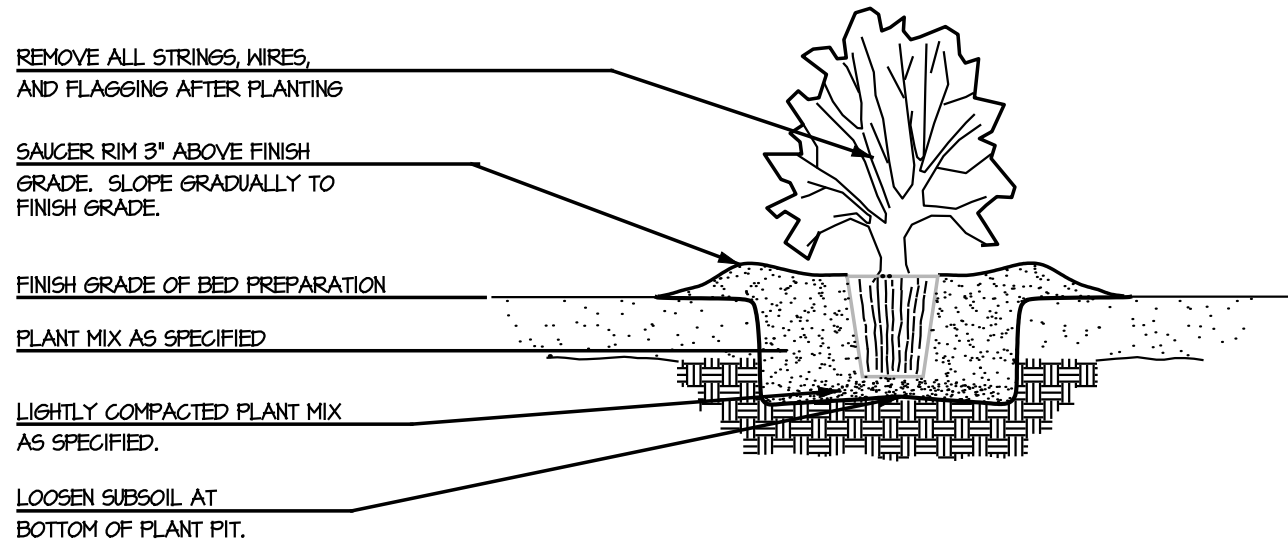
NO.

GOTTECH, INC.  
CONSULTING ENGINEERS | 8383 BLUEBONNET BLVD. | BATON ROUGE, LA. 70810  
PHONE: (225)766-5358 | FAX: (225)766-5879

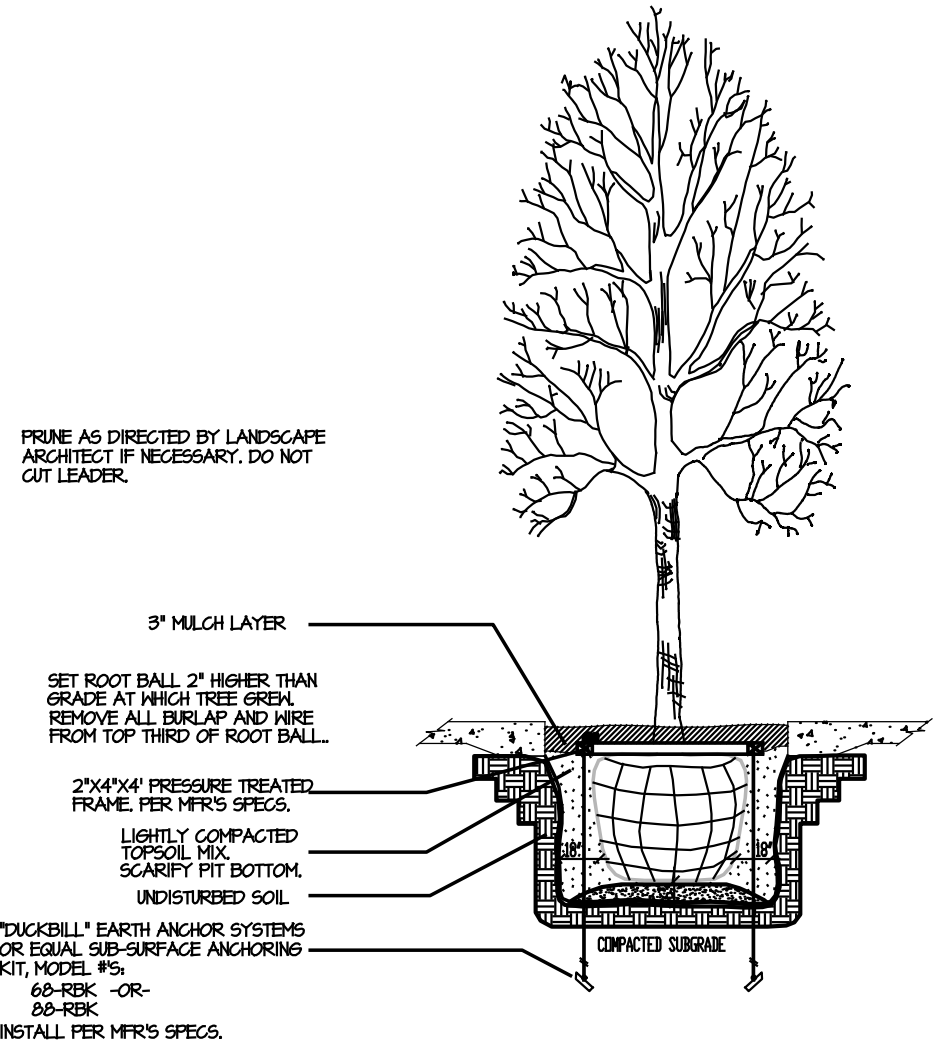
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DRAWN: AWP  
CHECKED: -  
APPROVED: -  
SCALE: AS NOTED  
DATE: JANUARY 26, 2024



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L1 SHRUB PLANTING DETAIL



L2 TREE-PLANTER STAKING DETAIL

## SECTION 02900 - LANDSCAPING

### I.1 GENERAL

A. Submittals: In addition to product certificates, submit the following:

1. Certification of grass seed from seed vendor for each seed mixture.
2. Planting schedule indicating anticipated dates and locations for each type of planting.

B. Quality Assurance: Provide trees, shrubs, ground covers, and plants of quality, size, genus, species, and variety indicated, complying with applicable requirements of ANSI Z60.1 "American Standard for Nursery Stock."

C. Special Warranty: Warrant trees and shrubs for a period of one year after date of Substantial Completion, against defects including death and unsatisfactory growth, except for defects resulting from lack of adequate maintenance, neglect, or abuse by Owner, abnormal weather conditions unusual for warranty period, or incidents which are beyond Contractor's control.

1. Remove and replace unhealthy and dead trees and shrubs within the warranty period.

D. Maintain trees and shrubs as required to establish healthy, viable plantings for 12 months following Substantial Completion.

E. Maintain ground cover and plants as required to establish healthy, viable plantings for 1 year following Substantial Completion.

F. Maintain and establish lawns by watering, fertilizing, weeding, mowing, trimming, replanting, and other operations to produce a uniformly smooth lawn for not less than the following:

1. Seeded Lawns: 90 days after date of Substantial Completion.
2. Sodded Lawns: 60 days after date of Substantial Completion.

### I.2 PRODUCTS

A. Trees and Shrubs: Well-shaped, fully branched, healthy, vigorous nursery-grown stock of sizes and grades indicated, free of disease, insects, eggs, larvae, and defects, conforming to ANSI Z60.1.

1. Provide balled and burlapped trees and shrubs.

B. Ground Covers and Plants: Established and well rooted in removable containers or integral peat pots and with not less than the minimum number and length of runners required by ANSI Z60.1 for the pot size indicated.

C. Grass Seed: Fresh, clean, dry, new-crop seed complying with the Association of Official Seed Analysts' "Rules for Testing Seeds" for purity and germination tolerances.

1. Seed Mixture: Provide seed of grass species and varieties, proportions by weight, and minimum percentages of purity, germination, and maximum percentage of weed seed as indicated.

D. Sod: Certified turfgrass sod complying with ASFA specifications for machine-cut thickness, size, strength, moisture content, and mowed height, and free of weeds and undesirable native grasses. Provide viable sod of uniform density, color, and texture, strongly rooted, and capable of vigorous growth and development when planted.

1. Species: Provide sod of grass species and varieties, proportions by weight, and minimum percentages of purity, germination, and maximum percentage of weed seed as indicated.

E. Topsoil: ASTM D 5268, pH range of 5.5 to 7, 4 percent organic material minimum, free of stones 1 inch (25 mm) or larger in any dimension, and other extraneous materials harmful to plant growth.

1. Topsoil Source: Amend existing surface soil to produce topsoil. Supplement with imported topsoil when required.

F. Lime: ASTM C 602, Class T, agricultural limestone.

G. Peat Humus: Finely divided or granular texture, with a pH range of 6 to 7.5, composed of partially decomposed moss peat (other than sphagnum), peat humus, or reed-sedge peat.

H. Sawdust or Ground-Bark Humus: Decomposed, nitrogen-treated, of uniform texture, free of chips, stones, sticks, soil, or toxic materials.

I. Bonemeal: Commercial, raw, finely ground; minimum of 4 percent nitrogen and 20 percent phosphoric acid.

J. Superphosphate: Commercial, phosphate mixture, soluble; minimum of 20 percent available phosphoric acid.

K. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea-form, phosphorous, and potassium in the following composition:

1. Composition: 1 lb per 1000 sq. ft. (0.5 kg per 100 sq. m) of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.

L. Slow-Release Fertilizer: Granular fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:

1. Composition: 5 percent nitrogen, 10 percent phosphorous, and 5 percent potassium, by weight.

M. Organic Mulch: Organic mulch, free from deleterious materials and suitable as a top dressing, consisting of ground or shredded pine-bark or pine needles. Cypress or similar hardwood mulch will not be accepted.

N. Peat Mulch: Provide peat moss in natural, shredded, or granulated form, of fine texture, with a pH range of 4 to 6.

O. Mineral Mulch: Hard, durable riverbed gravel or crushed stone, washed free of loam, sand, clay, and other foreign substances.

1. Size Range: 1-1/2 inches (38 mm) maximum, 3/4 inch (19 mm) minimum.

P. Weed-Control Barrier: Polypropylene or polyester nonwoven fabric, 3 oz. per sq. yd. (100 g per sq. m) minimum.

Q. Steel Edging: ASTM A 564 (ASTM A 564M), rolled edge, standard painted steel edging and accessories, fabricated in sections with loops stamped from or welded to face of sections approximately 30 inches (760 mm) apart to receive stakes.

1. Edging Size: 3/16 inch (4.8 mm) wide by 4 inches (102 mm) deep.

R. Aluminum Edging: Standard profile extruded-aluminum edging, ASTM B 221 (ASTM B 221M), alloy 6061-T6, fabricated in interlocking sections with loops stamped from face of sections approximately 24 inches (600 mm) apart to receive stakes.

1. Edging Size: 3/16 inch (4.8 mm) wide by 4 inches (102 mm) deep.
2. Finish: Standard black-paint finish.
3. Finish: Mill finish.

S. Polyethylene Edging: Manufacturer's standard-grooved, base-black polyethylene edging and accessories, 1/10 inch (2.5 mm) thick by 5 inches (125 mm) deep, unless otherwise indicated, extruded in standard lengths, rounded top, with 4-inch- (225-mm-) steel angle stakes.

T. Pre-Emergent Herbicide: Pre-Emergent Herbicide to be applied at time of planting mix installation. "Eptam" or similar client-approved granules to be applied at mfr's recommended rate.

### I.3 EXECUTION

A. Planting Soil Preparation: Before mixing, clean topsoil of roots, plants, sods, stones, clay lumps, and other extraneous materials harmful to plant growth. Mix soil amendments and fertilizers with topsoil at rates indicated.

B. Lawn Planting Preparation: Loosen subgrade to a minimum depth of 4 inches (100 mm). Remove stones larger than 1-1/2 inches (38 mm) in any dimension and sticks, roots, rubbish, and other extraneous materials.

I. Place approximately 1/2 the thickness of planting soil mixture required. Work into top of loosened subgrade to create a transition layer and then place remainder of planting soil mixture.

C. Lawn Planting Preparation: Where lawns are to be planted in areas unaltered or undisturbed by excavating, grading, or surface soil stripping operations, remove and dispose of existing grass, vegetation, and turf.

D. Grade lawn areas to a smooth, even surface with loose, uniformly fine texture. Remove trash, debris, stones larger than 1-1/2 inches (38 mm) in any dimension, and other objects that may interfere with planting or maintenance operations.

E. Moisten prepared lawn areas before planting when soil is dry and allow surface to dry before planting.

F. Ground Cover and Plant Bed Preparation: Loosen subgrade of planting bed areas to a minimum depth of 6 inches (150 mm). Remove stones larger than 1-1/2 inches (38 mm) in any dimension and sticks, roots, rubbish, and other extraneous materials.

G. Spread planting soil mixture to depth required to meet thickness, grades, and elevations shown, after light rolling and natural settlement. Place approximately 1/2 the thickness of planting soil mixture required. Work into top of loosened subgrade to create a transition layer and then place remainder of planting soil mixture.

H. Excavation for Trees and Shrubs: Excavate pits with vertical sides and with bottom of excavation slightly raised at center to assist drainage. Excavate approximately 1-1/2 times as wide as ball diameter and deep enough to allow placing of root ball on a setting layer of planting soil. Loosen hard subsoil in bottom of excavation.

I. Planting Trees and Shrubs: Set stock plumb and in center of pit or trench with top of ball raised above adjacent finish grades.

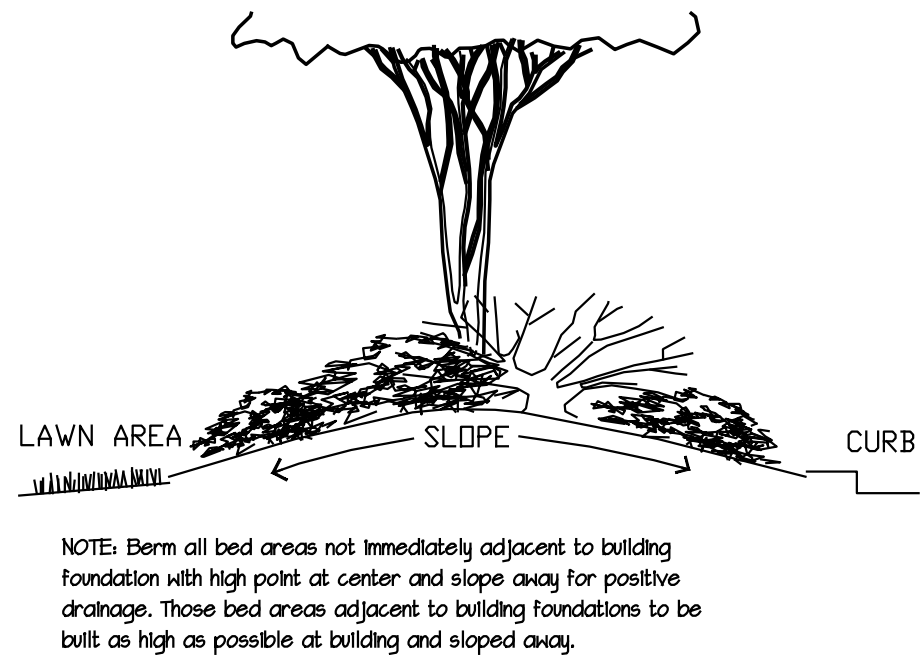
1. Place a setting layer of compacted planting soil.
2. Remove burlap and wire baskets from tops of balls and partially from sides, but do not remove from under balls. Do not use planting stock if ball is cracked or broken before or during planting operation.
3. Place backfill around ball in layers, tamping to settle backfill and eliminate voids and air pockets.
4. Dish and tamp top of backfill to form a 3-inch- (75-mm-) high mound around the rim of the pit. Do not cover top of root ball with backfill.

J. Tree and Shrub Pruning: Prune, thin, and shape trees and shrubs according to standard horticultural practice. Prune trees to retain required height and spread. Do not cut tree leaders; remove only injured or dead branches from flowering trees. Prune shrubs to retain natural character. Shrub sizes indicated are size after pruning.

K. Planting Ground Cover and Plants: Space 24 inches (600 mm) apart, unless otherwise indicated. Dig holes large enough to allow spreading of roots, and backfill with planting soil. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.

L. Mulching: Install weed-control barriers according to manufacturer's recommendations, before mulching. Completely cover area to be mulched. Apply mulch and finish level with adjacent finish grades. Do not place mulch against trunks or stems.

M. Seeding Lawns: Sow seed with a spreader or a seeding machine. Do not broadcast or drop seed when wind velocity exceeds 5 mph (8 km/h). Evenly distribute seed by sowing equal quantities in 2 directions at right angles to each other. Rake seed lightly into top 1/8 inch (3 mm) of topsoil, roll lightly, and water with fine spray.



L3 SHRUB BED BERMING DETAIL

2. Seeding Rate: 3 to 4 lb per 1000 sq. ft. (1.5 to 2 kg per 100 sq. m). Or as per manufacturer's recommended rate.

3. Protect seeded areas with slopes less than 1:6 against erosion by spreading straw mulch after completion of seeding operations and anchor by crimping into topsoil. Spread uniformly at a minimum rate of 2 tons per acre (45 kg per 100 sq. m).

N. Sodding Lawns: Lay sod to form a solid mass with tightly fitted joints within 24 hours of stripping. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to subgrade or sod during installation. Tamp and roll lightly to ensure contact with subgrade, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass and air.

1. Anchor sod on slopes exceeding 1:6 with wood pegs spaced as recommended by sod manufacturer.
2. Saturate sod with fine water spray within 2 hours of planting. During first week, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches (38 mm) below the sod.

O. Edgings: Install edgings where indicated and anchor with stakes driven below top elevation of edging according to manufacturer's recommendations.

P. Disposal: Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of it off the Owner's property.

### I.4 MAINTENANCE

1. Begin maintenance immediately after planting.

2. Maintain and warranty all trees, shrubs, and ground covers for no less than the following period:

A: Warranty period for trees, shrubs, and ground covers shall be (1) one year after substantial completion of planting.

B: Warranty period for sodded lawns shall be (60) sixty days after substantial completion of planting, 90 days for seeded lawns.

3. Maintain plantings of trees, shrubs, and ground covers for a one year period after substantial completion of planting.

4. Maintain and warranty all trees, shrubs, and other plants by pruning, cultivating, fertilizing, mulching, and weeding as required for healthy growth. Restore planting saucers and add additional mulch. Tighten and repair stake and guy supports and reset trees and shrubs to proper grades or vertical position as required. Restore or replace damaged wrappings. Spray as required to keep trees and shrubs free of insects and disease. Remove all tree staking and guy wires upon expiration of the (1) one year maintenance period. The lawn areas shall be maintained to be healthy and disease free. Upon completion of the (1) one year maintenance and warranty period, the Contractor, Owner, and Landscape Architect shall schedule a warranty and maintenance inspection to review the work and develop a punchlist of items to be completed or corrected. It shall be the responsibility of the Landscape Architect to determine which plant materials are in need of replacement due to death or decline in health. The Contractor will have seven (7) days to correct the work for another inspection.

Project No.: 890  
Sheet No.: L102

NEW ORLEANS RTA  
INTERIM DOWNTOWN TRANSIT HUB - PHASE 2

REVISIONS	DATE	NO.

GOTTECH, INC.  
CONSULTING ENGINEERS | 8383 BLUEBONNET BLVD. | BATON ROUGE, LA. 70810  
PHONE: (225)766-5358 | FAX: (225)766-5879



DESIGNED: AWP  
DRAWN: AWP  
CHECKED: -  
APPROVED: -  
SCALE: AS NOTED

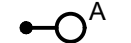



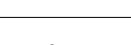
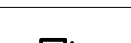


DATE:  
JANUARY 26, 2024





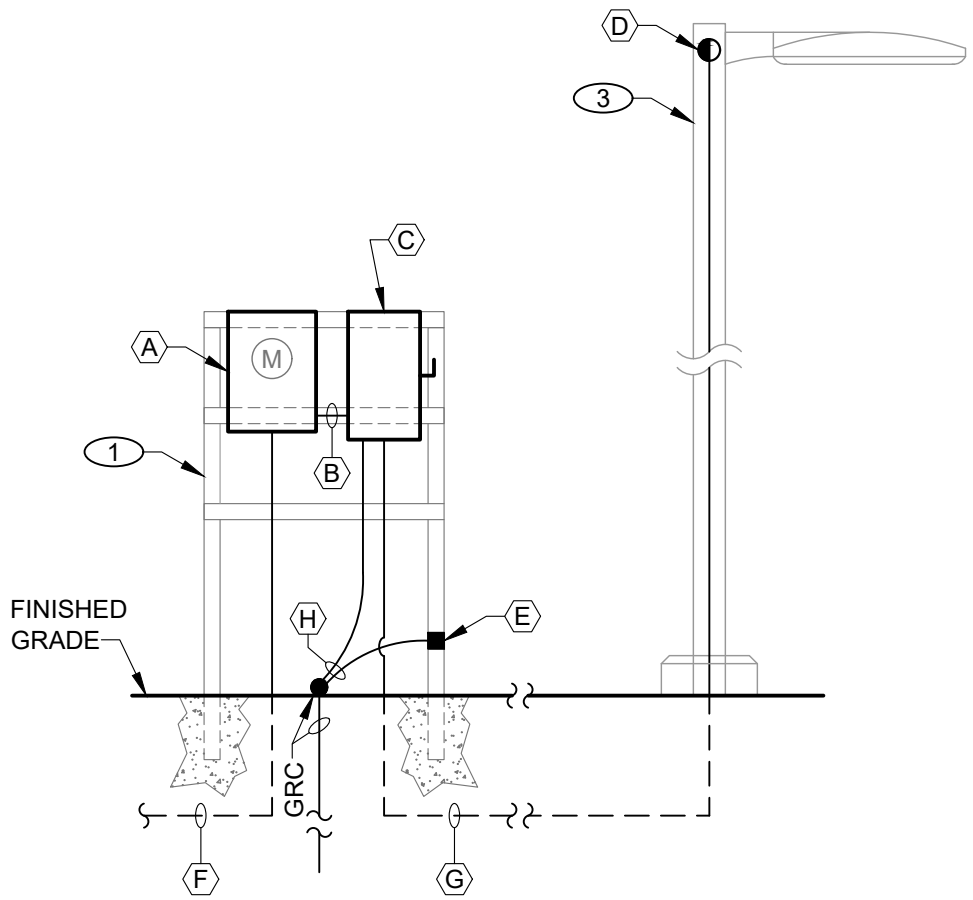


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ELECTRICAL SYMBOL AND ABBREVIATION SCHEDULE	
	POLE-MOUNTED (ARM/BACKET MOUNTING-TYPE) LIGHTING FIXTURE. "A" DENOTES TYPE.
	BOLLARD-TYPE LIGHTING FIXTURE. "B" DENOTES TYPE.
	GROUND-MOUNTED, AIMABLE, FLOODLIGHT-TYPE, LIGHTING FIXTURE. "C" DENOTES TYPE.
	WIRING BELOW GRADE OR FINISHED FLOOR.
	RACEWAY AND ELECTRICAL CABLE HOMERUN TO SAFETY SWITCH.
	PHOTOCELL. POLE-MOUNT AS HIGH AS PRACTICABLE.
	SAFETY SWITCH.
	UTILITY POWER-METERING EQUIPMENT.
EG	EQUIPMENT GROUND
EC	EMPTY CONDUIT WITH PULL WIRE

## 1 ELECTRICAL SYMBOL AND ABBREVIATION SCHEDULE

Scale: N.T.S.



## 3 ELECTRICAL RISER DIAGRAM AND ELETRICAL-SERVICE-ENTRANCE-EQUIPMENT RACK DETAIL

Scale: N.T.S.

NOTES FOR "ELECTRICAL RISER DIAGRAM" ONLY:	
(A)	METERING EQUIPMENT AS PER ENTERGY NEW ORLEANS, LLC REQUIREMENTS.
(B)	1-1/4", 4#6 & 1#10EG
(C)	120/208V, 30A, 3P, 3F, SN, NEMA 3R, SERVICE-ENTRANCE-RATED, SAFETY SWITCH. FUSE AT 30A.
(D)	PHOTOCELL NO. 1; INSTALL AND AIM THIS POLE-MOUNTED PHOTOCELL SO AS NOT TO BE ADVERSELY AFFECTED BY STREET LIGHTING/SITE LIGHTING (VERIFY IN ADVANCE); CONNECT THIS PHOTOCELL AS REQUIRED TO CONTROL ALL PROJECT LIGHTING FIXTURES, FOR DUSK-TO-DAWN OPERATION.
(E)	CADWELD GROUNDING CONNECTION
(F)	1-1/4", 4#6 & 1#10EG TO UNDERGROUND, TRANSFORMER-SECONDARY, SERVICE-LATERAL, ELECTRICAL CABLES TO THE EXACT LOCATION STIPULATED BY ENTERGY NEW ORLEANS, LLC; VERIFY IN ADVANCE.
(G)	1-1/4", 4#6 1#10EG TO POLE-MOUNTED PHOTOCELL NO. 1, AND THEN TO ALL PROJECT LIGHTING FIXTURES.
(H)	1/2", 1#8GEC

### LIGHTING FIXTURE SCHEDULE

#### Notes:

- See the specifications for information relative to LED lamps and drivers.
- Verify the exact respective desired locations for all lighting fixtures with the engineer before commencing the installations. Reference the engineering drawings for the exact locations. Adjust the location for any fixture so as to coordinate with the civil and landscaping drawings.
- Provide all mounting and connecting hardware which is required for each lighting fixture and for each piece of lighting equipment. All such hardware shall be appropriate for the respective exact applications.
- Install and connect all project lighting equipment in strict accordance with all of the manufacturers' recommendations, instructions, requirements, details, etc. (verify in advance).

#### DESCRIPTIONS:

- A1 A pedestrian, pole-mounted, lighting assembly consisting of a LITHONIA "Radean Arm Mount" #RAD1-LED-P3-40K-SYM-MVOLT-RPA-finish; 120-volt, exterior, arm-mounted, LED, area, lighting fixture, having a 7000-lumen, 54-watt, 4000K, LED source; symmetric, type V distribution; with the proper arm-mounting hardware; a 12'-0" high, round, metallic pole having a handhole, the finish color as selected by the architect (verify in advance); the appropriate anchor bolts; and a reinforced concrete foundation (see the POLE-MOUNTED LIGHTING ASSEMBLY CONCRETE FOUNDATION DETAIL). The entire installation shall be rated for 120 m.p.h. winds, with a 3-second gust factor. Provide two (2) 15A fuses in in-line fuseholders immediately behind the pole handhole cover. Verify desired finishes in advance with the architect.
- A2 Same as type "A1", except having a type III, "pathway" distribution.
- B HYDREL #3150C-H42-8COB-40K-MVOLT-SYM-finish/PL; 120-volt, exterior-rated, impact/vandal-resistant, LED, bollard assembly; with a 360-degree, symmetric distribution; the finish color as selected by the owner (verify in advance); and a 1810-lumen, 84-watt, 4000K, LED source. Conform to all manufacturer installation instructions.
- C LITHONIA #DSXF1-LED-40K-FL-MVOLT-THK-VG-finish; 120-volt, wet-location-rated, aimable, LED floodlight; with a 42-watt, 5406-lumen, 4000K, LED source; a 5x5, flood distribution; vandal guard; and the finish color to be selected by the architect (verify in advance). Install fixture on an 8" diameter x 1'-0" high, reinforced concrete foundation that protrudes 2" above finished grade. Once installed, aim fixture in order to best illuminate the existing decorative sculptures to the satisfaction of the owner/architect.

## 2 LIGHTING FIXTURE SCHEDULE

Scale: No Scale

### GENERAL ELECTRICAL NOTES:

- Not all required conduit routing is shown. Coordinate all routing with as-built field conditions and install all conduits accordingly.
- Verify all parameters and requirements in advance and provide the project construction/work accordingly.
- All conduits shall be sized in strict accordance with all, relevant, National Electrical Code requirements, and with all, relevant, manufacturers' recommendations and instructions.
- The exact locations of existing underground utilities are presently unknown. Before commencing any project excavations, obtain such exact locations directly from Louisiana 811 (phone: 1-800-272-3020).
- For all required coordination with Entergy New Orleans LLC, contact directly Entergy New Orleans LLC; Attention Mr. Vincent Roppolo, Entergy Metro Engineering, CBD Network; phone: 504-595-3711; email: vropp90@entergy.com, or Mr. Viet Tran, ENO Customer Service; mobile phone: 504-401-5472; email: vtran@entergy.com, or Mr. Ryan Adams P.E., Metro Region Manager; phone: 504-593-3419; email: radams8@entergy.com.
- The raceway routing which is shown on the drawings is shown "point-to-point" for clarity; field determine the required exact routing for all raceways.
- Before ordering any project equipment and before performing any project work, verify, and be responsible for, all applicable, project dimensions and measurements. No additional compensation will be paid because of differences between the dimensions or measurements which are shown on the drawings, and the respective, actual dimensions and measurements.
- Store equipment and materials in the exact locations which are stipulated in advance by the owner; verify in advance.
- At the completion and testing of the project electrical work, completely clean all project electrical equipment, materials, etc. to the satisfaction of the engineer and the user agency.

## 4 GENERAL ELECTRICAL NOTES

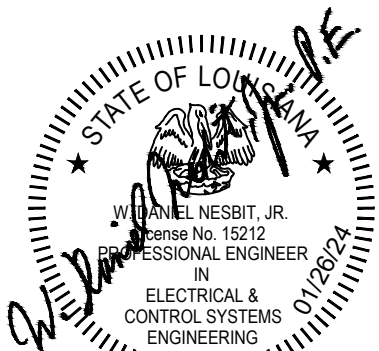
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### REFERENCED ELECTRICAL NOTES:

- Provide (in the exact location which is stipulated by the owner and by Entergy New Orleans, LLC; verify in advance) a steel-channel, electrical-equipment rack and install thereon all of the electrical equipment at and for this electrical service location. Such rack shall be sized as required to securely hold and support the respective equipment. Prepare, and submit to the engineer for review and comment, complete and accurate shop drawings of such rack, and obtain and address such comments, before ordering and/or fabricating such rack. Such rack shall be a properly-sized and properly-rated (verify all parameters and requirements in advance, and provide accordingly), very sturdy, welded, galvanized, structural-steel-channel, supporting rack, which is galvanized after fabrication, having at least two (2) 2" (minimum) vertical structural members, each of which is securely supported by a 1'-0" diameter x 3'-6" high, reinforced-concrete foundation that protrudes 0'-4" above finished grade or concrete, and having at least two (2) 2" (minimum) horizontal structural members, where and as required for the respective electrical equipment. Sufficiently apply two (2) coats of black, Bitumastic 300, coal-tar polyamide on each of the vertical structural members where such member will be embedded in concrete, and up to at least 6" above the top of the respective concrete foundation, where and as required to render complete and permanent protection of the member from degradation resulting from contact with concrete, etc. (verify in advance and provide accordingly)
- 3/4", 2#8 & 1#10EG, underground, to the load lugs of the service-entrance-rated, main, fusible, safety switch which is located at the electrical service-entrance-equipment rack.
- Light pole with the project photocell mounted thereon. Provide the project photocell, as high as practicable, on the project light pole which is nearest to the electrical service-entrance-equipment rack.
- 1-1/2" EC stubbed out and capped in the exact location stipulated by the engineer or owner (verify in advance) for future digital displays.

## 5 REFERENCED ELECTRICAL NOTES

Scale: No Scale



**NESBIT**  
& Associates, L.L.C.  
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Phone 225-291-9266  
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N&A Project Number 2542

Project No.: 890  
Sheet No.: E-200

NEW ORLEANS RTA  
INTERIM DOWNTOWN TRANSIT HUB - PHASE 2

REVISIONS

DATE

NO.

G O T E C H , I N C .

CONSULTING ENGINEERS | 8383 BLUEBONNET BLVD. | BATON ROUGE, LA 70810

PHONE: (225)766-5358 | FAX: (225)766-5879

DESIGNED: MCN/WDN  
DRAWN: MCN  
CHECKED: WDN  
APPROVED: WDN  
SCALE: AS SHOWN  
DATE: JANUARY 26, 2024



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ELECTRICAL SPECIFICATION NOTES

1.1 Basic Electrical Requirements:

- A. The word "shall", where used, is to characterize mandatory requirements, and the word "should", where used, is to characterize advisories. The word "may" is used in the permissive sense.
- B. Unless noted otherwise, the word "provide" shall be interpreted to mean "furnish, install, and connect as required to be complete and ready for the intended use" when referencing connectible items, equipment, and/or materials which are associated with the electrical work; shall be interpreted to mean "furnish and install as required to be complete and ready for the intended use" when referencing unconnectible items, equipment, and/or materials which are associated with the electrical work; and shall be interpreted to mean "furnish as required to be complete and ready for the intended use" when referencing electrical work which is neither installable nor connectible.
- C. The locations of existing utilities which are involved with the scope of this work, where and as indicated on the drawings and/or referenced herein, are offered only as a general guide, with no guarantee as to accuracy. Examine the site and verify the locations of all existing utilities, and the relationship of such utilities to the project work, and base the contract proposal on all conditions which will be encountered during the progress of the work. Verify all parameters and requirements in advance.
- D. Unless explicitly indicated otherwise, provide all materials, devices, equipment, equipment supports, controls, labor, services, appurtenances, etc. which are referenced in these specifications, shown on the drawings, and/or required to make complete and satisfactory installations, in working order.
- E. Visit the project site, determine the existing conditions, and allow for such conditions in the project proposal. Coordinate the locations of the electrical work with the existing conditions.
- F. The general arrangement of the work is indicated on the drawings. Due to the small scale of the drawings, not all required offsets, fittings, conduit bodies, boxes, etc. are indicated. Provide offsets, fittings, conduit bodies, boxes, etc. where and as needed, in accordance with codes and accepted practices.
- G. Verify measurements for accuracy before ordering any materials or doing any work.
- H. Establish and record the locations and grades of all underground conduit. In the event unforeseen obstructions occur in the work, obtain written consent from the engineer before undertaking any deviations from the drawings.
- I. Provide and maintain a complete grounding system.
- J. Perform all electrical work in strict accordance with local and state ordinances governing this class of work, and with the National Electrical Code.
- K. The specifications are intended to describe complete and workable systems of various sorts. Report all discrepancies and/or omissions preventing such utility prior to making the contract proposal.
- L. Note carefully that the electrical drawings are intended to indicate, only diagrammatically, the extent, the general character, and the respective locations of the work which is included. Provide all work which is obviously intended, but for which minor details are not shown, so as to be complete where and as required to perform the functions that are intended. Follow the existing conditions and fit the work of the electrical drawings and specifications thereto.
- M. Furnished materials shall be new and listed by UNDERWRITERS' LABORATORIES as conforming to their standards for the respective applications. All work shall be installed in a well-executed manner and shall present a neat appearance when completed.
- N. Base the project proposal on the equipment and materials which are specified herein and/or on the drawings. Reference to a specific manufacturer or trade name is not intended to indicate a preference for a specific manufacturer but to indicate a standard of quality. Substitute equipment which meets the engineer's approval as being "equivalent" for the respective application, may be provided.
- O. Provide proper grounding of the construction power system, and provide proper lighting if, where, and as required during construction. Provide adequate construction power and lighting where and as required by all trades.
- P. Keep the work as installed in repair and perfect working order for one (1) year from the date of notice of final acceptance. Such guarantee shall be based on defective materials, installation, and connection. Provide, free of additional cost to the owner, all materials and labor which are required to comply with such guarantee. In all cases where equipment has a factory warranty exceeding one (1) year, such full warranty shall apply.
- Q. Obtain and pay for all required permits, pay all required legal fees and charges, and comply with all state and municipal building and safety laws, ordinances, and regulations relating to building and public health and safety, and with the National Electrical Code.
- R. Notify the engineer well in advance of permanently concealing any of the project work.
- S. Coordinate fully with Entergy New Orleans LLC, the local power company, and give Entergy New Orleans LLC all required information. Provide all grounding apparatuses and all power-metering and service-entrance equipment, etc., where and as required by Entergy New Orleans LLC, and make the complete installation conform to their recommendations, standards, and other requirements. Pay all connection, service, and/or metering-equipment charges directly to Entergy New Orleans LLC, and include the payment of such charges in the contract proposal. No additional compensation will be paid to this contractor by the owner for any costs which are relative thereto.
- T. For the purpose of making the project proposal, assume that such connection, service, and/or metering-equipment charges which are required to be paid to Entergy New Orleans LLC for the project permanent power connection (only) will total \$2,000.00, and include such amount in the project proposal amount; a subsequent adjustment upward (in the form of an additive change order) or downward (in the form of a credit change order) will be made when the actual magnitude is known. As a clarification, the connection, service, and/or metering-equipment charges which are required to be paid to Entergy New Orleans LLC for the project temporary (i.e., construction) power connection shall be paid directly to Entergy New Orleans LLC by this contractor and shall not be included in the above-referenced figure; include the payment of such temporary-power charges in the contract proposal.
- U. For the purpose of coordination with Entergy New Orleans LLC, contact directly Entergy New Orleans LLC; Attention Mr. Vincent Roppolo, Entergy Metro Engineering, CBD Network; phone: 504-595-3711; email: vropp90@entergy.com., or Mr. Viet Tran, ENO Customer Service; mobile phone: 504-401-5472; email: vtran@entergy.com, or Mr. Ryan Adams P.E., Metro Region Manager; phone: 504-593-3419; email: radams8@entergy.com,
- V. As soon as this contract is let, make arrangements with the local inspection department to have an inspector make periodic inspections of the electrical work as the project progresses. The work shall be inspected before being permanently concealed. Furnish final inspection certificates from the local inspection department to the engineer. Include in the contract proposal all costs to comply with the above requirements.

- W. Follow, as minimum project standards, the established standards of the following organizations, and the individual standards which are named, the same as if they were fully written herein, except where otherwise explicitly specified (in all places in the project construction/bid documents where standards and codes are referenced, the reference is to the respective latest editions of such standards and codes; provide higher grades of materials and workmanship which are specified herein or indicated on the drawings):
1. The Institute of Electrical and Electronic Engineers (IEEE);
  2. The National Fire Protection Association "National Electrical Code" (NFPA No. 70) and "Life Safety Code" (NFPA No. 101);
  3. The National Fire Protection Association "Standard for Electrical Safety in the Workplace" (NFPA 70E);
  4. The International Building Code;
  5. The International Fire Code;
  6. The National Electrical Manufacturers Association (NEMA);
  7. The Edison Electric Institute (EEI);
  8. The Insulated Power Cable Engineers Association (IPCEA);
  9. The American National Standards Institute (ANSI);
  10. The American Society for Testing Materials (ASTM);
  11. The National Electrical Safety Code (Handbook H30);
  12. The Safety Rules for the Installation and Maintenance of Electrical Supply and Communications Lines (Handbook 81) of the National Bureau of Standards, Washington, D.C.;
  13. All National Fire Protection Association related standards; and
  14. The applicable Entergy New Orleans LLC mandates, recommendations, details, guidelines, instructions, etc.
- X. Submit to the engineer for review an electronic copy of detailed drawings showing construction details and dimensions, and in the case of lighting fixtures photometric data, of all items, equipment, and/or materials which are being provided, before they are ordered.
- Y. Deliver to the engineer an electronic copy, and three (3) hard copies, of maintenance manuals, which shall include printed instructions relating to the operation, proper maintenance, and repair, and parts lists indicating the various parts by name, number, and diagram, for each piece of equipment that is being provided. Neatly bind such documentation in hard-covered binders and deliver it to the engineer before the acceptance of the project.
- Z. Request and obtain from the engineer one (1) set of the project electrical drawings and keep such set of drawings on the project site. Show on such drawings all changes in the project work which are caused by any factors whatsoever. At the end of the project, submit such corrected set of drawings to the engineer prior to receiving the final project payment.
- AA. Remove all debris and clean all electrical work prior to project completion.
- 1.2 Circulating and Grouping of Circuits:
- A. Except where the number of electrical cables is indicated on the drawings, determine and provide the number of electrical cables which is required for each individual circuit according to all applicable codes and governing authorities, according to the instructions of the manufacturers of the respective electrical equipment that is being fed, and according to good practice.
- B. Provide a separate-and-distinct neutral conductor for each project circuit which requires a neutral conductor, whether such circuit is a "single-pole" circuit or a "multi-wire" circuit. As a clarification, do not provide any "common neutrals" for this project (a "common neutral" conductor is defined as a neutral conductor which is associated with more than one [1] circuit).
- C. Provide an insulated equipment-grounding conductor in each raceway, box, etc., whether so indicated on the drawings and/or elsewhere in these specifications or not. Such equipment-grounding conductors shall be sized respectively in accordance with Section 250-122 of the National Electrical Code.
- 1.3 Torquing:
- A. Torque all project lugs in strict accordance with the respective manufacturers' instructions, with all UNDERWRITERS' LABORATORIES' standards, and with the National Electrical Code, once at connection, and again just prior to project completion.
- 1.4 Testing:
- A. After the electrical work is complete and at the time that the engineer directs, conduct an operating test of each electrical item, equipment, and material for approval. Provide all instruments and personnel which are required for such tests.
- 1.5 Excavating:
- A. Provide all required excavations and backfilling for the proper execution of the work, and remove all dirt and debris. Tamp (utilizing a mechanical compactor where and as practicably) the backfill in 9" layers and water the finished fill. At the completion of the project, fill all low spots. As a clarification, in lieu of excavating and backfilling, underground raceways may be installed via directional boring.
- 1.6 Safety Precautions:
- A. Provide proper guards for the prevention of accidents. Provide and maintain all other construction which is required to secure safety of life and property, including maintaining sufficient lights where and as required to secure such protection.
- 1.7 Supervision:
- A. Constantly supervise the project work from beginning to completion. Furnish all information and personnel which are required to assist the engineer in inspecting the work.
- 1.8 Underground, Power, Pull Boxes:
- A. Provide all underground, power, pull boxes which are required for the project, whether shown on the drawings or not.
- B. Unless required by any applicable code or by any respective governing authority otherwise, each such pull box which is associated in any way with a public utility shall be in strict accordance with all applicable standards, details, recommendations, requirements, etc. of the respective utility company (request and obtain all relevant information in advance), and shall have a watertight, traffic-duty cover which is inscribed to say "POWER".
- C. Unless shown on the drawings, or required by any applicable code or by any respective governing authority otherwise, each such pull box which is involved with project work that is not associated with a public utility shall be approved for, and shall be completely compatible with, the respective application, and shall have a watertight, traffic-duty cover which is inscribed to say "POWER".
- D. Each underground power pull box shall meet all requirements of the National Electrical Code, particularly Article 314.
- 1.9 Temporary Electrical Service:
- A. Provide temporary electrical service for construction power, in strict accordance with the National Electrical Code, all local codes, and all Entergy New Orleans LLC requirements and recommendations, and disconnect and remove same before the completion of the project.
- B. Make all required arrangements with Entergy New Orleans LLC, including arrangements for metering and billing.
- 1.10 Safety Switch:
- A. The service-entrance-rated, main, safety switch shall be heavy-duty, fusible, quick-make, quick-break, with cover interlock, and shall be U.L.-listed as raintight. The handle for such safety switch shall be lockable in the "open" position and in the "closed" position with up to three (3) padlocks. Such safety switch shall include rejection clips which will accept current-limiting fuses and reject all others.
- B. Such safety switch shall be manufactured by SCHNEIDER, ABB, SIEMENS, or EATON, or shall be approved equivalent.

1.11 Fuses:

- A. Each fuse shall be the current-limiting type, shall be Class "RK1", shall have a minimum U.L.-listed interrupting rating of 200,000 amps, shall provide fast-acting protection against short-circuit currents but time-delayed protection against motor overloads, and shall have a barrel which are yellow in color.
- B. Unless indicated otherwise, the continuous-current rating of each fuse shall be in accordance with the National Electrical Code current-carrying capacity of the conductors of the respective circuit.
- C. Install each fuse so that its continuous-current rating is readily visible without the need to be removed.
- 1.12 Project Conductor and Lug/Termination Temperature Ratings:
- A. Ensure that all project conductors and all project lugs/terminations are compatible, as per NEC 110-14(C) and 110-40, as applicable.
- 1.13 Raceways and Electrical Cables:
- A. Electrical cables shall be installed in raceways which are concealed to the full extent which is practicable (verify in advance).
- B. Raceways for directional bores, and which are associated with underground, incoming, service-lateral feeders, shall be continuous; shall be Schedule 40 PVC conduit, shall be code-compliant and UL-listed for the respective exact applications; shall be coiled in reels for direct-burial service; and shall have a 4'-0" minimum soil cover. All above-grade portions of such raceway runs, including the elbows for rising to above grade, shall be Schedule 80 PVC conduit.
- C. Raceways for directional bores, and which are not associated with underground, transformer-secondary, service-lateral feeders, shall be continuous; shall be Schedule 40 PVC conduit or Schedule 80 HDPE, shall be code-compliant and UL-listed for the respective exact applications; shall be coiled in reels for direct-burial service; shall have a 4'-0" minimum soil cover; and shall have long-radius, rigid, galvanized-steel, conduit elbows where rising to above grade.
- D. There shall be no splices in directionally-bored conduit.
- E. As a clarification, if this contractor proposes to provide directionally-bored conduit, this contractor shall verify in advance that directionally-bored conduit can, and will, be successfully installed. If this contractor attempts to install directionally-bored conduit, and if satisfactory installation is unsuccessful for any reason, this contractor shall provide all required re-installations, utilizing raceways which will result in proper installations (e.g., raceways which are installed via excavating and backfilling, etc.), at no cost to the owner or the engineer.

- F. Other than directionally-bored raceways, raceways which are installed below grade shall be Schedule 40 PVC conduit with long-radius, rigid, galvanized-steel, conduit elbows. Such raceways shall be 3'-0" minimum below finished grade (except for underground raceways for underground, transformer-secondary, service-lateral feeders, which shall have a 4'-0" minimum soil cover, or more if so directed by Entergy New Orleans LLC; verify in advance and provide accordingly). Provide the proper warning tape, at 1'-0" below finished grade, immediately above, and running parallel with, each underground raceway, for the entire length of such raceway.
- G. Above-grade raceways shall be rigid metallic conduit. Metallic conduit shall be aluminum or galvanized steel, except that metallic conduit which is installed in concrete or below grade shall not be aluminum.
- H. Install raceways so as to be parallel or perpendicular to structural lines. Support raceways by pipe straps, conduit clamps, hangers, or other approved fastening devices. Do not provide tie wires for such application.
- I. Provide pull boxes where and as required. Each pull box shall be weather-tight and of code-gauge steel or aluminum, and shall have a removable access panel in its side, top, or bottom, as required.
- J. Conductors shall be of soft-drawn copper having the ampacity of at least ninety-eight percent (98%) of that of pure copper.
- K. Unless noted otherwise, the minimum conductor size shall be No. 12 AWG. 15-amp and 20-amp, circuit runs of from 75 feet to 199 feet in length to the ends of the respective loads shall have conductors which are sized no smaller than No. 10 AWG; and 15-amp and 20-amp, circuit runs that are longer than 199 feet in length to the ends of the respective loads shall have conductors which are sized no smaller than No. 8 AWG. The conductor size shall be the same throughout each circuit.
- L. Unless noted otherwise, size all conductors in accordance with the ratings of the respective protective devices and in accordance with the requirements of Article 240-OVERCURRENT PROTECTION of the National Electrical Code.
- M. Unless noted otherwise, electrical cables shall be the single-conductor type, and shall be Type "THHN/THWN" (75-degree C. rating). Conductors which are sized No. 8 AWG or larger shall be stranded, and conductors which are sized smaller than No. 8 AWG shall be solid.
- N. Color code electrical cables in strict accordance with the National Electrical Code. Unless required otherwise by any applicable code or governing authority, the insulation on electrical cables shall be color coded as follows:
1. Phase A - black
  2. Phase B - red
  3. Phase C - blue (there will be a "Phase C" only if the incoming service from Entergy New Orleans LLC will have 120/208V, 3-phase, 4-wire, wye-connected characteristics, as addressed more in detail below; verify in advance)
  4. Neutral - white
  5. Equipment ground - green

1.14 Concrete:

- A. Concrete for electrical work shall be ready-mix and shall develop a compressive strength of 4000 p.s.i. (minimum) within twenty-eight (28) days. Thoroughly compact concrete during and immediately after pouring, and thoroughly work concrete into the corners of the respective forms.

1.15 Ground Rod:

- A. The service-entrance ground rod shall be 3/4" diameter x 10'-0" long, copper-clad steel with a braze, irreversible-crimp, or thermal-weld connectors for the connection of the grounding cable. Bond all electrical-system-grounding and equipment-grounding means to all electrical-equipment enclosure-grounding means and to the metallic electrical-equipment rack. The electrical cables which are provided for all such bonding shall be sized the same as the project grounding-electrode cable.

1.16 Photoelectric Cell:

- A. Provide the project photoelectric cell (photozell) where and as shown on the drawings, and where and as required, and provide all required mounting and supporting hardware for mounting the photocell to, and supporting the photocell from, the designated, project, lighting-fixture pole, in strict accordance with manufacturer's instructions (verify in advance).
- B. Such means of support, and the total installation, shall be rated as required to withstand 120 m.p.h. winds, plus wind gusts of 3-second duration (verify in advance, and provide accordingly).
- C. Such photocell shall have the number of poles which is required for the number of circuits that are controlled; shall have a load rating that is greater than the total load which is controlled; and shall be in a weatherproof, cast-iron or cast-aluminum box/enclosure.
- D. Photocells shall be manufactured by TORK or INTERMATIC, or shall be approved equivalent.

1.17 Service Entrance and System of Wiring:

- A. Before ordering any project equipment, before preparing any project-equipment shop drawings, and before performing any project work, contact Entergy New Orleans LLC directly, coordinate directly and fully with Entergy New Orleans LLC, ascertain from Entergy New Orleans LLC what the exact characteristics of the new, incoming, electrical service to and for this project will be, and then take all such critical information into account when ordering the project equipment, when preparing the project-equipment shop drawings, and when performing the project work.
- B. For the sake of figuring the project construction cost and proposal (only), assume that the new, incoming, electrical service from Entergy New Orleans LLC will have 120/208-volt, 3-phase, 4-wire, wye-connected characteristics; that the project system of wiring shall have 120/208 volts, 3-phase, 4-wire, wye-connected characteristics; and that such new, incoming, electrical service from Entergy New Orleans LLC will be derived from the existing, Entergy New Orleans LLC, 120/208-volt, 3-phase, 4-wire, wye-connected, underground, distribution (network) system; and submit the project proposal accordingly.
- C. As a clarification, if the new, incoming, electrical service from Entergy New Orleans LLC will have characteristics other than 120/208-volt, 3-phase, 4-wire, wye-connected, and if such fact results in project-cost implications, a subsequent adjustment upward (in the form of an additive change order) or downward (in the form of a credit change order) will be made when the actual, incoming, service characteristics are known.

1.18 Main, Incoming-Power, Service-Lateral, Underground Conduits and Electrical Cables:

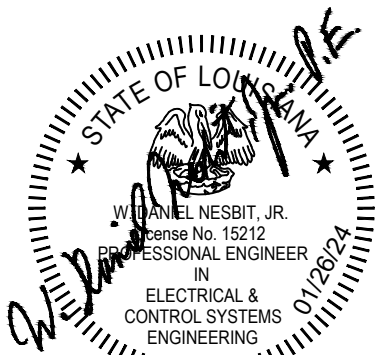
- A. Provide the main, incoming-power, service-lateral, underground conduits and electrical cables, where and as indicated on the drawings, and where and as required, in strict accordance with all Entergy New Orleans LLC requirements, from the designated (by Entergy New Orleans LLC), existing, underground, pull/junction box of the existing, Entergy New Orleans LLC, 3-phase, 4-wire, underground, distribution (network) system to the project, electrical, service-entrance-equipment location. Such conduits shall have a 4'-0" minimum soil cover (more if so directed by Entergy New Orleans LLC; verify in advance). Verify all parameters and requirements in advance, and provide accordingly.
- B. Conduit bends shall be the "long-radius" type.
- 1.19 Lighting Fixtures, Drivers, Lamps, Etc.:
- A. Properly and firmly support each lighting fixture, in strict accordance with manufacturer's instructions (verify in advance).
- B. Lighting-fixture drivers shall be U.L.-listed; high-power factor, and certified by CBM, if such certification is available.
- C. Provide LED lamps for all lighting fixtures.
- D. Provide LED lamps and LED drivers which are completely compatible with one another, as determined by their manufacturers, by UNDERWRITERS' LABORATORIES, and by good practice; verify all parameters and requirements in advance, and provide accordingly.
- E. LED lamps shall produce illumination having a minimum color-rendering index (CRI) of 75 and having the apparent correlated color temperature which is respectively indicated on the drawings.
- F. Provide lighting fixtures which have the respectively-proper input-voltage characteristics, based on the actual circuit from which they are fed, whether so indicated on the drawings and/or in the schedules or not (verify all parameters and requirements in advance, and provide accordingly).
- G. The lighting-fixture catalogue numbers which are indicated on the drawings do not necessarily contain the designations for all respectively-required options. Provide all necessary options, the requirements for which are made obvious by the respective lighting-fixture applications (verify all parameters and requirements in advance, and provide accordingly).

1.20 Equipment Connections:

- A. Connect all project equipment, in strict accordance with manufacturer's instructions, recommendations, etc.
- B. Information which is presented on the electrical drawings for connection of equipment is based on information which was furnished during the design phases of the project from certain manufacturers and from certain suppliers. The possibility exists that the actual requirements for the installation and connections of some or all of such equipment differ from the requirements which are respectively depicted on the project electrical drawings. Provide the facilities which are required for the equipment that will actually be installed.
- C. Rough-in in accordance with drawings and/or other information which is supplied by the respective equipment suppliers and/or manufacturers (request and obtain, well in advance and directly from the respective equipment suppliers and/or manufacturers, all relevant information).

1.21 Grounding and Bonding

- A. Electrical work for system grounding and bonding of circuits and equipment shall conform fully to NFPA 70: National Electrical Code, particularly Article 250, including the other articles which are referenced in 250.4 for particular case applications.
- B. Each raceway system shall enclose a separate, insulated (with green-colored insulation), equipment-grounding conductor, whether so indicated on the drawings and/or elsewhere in these specifications or not. Provide such ground-fault/transient-current return conductor regardless of whether or not the raceway system itself provides an adequate equipment-grounding return path.
- C. Provide an insulated equipment-grounding conductor in each raceway system, etc., whether so indicated on the drawings and/or elsewhere in these specifications or not. Such grounding conductors shall be sized respectively in accordance with Section 250-122 of the National Electrical Code (verify in advance and provide accordingly).
- D. System-grounding and equipment-grounding conductors shall be sized in strict accordance with Sections 250-66 and 250-122, respectively, of the National Electrical Code. Adjust the respective sizes which are indicated on the drawings as required to accommodate changes (such as design-manufacture differences, design changes, etc.), voltage drop, etc.
- E. Grounding conductors which are sized No. 8AWG or larger shall be stranded.
- F. Grounding-conductor connections shall be braze, irreversible-crimp, or thermal-weld connected to metallic equipment racks and to ground rods.
- G. Grounding-conductor connections to equipment-ground busses and raceways shall be mechanically bolted, clamped, or screwed, with the proper tightening torque, as required by the respective manufacturer, or by Article 110-14 of the National Electrical Code if the manufacturer's(s') recommendations are unavailable.
- H. Grounding-electrode conductors shall be installed in raceways.
- I. Grounding-electrode systems shall consist of 3/4" diameter x 10'-0" long (minimum), copper-clad steel rods and the project, metallic, equipment rack.



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890

Sheet No.:  
E-300

NEW ORLEANS RTA  
INTERIM DOWNTOWN TRANSIT HUB - PHASE 2

NO.	DATE	REVISIONS

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DRAWN: MCN  
CHECKED: WDN  
APPROVED: WDN  
SCALE: AS SHOWN  
DATE: JANUARY 26, 2024