

# **HKS**

### SMITHFIELD ELEMENTARY

NORTH RICHLAND HILLS, TX



OWNER

BIRDVILLE ISD 6125 EAST BELKNA

ARCHITEC

HKS INC. 350 N SAINT PAUL STREET, SUITE 10

DALLAS, TX 75201

JQ INFRASTRUCTURE

100 GLASS STREET, SUITE DALLAS, TX 75207

MEP ENGINEER

TYLER, TEXAS 75703

RAYMOND L. GOODSON JR., INC.

12001 N. CENTRAL EXPRESSWAY, SUIT DALLAS, TX 75243

CCA LANDSCAPE ARCHITECTS IN

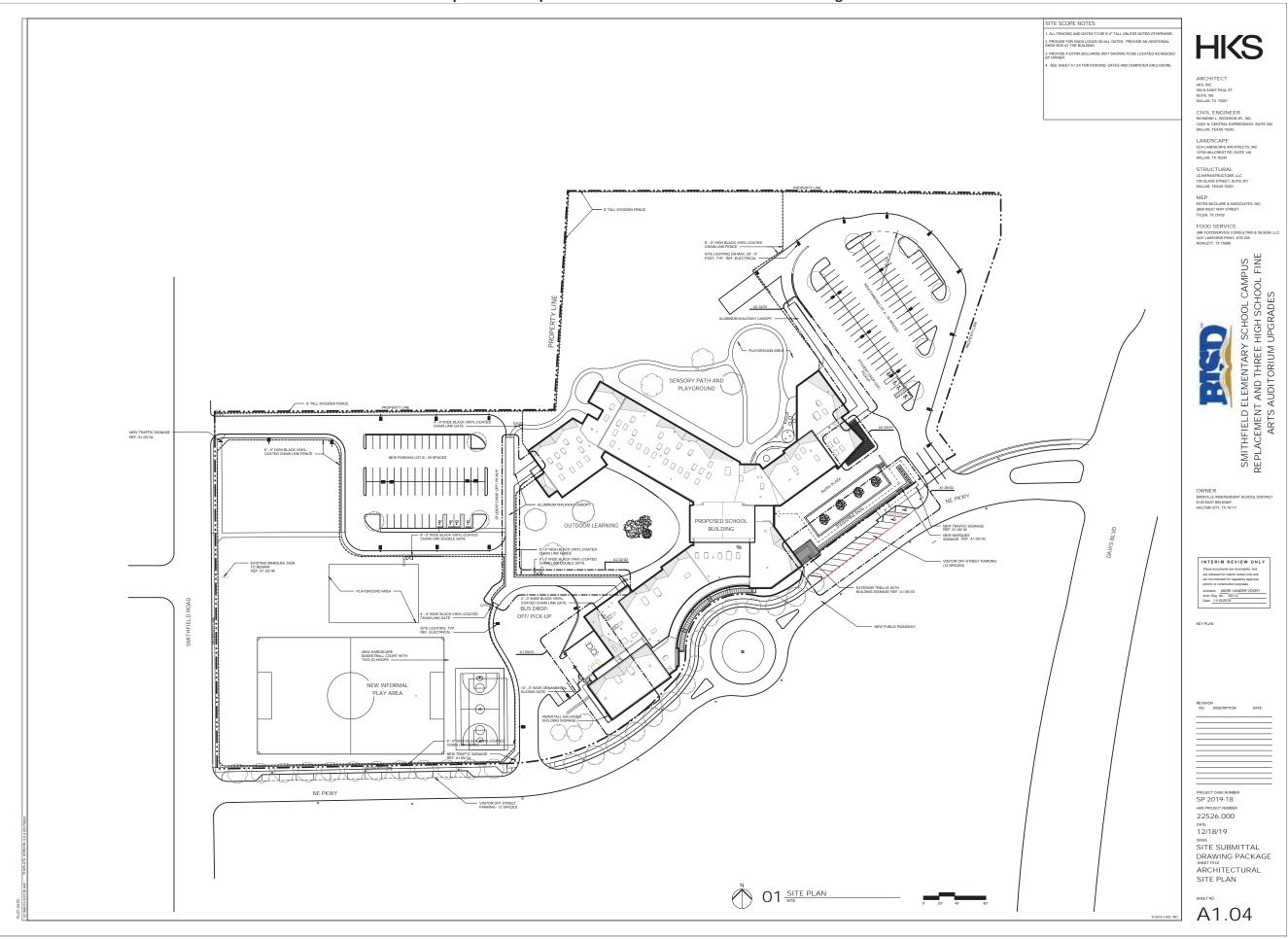
12700 HILLCREST ROAD, SUITE 149 DALLAS, TX 75230

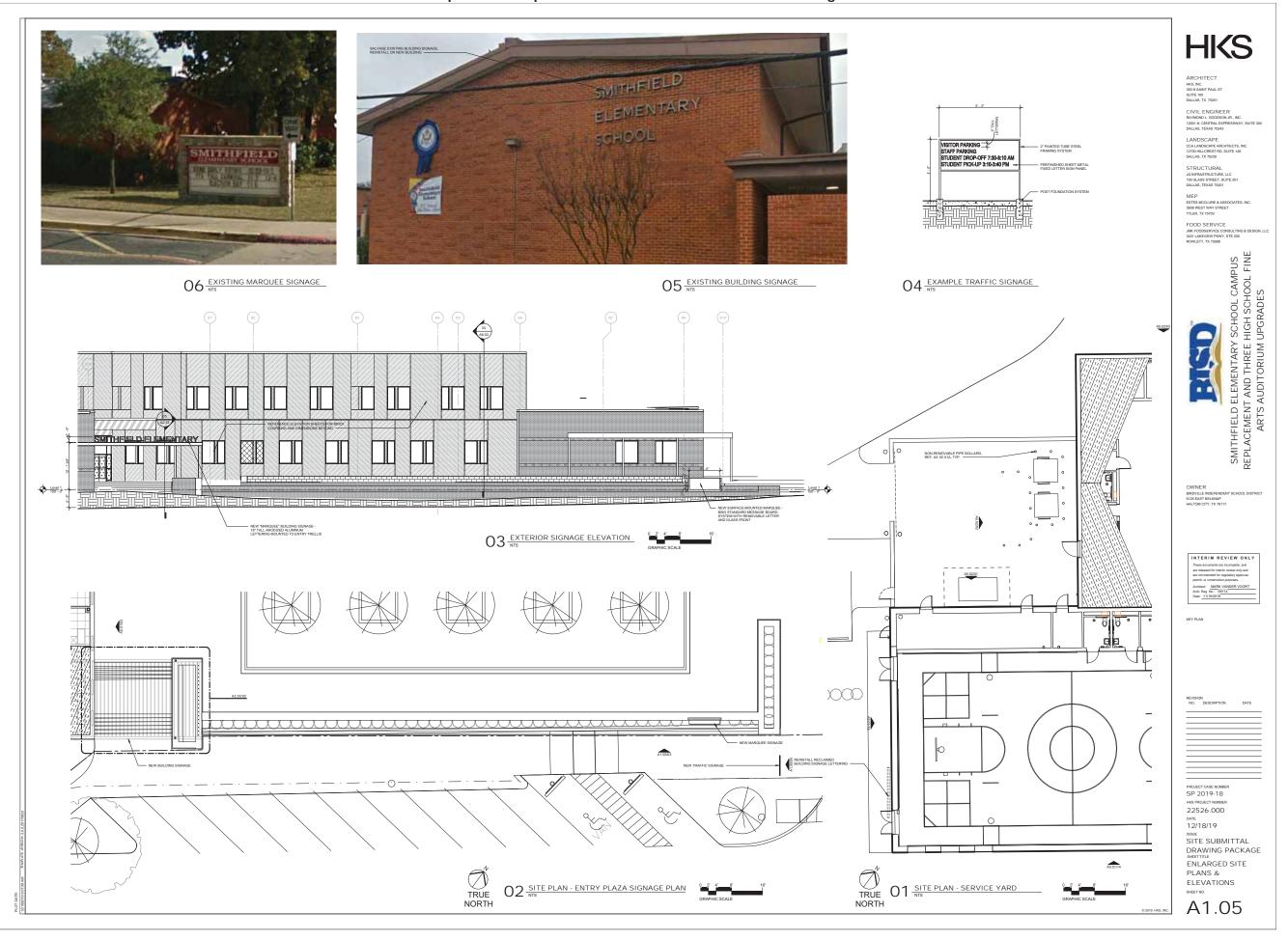
HAVE COORSERVICE CONSULTING & DESIGN LLC

COLISTICS ALIDIO VISUAL TECH

DIBRI CONSULTING, L.P. 15508 WRIGHT BROTHERS DRIVE

SITE SUBMITTAL DRAWING PACKAGE





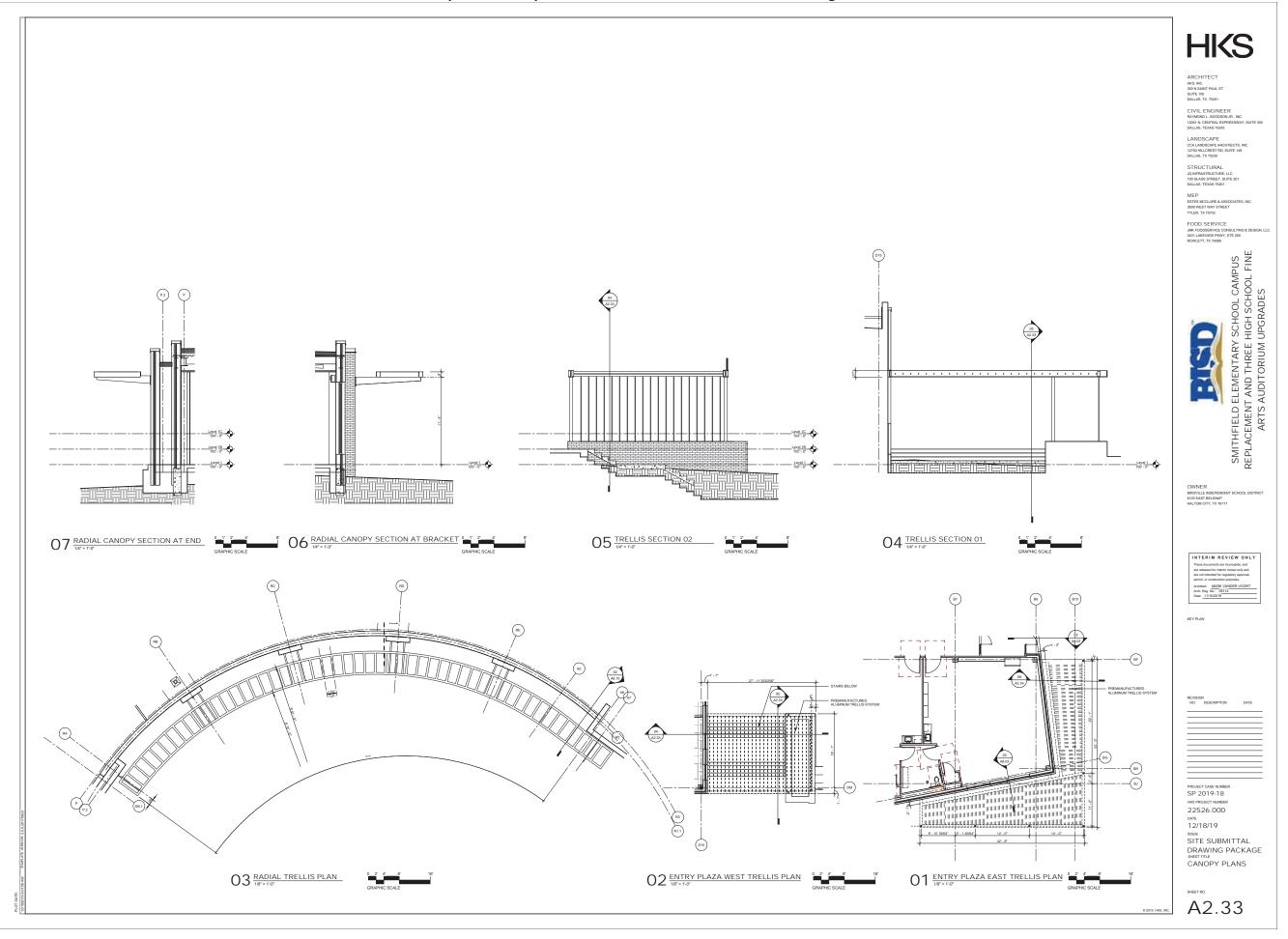
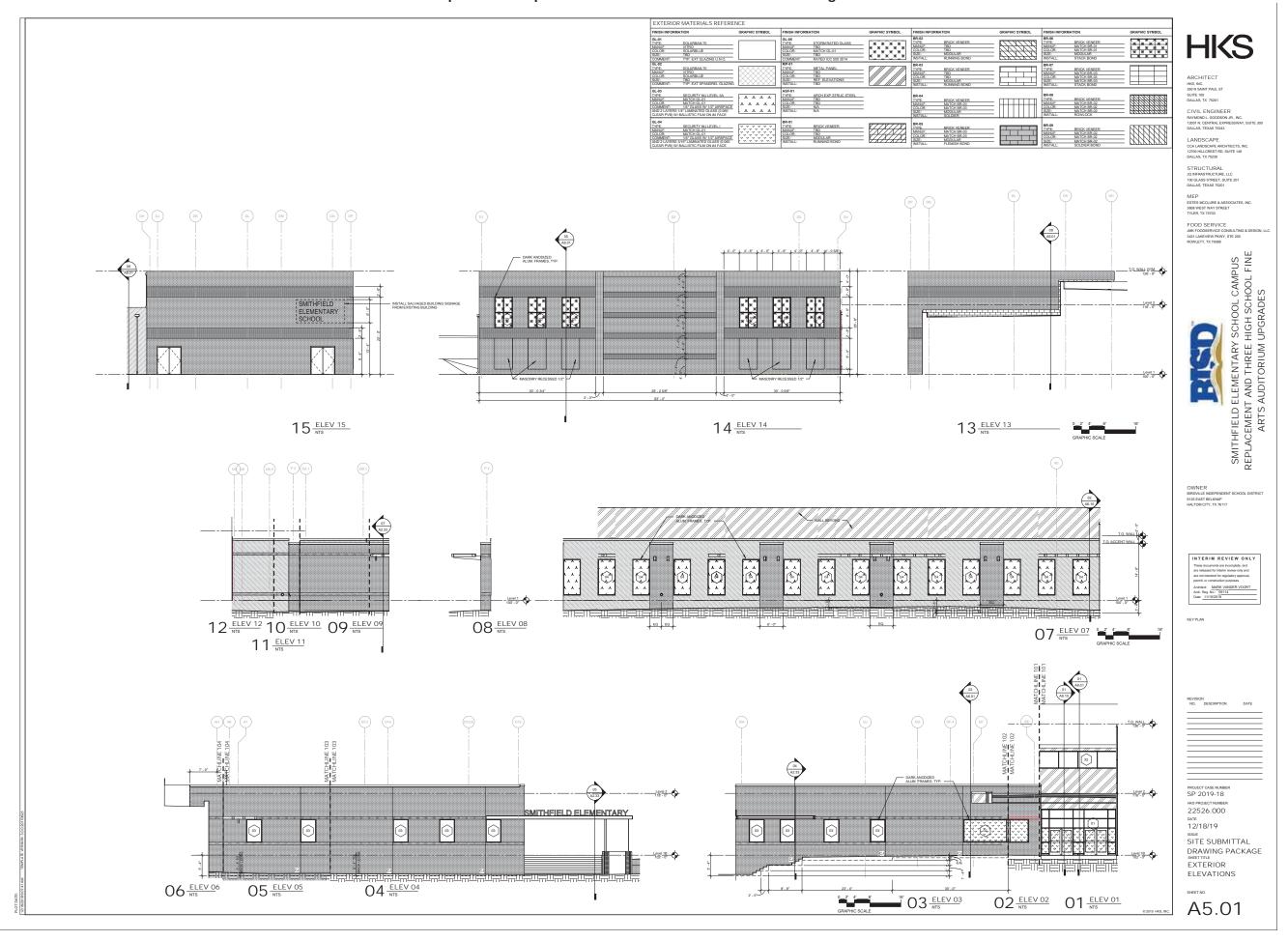


Exhibit C - Special Development Plan Exhibits - Ordinance No. 3637 - Page 5 of 19



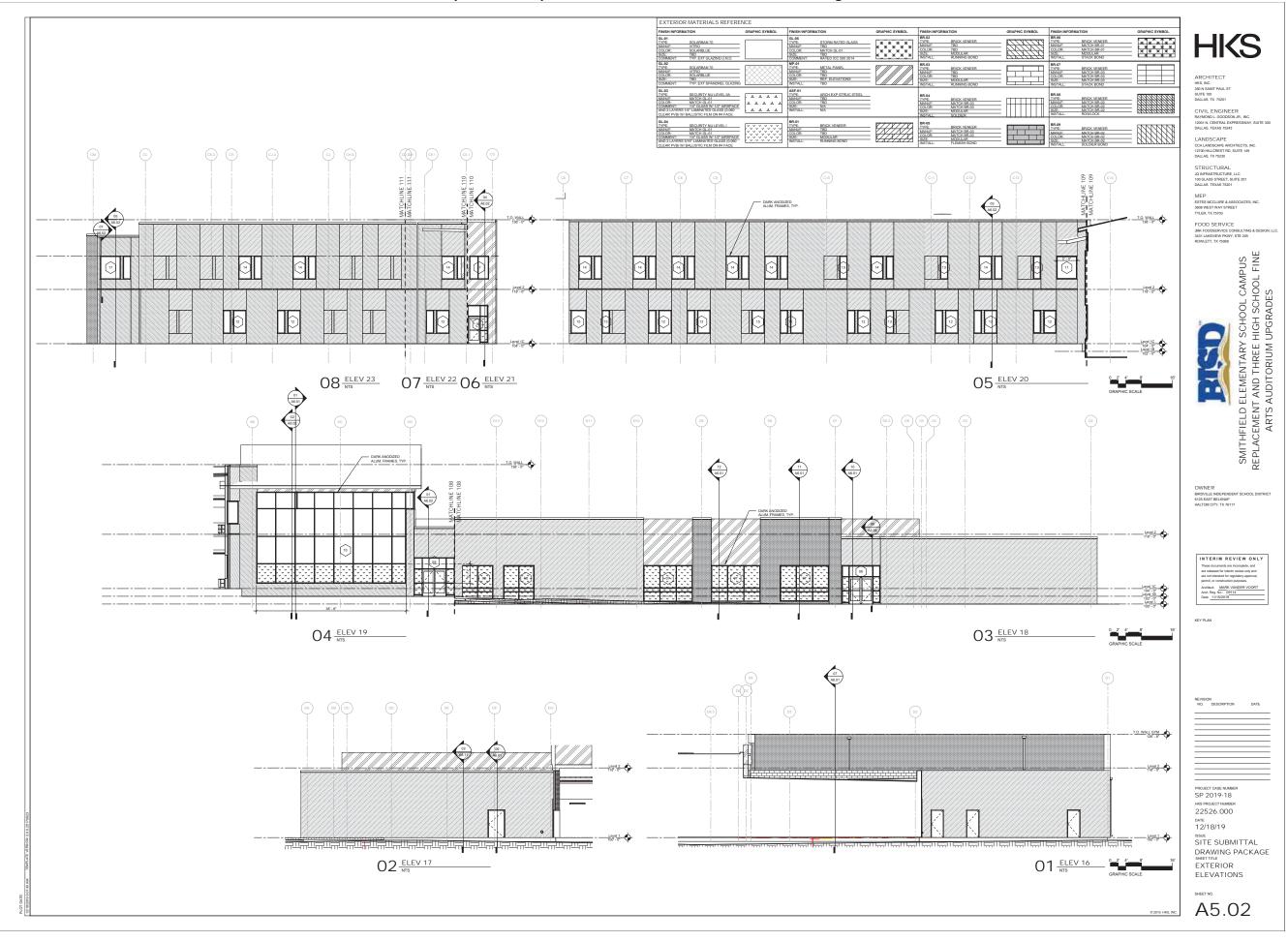


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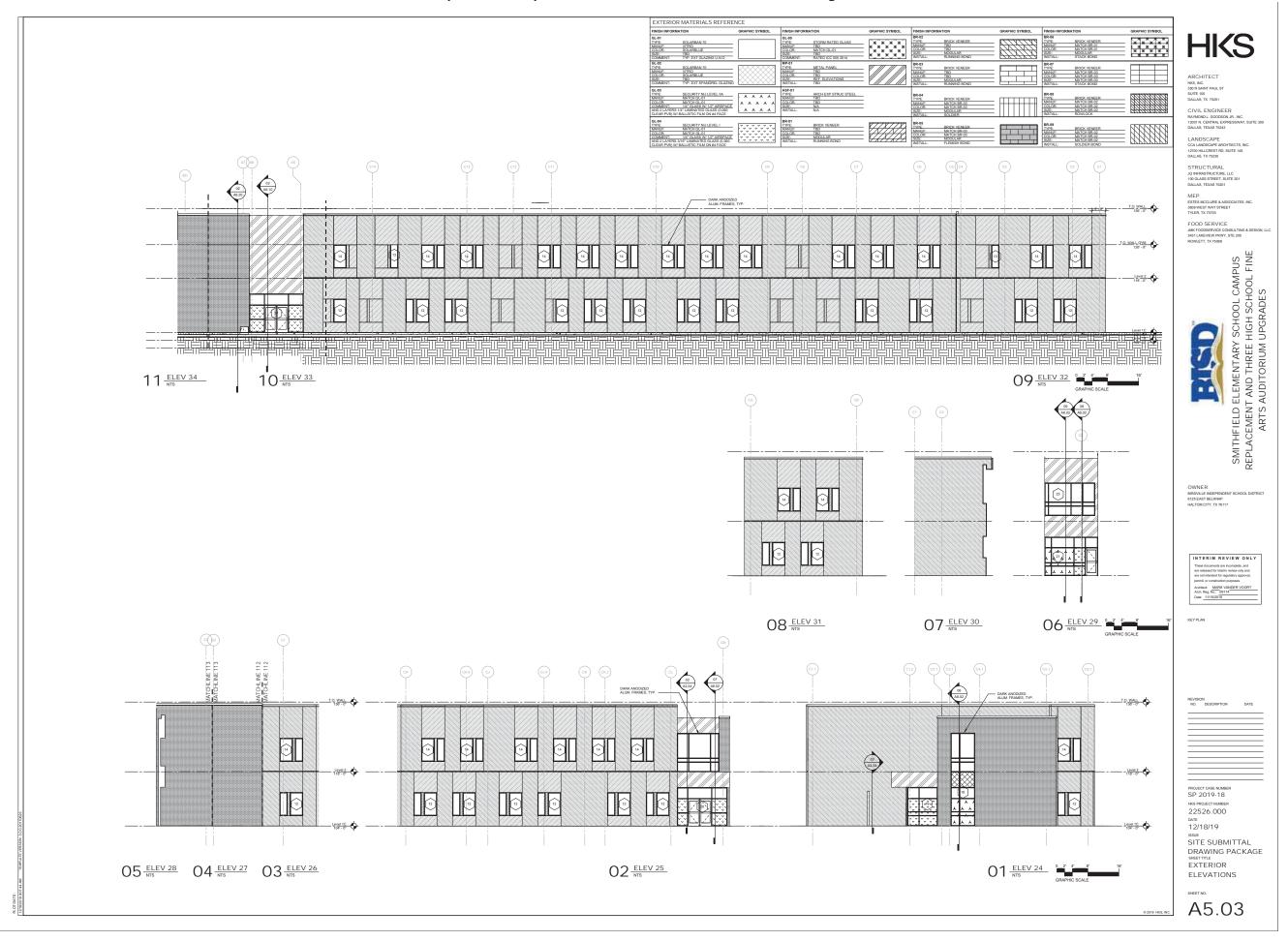
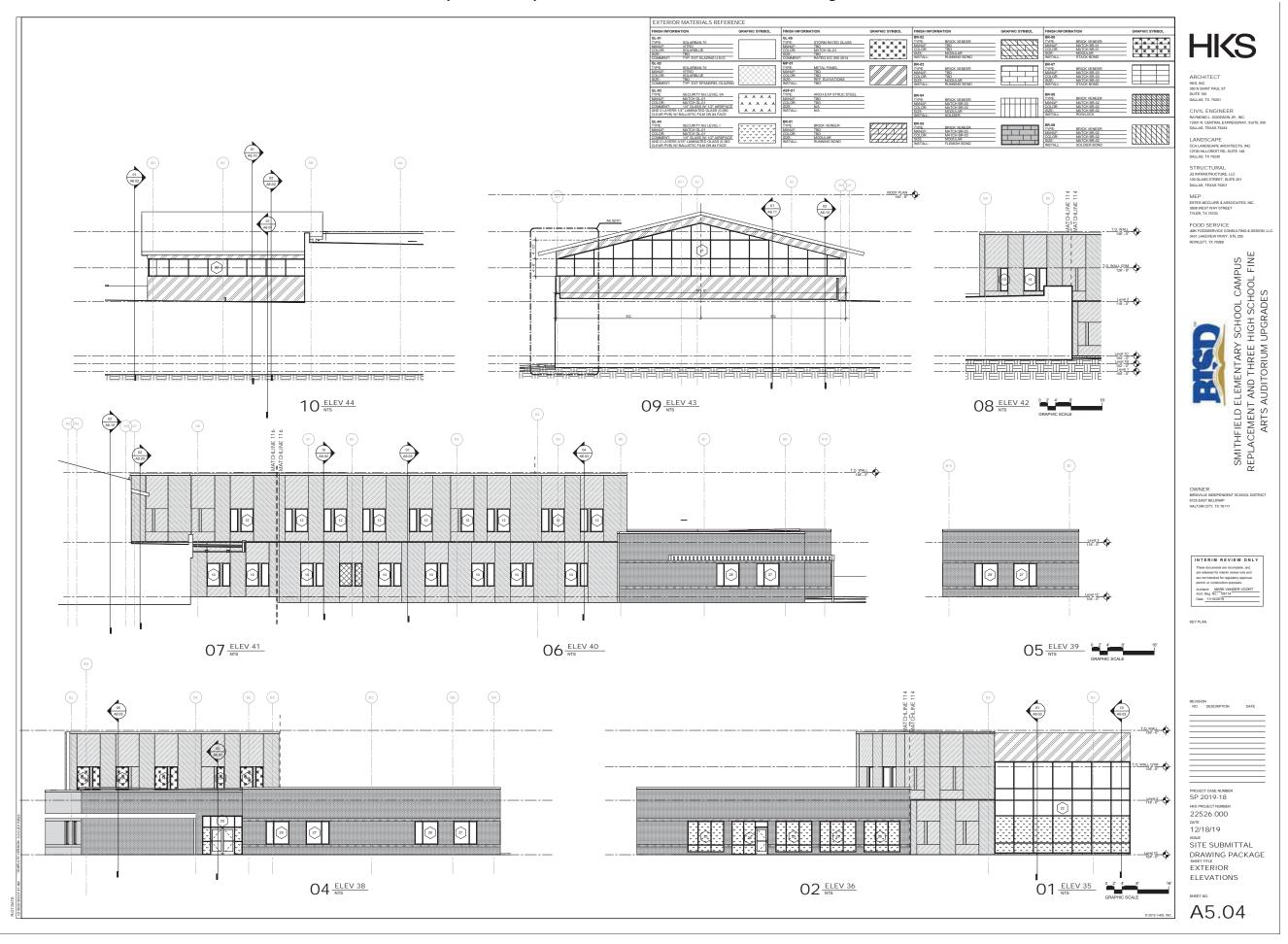
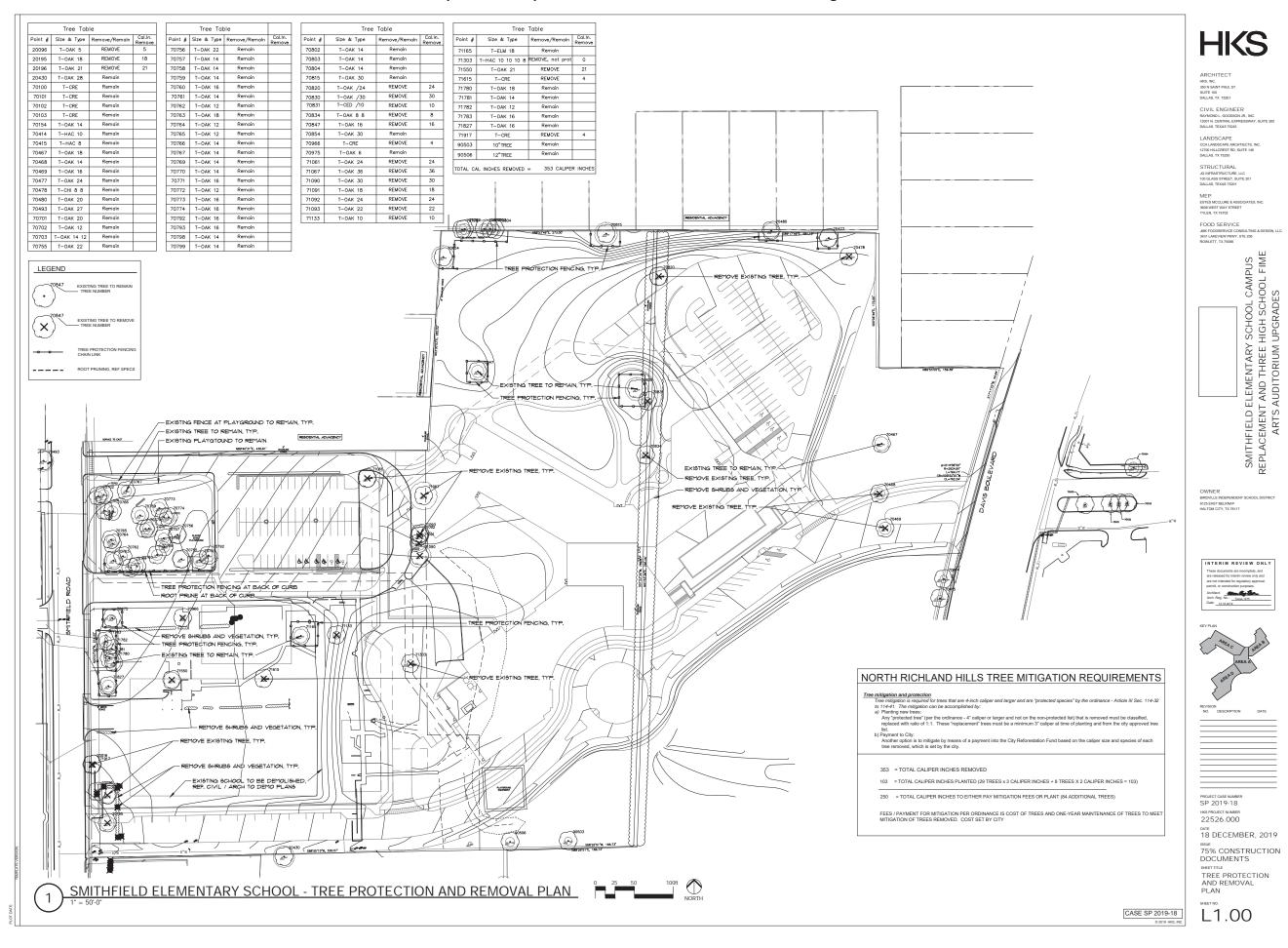


Exhibit C - Special Development Plan Exhibits - Ordinance No. 3637 - Page 8 of 19

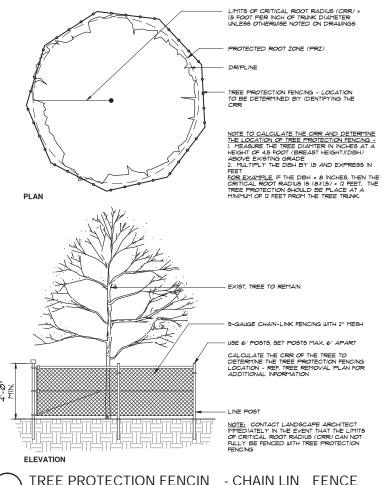




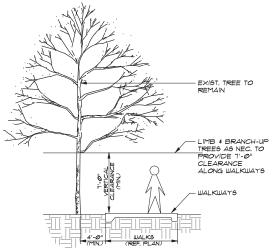
#### TREE PROTECTION & FENCING NOTES

- TREE PROTECTION MUST OCCUR PRIOR TO BEGINNING SITE WORK
- ALL EXISTING TREES ARE TO REMAIN AND BE PROTECTED DURING CONSTRUCTION INLESS DESIGNATED AS "TO BE REMOVED" ON THE DRAWINGS, CHAINLINK OR ORANGE SAFETY FENCING (MIN 4-70" HEIGHT) SHALL BE INSTALLED AS INDICATED ON PLANS AT THE DIRPLIK OR THE CRITICAL ROOT ZONE (WHICHEVER IS GREATER) OF THE TREE OR GROUP OF TREES TO REMAIN.
- 3. PARKING OF VEHICLES OR PERFORMING WORK WITHIN THESE AREAS OTHER THAN AS SHOUN ON THE PLANS WILL NOT BE ALLOWED. THE TREE PROTECTION SHALL REMAIN DURING THE ENTIRE CONSTRUCTION. OTHER TREE PROTECTION MEASURES SHALL BE IN ACCORDANCE WITH THE CITY OF FORT WORTH STANDARDS AND
- THE CONTRACTOR SHALL TAKE CARE IN MINIMIZING THE DISTURBANCE TO THE EXISTING TREE TRUNKS AND ROOT SYSTEMS, ALL DEMOLITION AND TRASH REMOVAL ADJACENT TO EXISTING TREES SHALL BE COMPLETED ISING HAND TOOLS WHERE POSSIBLE. NO LARGE EQUIPMENT OR ANY EQUIPMENT WITH TRACKS SHALL BE ALLOWED WADER THE DRIPHLE OF ANY EXISTING TREES TO REMAIN THERE SHALL BE NO STORAGE OF MATERIAL WITHIN THE DRIPLINE OF TREES TO REMAIN
- 6. NO ATTACHMENTS OR WIRES OF ANY KIND, OTHER THAN THOSE OF A PROTECTIVE NATURE, SHALL BE ATTACHED TO ANY TREE.
- 7. NO FILL OR EXCAVATION OF ANY NATURE SHALL OCCUR WITHIN THE DRIPLINE OF A TREE TO REHAIN OR BE PROTECTED UNLESS SPECIFIED ON THE PLANS, DO NOT STOCKPILE SUB-SOLIS UNDER THE TREE DRIPLINE, ALL EXCAVATION DONE WITHIN THE TREE DRIPLINE SHALL BE HAND DUG UNDER THE SUPERVISION OF THE LANDBCAPE ARCHITECT OR THE OUNER'S REPRESENTATIVE.
- 8. TREE PROTECTION SHALL REMAIN IN-PLACE UNTIL ALL CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND ONLY REMOVED UPON APPROVAL BY THE LANDSCAPE ARCHITECT OR THE OUNER'S REPRESENTATIVE.
- 9. WHERE NEW UTILITY LINES ARE CONSTRUCTED WITHIN THE DRIP LINE OF EXISTING TREES, MECHANICALLY BORE THE NEW UTILITY LINE OR ROOT PRUNE THE EXISTING TREE, MECHANICALLY BORE THE UTILITY LINE IF IT IS WITHIN THE DRIP LINE AND WITHIN FIFTEEN FEET OF THE TRENK OF THE TREE, ROOT PRUNE THE TREE IF THE UTILITY LINE IS WITHIN THE DRIP LINE BUT GREATER THAN FIFTEEN FEET AWAY FROM THE TREE'S TRUE REPORT THE TREES TO SPECIFICATIONS FOR BORING AND ROOT PRUNING REQUIREMENTS.
- 10. WHERE NEW IRRIGATION LINES ARE CONSTRUCTED WITHIN THE DRIP LINE OF EXISTING TREES, HAND DIG OR AIR SPADE LINE IF IT IS WITHIN THE DRIP LINE AND WITHIN FIFTEEN FEET OF THE TREAK OF THE TREE. ROOT PRIME THE TREE IF THE LINE IS WITHIN THE DRIP LINE BUT GREATER THAN FIFTEEN FEET AWAY FROM THE TREE'S TRUMK, REFER TO SPECIFICATIONS FOR HAND DIGGING, AIR SPADING, AND ROOT PRANING REQUIREMENTS.

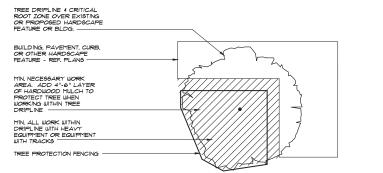
NOTE: DO NOT PARK, DRIVE, ETC. BENEATH ANY EXISTING TREE TO REMAIN, INCLUDING THOSE NOT SHOUN WITH TREE PROTECTION FENCING, ALL EXISTING TREES TO REMAIN ON SITE SHALL BE PROTECTED, WHETHER OR NOT FENCING IS SHOUN.



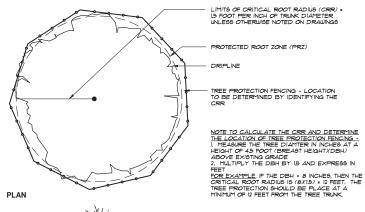
TREE PROTECTION FENCIN - CHAIN LIN FENCE

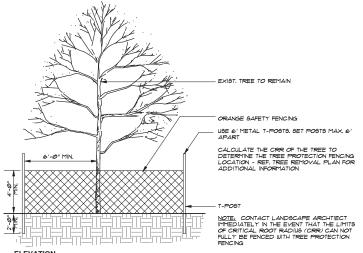


TREE CLEARANCE AT AL



TREE PROT FENCE NEAR CONSTR CTION ACTIVITY





TREE PROTECTION FENCIN - ORAN E SAFETY FENCE

# **HKS**

350 N SAINT PAUL ST SUITE 100 DALLAS, TX 75201

CIVIL ENGINEER

LANDSCAPE

STRUCTURAL

FOOD SERVICE

SMITHFIELD E REPLACEMENT ARTS A



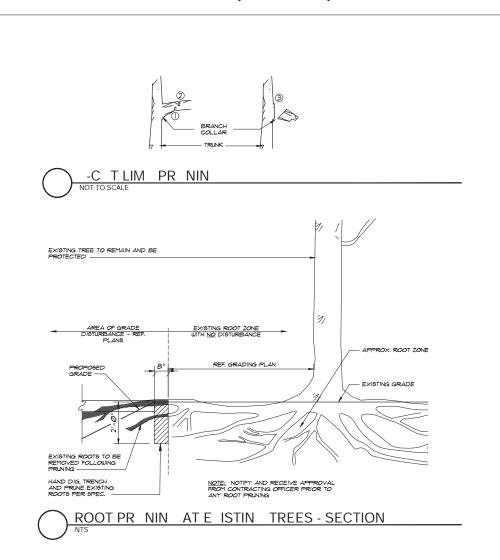


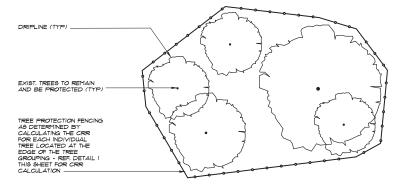
SP 2019-18 22526.000

18 DECEMBER, 2019

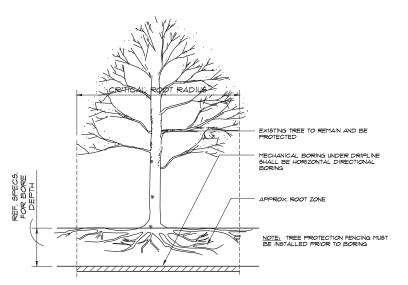
75% CONSTRUCTION DOCUMENTS TREE PROTECTION

AND REMOVAL DETAILS L1.01





TREE PROT FENCE NEAR CONSTR CTION ACTIVITY



NDER OR NEAR CRO N DRIPLINE - ELEVATION

USE TO REMOVE TREE LIMBS AS NECESARY. COMPLY WITH HORTICULTURAL PRACTICES. STEP I: SAW BOTTOM CUT APPROX. 6-12" AWAY FROM TRUNK AND APPROX. % OF THE WAY THROUGH THE LIMB. THE LIMB. SIEP 2: MAKE A SECOND CUT APPROX. 3" FURTHER FROM THE TRUNK THAN THE FIRST CUT UNTIL THE WEIGHT OF THE BRANCH PULLS THE BRANCH DOUN. SIEP 3: CUT THE STUB BACK TO THE COLLAR OF THE BRANCH - DO NOT CUT FLUSH WITH TRUNK. REMOVE AND DISPOSE OF ALL BRANCHES PER NOTES ON SHEET LI AND SPECIFICATIONS  $\underline{\textit{NOIE}}_{:}$  PRIOR TO LIMB REMOVAL ON EXISTING TREES, GET WRITTEN PERMISSION AND FIELD VERIFICATION FROM OWNER'S REPRESENTATIVE.

# **HKS**

FOOD SERVICE





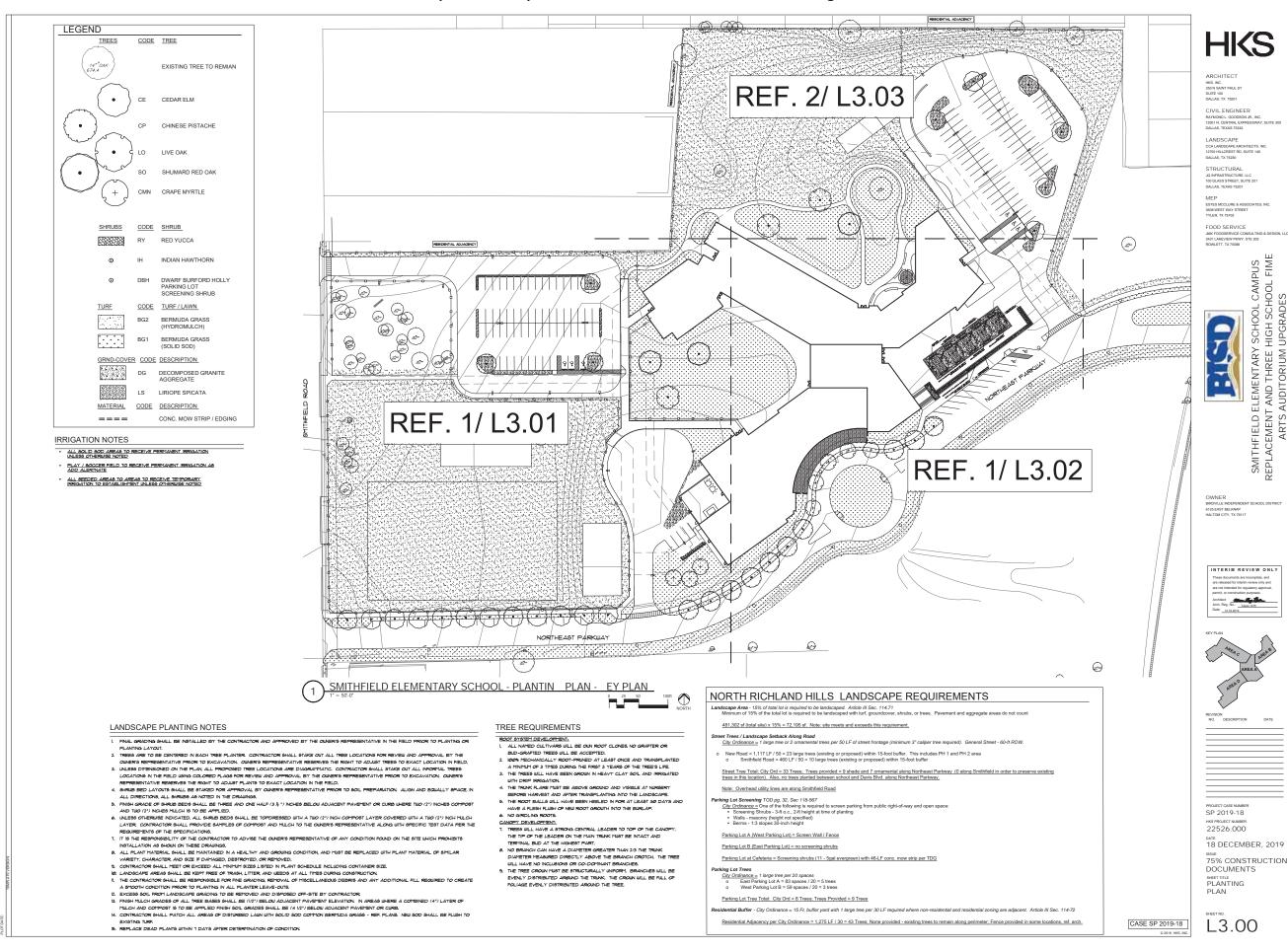
PROJECT CASE NUMBER SP 2019-18 HKS PROJECT NUMBER 22526.000

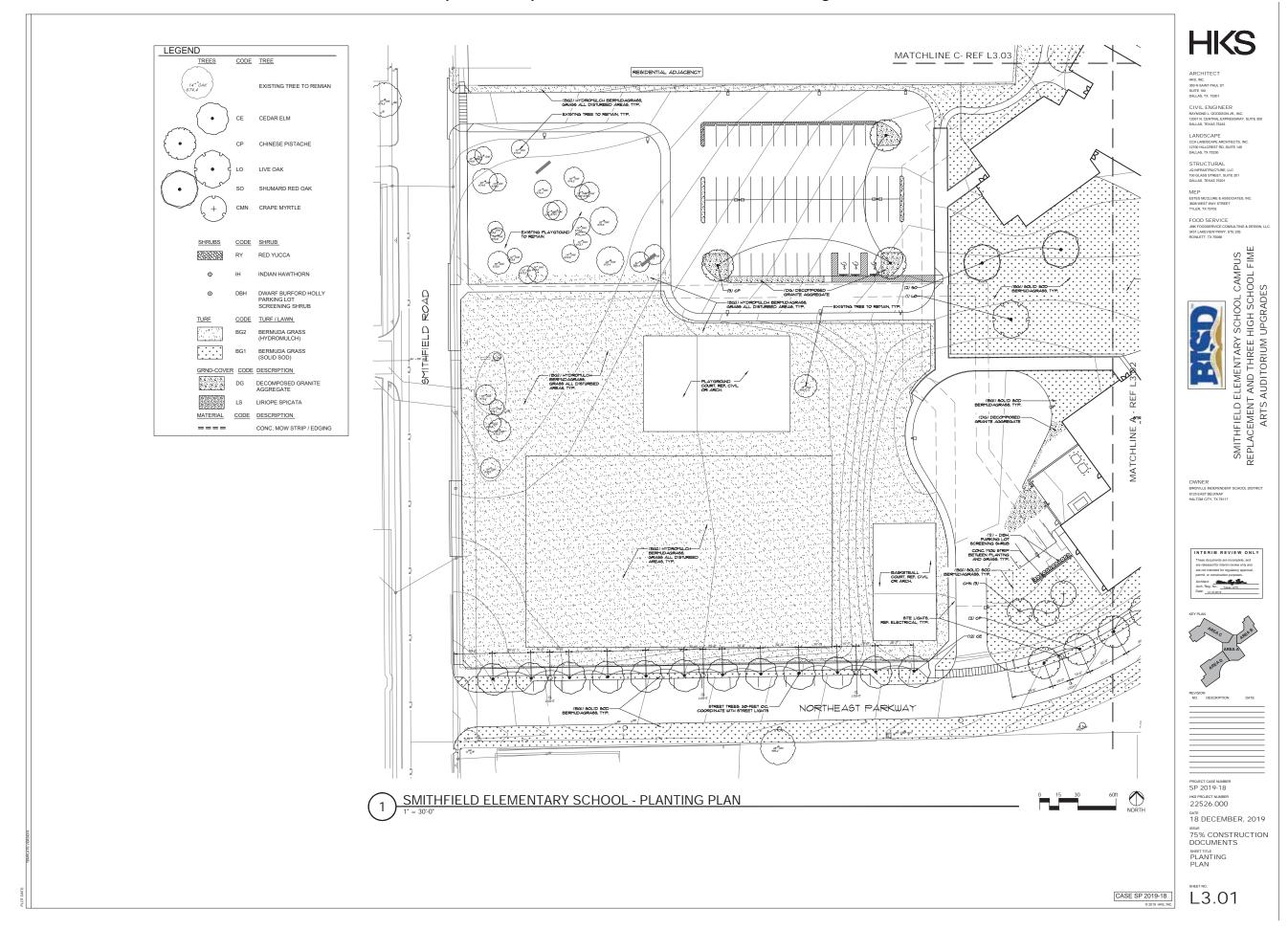
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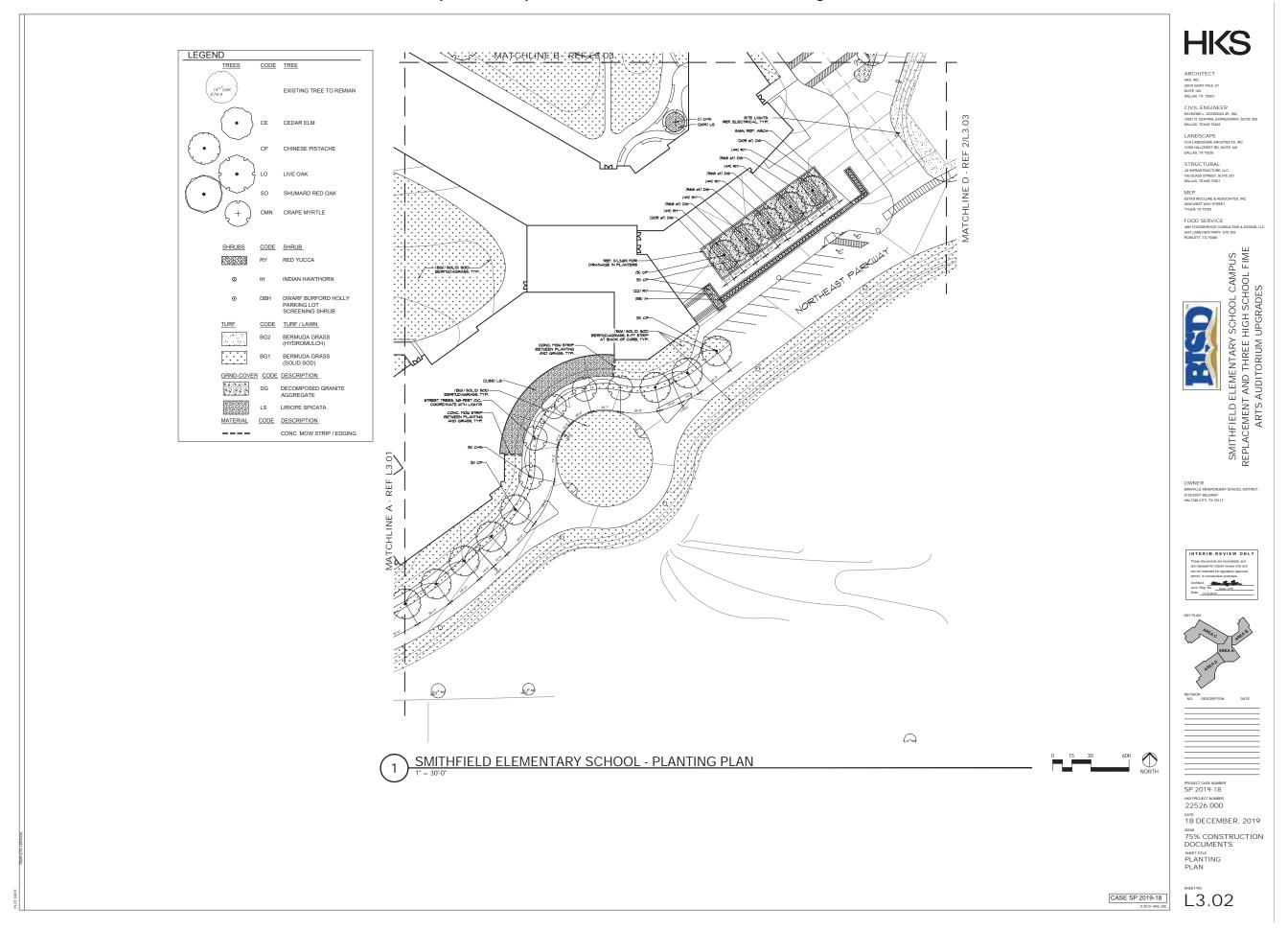
75% CONSTRUCTION DOCUMENTS

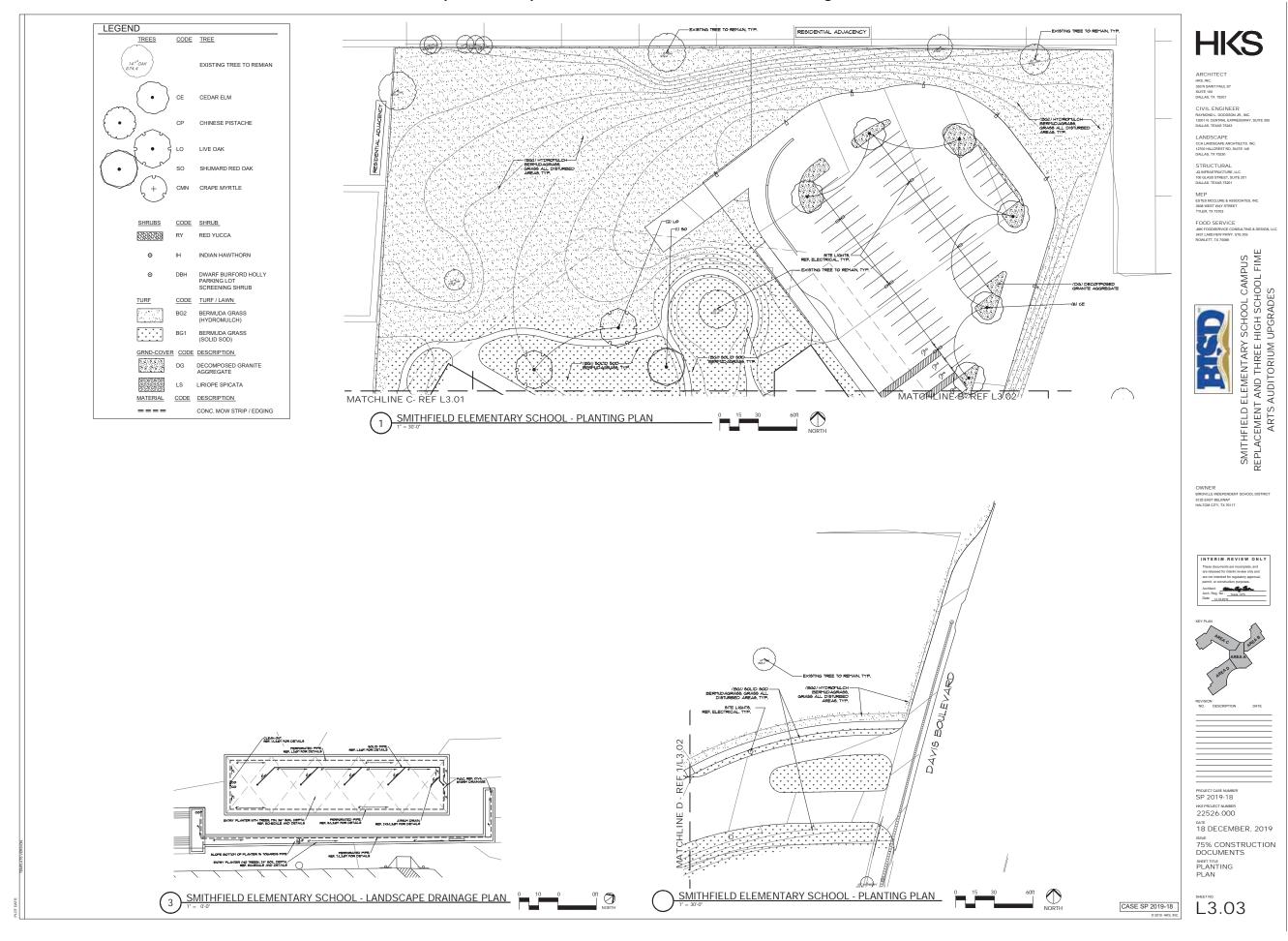
TREE PROTECTION AND REMOVAL DETAILS

L1.02



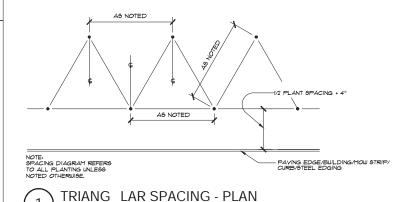






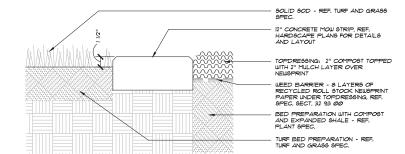
#### Exhibit C - Special Development Plan Exhibits - Ordinance No. 3637 - Page 16 of 19

TREES	CODE	COMMON NAME / BOTANICAL NAME		CONT	CAL	SIZE	REMARKS	QTY
$(\cdot)$	CE	CEDAR ELM / ULMUS CRASSIFOLIA		B&B	3" CAL. MIN.	11`-13`H X 4`-6`W MIN.	FULL, WELL BRANCHED, VERTICAL GROWTH HABIT NO CROSSING OR RUBBING BRANCHES	18
$\cdot)$	CP	CHINESE PISTACHE / PISTACIA CHINENS	IS	B&B / CONT	. 3" CAL. MIN.	11'-13'H X 4'-6'W MIN.	FULL, WELL BRANCHED, VERTICAL GROWTH HABIT	18
$\overline{(\cdot)}$	LO	LIVE OAK / QUERCUS VIRGINIANA		B&B	3" CAL. MIN.	11'-13'H X 4'-6'W MIN.	FULL, WELL BRANCHED, VERTICAL GROWTH HABIT	3
$(\cdot)$	so	RED OAK / QUERCUS SHUMARDII		B&B	3" CAL. MIN.	11'-13'H X 4'-6'W MIN.	FULL, WELL BRANCHED, VERTICAL GROWTH HABIT	3
+,	CMN	CRAPE MYRTLE / LAGERSTROEMIA x 'NATCHEZ'		B&B / CONT	. 2" CAL. MIN. 15 GAL. MIN.	8'H X 3'-5'W MIN.	FULL, WELL BRANCHED, VERTICAL GROWTH HABIT, STANDARD, NO CROSSING OR RUBBING BRANCHES	9
SHRUBS	CODE	COMMON NAME / BOTANICAL NAME		SIZE	REMARKS	SPACING		QTY
833533	RY	RED YUCCA / HESPERALOE PARVIFLORA		3 GAL	FULL TO BASE, HEAVILY ROOTED	EAVILY ROOTED TRIANGULAR SPACING AT 24" O.C., 0.28 PLANTS PER SF		
	IH	INDIAN HAWTHORN / HESPERALOE PARVIFLORA		3 GAL	FULL TO BASE, HEAVILY ROOTED SINGLE ROW AT 36" O.C.			+/- 55
$\odot$	DBH DWARF	PARKING LOT SCREENING SHRUB BURFORD HOLLY / ILEX CORNUTA `BURFO	5 GAL.	FULL TO BASE, HEAVILY ROOTED	AVILY ROOTED SINGLE ROW AT 36" O.C.			
GROUND COVERS	CODE	COMMON NAME / BOTANICAL NAME	CONT	REMARKS			QTY	
	BG2	BERMUDA GRASS / CYNODON DACTYLO	SEED	EED HYDROMULCH, REF. SPEC 329200			+/- 185,200 SF	
* * *	BG1	BERMUDA GRASS / CYNODON DACTYLON 'TIFFWAY 419'		SOD	SOD SOLID SOD, REF. SPEC 329200			+/- 98,700 SF
	DG	AGGREGATE - DECOMPOSED GRANITE OVER 2 LAYERS FILTER FABRIC	3-1/2" REF. SPEC 329300 DEPTH				+/- 4,710 SF	
	LS	LIRIOPE SPICATA		4" POT	FULL TO BASE, HEAVILY ROOTED	TRIANGULAR SPACING	AT 12" O.C, 1.15 PLANT PER SF	+/- 2,536
MATERIALS	ITEM		DEPTH	REMARKS				QTY
PLANTING BEDS FOR	R SHRUB	S AND GROUNDCOVER: NOTE - FIELD VER	ITY ALL QUANTIT	TIES, ALL BEDS	S TO BE FULL, REFER TO DETAILS A	ND SPECS		
	MULCH	- TOPDRESSING PLANTING BEDS	3" DEPTH	RUSTIC CUT	HARDWOOD OR APPROVED EQUIV	ALENT, COMPACTED DEF	PTH, REF. SPEC SECT 32 9300	FIELD VERIFY
	COMPO	OST - PLANTING BEDS	3" DEPTH	ORGANIC, W	VELL-DECOMPOSED, REF. SPEC SEC	CT 329300		FIELD VERIFY
	WEED	BARRIER - NEWSPRINT PLANTING BEDS	8 LAYERS	8 LAYERS OF	F NEWSPRINT AT PLANTING BEDS, F	REF. DETAILS AND SPEC	SECT 32 9300	FIELD VERIFY
	EXPANDED SHALE - PLANTING BEDS 3" DEPTH			PLANTING BEDS, SUPPLIED BY SOIL BUILDING SYSTEMS OR APPROVED EQUAL, REF. SPEC SECT 32 9300				FIELD VERIFY
	ORGAN	NIC BIOLOGICAL FERTILIZER - PLANTING B.		REF. SPEC SECT 329200 FOR MATERIAL AND APPLICATION RATE				FIELD VERIFY
	FILTER	FABRIC	2 LAYERS	2 LAYERS B	ENEATH AGGREGATE, REF. SPEC S	ECT 32 9300		+/- 4,710 SF X 2
=====		MOW STRIP - LANDSCAPE EDGING			DE CONC. MOW STRIP PER BISD STA	NDARDS		100 LF
LAWN / TURF GRAS		FIELD VERITY ALL QUANTITIES, ALL DIST						
		IL - LAWN / TURF GRASS	1 1/2" DEPTH		S AND SPECS			FIELD VERIFY
	COMPO	OST - LAWN / TURF GRASS	1/2" DEPTH	ORGANIC, W SUPPLIED B	VELL-DECOMPOSED, REF. DETAILS A BY SOIL SYSTEMS OR APPROVED EC	ND SPECS UAL, REF. SPEC 32 9300		FIELD VERIFY
	ORGAN	IIC BIOLOGICAL FERTILIZER - LAWN		REF. SPEC S	ECT 329200 FOR MATERIAL AND AP	PLICATION RATE		FIELD VERIFY
PLANTERS AT ENTR	:Y:							
	SOIL MI	OIL MIX - TREE MIX  +/- 36" WITH TREES SUPPLIED BY SOIL BUILDING SYSTEMS OR APPROVED EQUAL, REF. SPECS FOR PRODUCT INFO AND INSTALLATION +/- 24" WITHOUT TREES						
	MULCH	- TOPDRESSING	3"	FINE CUT HA	ARDWOOD SUPPLIED BY SOIL BUILD	ING SYSTEMS OR APPRO	OVED EQUAL, REF. SPEC 32 9300	FIELD VERIFY
	COMPO	ST - TOPDRESSING	2"	ORGANIC, W	ELL-DECOMPOSED, SUPPLIED BY S	OIL BUILDING SYSTEMS	OR APPROVED EQUAL, REF. SPEC 32 9300 FIELD VERIFY	
	DG / DE	COMPOSED GRANITE AGG.	3 1/2"	THICK LAYER REF. SPEC 3	R OVER 2 LAYERS FILTER FABRIC, A 32 9300	S SUPPLIED BY JEWEL/C	OLD CASTLE OR APPROVED EQUAL.	+/- 1,882 SF
	FILTER	FABRIC		2 LAYERS BE	ENEATH AGGREGATE, REF. SPEC 32	9300		1,882 SF X 2 LAYER
	SUB-DI	RAINAGE - AGGREGATE - #8 STONE	3"	AS SUPPLIE	D BY JEWEL/OLD CASTLE, VAQUERO	STONE AND SUPPLY, A	PPROVED EQUAL, REF. SPECS	FIELD VERIFY
	SUB-DI	RAINAGE - AGGREGATE - #57 STONE	3"	AS SUPPLIE	D BY JEWEL/OLD CASTLE, VAQUERO	STONE AND SUPPLY, A	PPROVED EQUAL, REF. SPECS	FIELD VERIFY

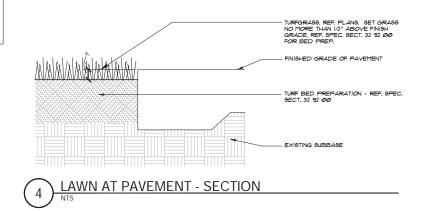


PLANT - REF. PLAN FOR LOCATION MULCH TOPDRESSING - REFER TO SPEC. SECT. 32 93 00 - WEED BARRIER - 8 LAYERS OF RECYCLED ROLL STOCK NEWSPRINT PAPER UNDER TOPDRESSING, REF. SPEC. SECT. 32 93 00 - EXISTING SUBBASE - RIPPED TO REMOVE COMPACTION - REF, SPEC, SECTION 32 93 00

PERENNIAL ORNAMENTAL AT EDS - SECT



T RF ED AT MO STRIP AT PLANTER ED - SECTION 3



**HKS** 

CIVIL ENGINEER RAYMOND L. GOODSON JR., INC. 12001 N. CENTRAL EXPRESSWAY, DALLAS, TEXAS 75243

LANDSCAPE
CCA LANDSCAPE ARCHTIECTS, INC.
12700 HILLCREST RD, SUITE 149
DALLAS, TX 75230

FOOD SERVICE

SMITHFIELD ELEMENTARY REPLACEMENT AND THREE I ARTS AUDITORIUM

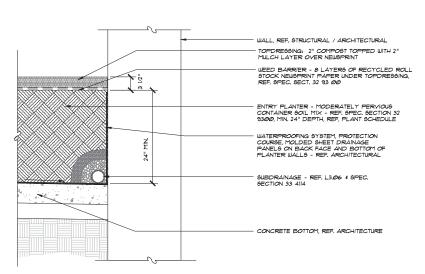




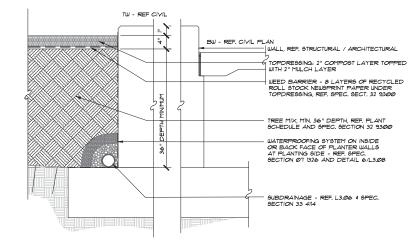
PROJECT CASE NUMBER SP 2019-18 HKS PROJECT NUMBER 22526.000 18 DECEMBER, 2019 75% CONSTRUCTION DOCUMENTS PLANTING DETAILS

L3.04

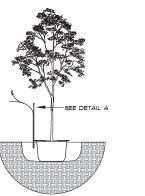
CASE SP 2019-18



### SOIL MI AT ENTRY PLANTER - SECTION



SOIL MI AT PLANTERS AT ENTRY ITH TREE - SECTION



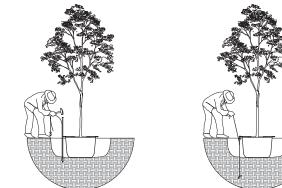
#### STEP 1:

- SET TREE IN PLANTING PIT CENTER ROOT ANCHOR'S INNER RING(S) AROUND TRUNK OF TREE ALICAI DRIVE ROD AS CLOSE AS POSSIBLE TO CUTSIDE EDGE OF U-BRACKET
- DRIVE ANCHOR STRAIGHT DOWN INTO UNDISTURBED SUBBASE SOIL AT MINIMUM OF 18" TO 24" DEFTH
   SEE CHART FOR RECOMMENDED DEPTHS PER TREE 512".

STEP 2:

- OPTIONAL ANCHORING SEQUENCES:

  A. FOR ANCHOR INSTALLATION PRIOR TO TREE INSTALLATION ANCHORS MAY BE PLACE, PER THE ROOT BALL DIAMETER, AND INSTALLED FROM THE BOTTOM OF THE EXCAVATED TREE PIT TO ENSURE THE DEPTH OF THE ANCHORS MEET THE REQUIRED 18" TO 24" DEPTH INTO INDISTURBED SOILS.
- B. FOR ANCHOR INSTALLATION AFTER THE PLANTING BACKFILL BE SURE TO MARK THE DRIVE PIN TO THE REQUIRED DEPTH TO ENSURE THAT WORKERS ARE DRIVING THE ANCHOR THE REQUIRED IS 'TO 24" DEPTH NTO UNDISTURBED SOILS BELOW THE BOTTOM OF THE EXCAVATED TREE PIT. IMPROPER DEPTH OF ANCHORING WILL BE CORRECTED AS NECESSARY TO ENSURE TREE IS STABLE.



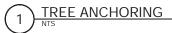
#### STEP 3:

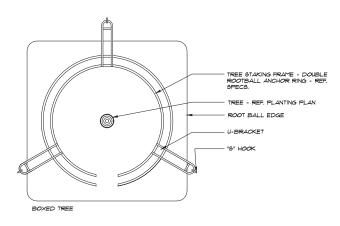
DETAIL A

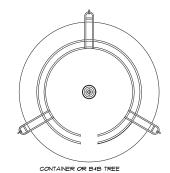
- PREMOVE DRIVE ROD

  REPEAT STEPS I 4 2 FOR ALL THREE (3) ANCHOR
  LOCATIONS

  FULL BACK ON STRAP APPROXIMATELY 3" FOR THE
  V-66 ANCHOR, OR 6" TO 1" FOR THE V-88 ANCHOR TO
  SET ANCHOR INTO A HORIZONTAL OR LOCKED
  POSITION. A FILL CRIM MAY BE REQUIRED TO ASSIST IN
  SETTING THE ANCHOR.
  PLACE "I HOOK OVER THE END OF THE U-BRACKET
  PULL STRAP UP VERTICALLY UNTIL ROOT ANCHOR
  RINGS BITE INTO THE TOP OF THE ROOT BALL AND
  U-BRACKETS ARE SETTING FLUSH ON TOP OF THE ROOT
  BALL
- BACK FILL ONLY AFTER THE TREE IS STRAIGHTENED AND SECURE







TYPICAL TREE GRO ND ANCHORNG - PLANS

# **HKS**

ARCHITECT HKS, INC. 350 N SAINT PAUL ST SUITE 100 DALLAS, TX 75201

CIVIL ENGINEER

LANDSCAPE CCA LANDSCAPE ARCHTIECTS, INC 12700 HILLCREST RD, SUITE 149 DALLAS, TX 75230

FOOD SERVICE

SMITHFIELD E REPLACEMENT ARTS A





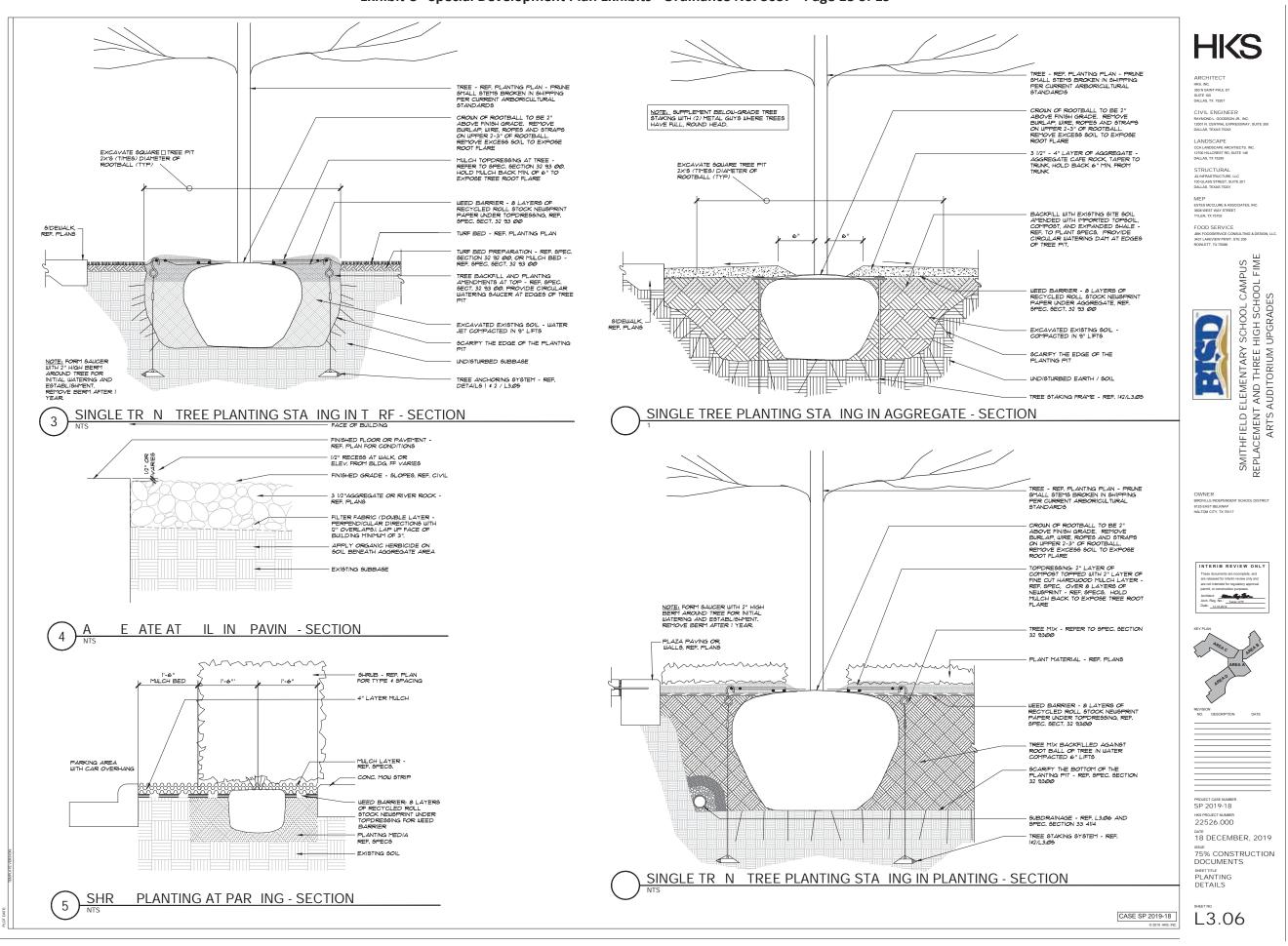
SP 2019-18 22526.000

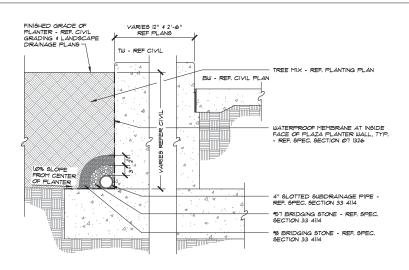
18 DECEMBER, 2019

75% CONSTRUCTION DOCUMENTS

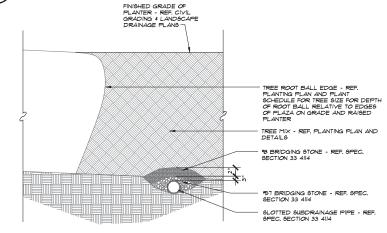
PLANTING

L3.05

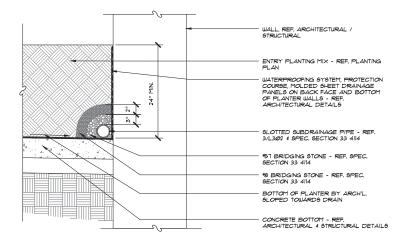




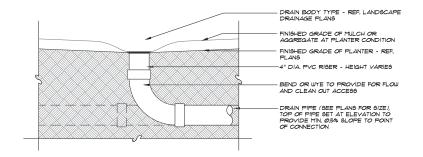
### NDERDRAIN SYSTEM AT TREE PLANTER ALL - SECTION



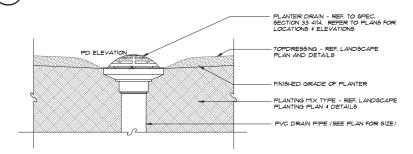
NDERDRAIN SYSTEM AT TREE ROOT ALLS - SECTION 6



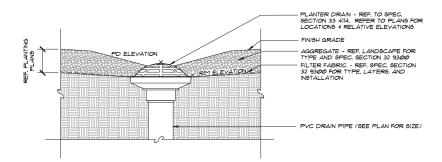
NDERDRAIN SYSTEM AT ENTRY PLANTER - SECTION



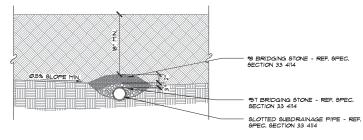
TR N LINE - SECTION



### PLANTER DRAIN IN PLANTER - SECTION



PLANTER DRAIN AT AGGREGATE - SECTION



NDERDRAIN SYSTEM IN PLANTER AREA - SECTION

## HKS

CIVIL ENGINEER RAYMOND L. GOODSON JR., INC. 12001 N. CENTRAL EXPRESSWAY DALLAS, TEXAS 75243

LANDSCAPE CCA LANDSCAPE ARCHTIECTS, INC 12700 HILLCREST RD, SUITE 149 DALLAS, TX 75230

STRUCTURAL

FOOD SERVICE

SMITHFIELD E REPLACEMENT ARTS A





SP 2019-18 22526.000

18 DECEMBER, 2019

75% CONSTRUCTION DOCUMENTS

PLANTING

L3.07