

# TOWN OF ADDISON, TEXAS

## WINNWOOD ROAD BRIDGE CLASS CULVERT OUTLET ARMORING

BID NO. 22-29  
TOWN PROJECT # 2021-07C

MAYOR  
Joe Chow

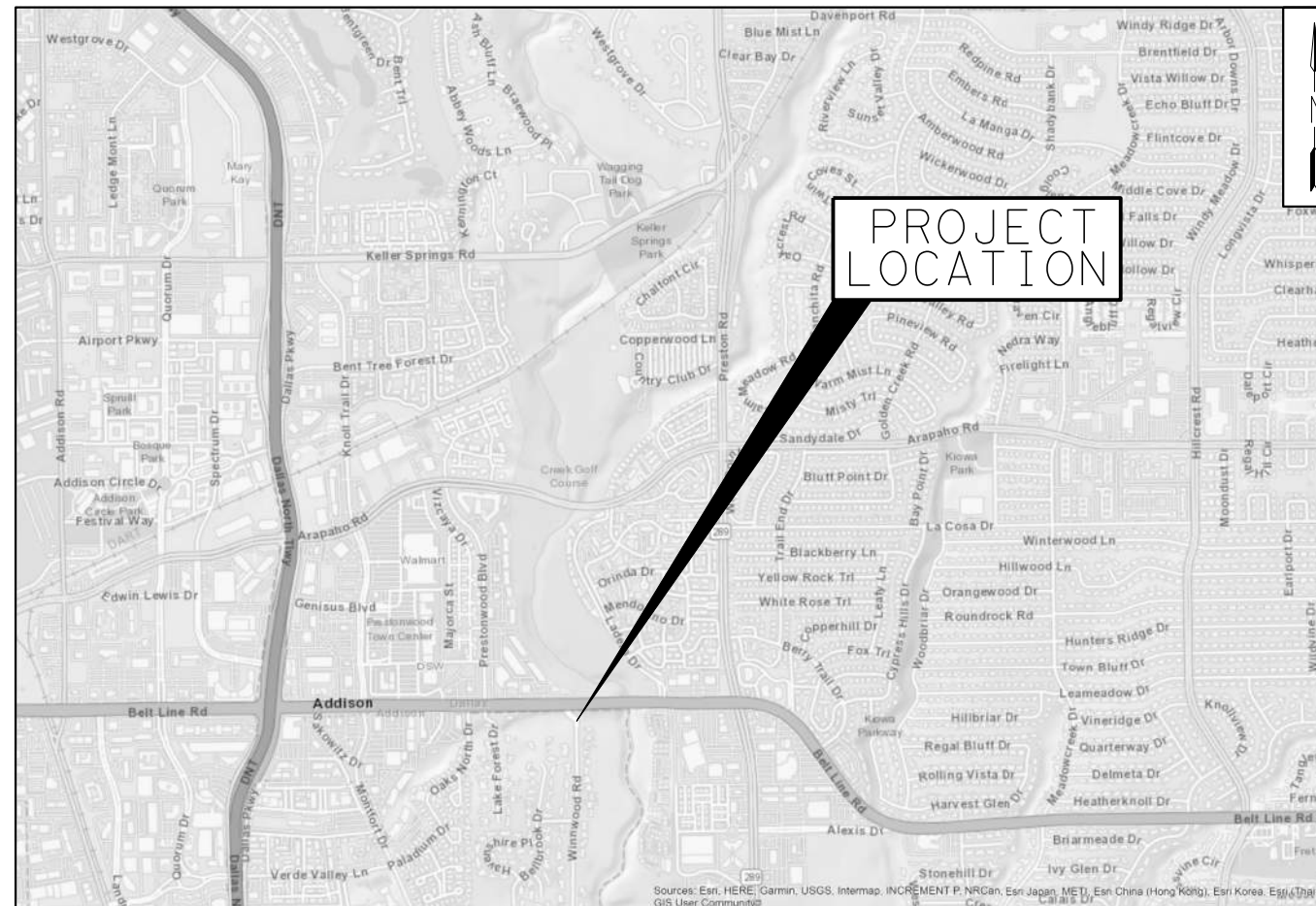
MAYOR PRO-TEM  
Guillermo Quintanilla

DEPUTY MAYOR  
PRO-TEM  
Paul Walden

COUNCIL MEMBERS  
Tom Braun  
Lori Ward  
Kathryn Wheeler  
Marlin Willesen

CITY MANAGER  
Wesley S. Pierson

DIRECTOR OF PUBLIC WORKS  
AND ENGINEERING SERVICES  
Shannon Hicks, P.E.



VICINITY MAP

NTS

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GARVER PROJECT NO. 20T46006

DECEMBER 2021



Digitally Signed  
on 12/16/2021

**PREPARED BY:**



TEXAS  
REGISTRATION NO.  
F-5713

3010 Gaylord Parkway  
Suite 190  
Frisco, TX 75034  
(972) 377-7480

**ESTIMATED QUANTITIES**

BID ITEM	NCTCOG SPEC	TXDOT SPEC	BID QTY	QNTY	UNIT	ITEM DESCRIPTION
1	SP-Item 26	500	1	1	LS	MOBILIZATION AND DEMOBILIZATION/CLEAN UP (MAX 10% OF BID TOTAL)
2	SP-Item 51 & 52	502	1	1	LS	TRAFFIC CONTROL (INCIDENTAL WITH BARRICADES, SIGNS, AND TRAFFIC HANDLING)
3	Tech Spec - PS		2	2	EA	PROJECT SIGN
4	202		250	235	SY	INSTALL, MAINTAIN, AND REMOVE CONSTRUCTION EXIT
5	202		200	100	LF	SILT FENCE (INST./MAINT./REM.)
6			1	1	LS	INSURANCE AND BONDING
7	201		7	7	EA	REMOVE EXISTING TREE (6" - 12") (INCLD ROOT BALL)
8	201/203		2	2	EA	REMOVE EXISTING TREE (13" - 20") (INCLD ROOT BALL)
9	203		3	3	EA	REMOVE, SALVAGE, STORE, AND REINSTALL EXISTING BOLLARD BASES
10	203		103	103	SY	REMOVE EXISTING SIDEWALK
11	203		25	25	SY	REMOVE EXISTING PLANTING AREA (MEDIAN NOSE AREA)
12	203		42	42	SY	REMOVE EXISTING CONCRETE RIPRAP (6")
13	203		11	11	SY	REMOVE EXISTING CONCRETE PAVING INCLUDING CURB
14	204		1	1	LS	CLEARING AND GRUBBING
15	303		40	36	SY	INSTALL / REMOVE NONREINFORCED CONCRETE PAVING (6" THICK, 3,600 PSI)
16	305		120	103	SY	CONCRETE SIDEWALK (4") THICK
17	305		11	11	SY	CONCRETE PAVEMENT (6" THICK)(4000 PSI) INCLUDING CURB (6" TALL)(MEDIAN NOSE)
18		401	30	23	CY	FLOWABLE BACKFILL
19		432	15	11	CY	RIPRAP (CONC)(5" THICK)
20		459	100	88	CY	GABIONS (3' X 3')(GALV)(TWISTED WIRE)(INCL CONNECTING TO CONC. TOE WALL)
21			1	1	AL	CONSTRUCTION CONTINGENCY OWNER'S ALLOWANCE (AS APPROVED BY OWNER)
22	204 / Tech Spec		1	1	LS	IRRIGATION REPAIR
23	204 / Tech Spec		1	1	LS	LANDSCAPE REPAIR (MEDIAN NOSE)(ANNUALS @ 5-INCHES ON CENTER)
24		180	2,000	1899	SF	SPECIAL HYDROMULCH (TxDOT WILDFLOWERS MIX)(NATIVE AMERICAN SEED: Item 2862)
25	204		250	211	SY	TOPSOIL (6" DEEP)
26	204		70	65	SY	MULCHING (6" DEEP)
27	204		15	13	CY	PLANTING AREA (MEDIAN NOSE AREA)(LIVING EARTH-ENRICHED SOIL w/ COMPOST)(18-INCH THICK)
28	201		4	4	EA	INSTALL TREE (4-INCH DIA)(BUR OAK)
29	201/203		4	4	EA	TREE TRIMMING (PER TREE REGARDLESS OF SIZE)(AS DIRECTED BY TOWN STAFF)
30	201	506	205	205	LF	TREE PROTECTION FENCE (INST./MAINT./REM.)
31		168 / Veg Est. Sht	70	68	MG	TEMPORARY WATERING FOR SPECIAL HYDRO MULCH (12 MONTHS)
32			12	12	Month	TEMPORARY WATERING FOR NEW TREES (12 MONTHS)
33	204		35	0	SY	BLOCK SOD (MATCH EXIST)

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 REVISED DATE:

NO.	DATE	REVISION	APPROV.



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1/4/22

PRJ NO. 20T46006	
DESIGN CHECK	SDC JWM
DRAWN CHECK	LTT BWS
DATE	1/4/2022
SCALE	AS SHOWN



WINNWOOD ROAD BRIDGE CLASS CULVERT OUTLET ARMORING
QUANTITY SUMMARY
TOWN OF ADDISON, TEXAS

SHEET 1 OF 1
SHEET NO. <b>2</b>

GENERAL NOTES:

THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG) PUBLIC WORKS CONSTRUCTION STANDARD SPECIFICATIONS AND THE TEXAS DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES (2014 EDITION) SHALL BE CONSIDERED PART OF THE CONSTRUCTION DOCUMENTS AS NOTED IN THE PLANS.

THE CONTRACTOR SHALL COORDINATE WITH THE TOWN FOR ESTABLISHMENT OF ANY STAGING AREAS AND ACCESS ROUTES A MINIMUM OF 1 MONTH PRIOR TO START OF CONSTRUCTION PLAN SHEETS WITH STAGING AREAS AND ACCESS ROUTES MUST BE SUBMITTED TO THE TOWN FOR APPROVAL.

THE CONTRACTOR MUST HAVE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER ON FILE WITH THE TOWN BEFORE THE CONTRACTOR MAY USE OR PLACE ANY MATERIALS OR EQUIPMENT ON PRIVATE PROPERTY. WHEN THE CONTRACTOR ELECTS TO PLACE EXCESS FILL ON PRIVATE PROPERTY ON A PERMANENT BASIS, LETTERS OF FINAL APPROVAL AND RELEASE FROM THE AFFECTED PROPERTY OWNER(S) MUST BE SUBMITTED TO THE TOWN BEFORE FINAL PAYMENT WILL BE AUTHORIZED ON THIS PROJECT. NO EXCESS EXCAVATED MATERIAL SHALL BE DEPOSITED IN LOW AREAS OR ALONG ANY NATURAL DRAINAGE WAY, WITHOUT WRITTEN PERMISSION FROM THE ENGINEER. IF THE CONTRACTOR PLACES EXCESS MATERIAL IN AREAS WITHOUT WRITTEN PERMISSION, HE WILL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM SUCH FILL AND HE SHALL REMOVE THE MATERIAL AT HIS OWN COST IF THE TOWN SO DIRECTS.

THE CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS AND SIDEWALKS ADJACENT TO THE PROJECT FREE OF MUD AND DEBRIS FROM THE CONSTRUCTION AT ALL TIMES.

THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR THE VERIFICATION OF THE ACCURACY OF THE DIMENSION CONTROL FURNISHED HEREIN. THE CONTRACTOR IS REQUIRED TO VERIFY ALL THE DIMENSIONS FOR ACCURACY. ANY DISCREPANCIES FOUND BY THE CONTRACTOR SHALL BE REPORTED IN WRITING TO THE ENGINEER IMMEDIATELY FOR RECONCILIATION.

THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN AREAS ADJACENT TO GAS LINES, UNDERGROUND ELECTRIC CABLE, TELEPHONE CABLE, AND EXISTING STRUCTURES AND IMPROVEMENTS AS SHOWN ON THE PLANS.

WHERE EXISTING SERVICE LINES ARE CUT, BROKEN OR DAMAGED, THE CONTRACTOR SHALL REPLACE OR REPAIR THE UTILITIES OR SERVICE LINES WITH THE SAME TYPE OF MATERIAL AND CONSTRUCTION, OR BETTER UNLESS OTHERWISE SHOWN OR NOTED ON THE PLANS. AT HIS OWN COST AND EXPENSE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AT ONCE OF ANY CONFLICTS IN GRADES AND ALIGNMENT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING ALL FIELD CHANGES TO THE PLANS.

ACCESS TO PROPERTY SHALL BE MAINTAINED DURING ALL NON-CONSTRUCTION PERIODS. ANY CLOSURE DURING WORKING HOURS SHALL BE COORDINATED BY THE CONTRACTOR AND THE TOWN PROJECT MANAGER WITH INDIVIDUAL PROPERTY OWNERS.

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPROPRIATE AGENCIES.

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXCESS CONSTRUCTION DEBRIS AND SURPLUS MATERIAL, WHICH WILL BE CONSIDERED INCIDENTAL TO THE PAY ITEMS PROVIDED NO ADDITIONAL PAY ITEM WILL BE PROVIDED.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION CONTROL FACILITIES BEFORE, DURING AND AFTER ALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

THE CONTRACTOR SHALL NOT CUT OR DAMAGE TREES WITHOUT WRITTEN APPROVAL OF THE TOWN ENGINEER. THE CONTRACTOR MUST NOTIFY THE TOWN ARBORIST AT (972) 450-2831 PRIOR TO BEGINNING CONSTRUCTION OF THE PROJECT. TREES SHOWN TO BE REMOVED IN THE PLANS SHALL BE CLEARLY MARKED WITH PAINT OR TAPE 1 WEEK PRIOR TO THE CONSTRUCTION. THE LOCATION OF THE TREES SHOWN TO BE REMOVED ARE APPROXIMATE. ANY ADDITIONAL TREE REMOVALS, NECESSARY TO CONSTRUCT IMPROVEMENTS ARE TO BE REMOVED AT THE CONTRACTOR'S EXPENSE PENDING APPROVAL OF THE TOWN ENGINEER. IN LOCATIONS WHERE EXCAVATION IS CLOSE TO TREE ROOTS, THE ROOTS SHALL BE SAWCUT.

EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, FENCES, DRIVEWAYS, SIDEWALKS, PAVEMENT, CURBS, UTILITY PIPELINES AND DRAINAGE STRUCTURES WHICH ARE REMOVED OR ALTERED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE IN THE SAME LOCATION IN A CONDITION AS GOOD AS OR BETTER THAN THEY WERE FOUND. THE CONTRACTOR AND TOWN ENGINEER SHALL DOCUMENT THE PRECONSTRUCTION CONDITIONS AT EACH LOCATION WITH PHOTOGRAPHS AND/OR VIDEO IN CASE A DISPUTE ARISES.

THE PROPERTY OWNER SHALL HAVE FIRST RIGHT OF REFUSAL FOR ANY CONCRETE RUBBLE REMOVED FROM THE CULVERT OUTFALL. ANY RELOCATION OF CONCRETE RUBBLE MATERIAL TO THE OWNER'S PROPERTY AS DIRECTED BY THE PROPERTY OWNER SHALL BE PAID FOR AT THE PROPERTY OWNER'S OWN EXPENSE.

AT&T CONTACT INFORMATION  
 NAME: BRETT LAMM  
 CELL PHONE: 979-322-5811  
 EMAIL: BL8576@ATT.COM

NO MATERIALS OR EQUIPMENT WILL BE PERMITTED TO BE STORED WITHIN THE DRAINAGE CHANNEL OVERNIGHT. THE LOCATION OF THE CONSTRUCTION STAGING AREA FOR THE STORAGE OF EQUIPMENT AND MATERIALS MUST BE APPROVED BY THE TOWN ENGINEER.

LOCATION OF CONSTRUCTION ACCESS ROADS SHALL BE APPROVED BY THE TOWN ENGINEER.

ALL DISTURBED AREAS SHALL BE REPLACED WITH BLOCK SODDING, NTCOG ITEM 204.

REMOVING TREES LESS THAN 4 INCH DIAMETER SHALL BE CONSIDERED INCIDENTAL TO CLEARING AND GRUBBING.

ALL ITEMS OF WORK REQUIRED TO COMPLETE THE WORK AS SHOWN OR IMPLIED BY THE PLANS AND SPECIFIED IN THE CONTRACT DOCUMENTS WHICH ARE NOT LISTED AS A PAY ITEM IN THE PROPOSAL SHALL BE CONSIDERED INCIDENTAL.

TRAILS AND SIDEWALKS DAMAGED BY CONSTRUCTION SHALL BE REMOVED AND REPLACED TO SAME THICKNESS AND WIDTH WITH MINIMUM 3000 PSI CONCRETE. NEW SIDEWALK SHALL BE DOWLED INTO EXISTING SIDEWALK.

NO PARKING OF VEHICLES AND/OR STORAGE OF MATERIALS OUTSIDE OF DESIGNATED STAGING AREAS, ACCESS ROUTES, OR CONSTRUCTION ZONE.

NO PARKING UNDER DRIP LINE OF TREES.

NO STORAGE OF MATERIAL UNDER DRIP LINE OF TREES.

CONTRACTOR SHALL BE RESPONSIBLE FOR MOWING WITHIN THE CONSTRUCTION ZONE, STAGING AREAS, AND ACCESS ROUTE UNTIL FINAL ACCEPTANCE OF PROJECT.

ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO BETTER OR EQUAL CONDITION INCLUDING ESTABLISHMENT OF GRASS.

ALL EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS AND DEPTHS AND ARE BASED ON THE BEST AVAILABLE RECORDS AND LIMITED FIELD DATA. THE ENGINEER DOES NOT CERTIFY THAT ALL UTILITIES ARE SHOWN. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS, SIZES, AND DEPTHS OF EXISTING UTILITIES BEFORE BEGINNING CONSTRUCTION. THIS WORK WILL BE INCIDENTAL TO OTHER ITEMS.

THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITIES AND UTILITY STRUCTURES. THE CONTRACTOR SHALL SUPPORT UNDERGROUND UTILITIES WHEN EXCAVATING OR CONSTRUCTING UNDER SUCH UTILITIES. THIS WORK WILL BE INCIDENTAL TO OTHER ITEMS.

THE CONTRACTOR SHALL BE ADVISED THAT THE WATER LEVEL WITHIN THE CREEK WILL VARY AND IS SUBJECT TO RISING RAPIDLY. ALL WORK WITHIN THE CHANNEL SHALL BE EXECUTED IN AN EXPEDIENT MANNER WITH MINIMAL DELAYS TO AVOID EXPOSING CONSTRUCTION TO HIGH FLOW EVENTS. THE CONTRACTOR SHALL MONITOR WEATHER REPORTS AND BE PREPARED TO PROTECT CONSTRUCTION PRIOR TO HIGH RAINFALL EVENTS. ANY DAMAGE EXPERIENCED DURING DRAINAGE EVENTS SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE PROJECT.

ALL VEGETATION AND TOP SOIL CONTAINING ORGANIC MATERIAL SHALL BE REMOVED FROM ANY AREAS BEING REGRADED.

THE CONTRACTOR SHALL PREPARE AND IMPLEMENT THE STORM WATER POLLUTION PREVENTION PLAN AND WILL BE REQUIRED TO FILL OUT THE CERTIFICATION FORMS IN THE SW3P, PERFORM INSPECTIONS AND COMPLETE INSPECTION REPORTS, AND PAY THE PERMIT FEES FOR THE NOTICE OF INTENT (NOI) AND NOTICE OF TERMINATION (NOT) TO THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) WITH COPIES TO THE TOWN PRIOR TO ANY CONSTRUCTION. ALSO, A COPY OF THE NOI SHALL BE POSTED AT THE CONSTRUCTION SITE AT ALL TIMES. (NO SEPARATE PAY - INCIDENTAL TO "MOBILIZATION AND DEMOBILIZATION/CLEANUP.")

IT IS HIGHLY RECOMMENDED THAT THE CONTRACTOR VISIT THE SITE TO DEVELOP A PLAN TO GET MATERIAL AND EQUIPMENT DOWN TO THE CREEK CONSTRUCTION AREA. THE EXISTING CREEK BANK SLOPE IS APPROXIMATELY 50%. A CONCRETE PUMP TRUCK MAY BE NEEDED. FINAL MEANS AND METHODS ARE THE CONTRACTOR'S RESPONSIBILITY.

TOWN PARK DEPARTMENT PLANTING NOTES:

TREE PROTECTIVE FENCING NEEDS TO BE LOCATED AT THE DRIPLINE OF THE TREE TO BE PROTECTED. ADDITIONALLY, TRUCKS OR MATERIALS CANNOT HAVE ACCESS TO AREAS OUTSIDE OF THE 15-FOOT-WIDE ACCESS ROUTE.

TEMPORARY IRRIGATION NEEDS TO BE MAINTAINED TO ESTABLISH THE NEW TREES AND HYDRO MULCH OF UNDERSTORY VEGETATION FOR 12 MONTHS, WITHIN AND OUTSIDE OF THE LIMITS OF THE PROPOSED CONSTRUCTION ACCESS ROUTE.

CONTRACTOR SHALL RE-ESTABLISH EXISTING GROUND TO ORIGINAL CONDITIONS/ELEVATIONS/DENSITY WITHIN THE LIMITS OF THE PROPOSED CONSTRUCTION ACCESS ROUTE BEFORE REPLANTING STARTS.

CONTRACTOR TO COORDINATE WITH THE TOWN'S PARK DEPARTMENT AND PROPERTY OWNER TO PROTECT EXISTING TREES AND LANDSCAPING ON PRIVATE PROPERTY.

CONTRACTOR TO COORDINATE WITH THE TOWN'S PARK DEPARTMENT AND PROPERTY OWNER ON WHERE TO PLANT THE NEW TREES.

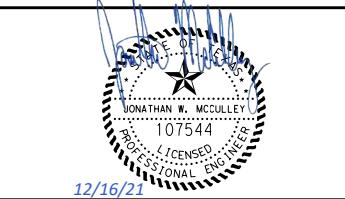
CONTRACTOR SHALL AVOID DAMAGE TO EXISTING TREES. WHEN NECESSARY, TREES AND SHRUB TRIMMING FOR CONSTRUCTION SHALL BE PERFORMED BY CERTIFIED TREE WORK UNDER THE DIRECTION OF A TOWN OF ADDISON PARKS STAFF MEMBER.

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 REVISIED DATE:

NO.	DATE	REVISION	APPROV.



TEXAS  
 REGISTRATION NO.  
 F-5713  
  
 3010 Gaylord Parkway  
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 Frisco, TX 75034  
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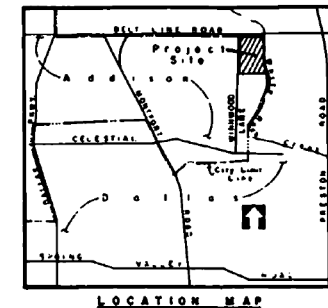
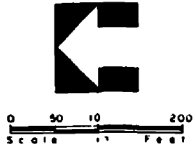


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DESIGN CHECK	JWM BWS
DRAWN CHECK	LTT BWS
DATE	12/16/2021
SCALE	AS SHOWN



WINNWOOD ROAD BRIDGE CLASS CULVERT OUTLET ARMORING	
GENERAL NOTES	
TOWN OF ADDISON, TEXAS	

SHEET  
 1 OF 1  
  
 SHEET NO.  
**3**



**OWNER'S CERTIFICATE**

WHEREAS, MICHAEL HALL ENTERPRISES, INC. AND PLATEAU/HODGES JOINT VENTURE do hereby adopt this plat designating the herein described property as THE WOODS, an addition to the Town of Addison, Texas. The easements shown thereon are hereby reserved for the purposes of water, sanitary sewer, storm sewer, electric and telephone, gas and cable television locations to be determined by Grantor. This plat approved subject to all platting ordinances, rules, regulations and resolutions of the Town of Addison, Texas.

WITNESSE MY HAND, at Addison, Texas on this, the 2nd day of May, 1986.

PLATEAU/HODGES JOINT VENTURE  
BY: *[Signature]*  
MICHAEL HALL ENTERPRISES, INC.  
BY: *[Signature]*

STATE OF TEXAS  
COUNTY OF DALLAS

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared *Michael Hall* known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, on this, the 2nd day of May, 1986.

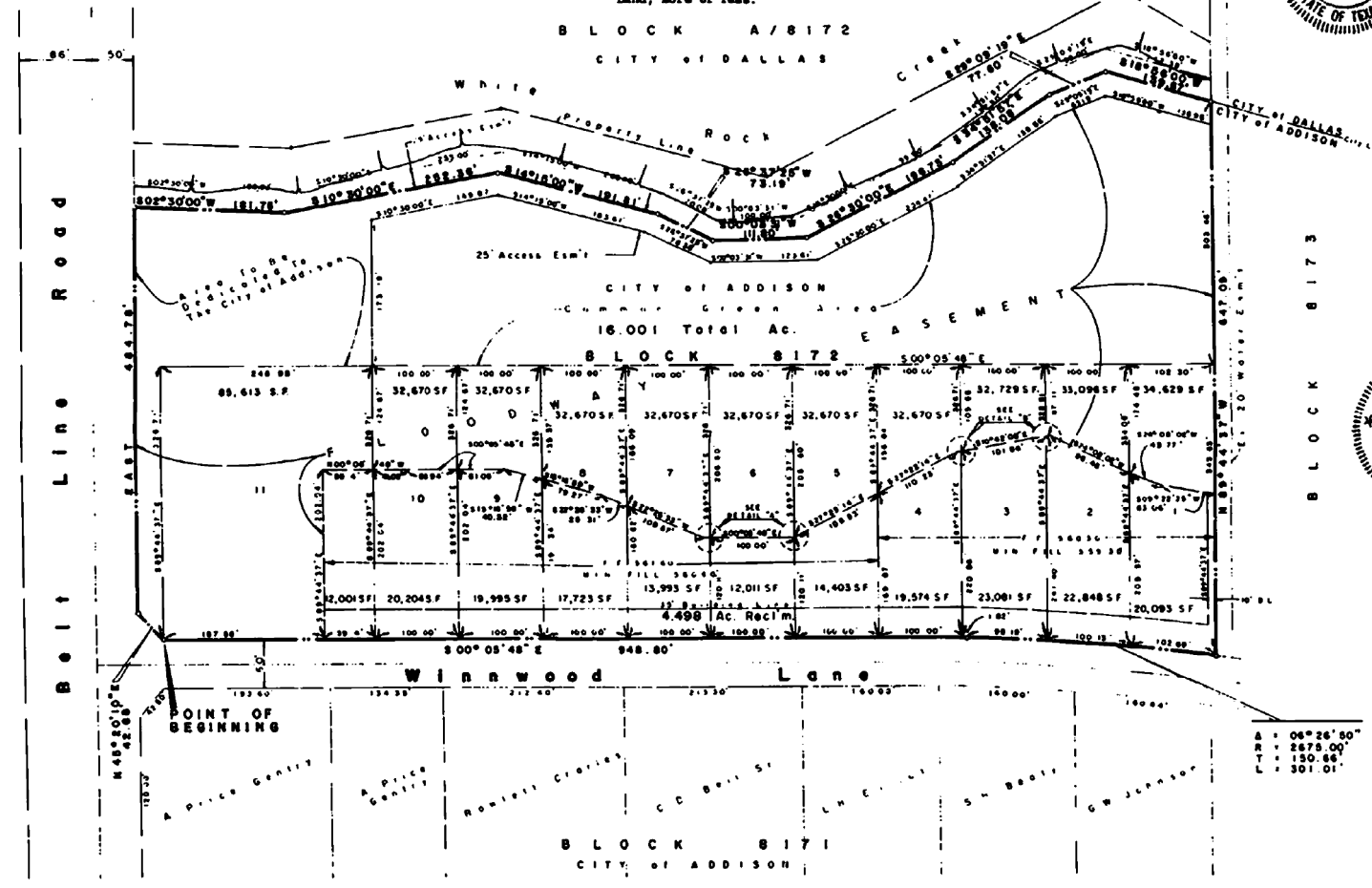
*[Signature]*  
Notary Public in and for Dallas County, Texas

STATE OF TEXAS  
COUNTY OF DALLAS

BEFORE ME, the undersigned Notary Public in and for Dallas County, Texas, on this day personally appeared E. LARRY HUITT, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this, the 2nd day of May, A.D., 1986.

*[Signature]*  
Notary Public in and for Dallas County, Texas



STATE OF TEXAS  
COUNTY OF DALLAS

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared *Michael Hall* known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, on this, the 2nd day of May, 1986.

*[Signature]*  
Notary Public in and for Dallas County, Texas

**FLOODWAY EASEMENT**

This Plat is accepted by the Owner subject to the following conditions which shall be binding upon the Owner, his heirs, grantees, successors and assigns.

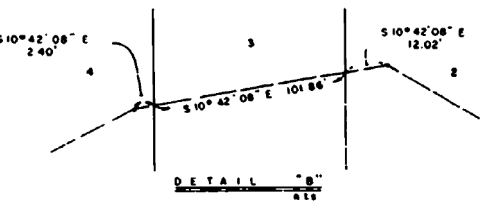
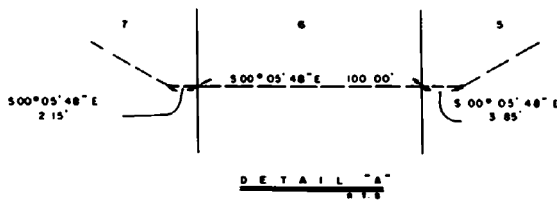
The existing creek or creeks traversing along Block 8172 within the limits of this addition, will remain as an open channel at all times and will be maintained by or adjacent to the owners of the lot or lots that are traversed by or adjacent to the drainage courses in Block 8172. The Town of Addison will not be responsible for the maintenance and operation of said creek or creeks or for any damage to private property or person that results from the flow of water along said creek, or for the control of erosion.

No obstruction to the natural flow of storm water run-off shall be permitted by filling, or by construction of any type of dam, building, bridge, fence, walkway or any other structure within the natural drainage channels, as hereinafter defined in Block 8172 unless approved by the Director of Public Works. Provided, however, it is understood that in the event it becomes necessary for the Town of Addison to erect any type of drainage structure in order to improve the storm drainage that may be occasioned by the streets and alleys in or adjacent to the subdivision, then in such event, the Town of Addison shall have the right to enter upon the floodway easement at any point, or points, to erect, construct and maintain any drainage facility deemed necessary for drainage purposes. Each property owner shall keep the natural drainage channels traversing or adjacent to his property clean and free of debris, silt, and any substance which would result in unsanitary conditions and the Town of Addison shall have the right of ingress and egress for the purpose of inspection and supervision of maintenance work by the property owner to alleviate any undesirable conditions which may occur.

The natural drainage channels through Block 8172, as in the case of all natural channels are subject to storm water overflow and natural bank erosion to an extent which cannot be definitely defined. The Town of Addison shall not be held liable for any damages of any nature resulting from the occurrence of these natural phenomena, nor resulting from the failure of any structure or structures, within the natural drainage channels. Property owners shall be responsible for replacement of any best erosion which occurs on their lots.

The natural drainage channel crossing each lot is shown by the Floodway Easement line as shown on the plat.

Building areas outside the Floodway Easement line should be filled to a minimum elevation as shown. The minimum floor elevations or houses built within this subdivision shall be as shown.



FOR INFORMATION ONLY

**CERTIFICATE OF APPROVAL**

Approved this 13th day of May, 1986 by the Town of Addison, Texas.

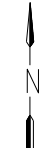
*[Signature]* Mayor  
*[Signature]* Secretary

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

Replat of  
**THE WOODS**  
An Addition to the Town of Addison  
Out of the A. Bledsoe Survey  
Abstract No. 157, Zoned R-16  
Dallas County, Texas

BY: MICHAEL HALL ENTERPRISES, INC.  
4488 Spring Valley Ave., Suite 500  
Dallas, Texas 75234  
Project No. 0438-01





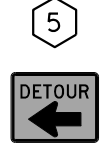
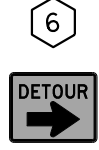
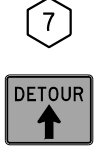

BY: HUITT-ZOLLARS, INC.  
33 McKinney Ave., Suite 500  
Dallas, Texas 75204  
Project No. 0438-01



**LEGEND**

-  TEMPORARY TCP SIGNS
-  TYPE III BARRICADE
-  DIRECTION OF TRAFFIC FLOW

NOTES:  
 1. CONTRACTOR SHALL DEVELOPE A FINAL TRAFFIC CONTROL PLAN THAT IS SUBJECT TO APPROVAL BY THE TOWN OF ADDISON AND MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER.

 1 ROAD WORK AHEAD CW20-1D (36"x36")	 2 DETOUR AHEAD CW20-2D (36"x36")	 3 ROAD CLOSED R11-2 (48"x30")	 4 ROAD CLOSED TO THRU TRAFFIC R11-4 (60"x30")
 5 DETOUR M4-9L (30"x24")	 6 DETOUR M4-9R (30"x24")	 7 DETOUR M4-9S (30"x24")	 8 DO NOT ENTER R5-1 (36"x36")

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Digitally Signed on 12/16/2021

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WINNWOOD ROAD BRIDGE CLASS  
 CULVERT OUTLET ARMORING  
  
 TRAFFIC CONTROL PLAN  
  
 TOWN OF ADDISON, TEXAS

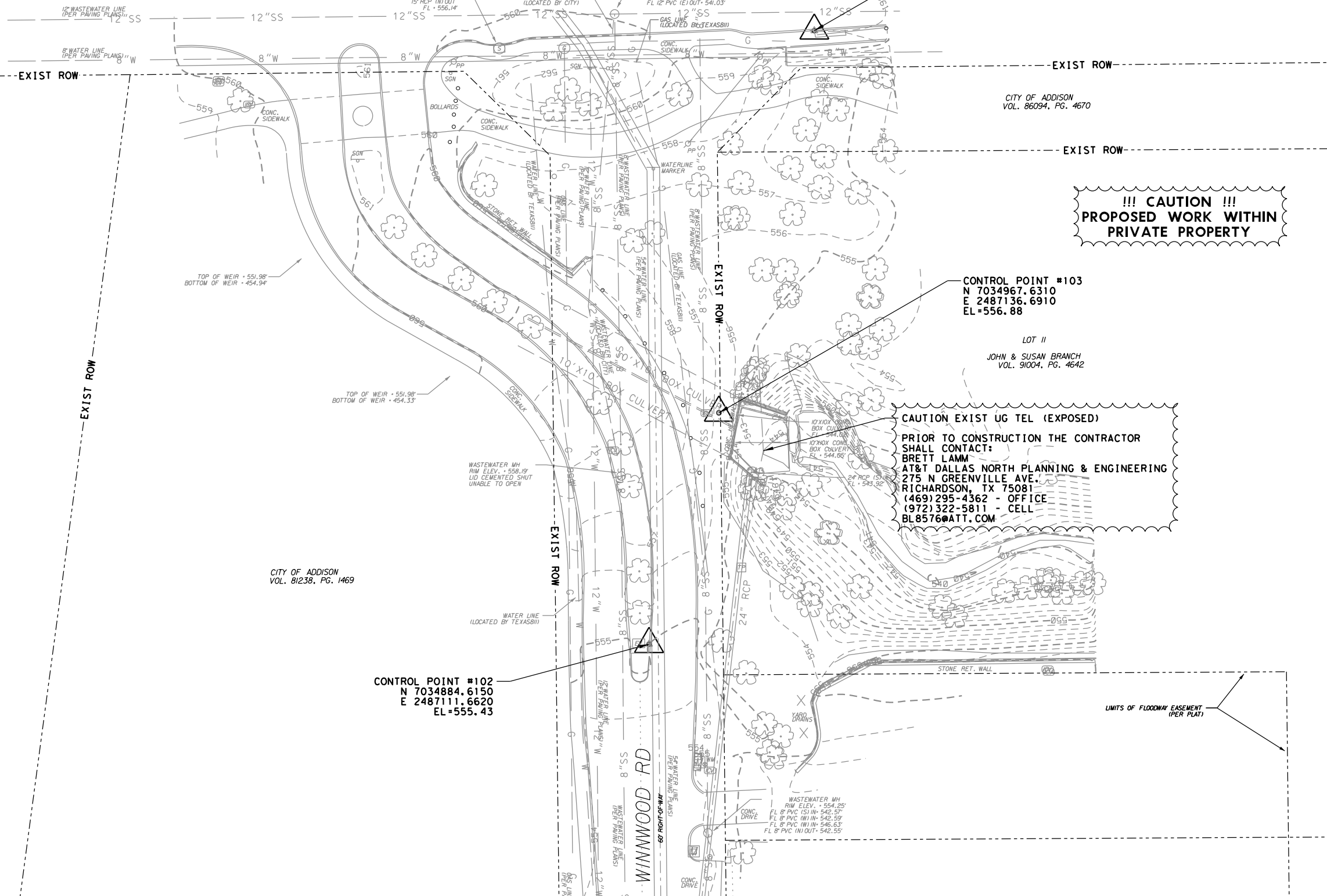
SHEET 1 OF 1  
  
 SHEET NO. 5



CONTROL POINT #101  
N 7035145.1780  
E 2486972.9220  
EL=560.95

BELTLINE RD  
VARIABLE WIDTH RIGHT-OF-WAY

CONTROL POINT #104  
N 7035104.7620  
E 2487170.9680  
EL=560.97



**!!! CAUTION !!!**  
**PROPOSED WORK WITHIN**  
**PRIVATE PROPERTY**

CONTROL POINT #103  
N 7034967.6310  
E 2487136.6910  
EL=556.88

- NOTES:
1. HORIZONTAL CONTROL - NAD 83 STATE PLANE COORDINATE SYSTEM NORTH CENTRAL ZONE (4202)
  2. VERTICAL CONTROL - NAVD 88
  3. SURFACE ADJUSTMENT FACTOR = 1.0001365

CAUTION EXIST UG TEL (EXPOSED)  
PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT:  
BRETT LAMM  
AT&T DALLAS NORTH PLANNING & ENGINEERING  
275 N GREENVILLE AVE.  
RICHARDSON, TX 75081  
(469) 295-4362 - OFFICE  
(972) 322-5811 - CELL  
BL8576@ATT.COM

CONTROL POINT #102  
N 7034884.6150  
E 2487111.6620  
EL=555.43

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WINNWOOD ROAD BRIDGE CLASS  
CULVERT OUTLET ARMORING  
  
PROJECT LAYOUT  
HORIZONTAL AND VERTICAL CONTROL  
  
TOWN OF ADDISON, TEXAS

SHEET  
1 OF 1  
  
SHEET NO.  
**6**

0' 20' 40'

(IN FEET)  
1" = 40' HORIZ.



IT IS HIGHLY RECOMMENDED THAT THE CONTRACTOR VISIT THE SITE TO DEVELOP A PLAN TO GET MATERIAL AND EQUIPMENT DOWN TO THE CREEK CONSTRUCTION AREA. THE EXISTING CREEK BANK SLOPE IS APPROXIMATELY 50%. A CONCRETE PUMP TRUCK MAY BE NEEDED. FINAL MEANS AND METHODS ARE THE CONTRACTOR'S RESPONSIBILITY.

**LEGEND**

- REPLACE EXIST SIDEWALK (4")
- ROCK FILTER DAM TY 3
- UNREINFORCED CONCRETE (6" THICK, 3,600 PSI)
- CONTRACTOR'S ACCESS PATH
- FULL DEPTH SAWCUT
- SILT FENCE
- TREE PROTECTION (FENCING)
- REMOVE EXIST TREE
- TYPE III BARRICADE

**!!! CAUTION !!!**  
**PROPOSED WORK WITHIN PRIVATE PROPERTY**

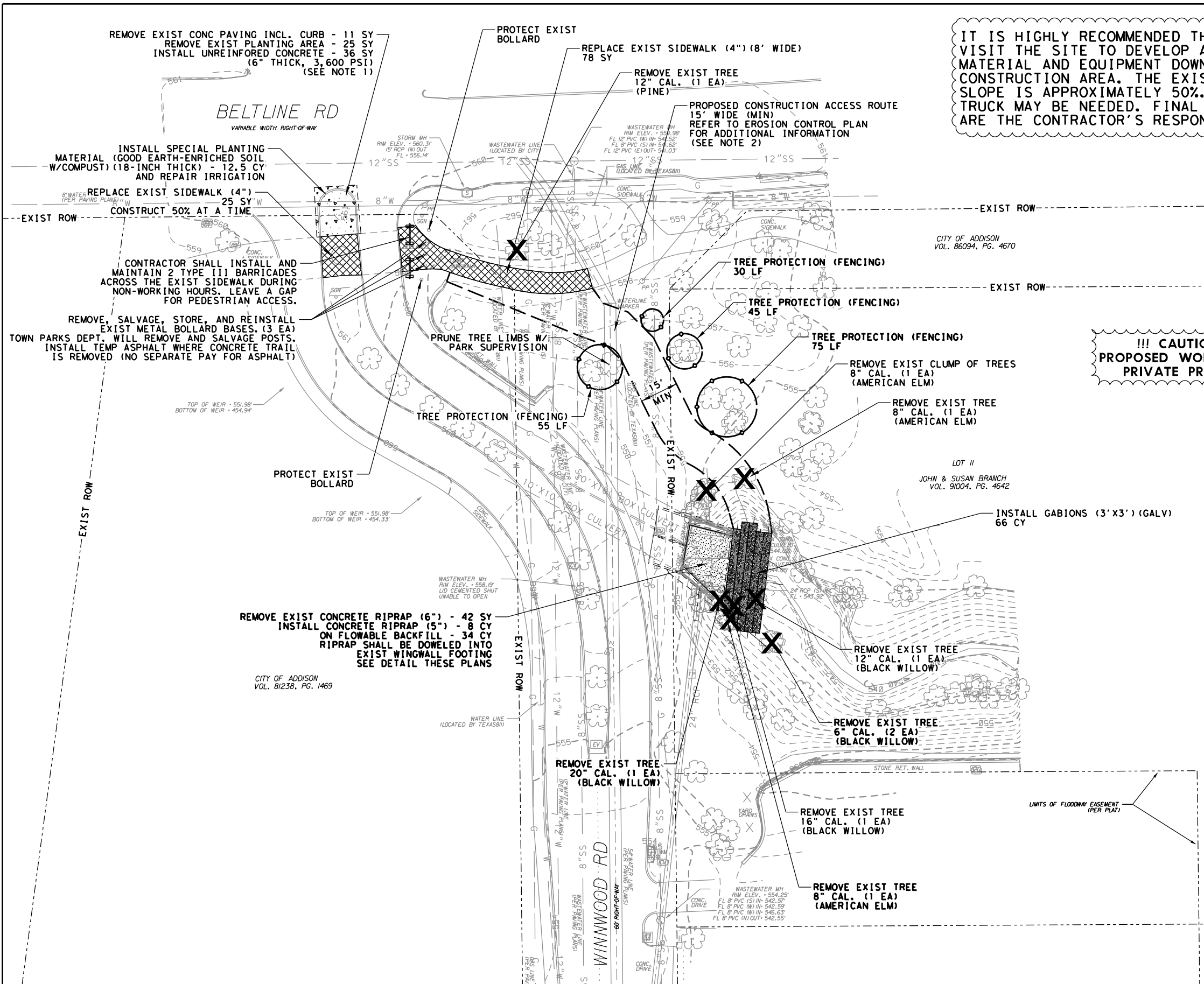
**NOTES:**

1. THE REMOVAL OF THE MEDIAN NOSE IS FOR CONTRACTOR'S TEMPORARY SITE ACCESS ONLY. UPON THE COMPLETION OF PROPOSED IMPROVEMENTS, THE CONTRACTOR SHALL REPLACE THE MEDIAN NOSE BACK TO IT'S PRECONSTRUCTION CONFIGURATION IN ACCORDANCE WITH THE TOWN'S MOST CURRENT DESIGN STANDARDS.  
  
CONTRACTOR SHALL DRILL AND EPOXY #6 DOWEL AS SHOWN IN "PAVEMENT REPAIR HEADER" DETAIL WHEN CONNECTING NEW ROADWAY PAVEMENT TO EXIST PAVEMENT (NO SEPARATE PAY FOR DOWEL BARS)
2. THE PROPOSED CONSTRUCTION EXIT AREA CONTAINS EXISTING IRRIGATION. THE CONTRACTOR SHALL REPAIR ALL IRRIGATION SYSTEM ITEMS DAMAGED DURING CONSTRUCTION. A PAY ITEM HAS BEEN INCLUDED TO REPAIR THIS IRRIGATION.

**TREE REMOVAL**

SIZE	TYPE
8"	AMERICAN ELM
8"	AMERICAN ELM
8"	AMERICAN ELM
12"	BLACK WILLOW
6"	BLACK WILLOW
16"	BLACK WILLOW
20"	BLACK WILLOW

\*AMERICAN ELM IS NOT MITIGATED



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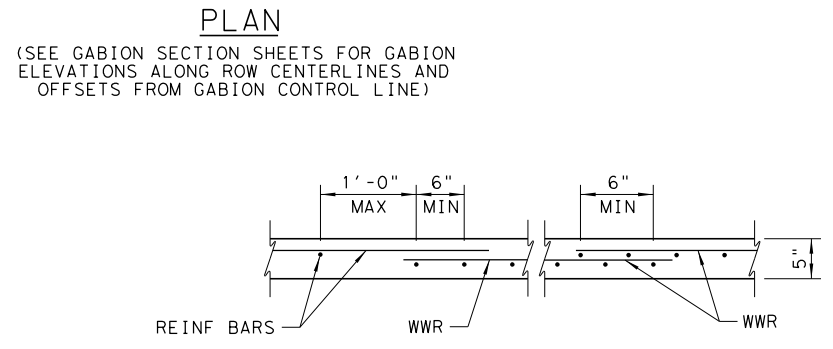
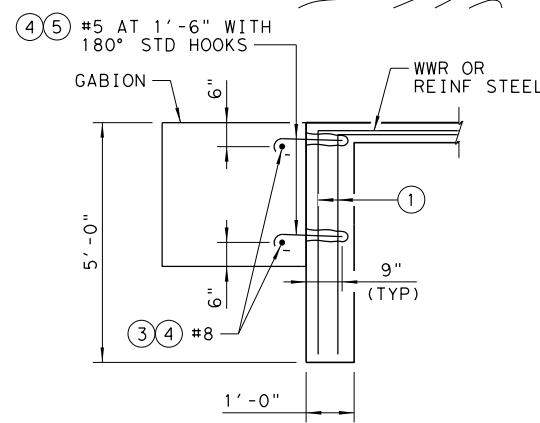
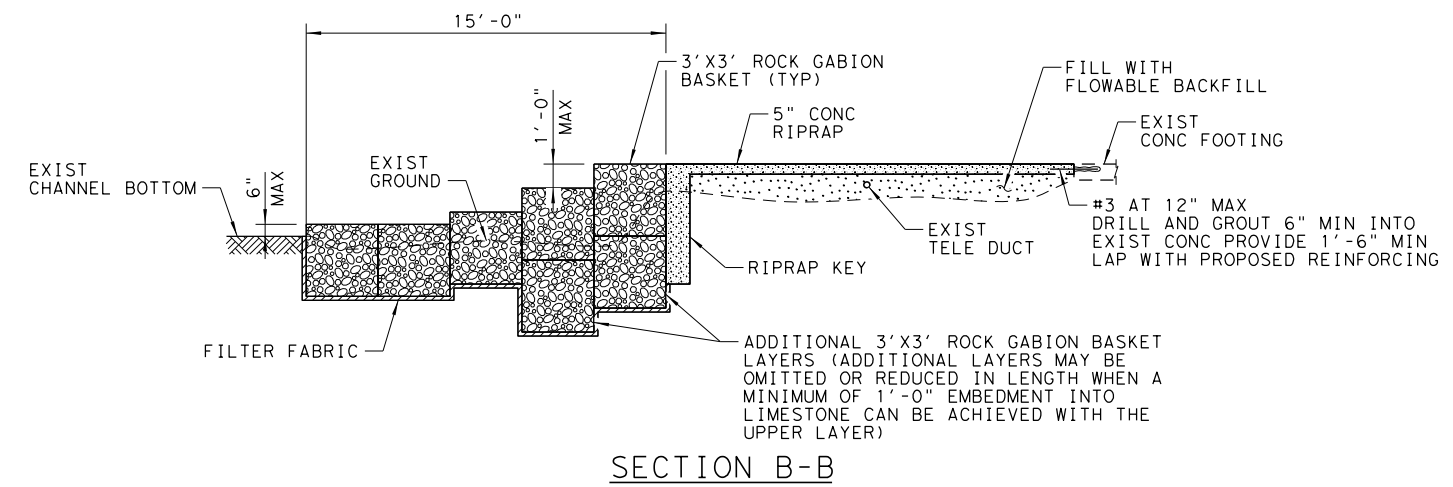
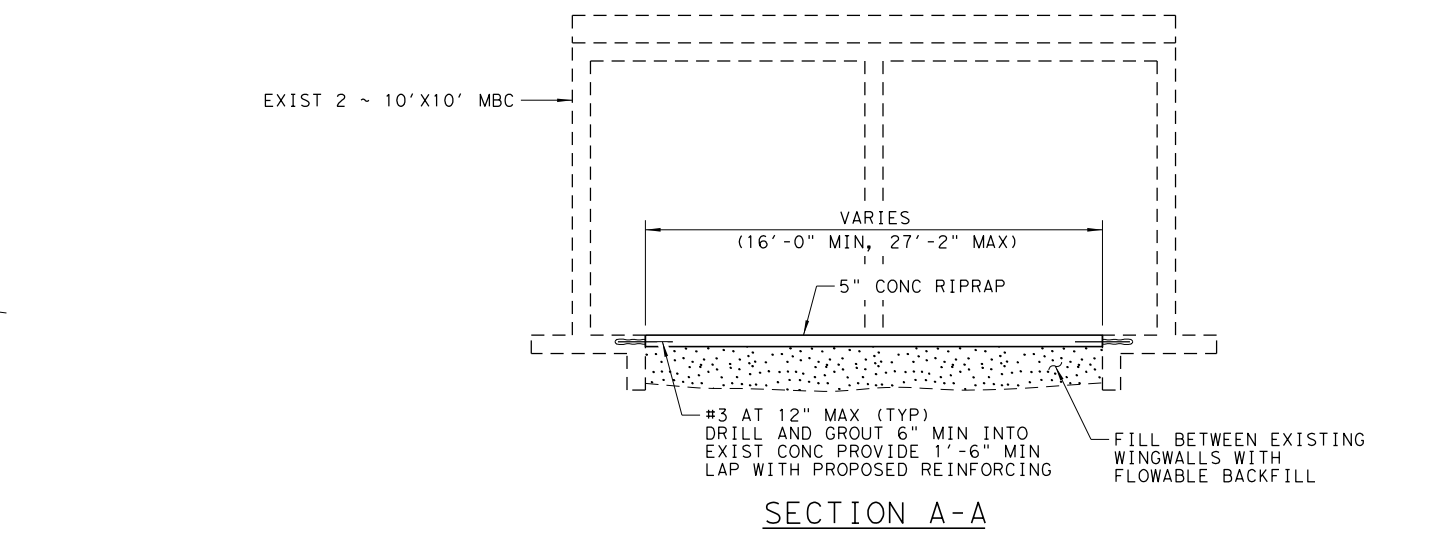
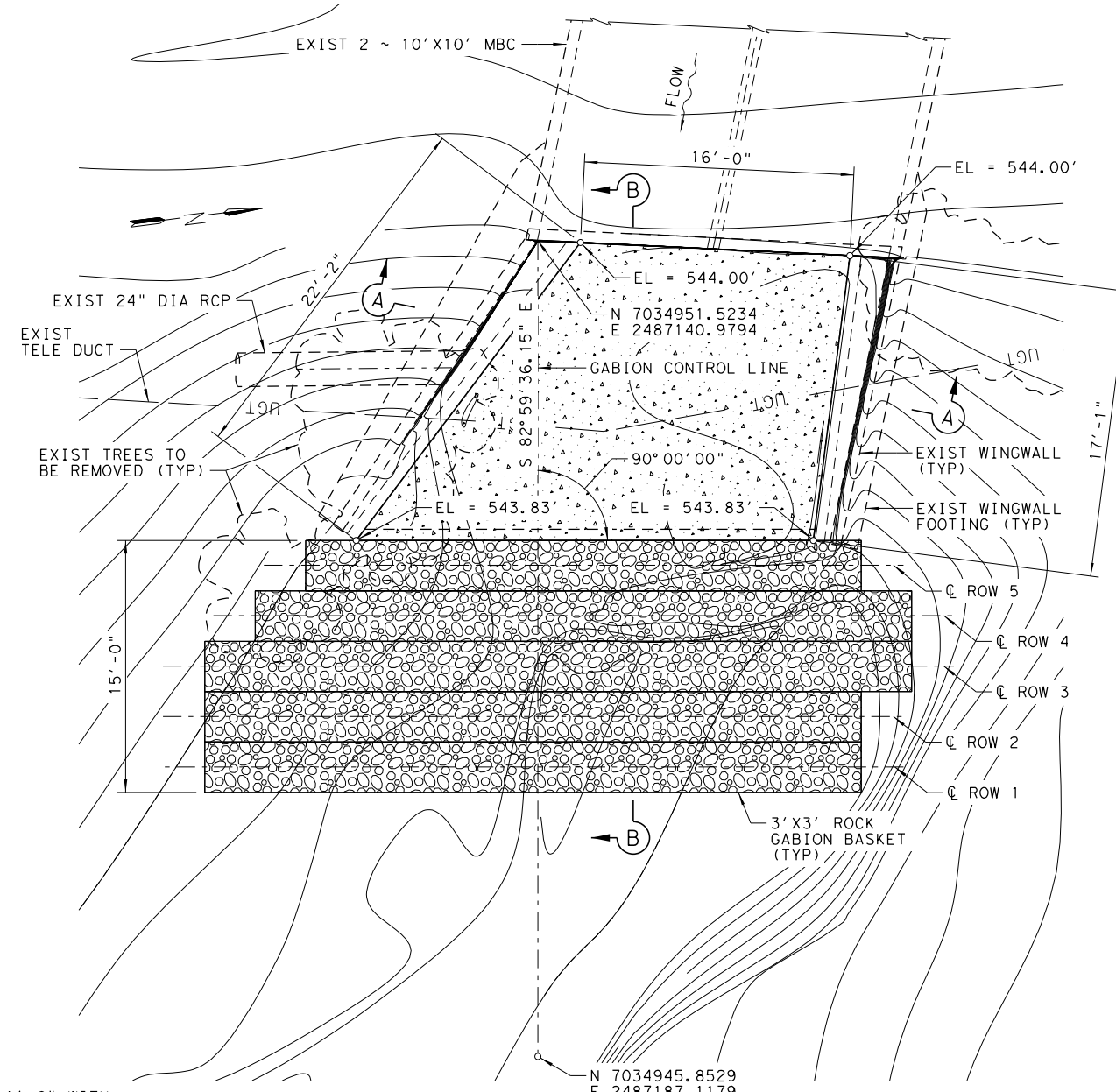
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WINNWOOD ROAD BRIDGE CLASS  
CULVERT OUTLET ARMORING  
  
PROPOSED SITE PLAN  
  
TOWN OF ADDISON, TEXAS

SHEET  
1 OF 1  
  
SHEET NO.  
**7**



**GABION NOTES:**

- FURNISH AND INSTALL GABIONS IN ACCORDANCE WITH TxDOT SPECIFICATION ITEM 459, "GABIONS AND GABION MATTRESSES."
- PROVIDE PVC COATED GALVANIZED TWISTED WIRE GABIONS.
- GABION FILL TO:  
ROCK SIZE: 4" TO 8", D50 = 6"  
ROCK UNIT WEIGHT: 150 PCF MINIMUM  
VOIDS: 30% MAXIMUM
- ① PROVIDE WWR OR #3 BARS, WITH 1'-0" EXTENSION INTO RIPRAP.
- ② PROVIDE #3 REINFORCING BARS AT 18" SPA C-C. PROVIDE WELDED WIRE REINFORCEMENT (WWR) AS 6X6-D2, 9X2.9 OR D3XD3. COMBINATIONS OF WWR AND REINFORCING BARS MAY BE USED IF BOTH ARE PERMITTED. USE LAP SPLICES OF A MINIMUM 6 INCHES, MEASURED FROM THE TRANSVERSE WIRE OF WWR, AND THE ENDS OF REINFORCING BARS.
- ③ FULL LENGTH OF GABION
- ④ PROVIDE EPOXY COATED OR GALVANIZED BARS.
- ⑤ DRILL AND EPOXY GROUT INTO RIPRAP KEY WITH HILTI HIT-RE 500 V3 OR APPROVED EQUAL.

**GENERAL NOTES:**

- THE CONTRACTOR SHALL LOCATE ALL UTILITIES AND NOTIFY ENGINEER IN WRITING PRIOR TO ALL CONSTRUCTION.
- THE CONTRACTOR SHALL REMOVE EXISTING DEBRIS AND RUBBLE AT CULVERT OUTFALL PRIOR TO CONSTRUCTION OF CONCRETE RIPRAP AND GABIONS. REMOVAL SHALL BE PAID FOR UNDER NTCOG ITEM 203, "REMOVE EXISTING CONCRETE RIPRAP (6)".
- TRENCHING AND EXCAVATION FOR GABION BASKETS IS SUBSIDIARY TO TxDOT SPECIFICATION ITEM 459, "GABIONS AND GABION MATTRESSES".

**MATERIAL NOTES:**

- PROVIDE CLASS "B" CONCRETE (F'C = 2,000 PSI)
- PROVIDE GRADE 60 REINFORCING STEEL.
- PROVIDE DEFORMED WELDED WIRE REINFORCEMENT (WWR) MEETING ASTM A1064.
- PROVIDE REINFORCING BARS, DEFORMED WWR, OR ANY SUITABLE COMBINATION OF BOTH TYPES FOR RIPRAP REINFORCING.
- OPTIONALLY SYNTHETIC FIBERS MAY BE USED IN APPROVED BY THE ENGINEER. PROVIDE SYNTHETIC FIBERS LISTED ON THE "FIBERS FOR CONCRETE" MATERIAL PRODUCER LIST (MPL) IN LIEU OF STEEL REINFORCING IN RIPRAP CONCRETE.

**RIPRAP KEY GABION ANCHOR DETAIL**

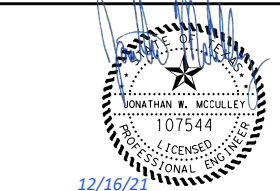
**RIPRAP REINFORCEMENT DETAIL**  
SEE GENERAL NOTES FOR OPTIONAL FIBER REINFORCEMENT.

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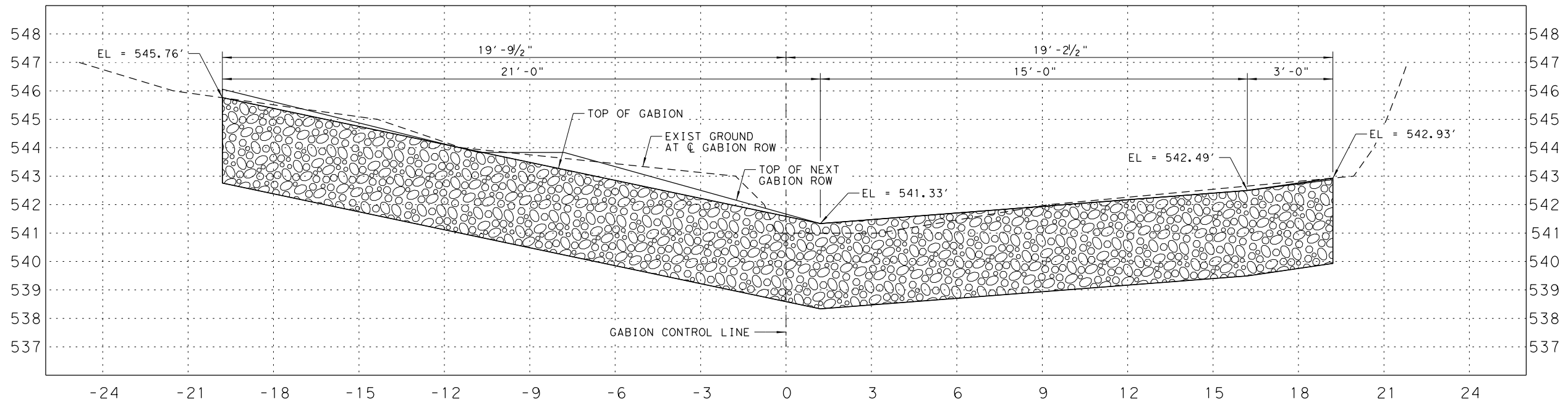
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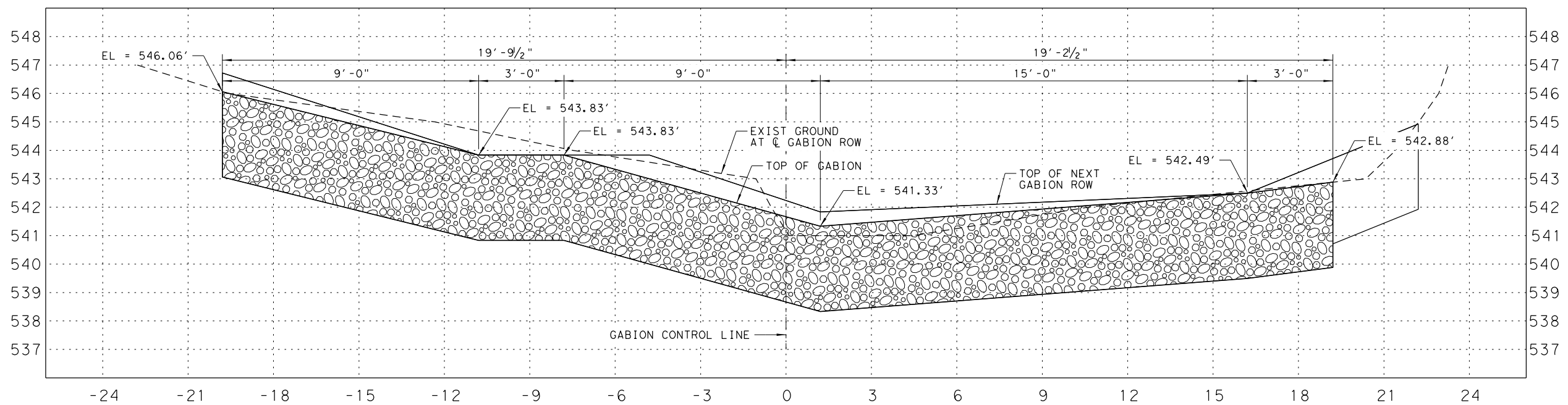
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 CULVERT OUTLET ARMORING  
  
 CULVERT OUTLET ARMORING DETAILS  
  
 TOWN OF ADDISON, TEXAS

SHEET  
 1 OF 1  
  
 SHEET NO.  
**8**





ROW 1



ROW 2

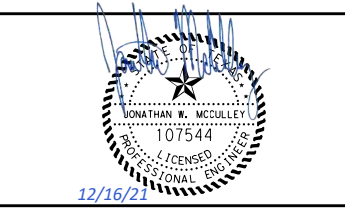
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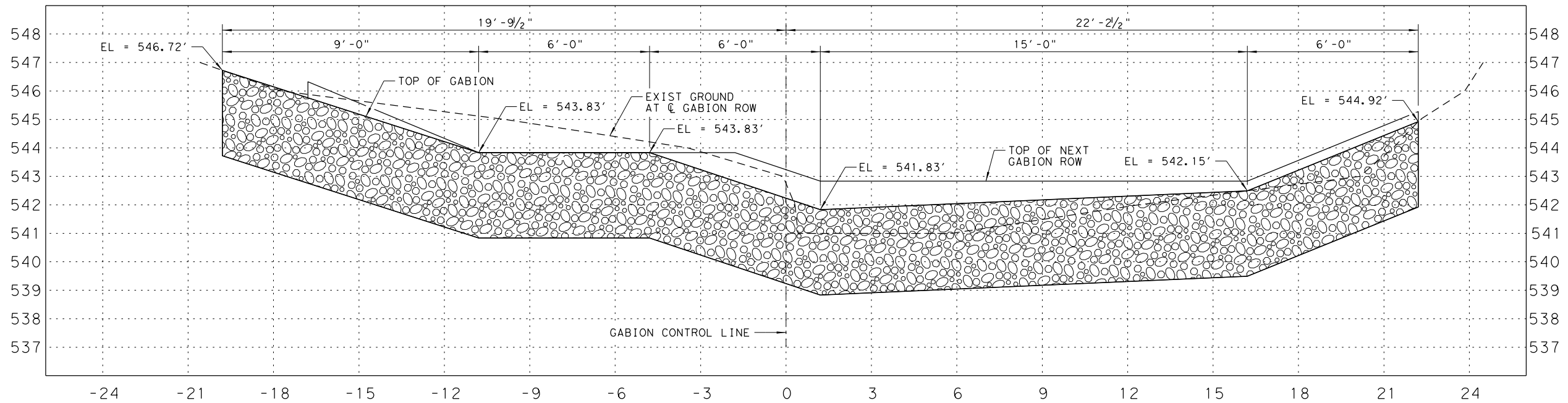


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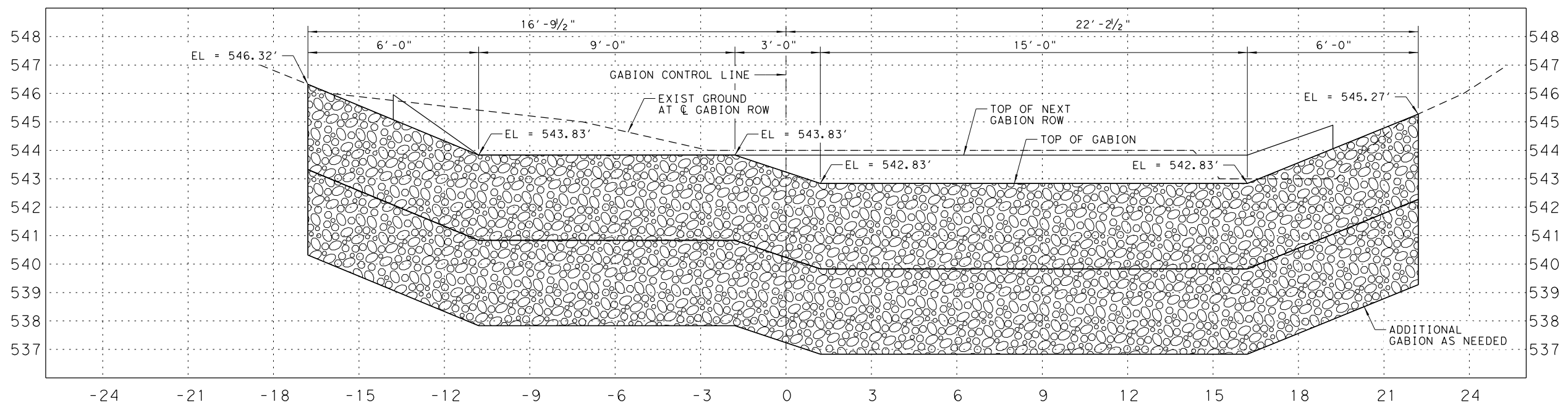


WINNWOOD ROAD BRIDGE CLASS  
 CULVERT OUTLET ARMORING  
  
 GABION SECTIONS  
  
 TOWN OF ADDISON, TEXAS

SHEET  
 1 OF 3  
  
 SHEET NO.  
**9**



ROW 3



ROW 4

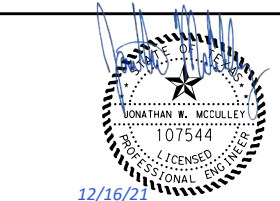
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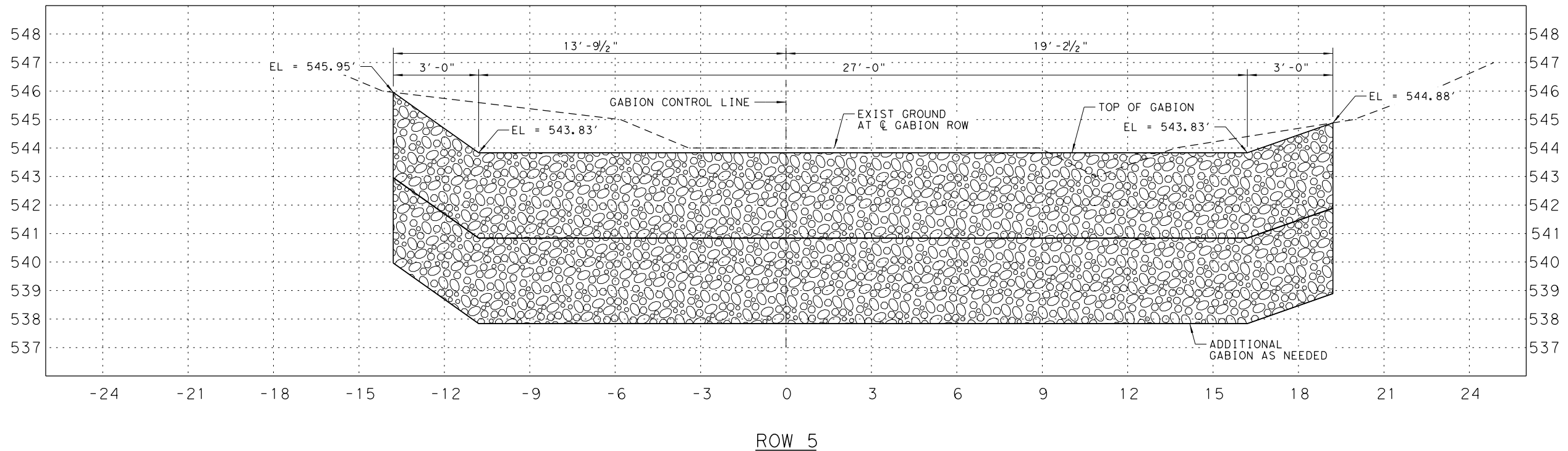


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WINNWOOD ROAD BRIDGE CLASS  
 CULVERT OUTLET ARMORING  
  
 GABION SECTIONS  
  
 TOWN OF ADDISON, TEXAS

SHEET  
 2 OF 3  
  
 SHEET NO.  
**10**



ROW 5

NOTE:  
CONTRACTOR SHALL ADJUST ELEVATIONS  
TO MEET FIELD CONDITIONS.

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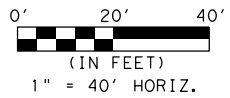


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






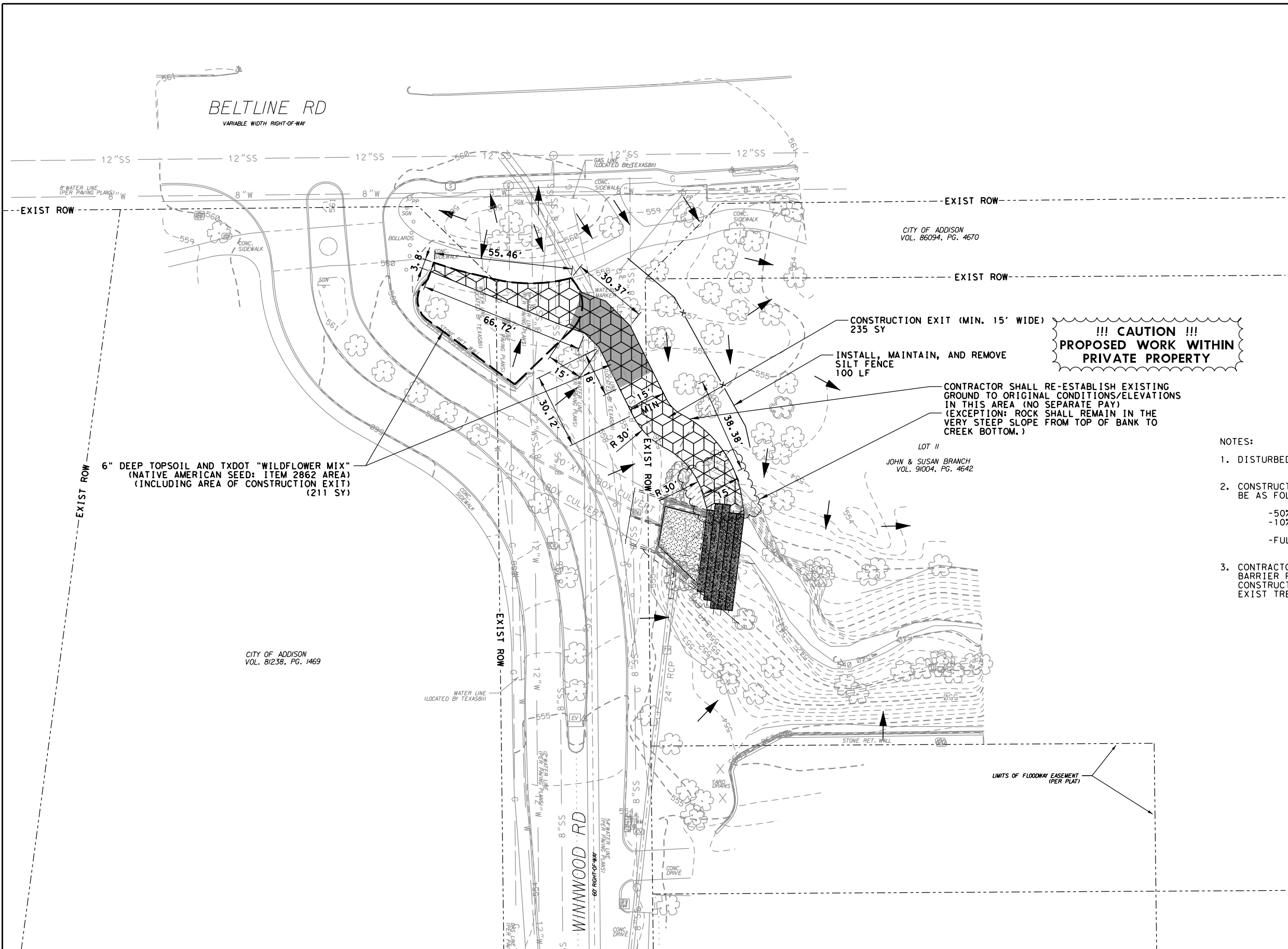
WINNWOOD ROAD BRIDGE CLASS  
 CULVERT OUTLET ARMORING  
  
 GABION SECTIONS  
  
 TOWN OF ADDISON, TEXAS

SHEET  
 3 OF 3  
  
 SHEET NO.  
**11**



**LEGEND**

-  CONSTRUCTION EXIT
-  CONSTRUCTION EXIT W/ 6" MULCH BARRIER (SEE NOTE 3)
-  SILT FENCE
-  FLOW ARROW
-  6" TOPSOIL & HYDROMULCH



**!!! CAUTION !!!  
PROPOSED WORK WITHIN  
PRIVATE PROPERTY**

**NOTES:**

1. DISTURBED AREA = 0.095 ACRES = 4141.0619 SF
2. CONSTRUCTION EXIT PAYSCALE SHALL BE AS FOLLOWS:
  - 50% UPON INSTALLATION
  - 10% PER MONTH FOR MAINTENANCE (MAX 3 MONTHS)
  - FULL PAYMENT UPON FINAL ACCEPTANCE OF PROJECT COMPLETION.
3. CONTRACTOR SHALL INSTALL 6" THICK MULCH BARRIER PRIOR TO INSTALLING ROCK CONSTRUCTION EXIT MATERIAL TO PROTECT EXIST TREE ROOTS UNDER TREE DRIP LINES.

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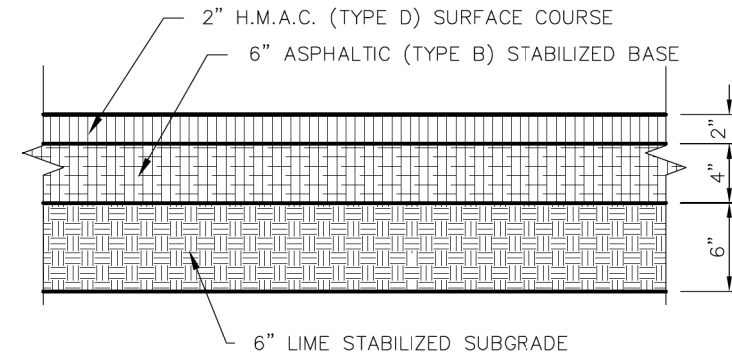


WINNWOOD ROAD BRIDGE CLASS  
 CULVERT OUTLET ARMORING  
  
 EROSION CONTROL PLAN  
  
 TOWN OF ADDISON, TEXAS

SHEET  
 1 OF 1  
  
 SHEET NO.  
**12**

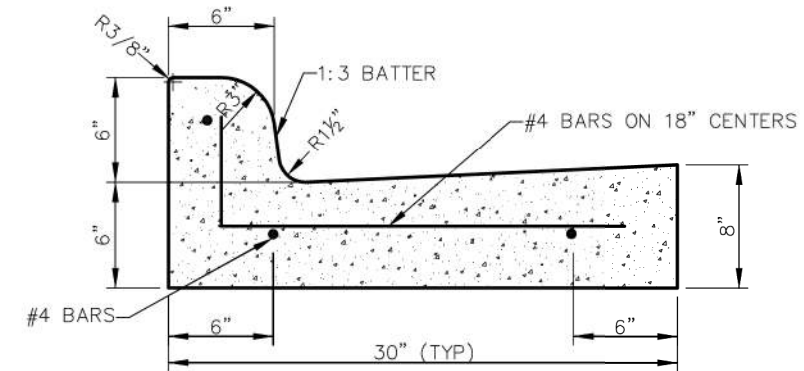
**PAVING – GENERAL NOTES**

1. GENERAL:  
PAVEMENT THICKNESS IS AS SHOWN IN ITEM 7. SUBGRADE DESIGN SHALL CONFORM TO TOWN OF ADDISON PUBLIC WORKS REQUIREMENTS IN ITEM 3, AND SHALL EXTEND 12" MIN. BEHIND THE BACK OF CURB.
2. REINFORCED CONCRETE PAVEMENT:
  - A. CONCRETE STRENGTH SHALL BE AS SHOWN IN ITEM 7 (NCTCOG LATEST EDITION).
  - B. ALL CURBS SHALL BE INTEGRAL WITH PAVEMENT AND SHALL BE OF THE SAME STRENGTH AS CONCRETE PAVEMENT.
  - C. DETAIL AND ARRANGEMENT OF PAVEMENT JOINTS, ALL TYPES, SHALL BE AS SHOWN ON THE TOWN STANDARD CONSTRUCTION DETAILS.
  - D. BAR LAPS SHALL BE THIRTY DIAMETERS.
  - E. REINFORCING STEEL SHALL BE #3 REBAR (3/8") ON 18" CENTERS FOR 8" OR LESS. #4 FOR 10" OR ABOVE
3. SUBGRADE:  
SUBGRADE UNDER ALL PAVEMENT SHALL BE 6" THICK AND SHALL BE STABILIZED WITH AT LEAST 30 LBS. PER SQ. YD. HYDRATED LIME, COMPACTED TO A DENSITY NOT LESS THAN 95 PERCENT. LABORATORY TESTS MUST BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT FOR APPROVAL TO DETERMINE AMOUNT OF LIME REQUIRED. LABORATORY TEST MAY BE WAIVED PROVIDED AT LEAST 36 LBS. OF LIME PER SQ. YD. IS USED. SEE NCTCOG ITEM 301.2 "LIME TREATMENT". FLEXIBLE BASE (CRUSHED STONE/CONCRETE) PER NCTCOG ITEM 301.5 MAY BE SUBSTITUTED FOR LIME TREATMENT WITH THE APPROVAL OF THE TOWN ENGINEER.
4. REBAR SHALL BE SUPPORTED BY BAR CHAIRS OR OTHER DEVICES APPROVED BY TOWN ENGINEER.
5. NO TRAFFIC ON FINISHED SUBGRADE SHALL BE PERMITTED AFTER REINFORCING STEEL IS INSTALLED ABOVE SUBGRADE. NO TRAFFIC SHALL BE PERMITTED BEFORE OR DURING THE PLACING OF CONCRETE.
6. CROSS SLOPE OF STRAIGHT CROWN STREETS SHALL BE 1/4" PER FOOT UNLESS APPROVED BY THE TOWN ENGINEER.
7. PAVEMENT THICKNESS AND STRENGTHS SHALL BE AS FOLLOWS:  
 MAJOR ARTERIAL – 10" CLASS "P1" OR "P2."  
 MINOR ARTERIAL – 8" CLASS "P1" OR "P2."  
 COMMERCIAL/INDUSTRIAL COLLECTOR – 8" CLASS "P1" OR "P2."  
 RESIDENTIAL COLLECTOR – 8" CLASS "P1" OR "P2."  
 RESIDENTIAL LOCAL – 8" CLASS "P1" OR "P2."  
 SIDEWALK AND BFR'S-4"-CLASS "A"  
 DRIVE APPROACH-8"-CLASS "P2"  
 ALLEY-6" CLASS "P1" OR "P2."
8. CONCRETE MIX DESIGN SHALL BE AS DEFINED BY NCTCOG 303.3.
9. ALL MEDIANS AND PARKWAYS SHALL BE PROVIDED WITH BERMUDA GROUND COVER.
10. ONCE A CURB ABUTTING A THOROUGHFARE HAS BEEN SAWCUT AND REMOVED, THE CONTRACTOR MUST REPLACE THE CONCRETE WITH A NEW POUR (I.E. DRIVEWAY) WITHIN 14 CALENDAR DAYS. LIQUIDATED DAMAGES WILL BE ASSESSED AT \$500 PER DAY FOR EACH CALENDAR DAY IN EXCESS OF 14 CALENDAR DAYS. PAYMENT SHALL BE MADE PRIOR TO ACCEPTANCE OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
11. ALL SIDEWALKS AND ACCESSIBLE ROUTES SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5% AND A MAXIMUM CROSS SLOPE OF 2%.
12. ALLEYS AND DRIVEWAYS
  - A. CONCRETE FOR ALLEY RETURNS AND DRIVEWAYS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS IDENTICAL TO THAT SPECIFIED FOR THE STREET PAVEMENT OR BASE WHEN BUILT AS COMPONENTS OF A CONCRETE PAVING PROJECT. WHEN BUILT SEPARATELY, THE STRENGTH SHALL BE AS SPECIFIED ON THE CONSTRUCTION PLAN.
  - B. SPACING AND CONSTRUCTION OF JOINTS SHALL CONFORM TO PARABOLIC STREET PAVEMENT.



**ASPHALT PAVING CROSS SECTION**

**NOTE:**  
CUT OF 6" INTO EXISTING PAVEMENT IS REQUIRED FOR CONSTRUCTION JOINT WITH NEW POURS TO GET A SMOOTH FINISH.



**CURB AND GUTTER & ASPHALT PAVING CROSS SECTION**

	<b>PAVING GENERAL NOTES</b>		<b>STANDARD CONSTRUCTION DETAILS PAVING</b>		
	DATE: AUGUST, 2010	REV DATE: -	SHEET : SD-P01		

	<b>CURB AND GUTTER &amp; ASPHALT PAVING CROSS SECTION</b>		<b>STANDARD CONSTRUCTION DETAILS PAVING</b>		
	DATE: AUGUST, 2010	REV DATE: -	SHEET : SD-P06		

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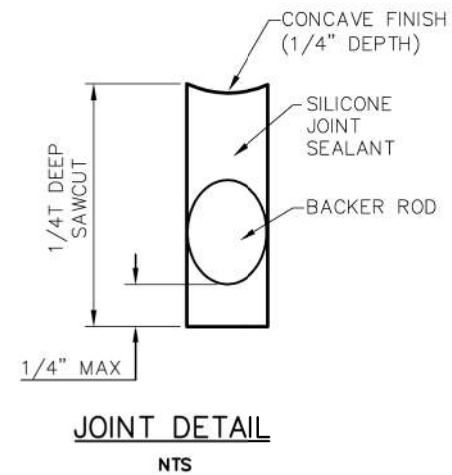
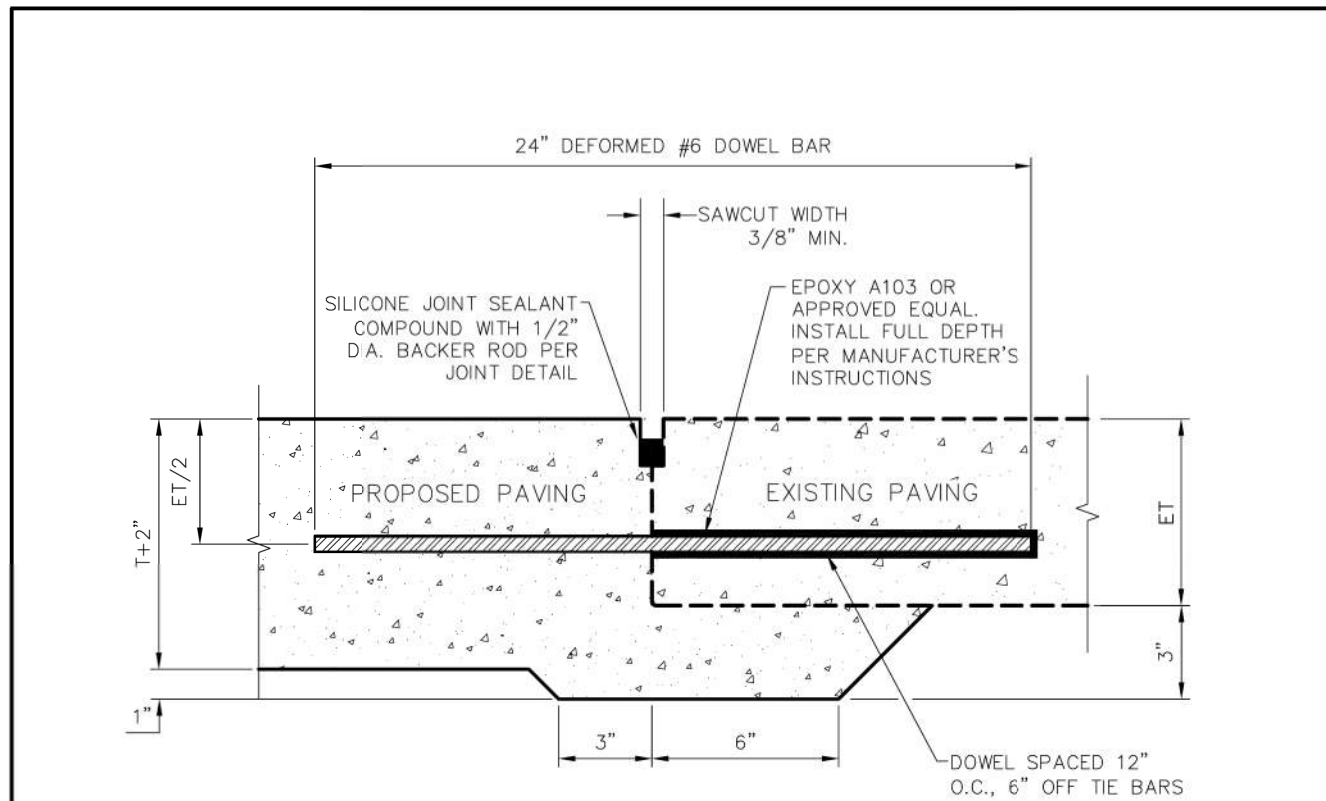
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**WINNWOOD ROAD BRIDGE CLASS  
CULVERT OUTLET ARMORING**  
  
**STANDARD DETAILS**  
  
**TOWN OF ADDISON, TEXAS**

SHEET  
1 OF 5  
  
 SHEET NO.  
**13**

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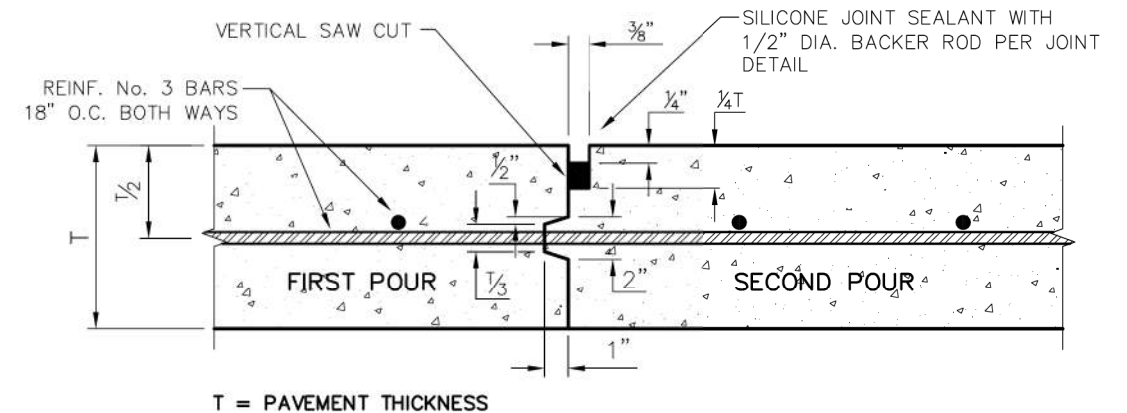
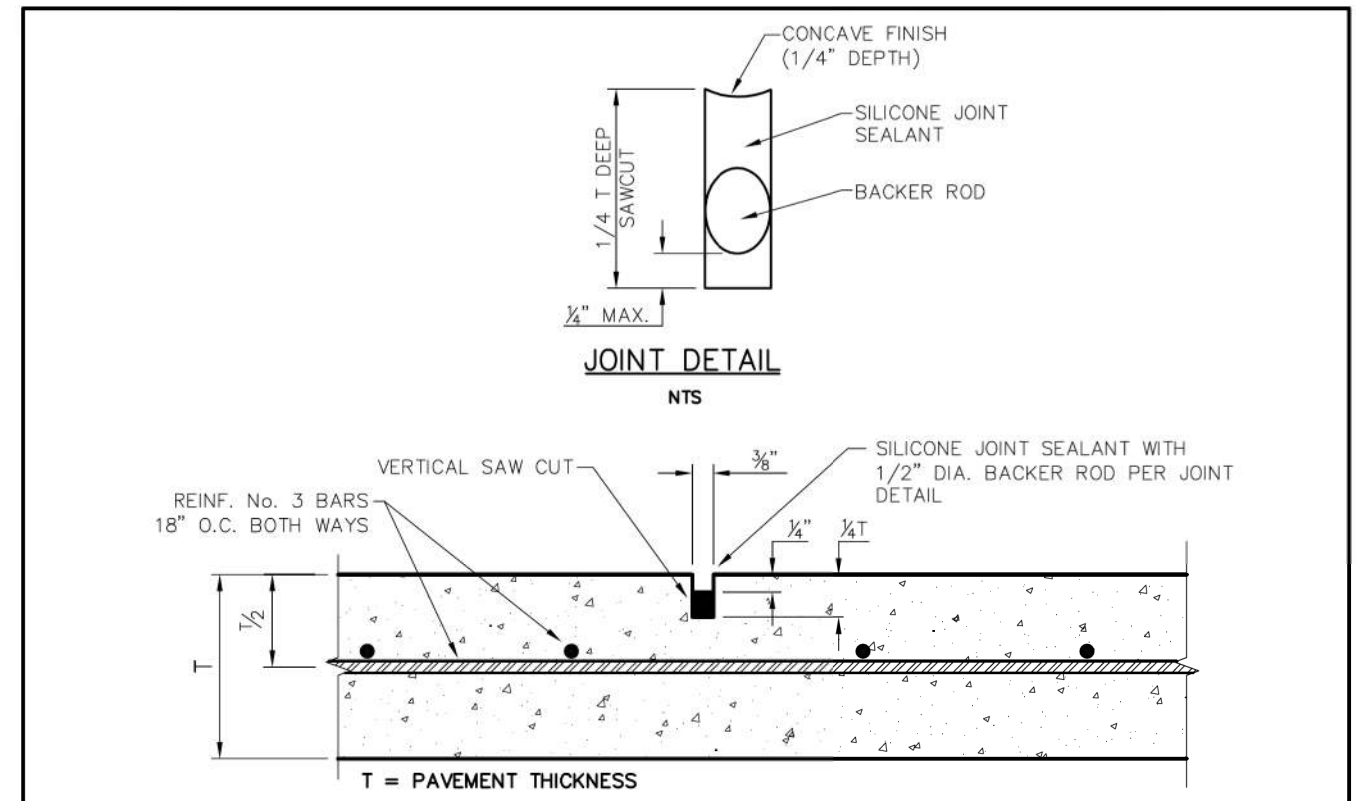
**NOTE:**

1. NO. 5 DEFORMED DOWEL BAR MAY BE USED IN 6 INCH PAVEMENT.
2. DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL RIG.
3. DRILLING BY HAND IS NOT ACCEPTABLE, PUSHING DOWEL BARS INTO GREEN CONCRETE IS NOT ACCEPTABLE.

T=PROPOSED PAVEMENT THICKNESS  
 ET=EXISTING PAVEMENT THICKNESS

**PAVEMENT REPAIR HEADER**  
 NTS

 PUBLIC WORKS DEPARTMENT	PAVEMENT REPAIR HEADER	STANDARD CONSTRUCTION DETAILS PAVING		
		DATE: AUGUST, 2010	REV DATE: -	SHEET : SD-P16



NOTE: CONTRACTOR SHALL PROTECT KEYWAY PRIOR TO SECOND POUR. IF LONGITUDINAL KEYWAY IS DAMAGED, CONTRACTOR SHALL REPAIR WITH THE USE OF LONGITUDINAL BUTT JOINT. DRILL AND GROUT DOWELS INTO FIRST POUR.

**CONSTRUCTION JOINTS FOR PAVEMENT**  
 NTS  
 TRANSVERSE AND LONGITUDINAL JOINTS

 PUBLIC WORKS DEPARTMENT	JOINT DETAILS	STANDARD CONSTRUCTION DETAILS PAVING		
		DATE: AUGUST, 2010	REV DATE: -	SHEET : SD-P18

NO.	DATE	REVISION	APPROV.

TEXAS  
 REGISTRATION NO.  
 F-5713

3010 Gaylord Parkway  
 Suite 190  
 Frisco, TX 75034  
 (972) 377-7480

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 on 12/16/2021

PRJ NO.	20T46006
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DRAWN CHECK	RJB QGS
DATE	12/16/2021
SCALE	AS SHOWN

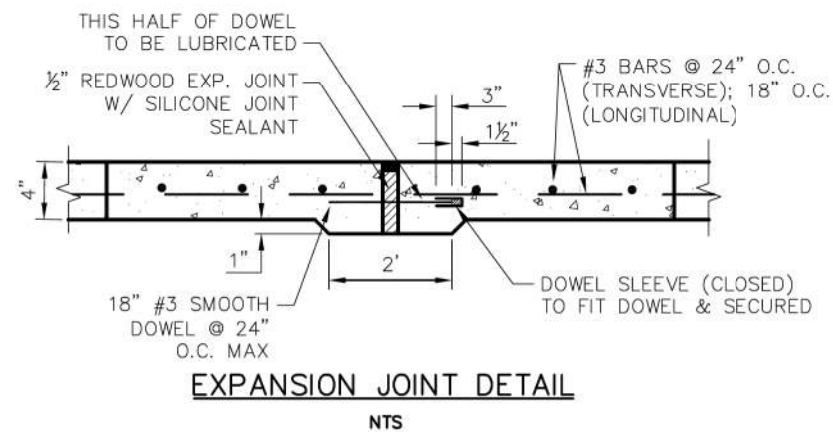
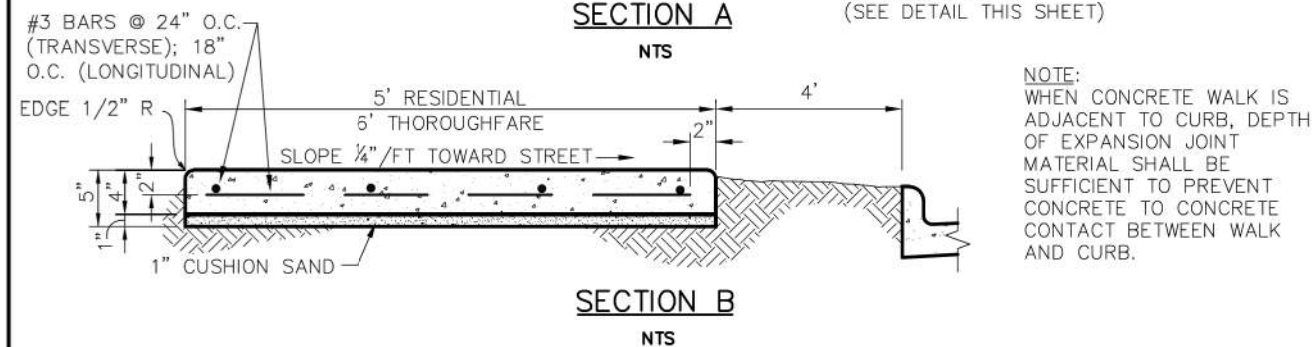
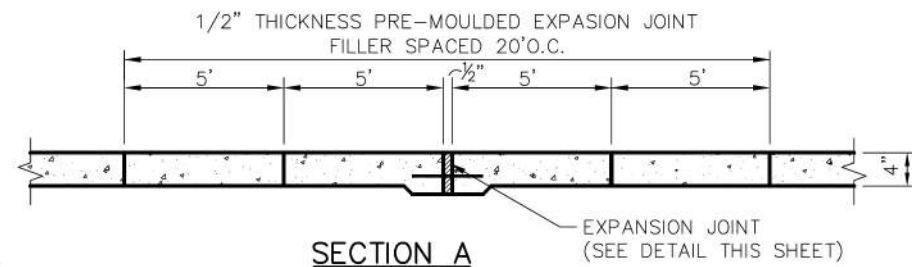
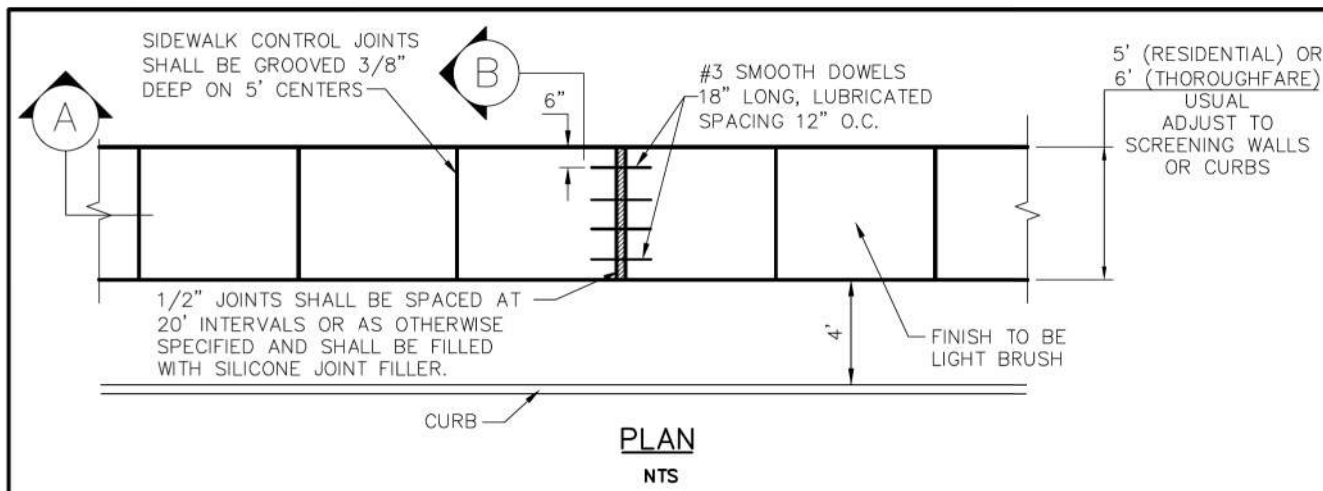


WINNWOOD ROAD BRIDGE CLASS  
 CULVERT OUTLET ARMORING

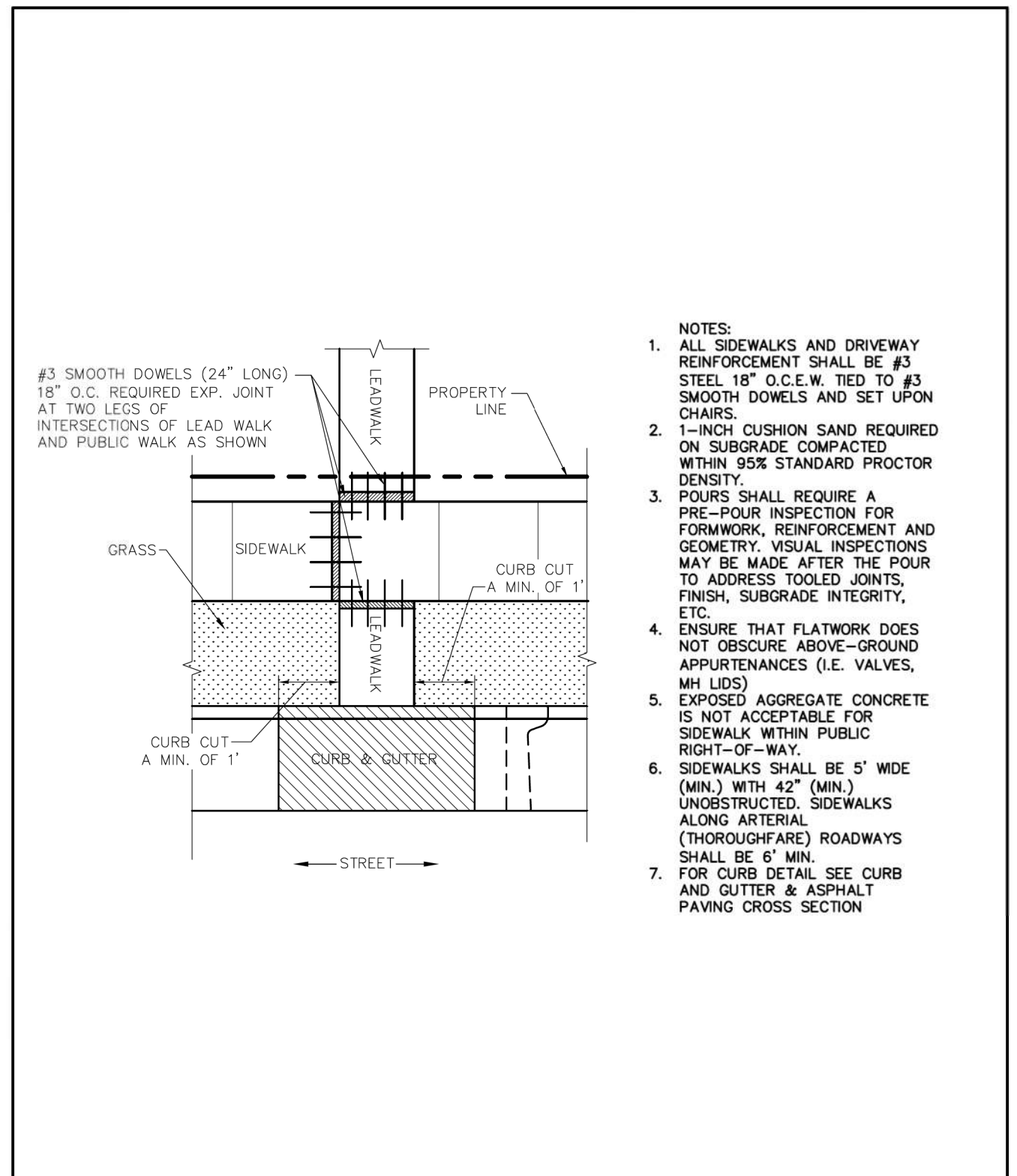
STANDARD DETAILS

TOWN OF ADDISON, TEXAS

SHEET 2 OF 5  
 SHEET NO. **14**



NOTE:  
WHEN CONCRETE WALK IS ADJACENT TO CURB, DEPTH OF EXPANSION JOINT MATERIAL SHALL BE SUFFICIENT TO PREVENT CONCRETE TO CONCRETE CONTACT BETWEEN WALK AND CURB.



- NOTES:
1. ALL SIDEWALKS AND DRIVEWAY REINFORCEMENT SHALL BE #3 STEEL 18" O.C.E.W. TIED TO #3 SMOOTH DOWELS AND SET UPON CHAIRS.
  2. 1-INCH CUSHION SAND REQUIRED ON SUBGRADE COMPACTED WITHIN 95% STANDARD PROCTOR DENSITY.
  3. POURS SHALL REQUIRE A PRE-POUR INSPECTION FOR FORMWORK, REINFORCEMENT AND GEOMETRY. VISUAL INSPECTIONS MAY BE MADE AFTER THE POUR TO ADDRESS TOoled JOINTS, FINISH, SUBGRADE INTEGRITY, ETC.
  4. ENSURE THAT FLATWORK DOES NOT OBSCURE ABOVE-GROUND APPURTENANCES (I.E. VALVES, MH LIDS)
  5. EXPOSED AGGREGATE CONCRETE IS NOT ACCEPTABLE FOR SIDEWALK WITHIN PUBLIC RIGHT-OF-WAY.
  6. SIDEWALKS SHALL BE 5' WIDE (MIN.) WITH 42" (MIN.) UNOBSTRUCTED. SIDEWALKS ALONG ARTERIAL (THOROUGHFARE) ROADWAYS SHALL BE 6' MIN.
  7. FOR CURB DETAIL SEE CURB AND GUTTER & ASPHALT PAVING CROSS SECTION

 PUBLIC WORKS DEPARTMENT	CONCRETE SIDEWALK	STANDARD CONSTRUCTION DETAILS PAVING		
		DATE: AUGUST, 2010	REV DATE: -	SHEET : SD-P26

 PUBLIC WORKS DEPARTMENT	CURB AND LEAD WALK REPAIR	STANDARD CONSTRUCTION DETAILS PAVING		
		DATE: AUGUST, 2010	REV DATE: -	SHEET : SD-P34

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 REVISED DATE:

NO.	DATE	REVISION	APPROV.

TEXAS REGISTRATION NO. F-5713  
 3010 Gaylord Parkway  
 Suite 190  
 Frisco, TX 75034  
 (972) 377-7480

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 R. JAKE BENNETT  
 107152  
 LICENSED PROFESSIONAL ENGINEER

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WINNWOOD ROAD BRIDGE CLASS  
 CULVERT OUTLET ARMORING  
 STANDARD DETAILS  
 TOWN OF ADDISON, TEXAS

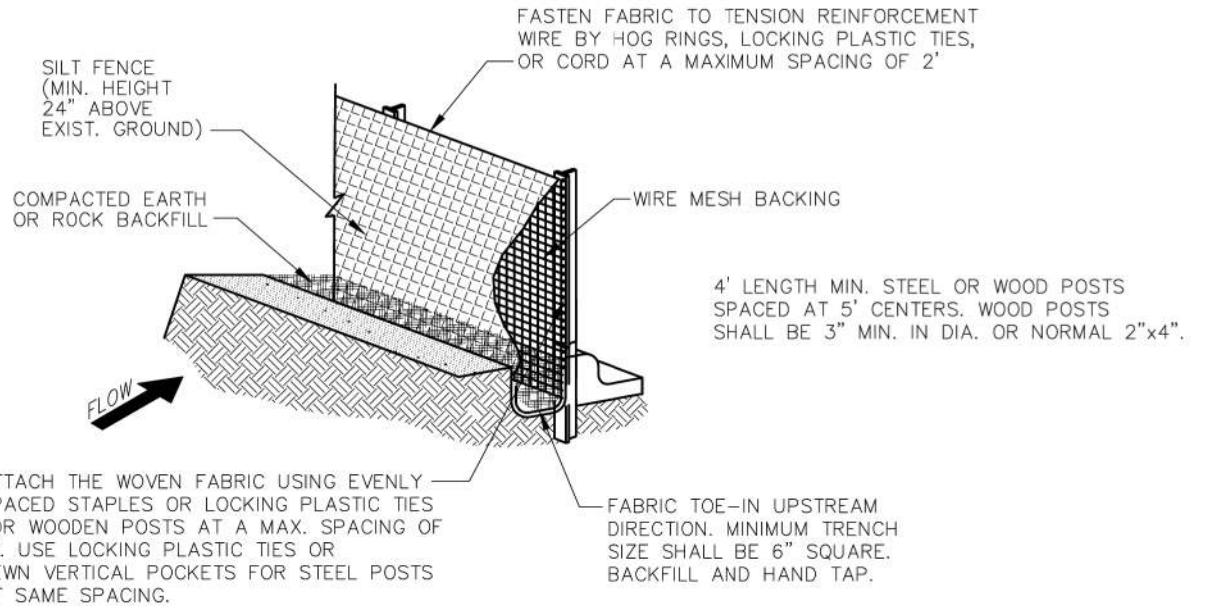
SHEET 3 OF 5  
 SHEET NO. 15

**EROSION CONTROL PLAN NOTES**

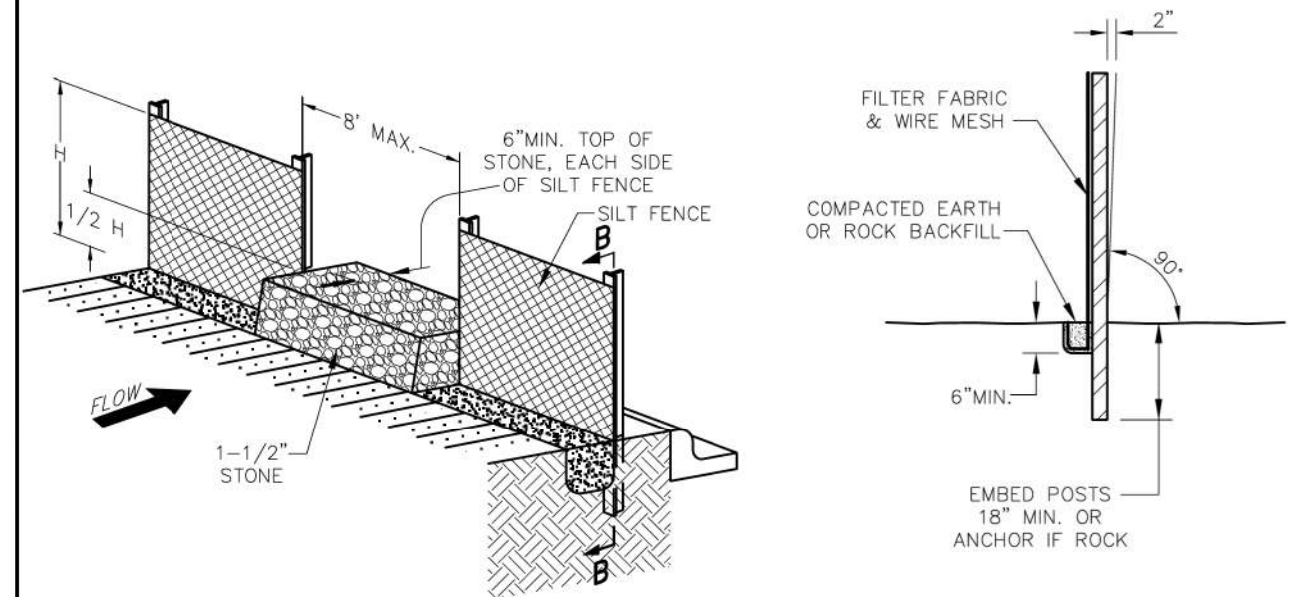
1. ALL OPERATORS AND/OR CONTRACTORS SHALL CONFORM TO THE TERMS AND CONDITIONS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ), TPDES GENERAL PERMIT NO. TXR 150000 ISSUED AND DATED MARCH 5, 2003.
2. THE NOTICE OF INTENT (NOI), AS REQUIRED BY THE GENERAL PERMIT, MUST BE PROPERLY DISPLAYED ON SITE AT ALL TIMES BY EACH OPERATOR.
3. ALL RELEASES OF THE REPORTABLE QUANTITIES OF HAZARDOUS SUBSTANCES SHALL BE REPORTED IMMEDIATELY TO THE FACILITY OPERATOR, EPA AND TCEQ.
4. QUALIFIED OPERATOR PERSONNEL MUST INSPECT THE SITE AT LEAST ONCE EVERY 14 DAYS AND WITHIN 24 HOURS OF A STORM EVENT OF 0.5 INCHES OR GREATER. AS AN ALTERNATIVE, AN INSPECTION CAN BE CONDUCTED ONCE EVERY SEVEN (7) CALENDAR DAYS ON A DEFINED DAY. A DECISION ON WHICH METHOD TO USE MUST BE DECIDED BEFORE WORK BEGINS AND MUST BE FOLLOWED THROUGHOUT THE PROJECT.
5. MODIFICATIONS TO THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE IMPLEMENTED AND BE IN-PLACE WITHIN A SEVEN CALENDAR DAY PERIOD.
6. IF ANY CONTRACTOR SEES A VIOLATION BY AN OPERATOR OR ANOTHER CONTRACTOR, THAT OPERATOR OR CONTRACTOR IN VIOLATION SHALL BE NOTIFIED AS WELL AS THE FACILITY OPERATOR.
7. EROSION CONTROL SHALL BE INSTALLED PRIOR TO GRADING.
8. ACCUMULATED SILT DEPOSITS SHALL BE REMOVED FROM SILT FENCES AND HAY BALE DIKES WHEN SILT DEPTH REACHES THREE INCHES OR 25%.
9. THE CONTRACTOR SHALL ADD OR DELETE EROSION PROTECTION AT THE REQUEST AND DIRECTION OF THE OPERATOR OR TOWN.
10. AFTER INSTALLATION OF PAVEMENT, FINAL LOT BENCHING AND GENERAL CLEANUP, THE CONTRACTOR SHALL ESTABLISH GRASS GROUNDCOVER IN ALL STREET PARKWAYS, LOT AND ALL OTHER DISTURBED AREAS. SODDING SHALL BE DONE AS SPECIFIED BY SECTION 202.5 AND SEEDING AS SPECIFIED BY SECTION 202.6 OF THE OCTOBER 2004 OR LATEST EDITION OF NCTCOG STANDARD SPECIFICATION.
11. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTROL AND LIMIT SILT AND SEDIMENT LEAVING THE SITE. SPECIFICALLY, THE CONTRACTOR SHALL PROTECT ALL PUBLIC STREETS, ALLEYS, STREAMS AND STORM DRAINAGE SYSTEMS FROM EROSION DEPOSITS.
12. A DRAINAGE AREA MAP WILL BE INCLUDED WITH THE EROSION CONTROL PLAN.
13. CONSTRUCTION WASTE DISPOSAL CONTAINERS SHALL BE PROVIDED ON THE SITE FOR DISPOSAL OF ALL NON-HAZARDOUS CONSTRUCTION WASTE MATERIALS. THE CONTAINERS SHALL BE HAULED TO LANDFILL BY THE CONTRACTOR.
14. ALL HAZARDOUS MATERIALS SHALL BE HANDLED AND DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

**SILT FENCE NOTES**

1. POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. THE POST MUST BE EMBEDDED A MINIMUM OF 18 INCHES.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G. PAVEMENT): WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON THE UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHALL BE SECURELY FASTENED TO EACH SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE SUPPORT POST. THERE SHALL BE A 6 INCH DOUBLE OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
5. INSPECTION SHALL BE MADE EVERY TWO WEEKS OR AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHALL BE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 3 INCHES. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.



**ISOMETRIC PLAN VIEW**  
N.T.S.



**SILT FENCE STONE OVERFLOW STRUCTURE**  
N.T.S.



PUBLIC WORKS DEPARTMENT

EROSION CONTROL & SILT FENCE NOTES

STANDARD CONSTRUCTION DETAILS  
EROSION CONTROL

DATE: AUGUST, 2010    REV DATE: -    SHEET : SD-EC01



PUBLIC WORKS DEPARTMENT

SILT FENCE DETAIL

STANDARD CONSTRUCTION DETAILS  
EROSION CONTROL

DATE: AUGUST, 2010    REV DATE: -    SHEET : SD-EC02

NO.	DATE	REVISION	APPROV.

**GARVER**

TEXAS REGISTRATION NO. F-5713

3010 Gaylord Parkway Suite 190 Frisco, TX 75034 (972) 377-7480

Digitally Signed on 12/16/2021

R. JAKE BENNETT

107152

LICENSED PROFESSIONAL ENGINEER

PRJ NO.	20T46006
DESIGN CHECK	RJB QGS
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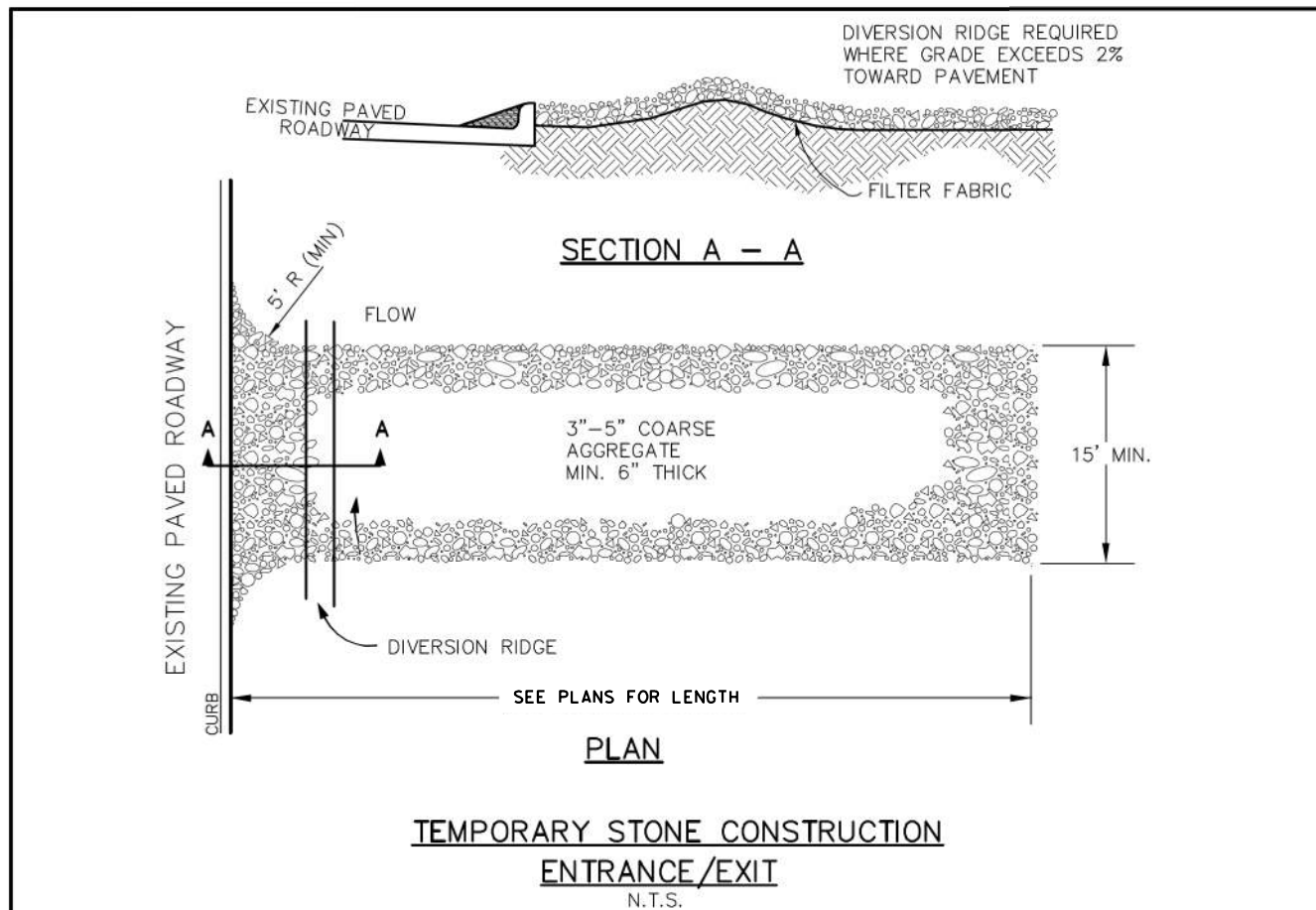
WINNWOOD ROAD BRIDGE CLASS  
CULVERT OUTLET ARMORING

STANDARD DETAILS

TOWN OF ADDISON, TEXAS

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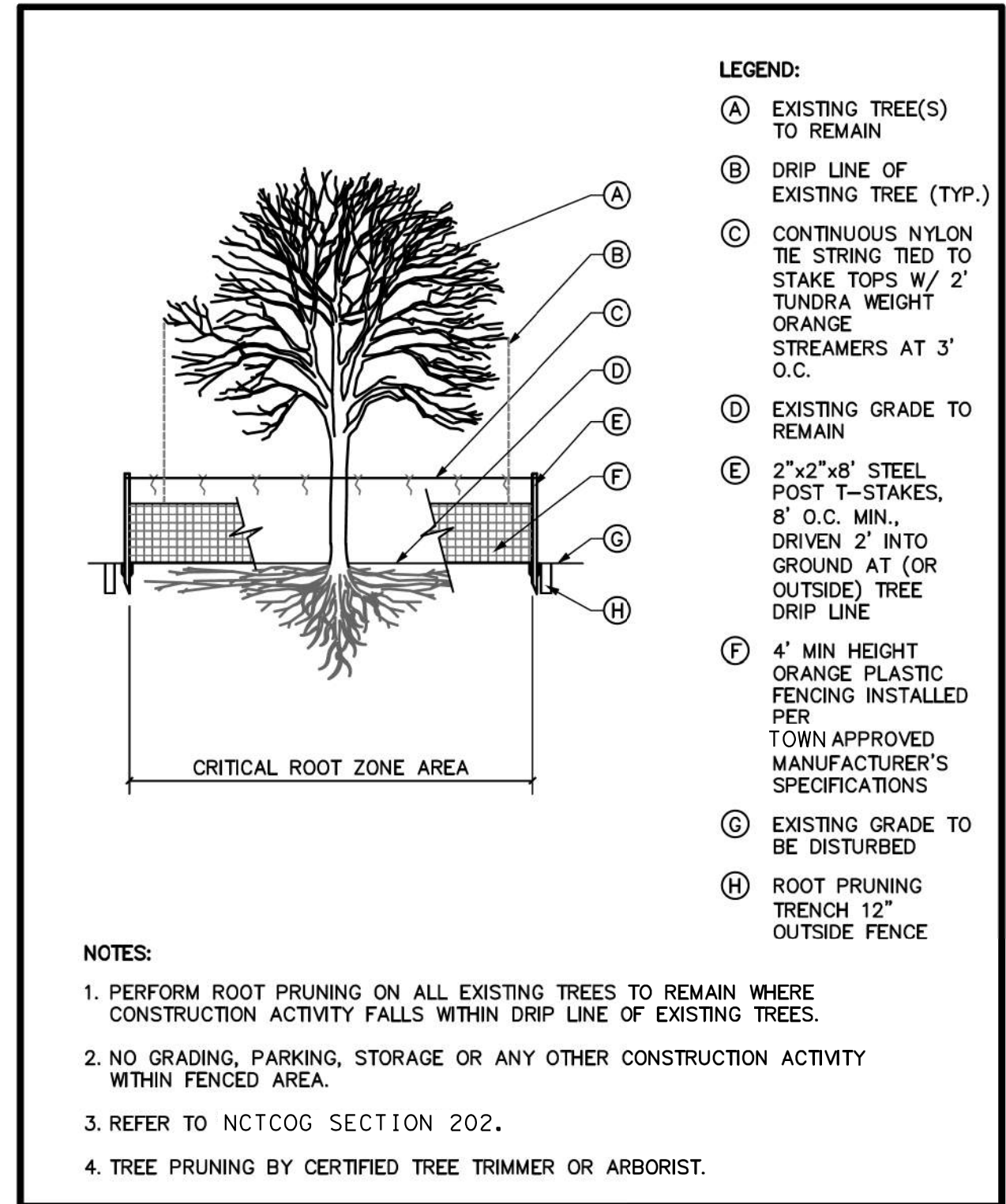
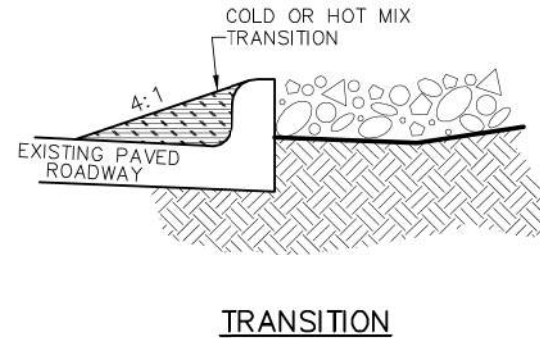




**TEMPORARY STONE CONSTRUCTION  
ENTRANCE/EXIT**  
N.T.S.

**STABILIZED CONSTRUCTION ENTRANCE GENERAL NOTES:**

1. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.
3. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
4. WHEN SEDIMENT HAS SUBSTANTIALLY CLOGGED THE VOID AREA BETWEEN THE ROCKS, THE AGGREGATE MAT MUST BE WASHED DOWN OR REPLACED. PERIODIC RE-GRADE AND TOP DRESSING WITH ADDITIONAL STONE MUST BE DONE TO KEEP THE EFFICIENCY OF THE ENTRANCE FROM DIMINISHING.



- LEGEND:**
- (A) EXISTING TREE(S) TO REMAIN
  - (B) DRIP LINE OF EXISTING TREE (TYP.)
  - (C) CONTINUOUS NYLON TIE STRING TIED TO STAKE TOPS W/ 2' TUNDRA WEIGHT ORANGE STREAMERS AT 3' O.C.
  - (D) EXISTING GRADE TO REMAIN
  - (E) 2"x2"x8' STEEL POST T-STAKES, 8' O.C. MIN., DRIVEN 2' INTO GROUND AT (OR OUTSIDE) TREE DRIP LINE
  - (F) 4' MIN HEIGHT ORANGE PLASTIC FENCING INSTALLED PER TOWN APPROVED MANUFACTURER'S SPECIFICATIONS
  - (G) EXISTING GRADE TO BE DISTURBED
  - (H) ROOT PRUNING TRENCH 12" OUTSIDE FENCE

- NOTES:**
1. PERFORM ROOT PRUNING ON ALL EXISTING TREES TO REMAIN WHERE CONSTRUCTION ACTIVITY FALLS WITHIN DRIP LINE OF EXISTING TREES.
  2. NO GRADING, PARKING, STORAGE OR ANY OTHER CONSTRUCTION ACTIVITY WITHIN FENCED AREA.
  3. REFER TO NCTCOG SECTION 202.
  4. TREE PRUNING BY CERTIFIED TREE TRIMMER OR ARBORIST.

<p>PUBLIC WORKS DEPARTMENT</p>	<p>TEMPORARY STONE CONSTRUCTION ENTRANCE/EXIT</p>	STANDARD CONSTRUCTION DETAILS EROSION CONTROL		
		DATE: AUGUST, 2010	REV DATE: -	SHEET : SD-EC03

TREE PROTECTION DETAIL

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WINNWOOD ROAD BRIDGE CLASS CULVERT OUTLET ARMORING  
 STANDARD DETAILS  
 TOWN OF ADDISON, TEXAS

**SURFACE PREPARATION** ITEM 160\* TOPSOIL SY / ITEM 161\* COMPOST MANUF. TOPSOIL (80S) (4") SY

**SURFACE PREPARATION**

Prepare planting area surface BEFORE placing Topsoil, Compost, Fertilizer, Seed and/or Sod. Once project area has been completed to final lines, grade and compaction, remove objectionable materials from planting area surface and cultivate existing surface to a depth of 4 inches, unless otherwise specified or directed.

Refer to Items 160 and 161 of TxDOT 2014 Standard Specifications\* for specifications, dimensions, volumes, and measurements that have been modified or not shown in plans. Materials and construction shall meet all specifications.

**TOPSOIL NOTES:**

- When Topsoil is specified under Item 160, use suitable material salvaged from the project ROW in accordance with Item 160 specifications, and/or secure additional good material from approved sources.
- Topsoil shall include only the top 6 inches of its native surface, and be easily cultivated, fertile, erosion-resistant and free of objectionable materials.
- Topsoil obtained from sites outside of the ROW must come from approved sources and have a pH between 5.5 and 8.5 su.
- Place Topsoil on pre-cultivated surface, spread to a uniform loose cover of thickness specified, and shape per plans. Water and roll the finished surface with a light roller or other suitable equipment per Item 160.3; do not over-compact.

**COMPOST NOTES:**

- When Compost Manufactured Topsoil (4") is specified under Item 161, use compost meeting all requirements of Item 161.2 and Table 1. Provide quality control (QC) documentation and obtain Engineer approval prior to compost delivery.
- Contractor shall provide tickets/invoices that document material type, quantity and placement for all compost delivered.
- Additional topsoil may be required to be imported to achieve the compost/topsoil mix ratio. Topsoil must meet Item 160 specifications.

**APPLICATION OF COMPOST MANUFACTURED TOPSOIL (4")**

AFTER Surface Preparation, uniformly spread a 1-inch layer of compost on-grade with 3 inches topsoil over pre-cultivated planting area. (25% compost and 75% topsoil = 1" compost and 3" topsoil.) Then mix compost and topsoil together by cultivating the compost into the topsoil (by till or disk) to a 4-inch (4") depth. Roll the finished surface with a light corrugated drum; do not over-compact.

**FERTILIZER** ITEM 166\* FERTILIZER AC

**SOIL ANALYSIS FOR FERTILIZER APPLICATION RATE**

Unless otherwise stated in the plans, Contractor shall perform at least one soil analysis on each project before fertilization, and submit results to Engineer with recommended fertilizer rates based on soil analysis. Engineer may direct sample location(s). Soil analysis may be waived if both compost and sod are used on entire project.

**FERTILIZER NOTES:**

- Refer to Item 166 of TxDOT 2014 Standard Specifications\* for specifications, dimensions, volumes, and measurements that have been modified or not shown in plans. Materials and construction shall meet all specifications.
- Apply fertilizer BEFORE seeding, or AFTER placing sod.
- Use fertilizer containing nitrogen (N), phosphoric acid (P) and potash (K) nutrients, unless otherwise specified. At least 50% of the Nitrogen component shall be a slow-release sulfur-coated urea as described in Item 166.3. Do not apply more than 60 lbs Nitrogen per acre without Engineer concurrence.
- Deliver fertilizer in bags, clearly labeled to show contents, unless otherwise specified or approved prior to delivery. When non-bagged, loose fertilizer is approved, provide documentation for each load of material delivered, to validate authenticity of the material.
- Apply fertilizer uniformly, as a dry, granular material, essentially dust-free, and do not mix with water for application as a slurry.
- When both temporary and permanent seeding are specified for the same area, apply half of the required fertilizer before the temporary seeding operation and the other half before the permanent seeding operation.

**SEEDING FOR EROSION CONTROL** ITEM 164\* DRILL SEEDING AC

RECOMMENDED PLANTING SEASON	PERMANENT RURAL SEED MIX ITEM 164 - DRILL SEEDING (PERM) (RURAL) (CLAY)	PERMANENT URBAN SEED MIX ITEM 164 - DRILL SEEDING (PERM) (URBAN) (CLAY)	TEMPORARY DRILL SEED MIX ITEM 164 - DRILL SEEDING (TEMP) (WARM OR COOL)																																				
<b>WARM SEASON</b> Mar. 15th, April, May, June, July, August, Sept. 15th	<table border="1"> <tr><th colspan="2">Pure Live Seed Rate**</th></tr> <tr><td>Green Sprangletop (Van Horn)</td><td>- 1.0 lbs/AC</td></tr> <tr><td>Sideoats Grama (Haskell)</td><td>- 1.0 lbs/AC</td></tr> <tr><td>Texas Grama (Atascosa)</td><td>- 1.0 lbs/AC</td></tr> <tr><td>Hairy Grama (Chaparral)</td><td>- 0.4 lbs/AC</td></tr> <tr><td>Shortspike Windmillgrass (Welder)</td><td>- 0.2 lbs/AC</td></tr> <tr><td>Little Bluestem (OK Select)</td><td>- 0.8 lbs/AC</td></tr> <tr><td>Purple Prairie Clover (Cuero)</td><td>- 0.6 lbs/AC</td></tr> <tr><td>Engelmann Daisy (Eldorado)</td><td>- 0.75 lbs/AC</td></tr> <tr><td>Illinois Bundlesflower</td><td>- 1.3 lbs/AC</td></tr> <tr><td>Awnless Bushsunflower (Plateau)</td><td>- 0.2 lbs/AC</td></tr> </table>	Pure Live Seed Rate**		Green Sprangletop (Van Horn)	- 1.0 lbs/AC	Sideoats Grama (Haskell)	- 1.0 lbs/AC	Texas Grama (Atascosa)	- 1.0 lbs/AC	Hairy Grama (Chaparral)	- 0.4 lbs/AC	Shortspike Windmillgrass (Welder)	- 0.2 lbs/AC	Little Bluestem (OK Select)	- 0.8 lbs/AC	Purple Prairie Clover (Cuero)	- 0.6 lbs/AC	Engelmann Daisy (Eldorado)	- 0.75 lbs/AC	Illinois Bundlesflower	- 1.3 lbs/AC	Awnless Bushsunflower (Plateau)	- 0.2 lbs/AC	<table border="1"> <tr><th colspan="2">Pure Live Seed Rate**</th></tr> <tr><td>Green Sprangletop (Leptochloa cubia)</td><td>- 0.3 lbs/AC</td></tr> <tr><td>Sideoats Grama (El Reno) (Bouteloua curtipendula)</td><td>- 3.6 lbs/AC</td></tr> <tr><td>Buffalograss (Texoka) (Buchloe dactyloides)</td><td>- 1.6 lbs/AC</td></tr> <tr><td>Bermudagrass (Cynodon dactylon)</td><td>- 2.4 lbs/AC</td></tr> </table>	Pure Live Seed Rate**		Green Sprangletop (Leptochloa cubia)	- 0.3 lbs/AC	Sideoats Grama (El Reno) (Bouteloua curtipendula)	- 3.6 lbs/AC	Buffalograss (Texoka) (Buchloe dactyloides)	- 1.6 lbs/AC	Bermudagrass (Cynodon dactylon)	- 2.4 lbs/AC	<table border="1"> <tr><th colspan="2">Pure Live Seed Rate**</th></tr> <tr><td>Foxtail Millet (Setaria italica)</td><td>- 34 lbs/AC</td></tr> </table>	Pure Live Seed Rate**		Foxtail Millet (Setaria italica)	- 34 lbs/AC
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<b>COOL SEASON</b> Sept 16th, Oct, Nov, Dec, Jan, Feb, Mar 14th			<table border="1"> <tr><th colspan="2">Pure Live Seed Rate**</th></tr> <tr><td>Tall Fescue (Festuca arundinaceae)</td><td>- 4.5 lbs/AC</td></tr> <tr><td>Western Wheatgrass (Agropyron smithii)</td><td>- 5.6 lbs/AC</td></tr> <tr><td>Red Winter Wheat (Triticum aestivum)</td><td>- 34 lbs/AC</td></tr> <tr><td>Cereal Rye</td><td>- 34 lbs/AC</td></tr> </table>	Pure Live Seed Rate**		Tall Fescue (Festuca arundinaceae)	- 4.5 lbs/AC	Western Wheatgrass (Agropyron smithii)	- 5.6 lbs/AC	Red Winter Wheat (Triticum aestivum)	- 34 lbs/AC	Cereal Rye	- 34 lbs/AC																										
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**SEEDING NOTES:**

- When seeding is specified under Item 164, refer to TxDOT 2014 Standard Specifications\* for specifications, dimensions, volumes, and measurements that have been modified or not shown. Materials and construction shall meet specifications.
- Conduct seeding upon completion of each applicable construction stage (dependent upon planting season requirements), without compensation for additional move-ins.
- Place seed AFTER preparing planting area surface. Refer to Surface Preparation detail this sheet, as well as Topsoil Item 160 and Compost Manufactured Topsoil Item 161 when specified. Apply fertilizer per Item 166 BEFORE seeding, per specifications and this sheet, to help drill the fertilizer into the soil.
- When temporary grasses are well-established and more than 2 inches tall, mow planting area before seeding permanent grasses; mowing for this purpose will be subsidiary. When vegetation is not already well-established, cultivate planting area to a depth as described in Item 164.3, before temporary seeding and before permanent seeding.
- Seed material must be appropriate to the location, soil type and season. Use the seed mix species and pure live seed rates designated in Tables 1-4 of the TxDOT 2014 Standard Specifications\* for Item 164, unless otherwise specified.
- All seed shall meet labeling, delivery, analysis, and testing requirements described in Item 164.2.1. Deliver seed in labeled, unopened bags or containers to Engineer prior to planting.
- Uniformly plant seed over the designated planting area, along the contour of slopes, and drill seed to a depth as described in Item 164.3.4.
- Hydroseeding may be allowed, when specified or Engineer concurs.
- Implement and continue Vegetative Watering per the schedule, rate and volume specified under Item 168.

**TxDOT REFERENCE MATERIALS:**

- "STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES" 2014
- "A GUIDANCE TO ROADSIDE VEGETATION ESTABLISHMENT" 2004
- ONLINE TRAINING COURSE: MNT415 REVEGETATION DURING CONSTRUCTION
- DALLAS DISTRICT "VEGETATION ESTABLISHMENT GUIDELINES"

**SODDING FOR EROSION CONTROL** ITEM 162\* BLOCK SOD (BERMUDA) SY

BLOCK OR ROLL SOD	COMMON NAME	BOTANICAL NAME
	Common Bermuda Grass	Cynodon dactylon

**SODDING NOTES:**

- Refer to Item 162 of TxDOT 2014 Standard Specifications\* for specifications, dimensions, volumes, and measurements that have been modified or not shown in plans. Materials and construction shall meet all specifications.
- Place sod between the average date of the last freeze in the Spring and 6 weeks before the average date of the first freeze in the Fall, per the Texas Almanac for the project area.
- Place sod only AFTER soil surface preparation is complete as detailed in this sheet. Dry soil may require pre-watering.
- Place all sod (blocks or rolls) within 24 hours of delivery to the site, and keep moist from the time it is dug up until it is planted. Sod with dried roots will not be accepted.
- Place sod with joints alternating on each row to prevent all joints from lining up, and place blocks firmly against adjacent blocks. Roll, tamp and trim sod per Item 162.3.
- Place fertilizer promptly AFTER sodding operation is complete in each area.
- Water sod immediately following placement, and continue Vegetative Watering per Item 168.

**VEGETATIVE WATERING FOR ESTABLISHING SEED AND SOD** ITEM 168\* VEGETATIVE WATERING MG

SEASON (Usual Months)	RATE	TIME SCHEDULE	TOTAL WATER ESTIMATE
SPRING & FALL (March, April, May, October)	7,000 gallons/acre per working day	Vegetative watering for seed shall begin on the day after rainfall described below and continue for 60 consecutive working days; vegetative watering for sod shall begin on the day the sod is placed and continue for a minimum of 15 consecutive working days.	420,000 gallons/acre (60 working days)
SUMMER (June, July, August, September)	12,000 gallons/acre per working day		720,000 gallons/acre (60 working days)
WINTER (November through February)	1,000 gallons/acre per working day	Vegetative watering for seed and/or sod shall begin on the day after placement for 15 consecutive working days	15,000 gallons/acre (15 working days)

Notes: Rate and frequency may be adjusted, with the approval of the Engineer, to meet site conditions (especially with sod). For informational purposes only: 1,000 gallons equals 1 MG

**VEGETATIVE WATERING NOTES:**

- Refer to Item 168 of TxDOT 2014 Standard Specifications\* for specifications, dimensions, volumes, and measurements that have been modified or not shown in plans. Materials and construction shall meet all specifications.
- Use clean water free of industrial waste and other substances harmful to vegetation growth, per Item 168.2.
- Use Vegetative Watering to keep the seed bed moist during germination; not to provide initial watering. After drill seeding, postpone watering operations until site receives at least 1/2-inch of natural rainfall in a single day. Delay watering operations for warm season grasses until soil temperature exceeds 70 degrees F.
- For sod, water immediately.
- All water distribution equipment shall be furnished and operated to provide water at a uniform and controllable rate. Use a metering device on all watering equipment.
- Evenly distribute water over entire area designated for seeding and/or sodding, using even spray patterns that do not disturb seed bed and/or dislodge seed from seed bed.
- Do not water between the hours of 12:00 p.m. and 6:00 p.m. when daytime temperatures exceed 95 degrees F.
- After initial establishment period, continue intermittent watering of newly established seed or sod at a rate of approximately 1-inch water/week, during summer months until end of contract.
- If 1/4-inch or more of rainfall occurs on site on any given working day, no vegetative watering will be needed on that working day. (Note: 1/4-inch rain equals 7,000 gallons of water per acre.)
- Should the Contractor fail to apply the specified amount of water within the time allowed, any seed or sod in poor condition shall be replaced, fertilized, and watered at Contractor's expense.

**ROADSIDE MOWING** ITEM 730\* PROJECT MAINTENANCE AC

**MOWING NOTES:**

- During project construction, once seed is established, use mowing to promote permanent grasses by mowing any remaining temporary grasses.
- Also mow established turf and ROW grasses in designated areas of project limits as specified or directed by Engineer.
- Remove litter and debris prior to mowing.
- Do not mow on wet ground when soil rutting can occur.
- Hand-trim around obstructions and stormwater control devices as needed.
- Maintain paved surfaces free of tracked soils and clipped vegetation.

**SEQUENCE OF WORK:**

- CULTIVATE SURFACE SOIL.
- PREPARE / PLACE TOPSOIL, OR
- PREPARE / PLACE COMPOST MANUFACTURED TOPSOIL.
- APPLY FERTILIZER AND THEN PLACE SEEDING, OR
- PLACE SOD AND THEN APPLY FERTILIZER.
- CONDUCT VEGETATIVE WATERING.
- CONDUCT ROADSIDE MOWING, AS DIRECTED.



**VEGETATION ESTABLISHMENT SHEET**  
(DALLAS DISTRICT)

TEMPLATE REVISION DATE: 02/21/19

DESTIN CPB	FED. RD. DIV. NO. 6	FEDERAL AID PROJECT NO. (See Title Sheet)	HIGHWAY NO.
GRAPHICS XXX	STATE TEXAS	DISTRICT DALLAS	COUNTY
CHECK XXX	CONTROL	SECTION	JOB
CHECK XXX			SHEET NO. 18