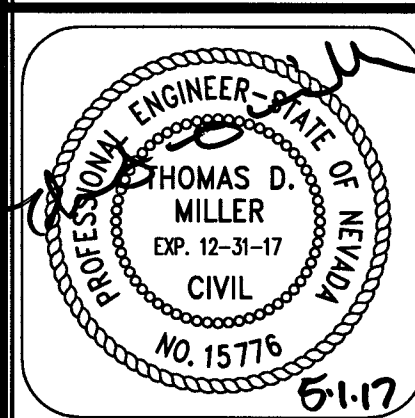
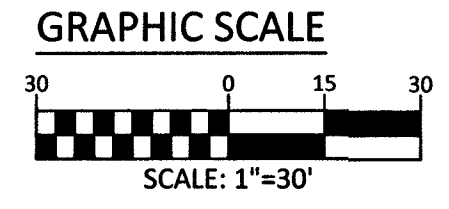


COLLINS ENGINEERS
3330 S. DURANGO DR., SUITE 404
LAS VEGAS, NV 89117
PHONE: (702) 248-8000
FAX: (702) 248-8070
www.collinsengr.com



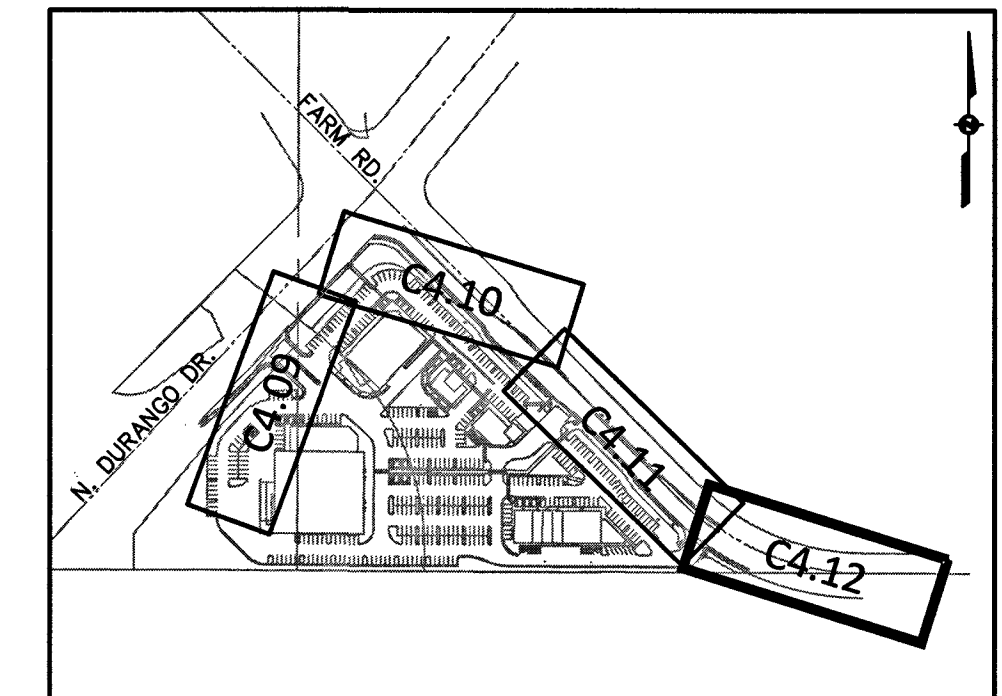
IMPROVEMENT PLANS FOR DC PLAZA
APN:125-17-613-001
STORM DRAIN PLAN & PROFILE
STA: 16+00.00 TO 20+54.95
8451 FARM ROAD
LAS VEGAS, NEVADA

DESCRIPTION	
DESIGN BY	5/16/17
DATE	3/13/17
NO.	1
CEI PROJECT:	4136
DESIGN BY:	JDM SR
DRAWN BY:	JDM SR
CHECKED BY:	TDM P.E.
DATE:	03/13/17
SCALE:	1"=30'
SHEET NUMBER	C4.12
SHEET 18 OF 45	
H # 64486	

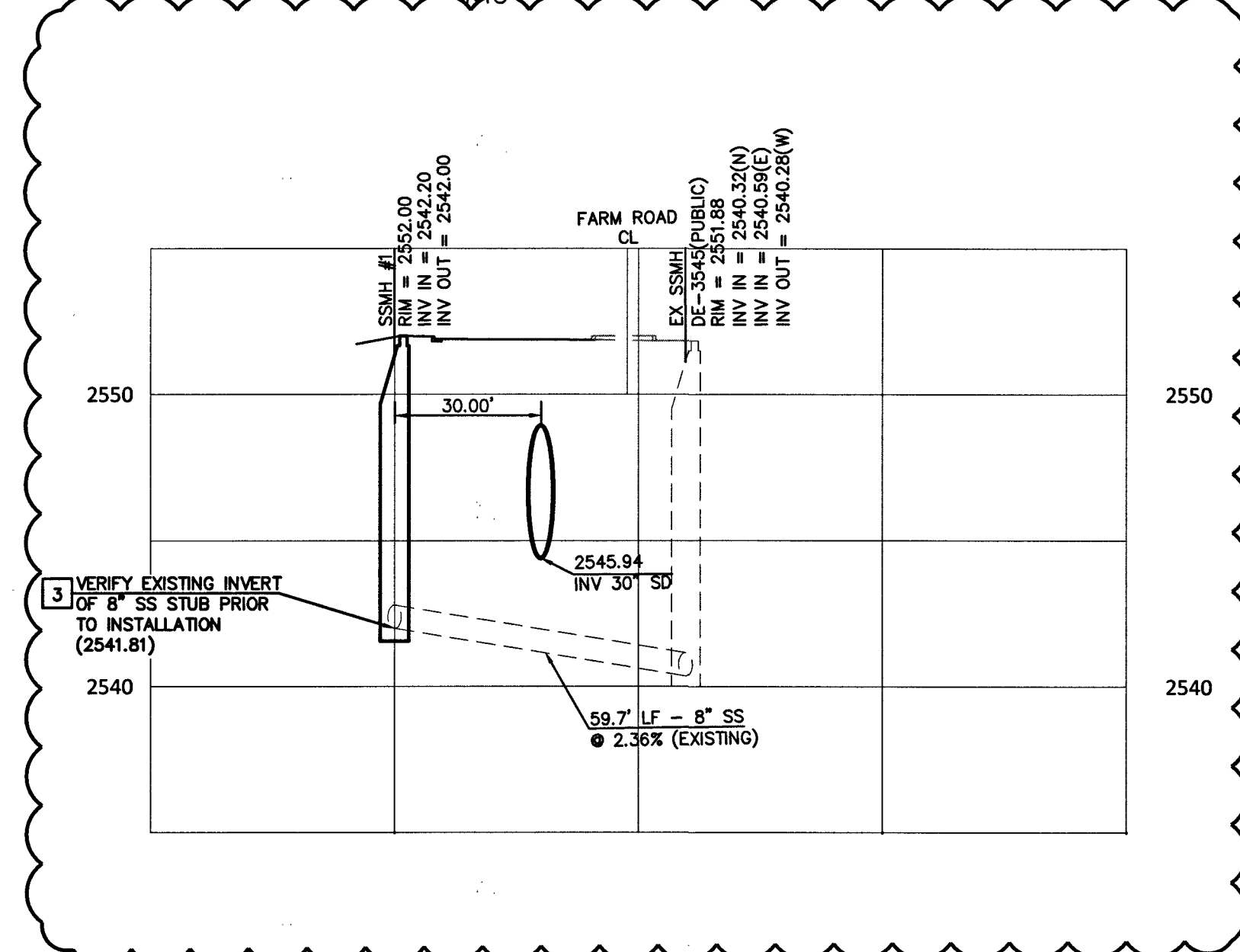


BASIS OF BEARING
NORTH 00°00'50" WEST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 17, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN FILE 97, PAGE 01 OF PARCEL MAPS ON FILE AT THE CLARK COUNTY, NEVADA RECORDER'S OFFICE.

BENCHMARK
CITY OF LAS VEGAS BENCHMARK # 5LV90 16NWS
A RIVET AND PLATE IN THE TOP OF CURB EAST SIDE OF TULE SPRINGS ROAD 1/4 MILE SOUTH OF GRAND TETON DRIVE.
NAVD 88 ELEVATION = 774.403 METERS / 2540.69 FEET
NORTH AMERICAN DATUM OF 1988



KEY MAP
1/4"



SS/SD CROSSING

1st Submitted 10/24/16 APPROVED FOR CONSTRUCTION
S. SHARPER
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 5/3/17 PROJECT NO.: 124663
LAWD APPROVED FIRE FLOW 1875 GPM AT 20 PSI RESIDUAL
SHEETS: C1.01, C1.02, C4.05, C4.06, C4.07, C4.09, C4.10, C4.11, C4.12, C4.13, C5.01, C5.02, C5.03, C5.04, C5.11, C5.12 NDOT.

NOTE:
ALL ON-SITE STORM DRAIN SYSTEMS AND THE ASSOCIATED FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE OWNERS/HOA.

FLOOD ZONE NOTE:
THE PROJECT SITE LIES WITHIN ZONE X AS PER FEMA FIRM PANEL 3200301745E DATED NOVEMBER 16, 2011.

OFFSITE IMPROVEMENTS
SEE SHEETS C4.05-C4.08 FOR OFFSITE IMPROVEMENT PLANS.

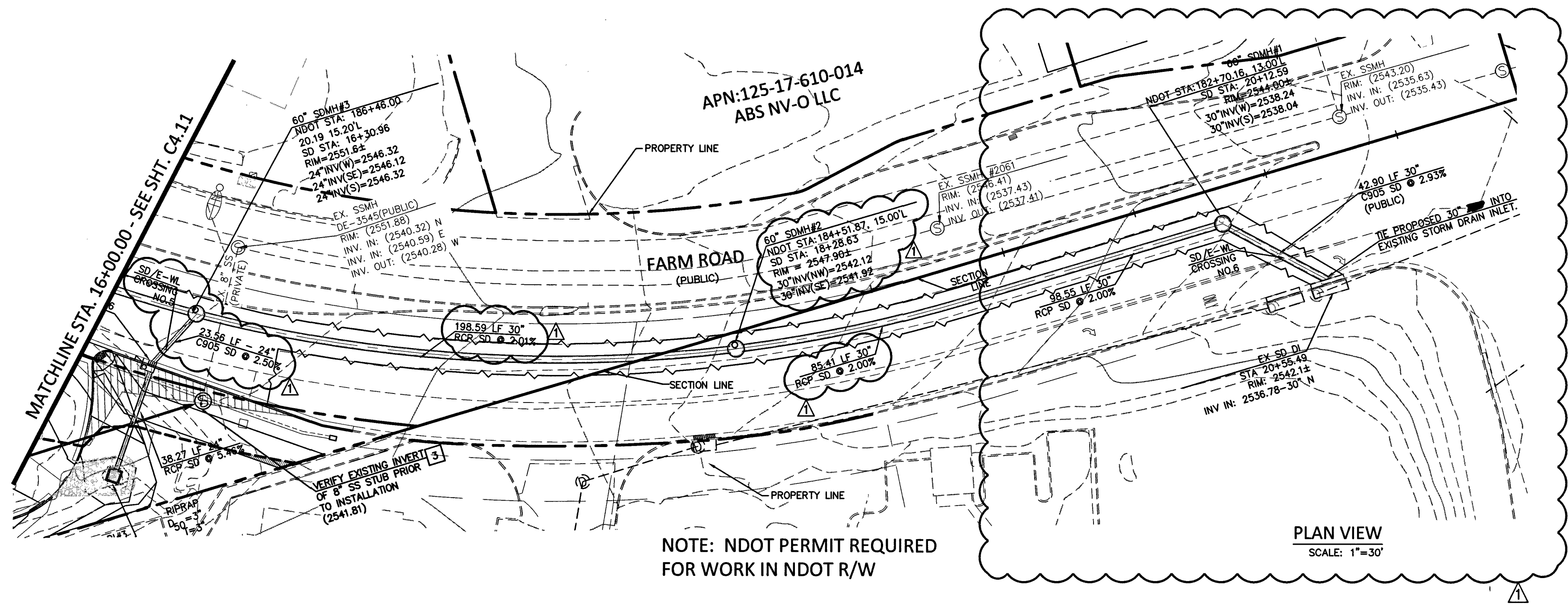
ALL GRADING WORK SHALL BE IN STRICT ACCORDANCE WITH THE SOILS REPORT FOR THE SITE ENTITLED "PROPOSED COMMERCIAL DEVELOPMENT SOUTH CORNER OF DURANGO DR. AND FARM RD."

PROJECT NO.: 4125XD130, DATED DECEMBER 22, 2015
PREPARED BY:
WESTERN TECHNOLOGIES INC.
6633 WEST POST ROAD
LAS VEGAS, NV 89118
PHONE NO. (702) 798-8050
FAX NO. (702) 798-7664

ALL WORK SHALL BE PERFORMED UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL SOILS ENGINEER.

I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH THE CITY OF LAS VEGAS, D5# 4710A

Thomas D. Miller 5.11.17
THOMAS D. MILLER - 15776 DATE 10/27/2017

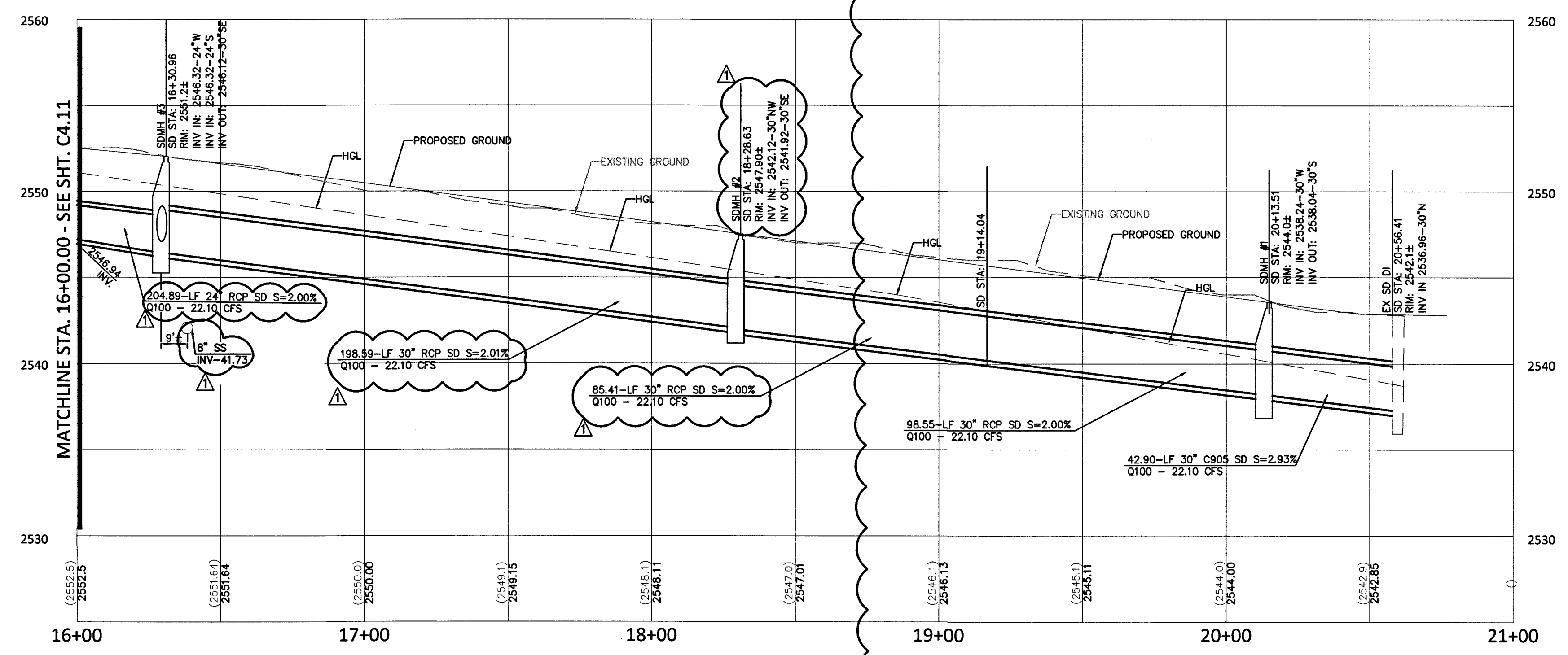


NOTE: NDOT PERMIT REQUIRED FOR WORK IN NDOT R/W

- PAVING NOTES:**
- PRIOR TO PLACING THE FIRST LIFT OF PLANTMIX THE AGGREGATE BASE SHALL BE PRIMED WITH CUTBACK ASPHALT, TYPE MC-70NVT AT 0.28 GAL/YD2, OR AN APPROVED EQUAL FROM THE NDOT QPL APPLIED AT THE MANUFACTURER'S RECOMMENDATION.
 - EMULSIFIED ASPHALT FOR THE TACK COAT SHALL BE EMULSIFIED ASPHALT, TYPE SS-1H (DILUTED) AT FOLLOWING APPLICATION RATES:
I. TACK COLD MILLED SURFACE 0.10 GAL/SQYD
II. TACK BETWEEN DENSE GRADE LIFTS 0.06 GAL/SQYD
III. TACK OPEN GRADE TO DENSE GRADE 0.07 GAL/SQYD

NOTE

STORM SEWER TWENTY FOUR(24) INCHES IN DIAMETER OR GREATER MAY BE INSTALLED WITH WATERTIGHT JOINTS USING AGENCY APPROVED INTERNAL ELASTOMERIC JOINT SEALANT, IN COMPLIANCE WITH ASTM C920, OR JOINT GASKETS, WITH PROVISIONS TO INSURE AGAINST DIFFERENTIAL SETTLEMENT OF THE STORM DRAIN.
AT MANHOLE INSTALLATION USE A WATERTIGHT GASKET BY A-LOK, KOR-N-SEAL OR APPROVED EQUAL.



PROFILE VIEW
H: 1"=30'
V: 1"=5'

NDOT NOTE:
NDOT PERMIT REQUIRED. CONTRACTOR TO OBTAIN NDOT OCCUPANCY PERMIT PRIOR TO CONSTRUCTION IN NDOT RIGHT OF WAY

CALL BEFORE YOU DIG
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.

FAST
Call before you dig
Underground
1-702-432-5300
FREEMAN AND ARTERIAL
SYSTEM OF TRANSPORTATION

1-702-227-2929

COLLINS ENGINEERS ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. IF A CONFLICT EXISTS BETWEEN WHAT IS SHOWN ON THESE DRAWINGS AND WHAT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE ARCHITECT OR ENGINEER IMMEDIATELY.

LEGEND		EXISTING		PROPOSED		EXISTING		PROPOSED		EXISTING		PROPOSED		EXISTING		PROPOSED																																																	
	ELEVATION TAG		DRAIN INLET		RETAINING WALL		SCREEN WALL		UTILITY POLE		STREET LIGHT		POWER LINE/POLE		TELEPHONE LINE		WATER LINE		SANITARY SEWER LINE		STORM SEWER LINE		GAS LINE		STORM MANHOLE		FIRE HYDRANT		FIRE DEPARTMENT CONNECTION		WATER VALVE		REDUCER		STORM MANHOLE		CLEANOUT		GAS VALVE		PL-RIGHT-OF-WAY		PL-ADJACENT CENTERLINE		EASEMENT LINE		FLOW LINE		SIGN WYE		SAWCUT		AREA LIGHT		WATER METER		AC PAVEMENT		6" TYPE "A" CURB		24" TYPE "L" CURB & GUTTER		30" ROLL CURB		BACK WATER VALVE