# Attachment 1 to Exhibit 2

# Schematics

# IH 635 MANAGED LANES PROJECT

## PLAN LEGEND

| | |
|---|---|
| GENERAL PURPOSE | EXISTING ROW |
| MANAGED LANES | PROPOSED ROW |
| FRONTAGE ROAD | CURBS |
| RAMPS | BARRIER |
| CROSS STREETS | BY OTHERS |
| BRIDGES | CONTROL OF ACCESS (COA) |
| CAPACITY IMPROVEMENT SECTION | TOLL GANTRY |
| NOISE WALL | COSS CANTILEVER OVERHEAD SIGN STRUCTURE |
| RETAINING WALL | OSB OVERHEAD SIGN BRIDGE |
| PROPOSED CULVERT | PC/PT LOCATION |
| | XXXXXX CHAIN NAME |

PROJECT DESIGN SPEEDS

| ROADWAY | DESIGN SPEED |
|---|---|
| GENERAL PURPOSE LANES | 60MPH |
| SURFACE & DEPRESSED HOV / MANAGED LANES | 60MPH |
| DIRECT CONNECTORS | 50MPH |
| ELEVATED CONNECTORS | 50MPH |
| FRONTAGE ROADS | 45MPH |
| RAMPS AND BYPASSES | 45MPH |
| ARTERIALS | 40MPH |
| COLLECTORS | 30MPH |

SUBSTRUCTURE UNITS NOT SHOWN FOR CLARITY. CONSTRUCTION OF SUBSTRUCTURE UNITS TO OCCUR BETWEEN PHASES 1 AND 3. BENTS SHOWN ARE AT LOCATIONS NEAR RESTRICTED SUBSTRUCTURE PLACEMENT AREAS. ALL BENT LOCATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE. NOTES 1 THROUGH 5 OF TxDOT'S SUBSTRUCTURE GUIDANCE EXHIBIT LAST PROVIDED TO DEVELOPER IN ADDENDUM 9 DATED OCTOBER 8, 2008 SHALL APPLY.

PROJECT LOCATION
IH635
FROM LUNA ROAD TO WEST OF COIT ROAD
STA 10533+63.00 TO STA 413+71.78
STA EQ: 10607+23.68 (BK) =40+00.00 (AH)

PROJECT LOCATION
IH35E
FROM IH35E/IH635 INTERCHANGE TO VALWOOD PKWY
STA 711+49.20 TO STA 823+00.00

PROJECT LOCATION
IH35E
FROM JOE'S CREEK TO IH35E/IH635 INTERCHANGE
STA 984+18.40 TO STA 711+49.20
STA EQ:1153+81.75 (BK) = 684+00.00 (AH)

PROJECT LOCATION
LOOP 12
FROM NORTHWEST HIGHWAY TO IH35E
STA 1498+60.73 TO STA 1512+42.00

PROJECT LOCATION
IH 635/ US 75 INTERCHANGE
FOR BARRIER & PAVEMENT MARKINGS IMPROVEMENTS

PROJECT LOCATION MAP
N.T.S.

CSJ:2374-01-068, ETC.

HIGHWAY CLASSIFICATION
URBAN INTERSTATE

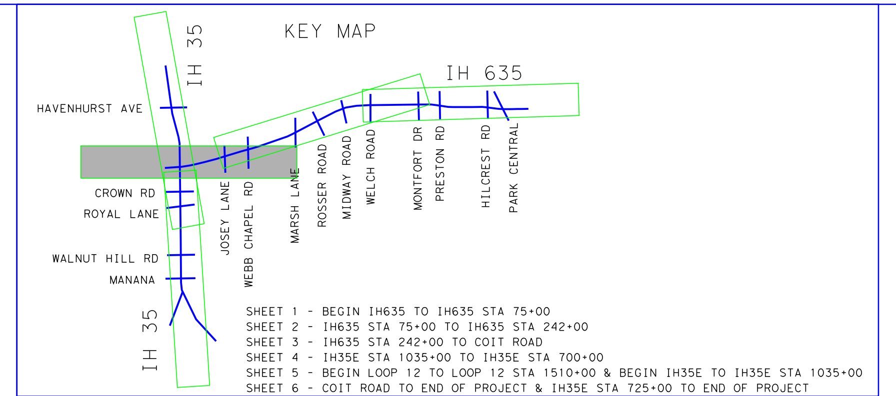
BRIDGEFARMER & ASSOCIATES, INC.
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES
INFORMATION ONLY
THIS DOCUMENT IS PREPARED UNDER THE SUPERVISION OF
MUHAMMAD MANSOOR AHSAN, P.E. # 83672
CHASE W. MYERS, P.E. # 94895
FIROZE SHAMS, P.E. # 97215
APRIL 2009

ROLL 1 OF 6

Cintra · meridiam infrastructure · ferrovial AGROMAN · W.W.WEBBER LLC CONTRACTORS CIVIL CONSTRUCTION

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS

Texas Department of Transportation © 2009




| ROADWAY | E MAX | BEGIN TRANSITION | | END TRANSITION | | BEGIN TRANSITION | | END TRANSITION | |
|---|---|---|---|---|---|---|---|---|---|
| | | STA | E | STA | E | STA | E | STA | E |
| D63WN35 | 6% | 10521+40 | NC | 10522+90 | -2.20% | 10524+90 | -2.20% | 10526+40 | NC |
| | | 10526+10 | NC | 10527+90 | -5.68% | 10531+80 | -5.68% | 10533+60 | NC |
| | | 10538+80 | NC | 10540+30 | 2.05% | 10543+10 | 2.05% | 10544+60 | NC |
| | | 10546+10 | NC | 10548+10 | 6.00% | 10560+30 | 6.00% | 10562+30 | NC |
| D35SE63 | 6% | 94+20 | NC | 95+70 | -3.40% | 97+00 | -3.40% | 98+50 | NC |
| | | 105+60 | NC | 107+50 | -5.93% | 124+00 | -5.93% | 125+90 | NC |
| D35NE63 | 6% | 1001+80 | NC | 1003+30 | 2.07% | 1007+30 | 2.07% | 1008+80 | 4.42% |
| | | 1007+30 | 4.42% | 1008+80 | 4.42% | 1009+80 | 4.42% | 1011+30 | NC |
| | | 1036+70 | NC | 1038+20 | 2.18% | 1055+20 | 2.18% | 1056+70 | NC |
| | | 1160+70 | NC | 1162+60 | 4.01% | 1189+10 | 4.01% | 1191+00 | NC |
| | | 1210+60 | NC | 1212+10 | -3.40% | 1215+50 | -3.40% | 1217+00 | NC |
| D63WS1 | 6% | 1039+20 | NC | 1040+70 | 2.81% | 1044+50 | 2.81% | 1046+00 | NC |
| | | 1046+90 | NC | 1048+40 | -2.41% | 1052+60 | -2.41% | 1054+10 | NC |
| | | 1173+40 | NC | 1178+10 | -6.00% | 1189+00 | -6.00% | 1193+70 | NC |

IH 635 MANAGED LANES PROJECT
PLAN LEGEND
ROLL 1 OF 6

# IH 635 MANAGED LANES PROJECT

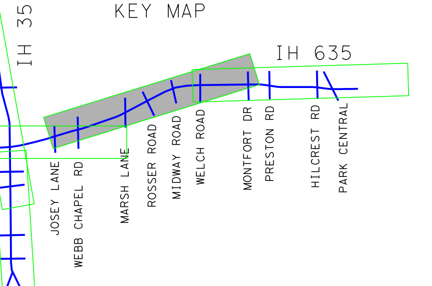
## PLAN LEGEND

| | |
|---|---|
| GENERAL PURPOSE | EXISTING ROW |
| MANAGED LANES | PROPOSED ROW |
| FRONTAGE ROAD | CURBS |
| RAMPS | BARRIER |
| CROSS STREETS | BY OTHERS |
| BRIDGES | CONTROL OF ACCESS (COA) |
| CAPACITY IMPROVEMENT SECTION | TOLL GANTRY |
| NOISE WALL | COSS CANTILEVER OVERHEAD SIGN STRUCTURE |
| RETAINING WALL | OSB OVERHEAD SIGN BRIDGE |
| PROPOSED CULVERT | PC/PT LOCATION |
| | XXXXXX CHAIN NAME |

PROJECT DESIGN SPEEDS

| ROADWAY | DESIGN SPEED |
|---|---|
| GENERAL PURPOSE LANES | 60MPH |
| SURFACE & DEPRESSED HOV / MANAGED LANES | 60MPH |
| DIRECT CONNECTORS | 50MPH |
| ELEVATED CONNECTORS | 50MPH |
| FRONTAGE ROADS | 45MPH |
| RAMPS AND BYPASSES | 45MPH |
| ARTERIALS | 40MPH |
| COLLECTORS | 30MPH |

SUBSTRUCTURE UNITS NOT SHOWN FOR CLARITY. CONSTRUCTION OF SUBSTRUCTURE UNITS TO OCCUR BETWEEN PHASES 1 AND 3. BENTS SHOWN ARE AT LOCATIONS NEAR RESTRICTED SUBSTRUCTURE PLACEMENT AREAS. ALL BENT LOCATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE. NOTES 1 THROUGH 5 OF TxDOT'S SUBSTRUCTURE GUIDANCE EXHIBIT LAST PROVIDED TO DEVELOPER IN ADDENDUM 9 DATED OCTOBER 8, 2008 SHALL APPLY.




SHEET 1 - BEGIN IH635 TO IH635 STA 75+00
SHEET 2 - IH635 STA 75+00 TO IH635 STA 242+00
SHEET 3 - IH635 STA 242+00 TO COIT ROAD
SHEET 4 - IH35E STA 1035+00 TO IH35E STA 700+00
SHEET 5 - BEGIN LOOP 12 TO LOOP 12 STA 1510+00 & BEGIN IH35E TO IH35E STA 1035+00
SHEET 6 - COIT ROAD TO END OF PROJECT & IH35E STA 725+00 TO END OF PROJECT

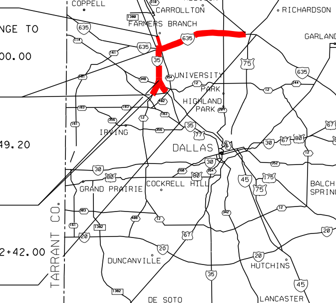
PROJECT LOCATION
IH635
FROM LUNA ROAD TO WEST OF COIT ROAD
STA 10533+63.00 TO STA 413+71.78
STA EQ: 10607+23.68 (BK) =40+00.00 (AH)

PROJECT LOCATION
IH35E
FROM IH35E/IH635 INTERCHANGE TO VALWOOD PKWY
STA 711+49.20 TO STA 823+00.00

PROJECT LOCATION
IH35E
FROM JOE'S CREEK TO IH35E/IH635 INTERCHANGE
STA 984+18.40 TO STA 711+49.20
STA EQ:1153+81.75 (BK) = 684+00.00 (AH)

PROJECT LOCATION
LOOP 12
FROM NORTHWEST HIGHWAY TO IH35E
STA 1498+60.73 TO STA 1512+42.00

PROJECT LOCATION
IH 635/ US 75 INTERCHANGE
FOR BARRIER & PAVEMENT MARKINGS IMPROVEMENTS




PROJECT LOCATION MAP
N.T.S.

CSJ:2374-01-068, ETC.

HIGHWAY CLASSIFICATION
URBAN INTERSTATE

BRIDGEFARMER & ASSOCIATES, INC.
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES
INFORMATION ONLY
THIS DOCUMENT IS PREPARED UNDER THE SUPERVISION OF
MUHAMMAD MANSOOR AHSAN, P.E. # 83672
CHASE W. MYERS, P.E. # 94895
FIROZE SHAMS, P.E. # 97215
APRIL 2009

100 50 0 100 200

ROLL 2 OF 6

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS

Texas Department of Transportation
© 2009

IH 635 MANAGED LANES PROJECT
PLAN LEGEND
PROJECT DESIGN SPEEDS
HIGHWAY CLASSIFICATION
URBAN INTERSTATE
BRIDGEFARMER & ASSOCIATES, INC.
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES
INFORMATION ONLY
ROLL 2 OF 6

# IH 635 MANAGED LANES PROJECT

## PLAN LEGEND

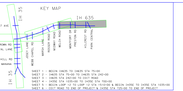
| | | | |
|---|---|---|---|
| EXISTING PAVEMENT | | EXISTING ROW | |
| PROPOSED PAVEMENT | | PROPOSED ROW | |
| EXISTING CURB | | CURBS | |
| CURBS | | BARRIER | |
| EXISTING STRUCTS | | STRUCTURE | |
| BRIDGES | | CENTER OF BRIDGE FLOW | |
| CAPACITY IMPROVEMENT SECTION | | TRUE NORTH | |
| RETAINING WALL | | PROPOSED SOUND WALL STRUCTURE | |
| RETAINING WALL | | CONCRETE FLUME BARRIER | |
| PROPOSED CULVERT | | BLUE LOCATION | |
| | | CLEAR ZONE | |

PROJECT DESIGN GROUND

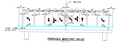
| | |
|---|---|
| EXISTING TERRAIN | BROWN |
| CAPACITY IMPROVEMENT SECTION | GRAY |
| BRIDGE | GRAY |
| RETAINING WALL | GRAY |
| SOUND WALL | GRAY |
| CURB AND GUTTERS | GRAY |
| BARRIER | GRAY |
| PROPOSED CULVERT | GRAY |

DESIGN DATA AND CRITERIA FOR THE MANAGED LANES PROJECT IS BASED ON THE TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) DESIGN CRITERIA AS SHOWN IN THE TXDOT ROADWAY DESIGN MANUAL, AASHTO GREEN BOOK, AND TXDOT SUPPLEMENTAL DESIGN CRITERIA DOCUMENT DATED JANUARY 2009.

## KEY MAP




| PROJECT | BEG. MILE | BEGIN CHAINAGE | END MILE | END CHAINAGE | BEGIN PROJECTION | END PROJECTION |
|---|---|---|---|---|---|---|
| 635 | 12.00 | 633+60.00 | 14.00 | 739+20.00 | 633+60.00 | 739+20.00 |
| 635 | 14.00 | 739+20.00 | 16.00 | 844+80.00 | 739+20.00 | 844+80.00 |
| 635 | 16.00 | 844+80.00 | 18.00 | 950+40.00 | 844+80.00 | 950+40.00 |
| 635 | 18.00 | 950+40.00 | 20.00 | 1056+00.00 | 950+40.00 | 1056+00.00 |
| 635 | 20.00 | 1056+00.00 | 22.00 | 1161+60.00 | 1056+00.00 | 1161+60.00 |
| 635 | 22.00 | 1161+60.00 | 24.00 | 1267+20.00 | 1161+60.00 | 1267+20.00 |
| 635 | 24.00 | 1267+20.00 | 26.00 | 1372+80.00 | 1267+20.00 | 1372+80.00 |
| 635 | 26.00 | 1372+80.00 | 28.00 | 1478+40.00 | 1372+80.00 | 1478+40.00 |
| 635 | 28.00 | 1478+40.00 | 30.00 | 1584+00.00 | 1478+40.00 | 1584+00.00 |
| 635 | 30.00 | 1584+00.00 | 32.00 | 1689+60.00 | 1584+00.00 | 1689+60.00 |
| 635 | 32.00 | 1689+60.00 | 34.00 | 1795+20.00 | 1689+60.00 | 1795+20.00 |
| 635 | 34.00 | 1795+20.00 | 36.00 | 1900+80.00 | 1795+20.00 | 1900+80.00 |
| 635 | 36.00 | 1900+80.00 | 38.00 | 2006+40.00 | 1900+80.00 | 2006+40.00 |
| 635 | 38.00 | 2006+40.00 | 40.00 | 2112+00.00 | 2006+40.00 | 2112+00.00 |



COLLECTION OF ORIG. DTA.

PREPARED IN ACCORDANCE WITH:
DEVELOPMENT & ASSOCIATES, INC.
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

THIS DOCUMENT IS PRELIMINARY UNTIL THE SUBMISSION OF THE FINAL PLANS, SPECIFICATIONS, AND ESTIMATE.
CHARLES W. MITCHELL, P.E., P. ENGINEER
TEXAS LICENSE NO. 102311
APRIL 2009

SHEET 1 OF 6

Cintra meridam ferrovial agroman HUNTING ENERGY SERVICES

BRIDGEFARMER & ASSOCIATES, INC.
TRANSPORTATION ENGINEERS

Texas Department of Transportation

IH 635 MANAGED LANES PROJECT

PLAN LEGEND

PROJECT DESIGN GROUND

DESIGN DATA AND CRITERIA FOR THE MANAGED LANES PROJECT IS BASED ON THE TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) DESIGN CRITERIA AS SHOWN IN THE TXDOT ROADWAY DESIGN MANUAL, AASHTO GREEN BOOK, AND TXDOT SUPPLEMENTAL DESIGN CRITERIA DOCUMENT DATED JANUARY 2009.

PROJECT LOCATION
FROM: PARKS RANCH INTERCHANGE TO: STATE HIGHWAY 78
PROJECT LOCATION
FROM: IH 30 (DALLAS)
TO: IH 35E (DALLAS)
STA. BEGIN: 633+60.00 (12.00 MILES)
STA. END: 2112+00.00 (40.00 MILES)
PROJECT LOCATION
FROM: IH 35E (DALLAS)
TO: IH 45 (DALLAS)
STA. BEGIN: 2112+00.00 (40.00 MILES)
STA. END: 2239+00.00 (42.40 MILES)
PROJECT LOCATION
FROM: IH 45 (DALLAS)
TO: STATE HIGHWAY 78
STA. BEGIN: 2239+00.00 (42.40 MILES)
STA. END: 2344+00.00 (44.40 MILES)

COLLECTION OF ORIG. DTA.

PREPARED IN ACCORDANCE WITH:
DEVELOPMENT & ASSOCIATES, INC.
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

THIS DOCUMENT IS PRELIMINARY UNTIL THE SUBMISSION OF THE FINAL PLANS, SPECIFICATIONS, AND ESTIMATE.
CHARLES W. MITCHELL, P.E., P. ENGINEER
TEXAS LICENSE NO. 102311
APRIL 2009

SHEET 1 OF 6

Cintra meridam ferrovial agroman HUNTING ENERGY SERVICES

BRIDGEFARMER & ASSOCIATES, INC.
TRANSPORTATION ENGINEERS

Texas Department of Transportation

# IH 635 MANAGED LANES PROJECT

## PLAN LEGEND

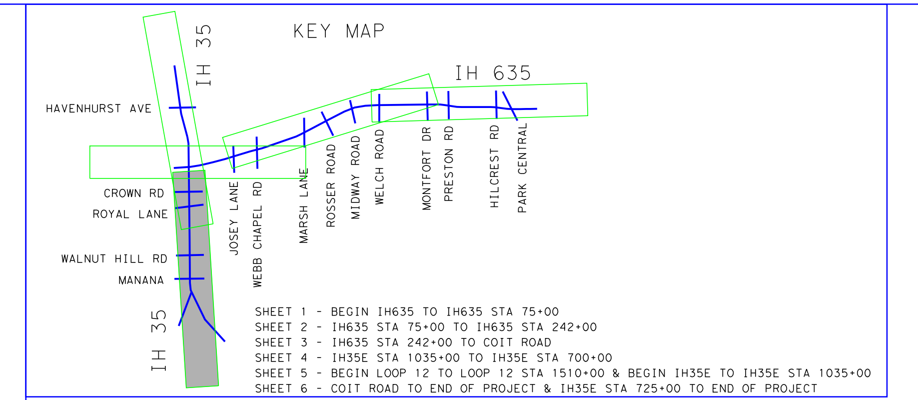
| | |
|---|---|
| GENERAL PURPOSE | EXISTING ROW |
| MANAGED LANES | PROPOSED ROW |
| FRONTAGE ROAD | CURBS |
| RAMPS | BARRIER |
| CROSS STREETS | BY OTHERS |
| BRIDGES | CONTROL OF ACCESS (COA) |
| CAPACITY IMPROVEMENT SECTION | TOLL GANTRY |
| NOISE WALL | COSS CANTILEVER OVERHEAD SIGN STRUCTURE |
| RETAINING WALL | OSB OVERHEAD SIGN BRIDGE |
| PROPOSED CULVERT | PC/PT LOCATION |
| | XXXXXX CHAIN NAME |

PROJECT DESIGN SPEEDS

| ROADWAY | DESIGN SPEED |
|---|---|
| GENERAL PURPOSE LANES | 60MPH |
| SURFACE & DEPRESSED HOV / MANAGED LANES | 60MPH |
| DIRECT CONNECTORS | 50MPH |
| ELEVATED CONNECTORS | 50MPH |
| FRONTAGE ROADS | 45MPH |
| RAMPS AND BYPASSES | 45MPH |
| ARTERIALS | 40MPH |
| COLLECTORS | 30MPH |

SUBSTRUCTURE UNITS NOT SHOWN FOR CLARITY. CONSTRUCTION OF SUBSTRUCTURE UNITS TO OCCUR BETWEEN PHASES 1 AND 3. BENTS SHOWN ARE AT LOCATIONS NEAR RESTRICTED SUBSTRUCTURE PLACEMENT AREAS. ALL BENT LOCATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE. NOTES 1 THROUGH 5 OF TxDOT'S SUBSTRUCTURE GUIDANCE EXHIBIT LAST PROVIDED TO DEVELOPER IN ADDENDUM 9 DATED OCTOBER 8, 2008 SHALL APPLY.

## KEY MAP




SHEET 1 - BEGIN IH635 TO IH635 STA 75+00
SHEET 2 - IH635 STA 75+00 TO IH635 STA 242+00
SHEET 3 - IH635 STA 242+00 TO COIT ROAD
SHEET 4 - IH35E STA 1035+00 TO IH35E STA 700+00
SHEET 5 - BEGIN LOOP 12 TO LOOP 12 STA 1510+00 & BEGIN IH35E TO IH35E STA 1035+00
SHEET 6 - COIT ROAD TO END OF PROJECT & IH35E STA 725+00 TO END OF PROJECT

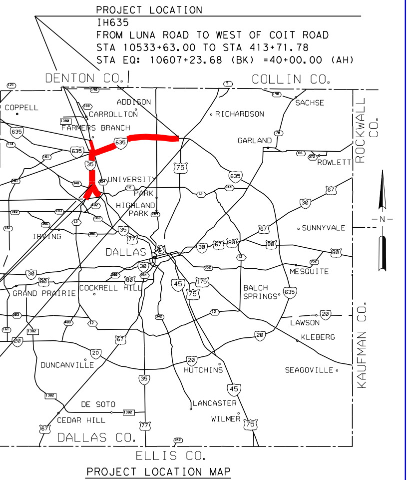
PROJECT LOCATION
IH635
FROM LUNA ROAD TO WEST OF COIT ROAD
STA 10533+63.00 TO STA 413+71.78
STA EQ: 10607+23.68 (BK) =40+00.00 (AH)

PROJECT LOCATION
IH35E
FROM IH35E/IH635 INTERCHANGE TO VALWOOD PKWY
STA 711+49.20 TO STA 823+00.00

PROJECT LOCATION
IH35E
FROM JOE'S CREEK TO IH35E/IH635 INTERCHANGE
STA 984+18.40 TO STA 711+49.20
STA EQ:1153+81.75 (BK) = 684+00.00 (AH)

PROJECT LOCATION
LOOP 12
FROM NORTHWEST HIGHWAY TO IH35E
STA 1498+60.73 TO STA 1512+42.00

PROJECT LOCATION
IH 635/ US 75 INTERCHANGE
FOR BARRIER & PAVEMENT MARKINGS IMPROVEMENTS




PROJECT LOCATION MAP
N.T.S.

CSJ:2374-01-068, ETC.

HIGHWAY CLASSIFICATION
URBAN INTERSTATE

BRIDGEFARMER & ASSOCIATES, INC.
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES
INFORMATION ONLY
THIS DOCUMENT IS PREPARED UNDER THE SUPERVISION OF
MUHAMMAD MANSOOR AHSAN, P.E. # 83672
CHASE W. MYERS, P.E. # 94895
FIROZE SHAMS, P.E. # 97215
APRIL 2009

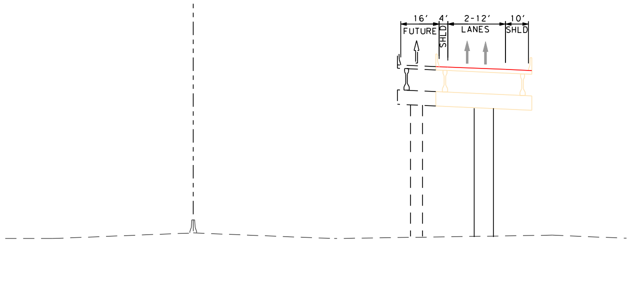
100 50 0 100 200

ROLL **4** OF **6**

Cintra
meridiam infrastructure
ferrovial AGROMAN
W.W.WEBBER LLC CONTRACTORS CIVIL CONSTRUCTION

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS

Texas Department of Transportation
© 2009




TYPICAL SECTION
STA 1055+00 TO STA 1154+00

| ROADWAY | E MAX | BEGIN TRANSITION | | END TRANSITION | | BEGIN TRANSITION | | END TRANSITION | |
|---|---|---|---|---|---|---|---|---|---|
| | | STA | E | STA | E | STA | E | STA | E |
| D35NE63 | 6% | 1001+80 | NC | 1003+30 | 2.07% | 1007+30 | 2.07% | 1008+80 | 4.42% |
| | | 1007+30 | 4.42% | 1008+80 | 4.42% | 1009+80 | 4.42% | 1011+30 | NC |
| | | 1036+70 | NC | 1038+20 | 2.18% | 1055+20 | 2.18% | 1056+70 | NC |
| | | 1160+70 | NC | 1162+60 | 4.01% | 1189+10 | 4.01% | 1191+00 | NC |
| | | 1210+60 | NC | 1212+10 | -3.40% | 1215+50 | -3.40% | 1217+00 | NC |
| D63WS1 | 6% | 1039+20 | NC | 1040+70 | 2.81% | 1044+50 | 2.81% | 1046+00 | NC |
| | | 1046+90 | NC | 1048+40 | -2.41% | 1052+60 | -2.41% | 1054+10 | NC |
| | | 1173+40 | NC | 1178+10 | -6.00% | 1189+00 | -6.00% | 1193+70 | NC |
| D12NNHV | 6% | 1031+30 | NC | 1032+80 | 3.51% | 1033+20 | 3.51% | 1034+70 | NC |
| | | 1035+10 | NC | 1036+60 | -4.44% | 1045+40 | -4.44% | 1048+52 | 2.18% |
| DHVSS35 | 6% | 1014+70 | NC | 1016+20 | -3.51% | 1019+30 | -3.51% | 1020+80 | NC |
| | | 1024+50 | NC | 1026+00 | 3.40% | 1028+60 | 3.40% | 1030+10 | NC |
| | | 1038+20 | NC | 1039+70 | -3.80% | 1051+50 | -3.80% | 1053+00 | NC |

IH 635 MANAGED LANES PROJECT
PLAN LEGEND
PROJECT DESIGN SPEEDS
HIGHWAY CLASSIFICATION
URBAN INTERSTATE
BRIDGEFARMER & ASSOCIATES, INC.
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES
INFORMATION ONLY
CSJ:2374-01-068, ETC.
ROLL 4 OF 6
BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Texas Department of Transportation

# IH 635 MANAGED LANES PROJECT

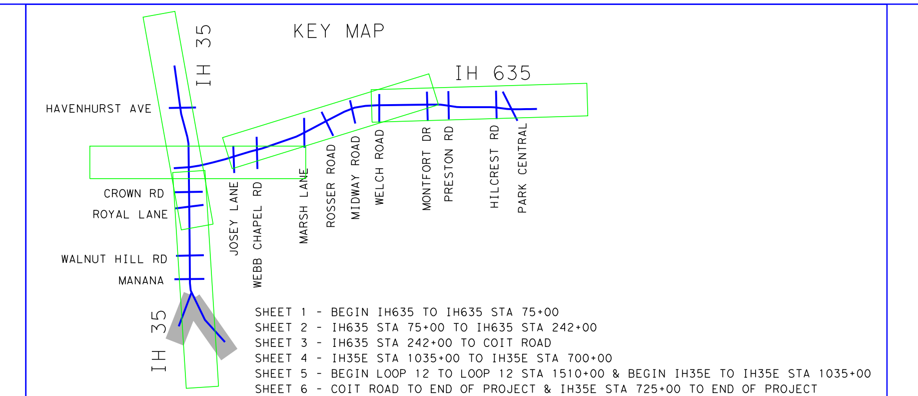
## PLAN LEGEND

| | |
|---|---|
| GENERAL PURPOSE | EXISTING ROW |
| MANAGED LANES | PROPOSED ROW |
| FRONTAGE ROAD | CURBS |
| RAMPS | BARRIER |
| CROSS STREETS | BY OTHERS |
| BRIDGES | CONTROL OF ACCESS (COA) |
| CAPACITY IMPROVEMENT SECTION | TOLL GANTRY |
| NOISE WALL | COSS CANTILEVER OVERHEAD SIGN STRUCTURE |
| RETAINING WALL | OSB OVERHEAD SIGN BRIDGE |
| PROPOSED CULVERT | PC/PT LOCATION |
| | XXXXXX CHAIN NAME |

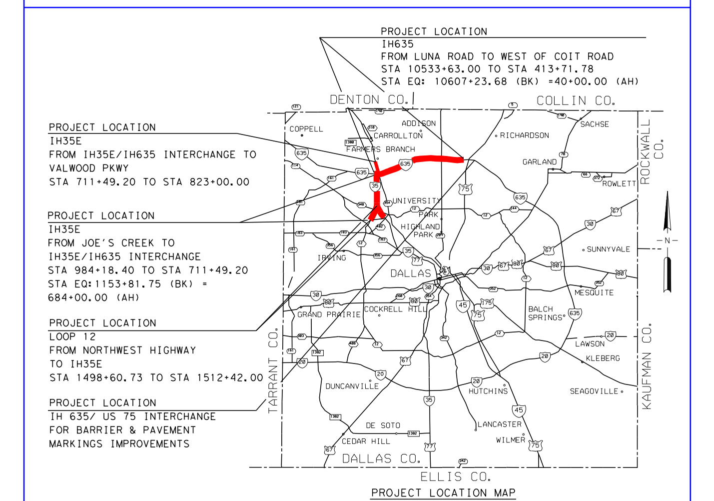
PROJECT DESIGN SPEEDS

| ROADWAY | DESIGN SPEED |
|---|---|
| GENERAL PURPOSE LANES | 60MPH |
| SURFACE & DEPRESSED HOV / MANAGED LANES | 60MPH |
| DIRECT CONNECTORS | 50MPH |
| ELEVATED CONNECTORS | 50MPH |
| FRONTAGE ROADS | 45MPH |
| RAMPS AND BYPASSES | 45MPH |
| ARTERIALS | 40MPH |
| COLLECTORS | 30MPH |

SUBSTRUCTURE UNITS NOT SHOWN FOR CLARITY. CONSTRUCTION OF SUBSTRUCTURE UNITS TO OCCUR BETWEEN PHASES 1 AND 3. BENTS SHOWN ARE AT LOCATIONS NEAR RESTRICTED SUBSTRUCTURE PLACEMENT AREAS. ALL BENT LOCATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE. NOTES 1 THROUGH 5 OF TxDOT'S SUBSTRUCTURE GUIDANCE EXHIBIT LAST PROVIDED TO DEVELOPER IN ADDENDUM 9 DATED OCTOBER 8, 2008 SHALL APPLY.




PROJECT LOCATION
IH635
FROM LUNA ROAD TO WEST OF COIT ROAD
STA 10533+63.00 TO STA 413+71.78




PROJECT LOCATION
IH 635/ US 75 INTERCHANGE
FOR BARRIER & PAVEMENT
MARKINGS IMPROVEMENTS

CSJ:2374-01-068, ETC.

PROJECT LOCATION MAP
N.T.S.

HIGHWAY CLASSIFICATION
URBAN INTERSTATE

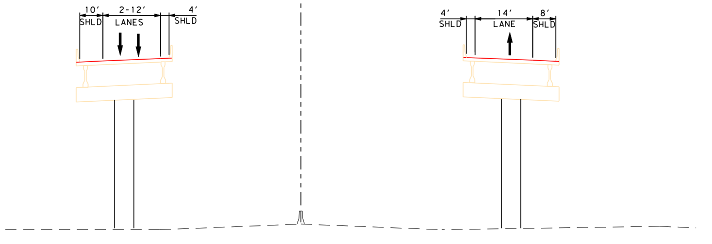
BRIDGEFARMER & ASSOCIATES, INC.
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES
INFORMATION ONLY
THIS DOCUMENT IS PREPARED UNDER THE SUPERVISION OF
MUHAMMAD MANSOOR AHSAN, P.E. # 83672
CHASE W. MYERS, P.E. # 94895
FIROZE SHAMS, P.E. # 97215
APRIL 2009

100 50 0 100 200

ROLL 5 OF 6

BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Texas Department of Transportation
© 2009

| ROADWAY | E MAX | BEGIN TRANSITION | | END TRANSITION | | BEGIN TRANSITION | | END TRANSITION | |
|---|---|---|---|---|---|---|---|---|---|
| | | STA | E | STA | E | STA | E | STA | E |
| D35NE63 | 6% | 1001+80 | NC | 1003+30 | 2.07% | 1007+30 | 2.07% | 1008+80 | 4.42% |
| | | 1007+30 | 4.42% | 1008+80 | 4.42% | 1009+80 | 4.42% | 1011+30 | NC |
| | | 1036+70 | NC | 1038+20 | 2.18% | 1055+20 | 2.18% | 1056+70 | NC |
| | | 1160+70 | NC | 1162+60 | 4.01% | 1189+10 | 4.01% | 1191+00 | NC |
| | | 1210+60 | NC | 1212+10 | -3.40% | 1215+50 | -3.40% | 1217+00 | NC |
| D63WS1 | 6% | 1039+20 | NC | 1040+70 | 2.81% | 1044+50 | 2.81% | 1046+00 | NC |
| | | 1046+90 | NC | 1048+40 | -2.41% | 1052+60 | -2.41% | 1054+10 | NC |
| | | 1173+40 | NC | 1178+10 | -6.00% | 1189+00 | -6.00% | 1193+70 | NC |
| D12NNHV | 6% | 1031+30 | NC | 1032+80 | 3.51% | 1033+20 | 3.51% | 1034+70 | NC |
| | | 1035+10 | NC | 1036+60 | -4.44% | 1045+40 | -4.44% | 1048+52 | 2.18% |
| DHVSS35 | 6% | 1014+70 | NC | 1016+20 | -3.51% | 1019+30 | -3.51% | 1020+80 | NC |
| | | 1024+50 | NC | 1026+00 | 3.40% | 1028+60 | 3.40% | 1030+10 | NC |
| | | 1038+20 | NC | 1039+70 | -3.80% | 1051+50 | -3.80% | 1053+00 | NC |




TYPICAL SECTION
STA 1000+00 TO STA 1035+00


| ROADWAY | E MAX | BEGIN TRANSITION | | END TRANSITION | | BEGIN TRANSITION | | END TRANSITION | |
|---|---|---|---|---|---|---|---|---|---|
| | | STA | E | STA | E | STA | E | STA | E |
| D35NE63 | 6% | 1001+80 | NC | 1003+30 | 2.07% | 1007+30 | 2.07% | 1008+80 | 4.42% |
| | | 1007+30 | 4.42% | 1008+80 | 4.42% | 1009+80 | 4.42% | 1011+30 | NC |
| | | 1036+70 | NC | 1038+20 | 2.18% | 1055+20 | 2.18% | 1056+70 | NC |
| | | 1160+70 | NC | 1162+60 | 4.01% | 1189+10 | 4.01% | 1191+00 | NC |
| | | 1210+60 | NC | 1212+10 | -3.40% | 1215+50 | -3.40% | 1217+00 | NC |
| D63WS1 | 6% | 1039+20 | NC | 1040+70 | 2.81% | 1044+50 | 2.81% | 1046+00 | NC |
| | | 1046+90 | NC | 1048+40 | -2.41% | 1052+60 | -2.41% | 1054+10 | NC |
| | | 1173+40 | NC | 1178+10 | -6.00% | 1189+00 | -6.00% | 1193+70 | NC |
| D12NNHV | 6% | 1031+30 | NC | 1032+80 | 3.51% | 1033+20 | 3.51% | 1034+70 | NC |
| | | 1035+10 | NC | 1036+60 | -4.44% | 1045+40 | -4.44% | 1048+52 | 2.18% |
| DHVSS35 | 6% | 1014+70 | NC | 1016+20 | -3.51% | 1019+30 | -3.51% | 1020+80 | NC |
| | | 1024+50 | NC | 1026+00 | 3.40% | 1028+60 | 3.40% | 1030+10 | NC |
| | | 1038+20 | NC | 1039+70 | -3.80% | 1051+50 | -3.80% | 1053+00 | NC |

IH 635 MANAGED LANES PROJECT

# IH 635 MANAGED LANES PROJECT

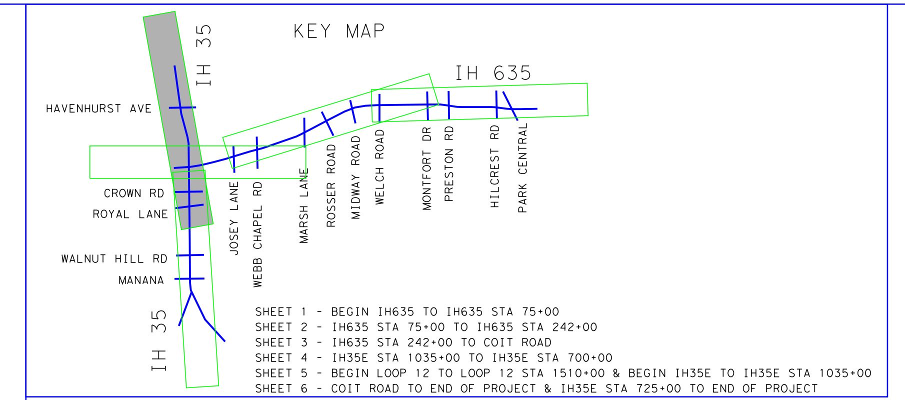
## PLAN LEGEND

| | |
|---|---|
| GENERAL PURPOSE | EXISTING ROW |
| MANAGED LANES | PROPOSED ROW |
| FRONTAGE ROAD | CURBS |
| RAMPS | BARRIER |
| CROSS STREETS | BY OTHERS |
| BRIDGES | CONTROL OF ACCESS (COA) |
| CAPACITY IMPROVEMENT SECTION | TOLL GANTRY |
| NOISE WALL | COSS CANTILEVER OVERHEAD SIGN STRUCTURE |
| RETAINING WALL | OSB OVERHEAD SIGN BRIDGE |
| PROPOSED CULVERT | PC/PT LOCATION |
| | XXXXXX CHAIN NAME |

PROJECT DESIGN SPEEDS

| ROADWAY | DESIGN SPEED |
|---|---|
| GENERAL PURPOSE LANES | 60MPH |
| SURFACE & DEPRESSED HOV / MANAGED LANES | 60MPH |
| DIRECT CONNECTORS | 50MPH |
| ELEVATED CONNECTORS | 50MPH |
| FRONTAGE ROADS | 45MPH |
| RAMPS AND BYPASSES | 45MPH |
| ARTERIALS | 40MPH |
| COLLECTORS | 30MPH |

SUBSTRUCTURE UNITS NOT SHOWN FOR CLARITY. CONSTRUCTION OF SUBSTRUCTURE UNITS TO OCCUR BETWEEN PHASES 1 AND 3. BENTS SHOWN ARE AT LOCATIONS NEAR RESTRICTED SUBSTRUCTURE PLACEMENT AREAS. ALL BENT LOCATIONS ARE PRELIMINARY AND SUBJECT TO CHANGE. NOTES 1 THROUGH 5 OF TxDOT'S SUBSTRUCTURE GUIDANCE EXHIBIT LAST PROVIDED TO DEVELOPER IN ADDENDUM 9 DATED OCTOBER 8, 2008 SHALL APPLY.



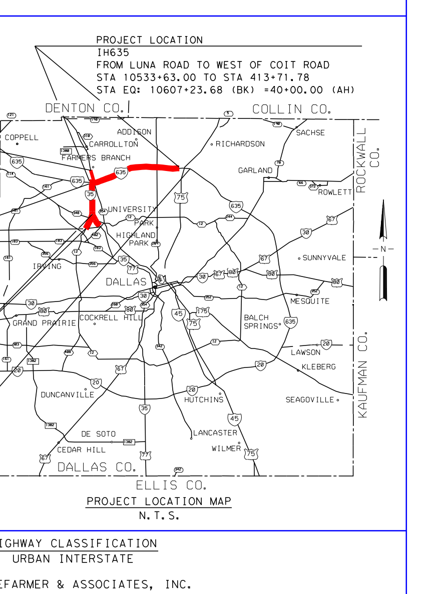

PROJECT LOCATION
IH635
FROM LUNA ROAD TO WEST OF COIT ROAD
STA 10533+63.00 TO STA 413+71.78
STA EQ: 10607+23.68 (BK) =40+00.00 (AH)

PROJECT LOCATION
IH35E
FROM IH35E/IH635 INTERCHANGE TO VALWOOD PKWY
STA 711+49.20 TO STA 823+00.00

PROJECT LOCATION
IH35E
FROM JOE'S CREEK TO IH35E/IH635 INTERCHANGE
STA 984+18.40 TO STA 711+49.20
STA EQ:1153+81.75 (BK) = 684+00.00 (AH)

PROJECT LOCATION
LOOP 12
FROM NORTHWEST HIGHWAY TO IH35E
STA 1498+60.73 TO STA 1512+42.00

PROJECT LOCATION
IH 635/ US 75 INTERCHANGE
FOR BARRIER & PAVEMENT MARKINGS IMPROVEMENTS




PROJECT LOCATION MAP
N.T.S.

CSJ:2374-01-068, ETC.

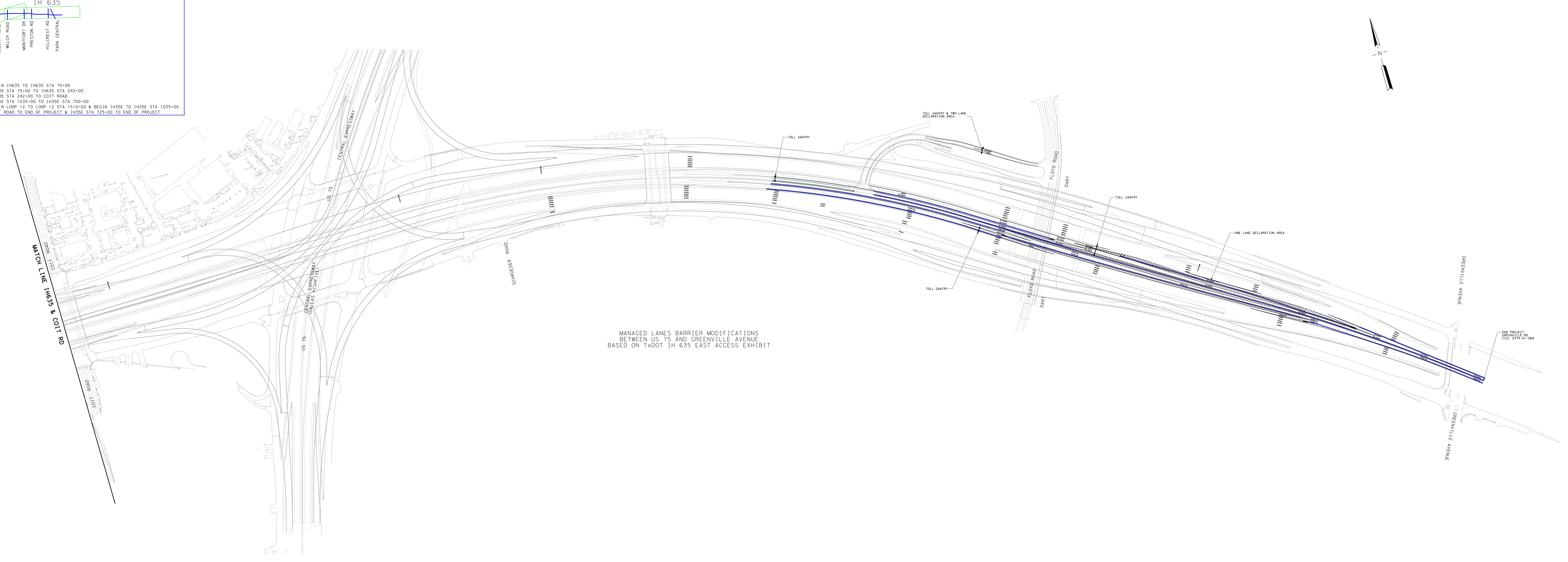
HIGHWAY CLASSIFICATION
URBAN INTERSTATE

BRIDGEFARMER & ASSOCIATES, INC.
NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES
INFORMATION ONLY
THIS DOCUMENT IS PREPARED UNDER THE SUPERVISION OF
MUHAMMAD MANSOOR AHSAN, P.E. # 83672
CHASE W. MYERS, P.E. # 94895
FIROZE SHAMS, P.E. # 97215
APRIL 2009

100 50 0 100 200

ROLL 6 OF 6

Cintra
meridiam infrastructure
ferrovial AGROMAN
W.W.WEBBER LLC CONTRACTORS CIVIL CONSTRUCTION
BRIDGEFARMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Texas Department of Transportation
© 2009




MANAGED LANES BARRIER MODIFICATIONS
BETWEEN US 75 AND GREENVILLE AVENUE
BASED ON TxDOT IH 635 EAST ACCESS EXHIBIT

| ROADWAY | E MAX | BEGIN TRANSITION | | END TRANSITION | | BEGIN TRANSITION | | END TRANSITION | |
|---|---|---|---|---|---|---|---|---|---|
| | | STA | E | STA | E | STA | E | STA | E |
| D63WN35 | 6% | 10521+40 | NC | 10522+90 | -2.20% | 10524+90 | -2.20% | 10526+40 | NC |
| | | 10526+10 | NC | 10527+90 | -5.68% | 10531+80 | -5.68% | 10533+60 | NC |
| | | 10538+80 | NC | 10540+30 | 2.05% | 10543+10 | 2.05% | 10544+60 | NC |
| | | 10546+10 | NC | 10548+10 | 6.00% | 10560+30 | 6.00% | 10562+30 | NC |
| D35SE63 | 6% | 94+20 | NC | 95+70 | -3.40% | 97+00 | -3.40% | 98+50 | NC |
| | | 105+60 | NC | 107+50 | -5.93% | 124+00 | -5.93% | 125+90 | NC |


IH 635 MANAGED LANES PROJECT
PLAN LEGEND
PROJECT DESIGN SPEEDS
PROJECT LOCATION MAP
CSJ:2374-01-068, ETC.
HIGHWAY CLASSIFICATION
URBAN INTERSTATE
ROLL 6 OF 6