

CITY COUNCIL ACTION REPORT

June 5, 2009

TO: John Szerlag, Acting City Manager

FROM: Brian P. Murphy, Asst. City Manager/Economic Development Services
Steven J. Vandette, City Engineer *SV*

SUBJECT: Agenda Item – MDOT Resolution for Big Beaver / I-75 Interchange Enhancements

Project Description:

The Big Beaver / I-75 Interchange Enhancement is one of the projects adopted by City Council and the Troy Downtown Development Authority (DDA) as part of the Big Beaver Corridor Study.

The project will add significant landscaping in and around the interchange of I-75 and Big Beaver. Enhancements under the I-75 bridge include new 8' wide sidewalks, new decorative fencing and panels, addition of lighting under the bridge and painting the remaining portions of the bridge from the beams down to the pavement. The improvements within the loop ramp areas include significant landscaping, construction of two ponds, irrigation and reestablishment of grass.

Along Big Beaver on each side of the bridge are two vertical iconic features with lights and landscaping around their bases. The project will have a major impact on aesthetics and walkability; enhancing pedestrian mobility within the Big Beaver corridor. The project will also improve pedestrian safety at all intersection crosswalks by upgrading the sidewalks and cross walks to comply with the latest American's with Disabilities Act (ADA) requirements and by adding a pedestrian signal at the off ramp at eastbound Big Beaver, west of the bridge.

Background:

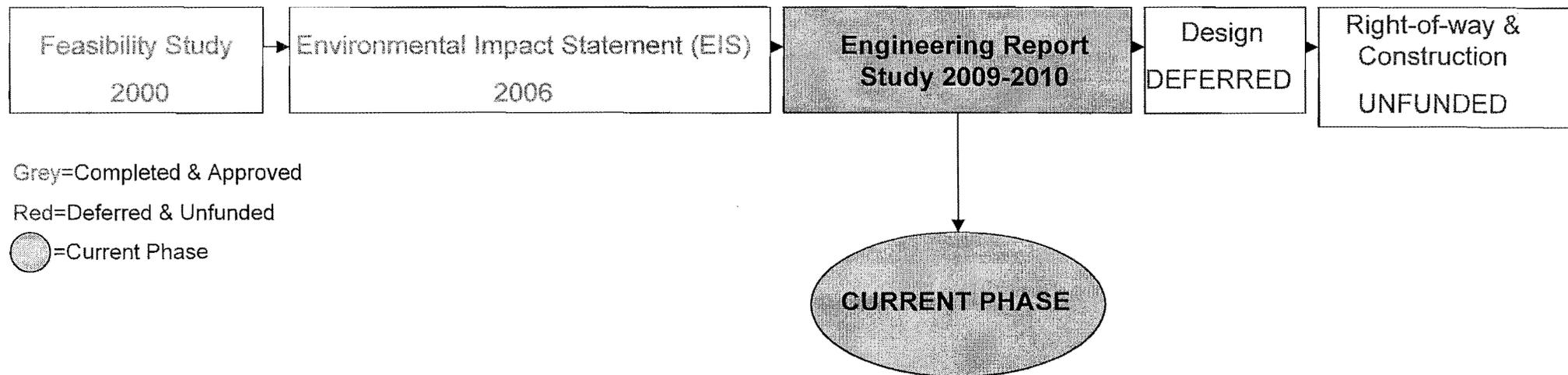
- The Key Concepts of the Big Beaver Corridor Study were adopted by City Council, the Planning Commission and the DDA in 2006.
- In 2007 the Troy DDA and City Council approved the Troy Downtown Development Plan #6, which includes the I-75 Interchange Improvements as well as various public thoroughfares, intersections and service roads, park improvements and property acquisition.
- The Big Beaver / I-75 Interchange Enhancement project is scheduled to be out for bids this summer and construction to start late summer or fall. Project completion is spring of 2010.
- The Interchange Enhancement project involves work within the Michigan Department of Transportation (MDOT) right-of-way and requires a permit from MDOT. During the project design and permit review process, the potential future widening of I-75 was considered by the City and MDOT so that future conflicts could be minimized.

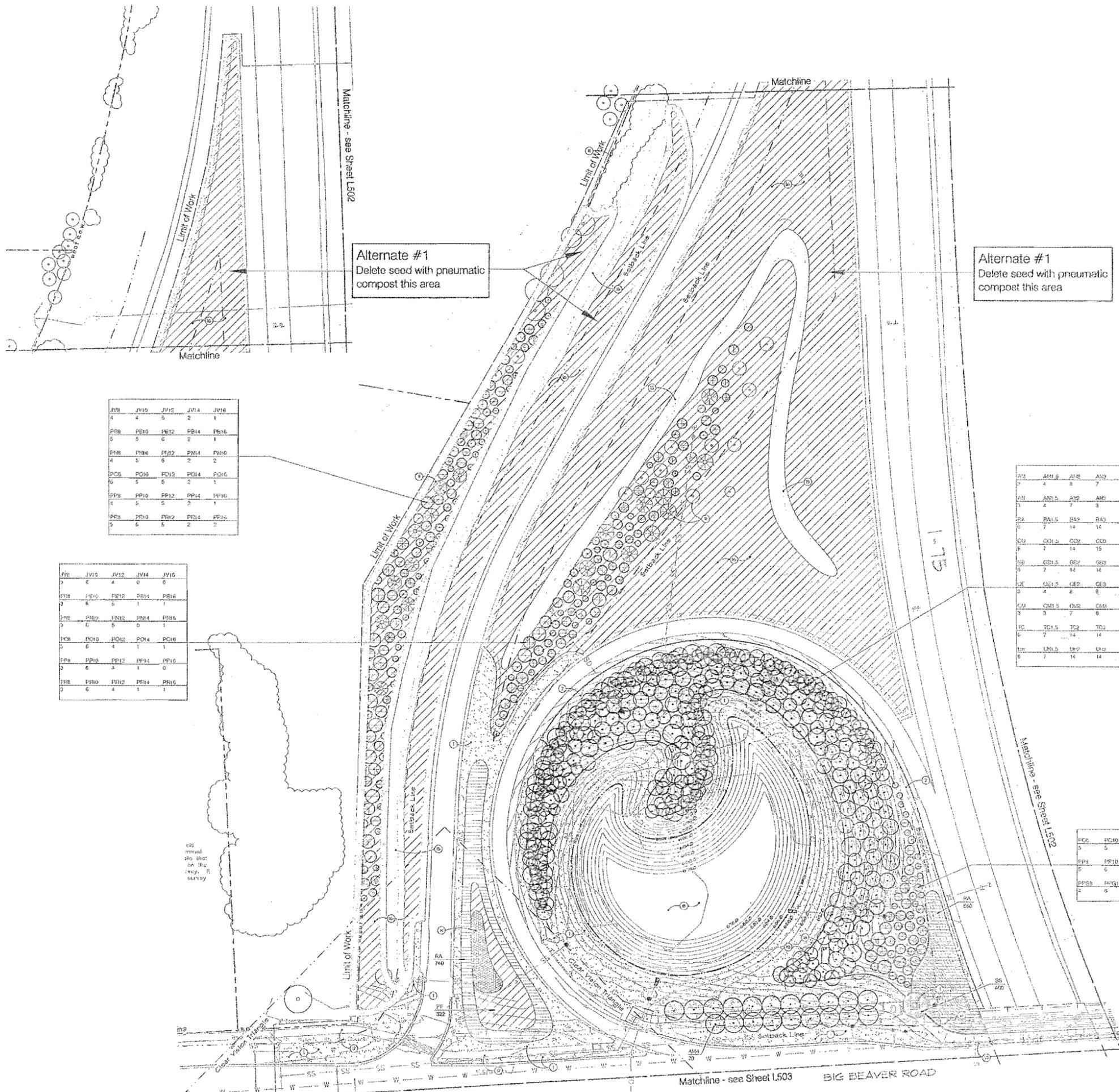
- The final I-75 Corridor Study adopted in 2000 recommended adding one lane in each direction within the median to provide four (4) lanes in each direction. This construction within the median would not impact the landscaping, grading and pond improvements constructed for the enhancement project, which are located within the loop ramp areas of the interchange.
- The final I-75 Corridor Study, completed in 2000, indicates no interchange reconfiguration for the Big Beaver / I-75 interchange. The loop ramps and the interior of the loop ramps are proposed to remain as they are.
- The schedule for the future widening is unknown, but the project is likely to be many years in the future given the current state of the economy, current poor conditions on state roads and significant road funding problems facing the state of Michigan.
- An Environmental Impact Statement (EIS) study for the I-75 widening was completed in January 2006.
- The next phase is the Engineering Report study phase, which has begun and will further examine complex, engineering elements in detail while trying to refine impacts to the local communities. The Engineering Report study is expected to take two years and be complete in 2010.
- The next phase, Design activities for the I-75 widening project, have been deferred. According to MDOT, there is no money available to move to this next phase of the project.
- The last phase, right-of-way acquisition and construction, are also unfunded.
- Given the plan for future widening project and in accordance with standard MDOT requirements for any local enhancement project within state highway right-of-way, MDOT is requiring that the City adopt a resolution that acknowledges that MDOT has this future widening project along I-75 in Oakland County and that despite current corridor study information to the contrary, acknowledge that the interchange enhancement project may be impacted by the future widening project. Therefore, MDOT requires that any improvements that may be impacted by the future I-75 widening project must be removed without cost to MDOT prior to the start of the I-75 widening project.
- The recommended resolution has been reviewed and approved by MDOT.
- Adoption of the recommended resolution is required by MDOT in order to receive a permit for the work.

Recommendation:

- Staff recommends that City Council approve the recommended resolution to acknowledge the future widening of I-75 and that any Big Beaver / I-75 Interchange improvements that may be impacted by the future widening project will be removed at city cost.

I-75 CORRIDOR, OAKLAND COUNTY ENGINEERING REPORT STUDY





Alternate #1
Delete seed with pneumatic
compost this area

Alternate #1
Delete seed with pneumatic
compost this area

| | | | | |
|-----|------|------|------|------|
| JV8 | JV10 | JV12 | JV14 | JV18 |
| 4 | 4 | 5 | 2 | 1 |
| PE8 | PE10 | PE12 | PE14 | PE16 |
| 5 | 5 | 6 | 2 | 1 |
| PH8 | PH10 | PH12 | PH14 | PH16 |
| 4 | 5 | 6 | 2 | 2 |
| PO8 | PO10 | PO12 | PO14 | PO16 |
| 6 | 5 | 6 | 2 | 1 |
| PP8 | PP10 | PP12 | PP14 | PP16 |
| 4 | 5 | 5 | 2 | 1 |
| PR8 | PR10 | PR12 | PR14 | PR16 |
| 5 | 5 | 5 | 2 | 2 |

| | | | | |
|-----|------|------|------|------|
| JV6 | JV10 | JV12 | JV14 | JV16 |
| 3 | 4 | 4 | 0 | 0 |
| PE6 | PE10 | PE12 | PE14 | PE16 |
| 3 | 4 | 5 | 1 | 1 |
| PH6 | PH10 | PH12 | PH14 | PH16 |
| 3 | 0 | 5 | 0 | 1 |
| PO6 | PO10 | PO12 | PO14 | PO16 |
| 3 | 0 | 4 | 1 | 1 |
| PP6 | PP10 | PP12 | PP14 | PP16 |
| 3 | 6 | 4 | 1 | 0 |
| PR6 | PR10 | PR12 | PR14 | PR16 |
| 3 | 0 | 4 | 1 | 1 |

| | | | | | |
|------|------|-----|-----|-----|-----|
| AN | AN15 | AN2 | AN3 | AN4 | AN5 |
| 3 | 4 | 7 | 3 | 3 | 2 |
| BA15 | BA2 | BA3 | BA4 | BA5 | |
| 7 | 14 | 14 | 6 | 3 | |
| CO15 | CO2 | CO3 | CO4 | CO5 | |
| 7 | 14 | 15 | 5 | 3 | |
| GE15 | GE2 | GE3 | GE4 | GE5 | |
| 3 | 7 | 8 | 3 | 1 | |
| TC15 | TC2 | TC3 | TC4 | TC5 | |
| 3 | 7 | 14 | 14 | 6 | 3 |
| UN15 | UN2 | UN3 | UN4 | UN5 | |
| 3 | 7 | 14 | 14 | 6 | 2 |

| | | | | |
|-----|------|------|------|------|
| PO8 | PO10 | PO12 | PO14 | PO16 |
| 5 | 5 | 5 | 1 | 0 |
| PP8 | PP10 | PP12 | PP14 | PP16 |
| 5 | 6 | 5 | 1 | 1 |
| PR8 | PR10 | PR12 | PR14 | PR16 |
| 4 | 6 | 5 | 1 | 1 |



Key Map
SCALE: NOT TO SCALE

Survey Legend

| | |
|------------------------------|------------------|
| Found Iron | Stone |
| Found Nail | Dead Tree |
| Found Brick | Decorative Stone |
| Found Section Corner | Decorative Stone |
| Found Remnant Section Corner | Decorative Stone |
| Found Tree, PL | Decorative Tree |
| OT Twp. PL | Decorative Tree |
| Water Valve Box | Building Cor. |
| Water Meter Box | Water Meter |
| Water Sprinkler Head | Water Meter |
| Water Meter Valve | Water Meter |
| Water Compensator Valve | Water Meter |
| Fire Hydrant | Water Meter |
| Unspecified M.S. | Water Meter |
| Storm M.S. | Water Meter |
| Storm Sewer Pipe | Water Meter |
| Storm Sewer Manhole | Water Meter |
| Storm Sewer End Section | Water Meter |
| Sanitary Sewer | Water Meter |
| Sanitary Sewer Manhole | Water Meter |
| Sanitary Sewer End Section | Water Meter |
| Electric Utility Pole | Water Meter |
| Electric Light Pole | Water Meter |
| Telephone Pole | Water Meter |
| Telephone Manhole | Water Meter |
| Gas Meter | Water Meter |
| Natural Gas Collector | Water Meter |
| Gas Valve | Water Meter |
| Water Distribution Box | Water Meter |
| Concrete Surface | Water Meter |
| Asphalt Surface | Water Meter |
| Gravel Surface | Water Meter |
| Stone Surface | Water Meter |

- NOTE KEY
- PROPOSED IRRIGATED SEEDED LAWN
 - PROPOSED SEEDING NO MOW LAWN ON SLOPES AND REDISTRIBUTED AT TOP OF SLOPE
 - PROPOSED SHOVEL CUT EDGE
 - PROPOSED SLOPED BANK MULCH - REFER TO TYPICAL DETAILS FOR DEPTH
 - PROPOSED SIDEWALK
 - PROPOSED RETAINING WALL
 - PROPOSED FREESTANDING ISDN
 - PROPOSED POND LOCATION
 - 12" DIA. NATURAL STONE OR FRACTURED ROCK WITH NEAR 12" DIA. DEPTH ON FILTER FABRIC - REFER TO SPEC.
 - EXISTING RETAINING WALL
 - EXISTING TREES TO REMAIN
 - EXISTING SIDEWALK
 - EXISTING UTILITIES
 - EXISTING LIGHT POLE LOCATIONS
 - EXISTING SHALE AND VEGETATION TO REMAIN
 - PROPOSED SEEDING NO MOW LAWN OVER 12" DEEP EXISTING LAWN. APPLY 1/2" DEPTH PNEUMATIC COMPOST OVER EXISTING LAWN AREAS GREATED WITH HERBICIDE. AFTER 10 DAYS APPLY 1/2" DEPTH PNEUMATIC COMPOST OVER EXISTING LAWN SUEP MIX AND TACKLEIN - REFER TO SPEC.
 - LIMIT OF IRRIGATED SEEDED LAWN
 - PROPOSED EQUIPMENT PAD - REFER TO LAYOUT PLANS
 - PROPOSED POINTING LOG BOX - REFER TO ELEC. PLANS

NOTE

REFER TO SHEET LOGS FOR PLANT LIST AND PLANT DETAILS

REPAIR ALL AREAS DAMAGED BY TREE INSTALLATION WITH TOPSOIL AND FERTILIZER

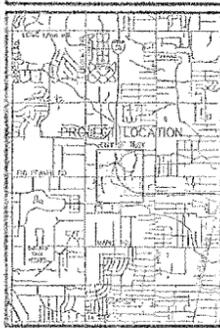
REFER TO SHEET LOGS FOR ALL PLANTING BETWEEN ZONE DIMENSIONS. CONTRACTOR SHALL LOCATE ALL UTILITY LINES AND STAKE THESE LOCATIONS FOR LANDSCAPE ARCHITECT REVIEW PRIOR TO PLANTING



HRC
HUBBELL, RUTH & CLARK, INC.
Consulting Engineers
535 WEST BAY
HUNTSVILLE, AL, 35891
PHONE: (256) 424-4300
FAX: (256) 424-4312
147 CHINA ROAD, SUITE 100
MOBILE, AL, 36688
WWW.HRC-INC.COM

GRISSIM
METZ
ANDRIESE
INCORPORATED
11000 W. BIRMINGHAM
BLVD., SUITE 100
BIRMINGHAM, AL 35242
205-991-1100

| | |
|----------------------------|-----------|
| DESIGNED | GAH-RM |
| DRAWN | GAH-MF |
| CHECKED | GAH-RM |
| APPROVED | GAH-RM |
| ISSUED FOR PERM. REVIEW | 4-24-2009 |
| ISSUED FOR FINAL REVIEW | 4-24-2009 |
| ISSUED FOR PERMITS REVIEW | 2-20-2009 |
| ISSUED FOR PERMITS REVIEW | 2-20-2009 |
| ADDITIONS AND/OR REVISIONS | |

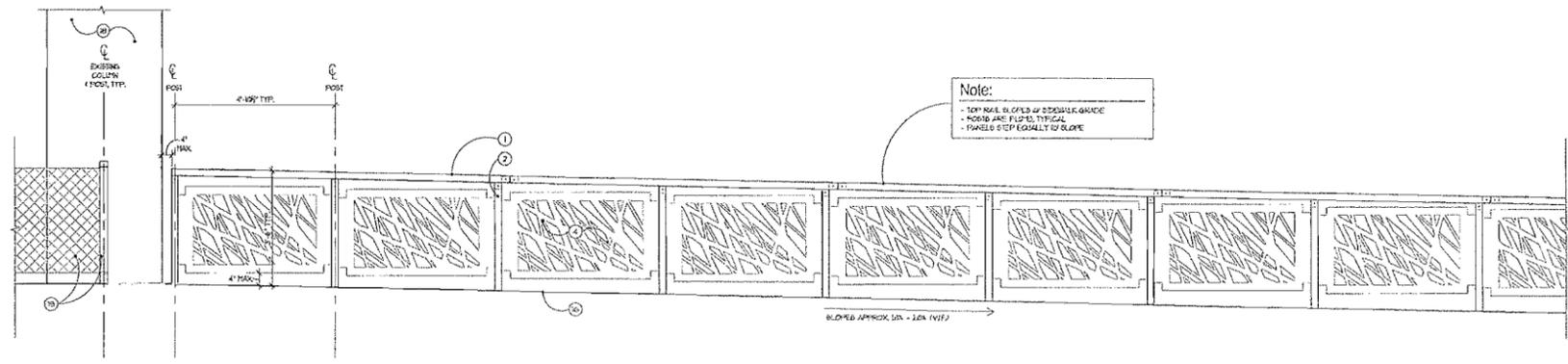


CITY OF TROY
BIG BEAVER ROAD
AND I-75
BRIDGE ENHANCEMENTS
OAKLAND COUNTY
MICHIGAN
LANDSCAPE ENLARGEMENT
PLAN - NORTHWEST
QUADRANT

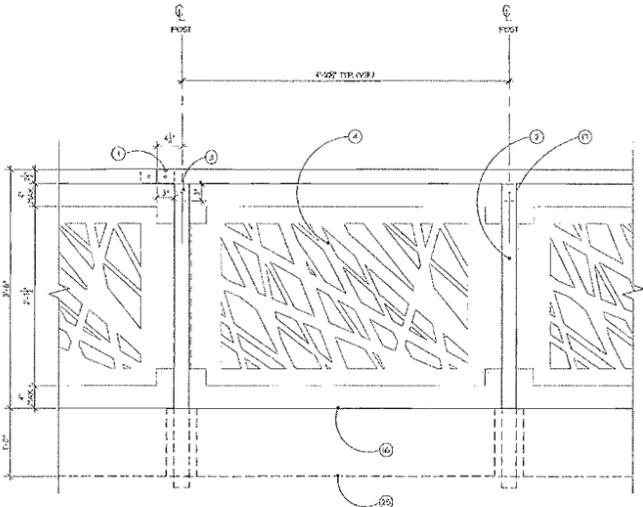


SCALE: 1" = 40'

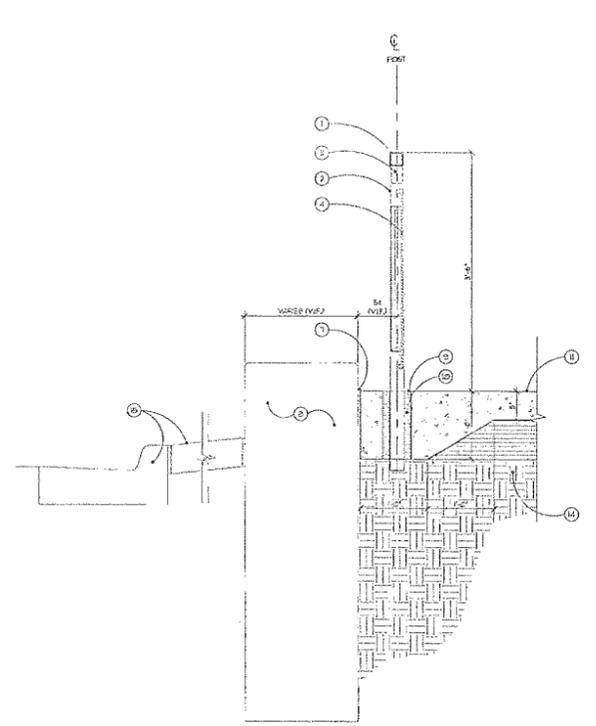
DATE: FEBRUARY 2009
SCALE: 1" = 40'



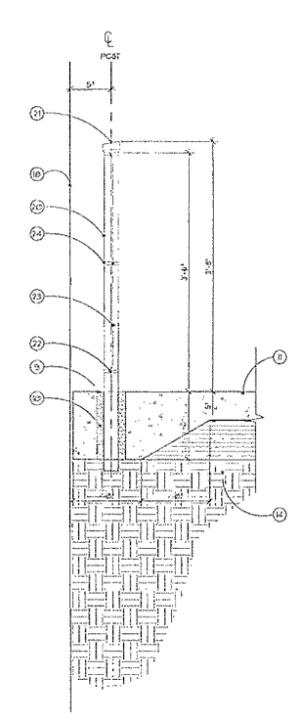
6 Typical Guard Rail / Ornamental Fence Elevation @ Sloping Walks
SCALE: 1/2" = 1'-0"



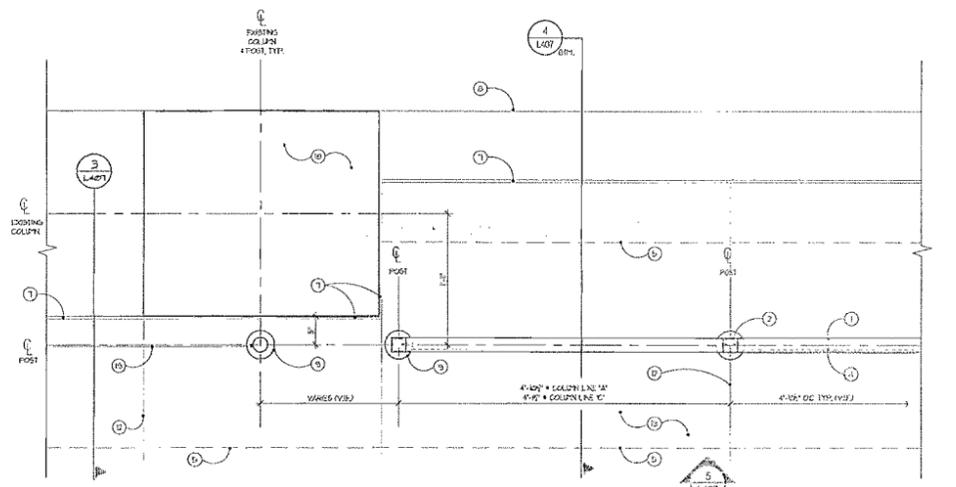
5 Guard Rail / Ornamental Fence - Typical Elevation
SCALE: 1" = 1'-0"



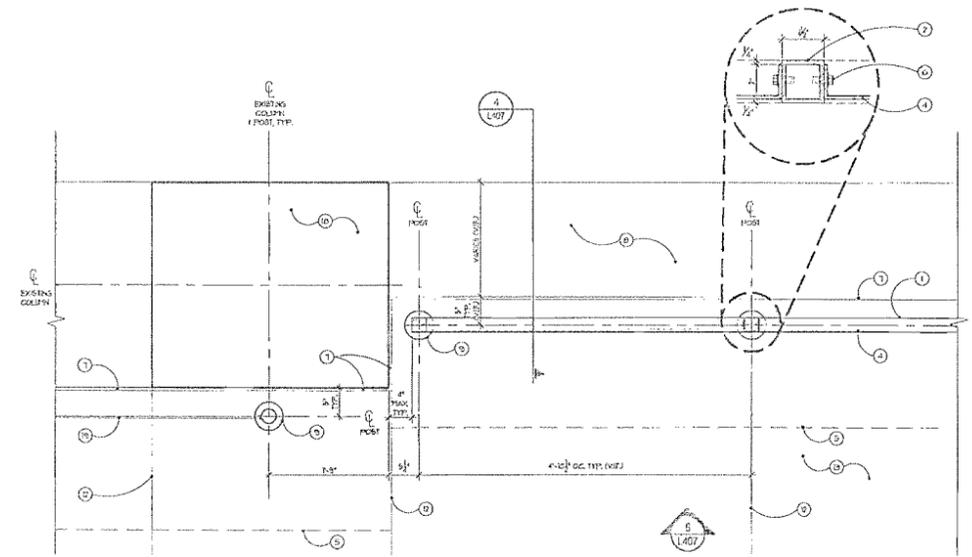
4 Guardrail / Ornamental Fence Section Detail
SCALE: 1" = 1'-0"



3 Vinyl Coated Chain Link Fence Section Detail
SCALE: 1" = 1'-0"



2 Fence & Guardrail Condition @ Center of Bridge
SCALE: 1" = 1'-0"



1 Fence & Guardrail Condition @ End of Bridge / Sloping Walks
SCALE: 1" = 1'-0"

- Note Key:**
- 1) 2" DIA. 304L SS 40 GALV. TOP RAIL @ 3" TYP. EXTENDING 4' POST HEIGHT (PAINTED FINISH)
 - 2) 2" DIA. POST W/ PAINTED FINISH - EXTEND 1/2" PAST BOTTOM OF THICKENED CONCRETE
 - 3) FASTEN TOP RAILS TOGETHER BY INSERT GLEE-VE & PLACED FINISHED SET SCREWS
 - 4) 1/4" TH. GALV. PANEL OF LASTER, 1/8" CUT PATTERNS 4" TYP. EACH END - FASTEN TO POSTS BY PAINTED FINISH TOP PER POST SCREWS FROM SHOP DRAWINGS
 - 5) LINE OF THICKENED BLAS
 - 6) FORMER PROOF (PAINTED) GRENDS (PER SHOP DRAWINGS)
 - 7) EXPANSION JOINT BY BACKEN ROD & RESALANT
 - 8) EXISTING CONCRETE RETAINING WALL
 - 9) CORN. BELL W/ DIA. HOLE THROUGH THICKENED CONCRETE SIDEWALK BLAS
 - 10) SPOKES GREAT POSTS IN PLACE W/ NON-BANKING SPOKES GREAT
 - 11) CONCRETE SIDEWALK BLAS ON COMPACTED SAND BASE
 - 12) CONTROL JOINT PER LAYOUT PLAN
 - 13) NEW CONCRETE SIDEWALK
 - 14) COMPACTED SANDBASE TO 10% FROST PROTECTOR
 - 15) EXISTING CURB & SLAB
 - 16) LINE OF GRADE (FOR SLOPE) - MARK LOCATIONS
 - 17) INTERMEDIATE 3" GALV. INSERT 3/4" DIA. - FASTEN TO POST BY TOP PER THICK PAINTED FINISHED SET SCREWS
 - 18) EXISTING ENDPOST COLUMN
 - 19) BLACK VINYL COATED HINGE - REFER TO DETAIL 46A01
 - 20) 2" DIA. VINYL COATED FENCE POST
 - 21) BLACK VINYL COATED POST CAP
 - 22) 3/8" DIA. 6 GALV. VINYL FINISH TENSION BARS, TOP & BOTTOM OF FENCE
 - 23) BLACK VINYL COATED END TIE WITH FIZING
 - 24) VINYL COATED HOG RINGS OF TENSION BARS AS REQ'D

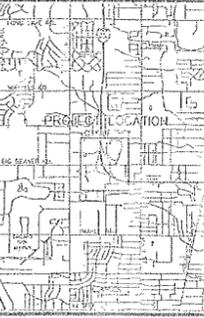
Note:
FENCE CONTRACTOR SHALL VERIFY COMPLETE SHOP DRAWINGS & SUPPLIES FOR REVIEW & APPROVAL. DRAWINGS SHALL REFLECT, BUT NOT BE LIMITED TO, LAYOUT DRAWINGS, SECTIONS, TYPING, DETAILS, MATERIAL SPECIFICATIONS, STANDARD CONNECTIONS, IDENTIFICATIONS & FITTINGS.



HRC
HUBBELL, BATH & CLARK, INC.
Consulting Engineers
555 HOLEY DRIVE
BLOOMFIELD HILLS, MI, 48301
P.O. BOX 224
81037-0224
PHONE: (248) 434-6300
FAX: (248) 434-6312
FAX: (248) 434-2342
WEB SITE: <http://www.hrc-mi.com>

GRISSIM METZ ANDRIESE
ARCHITECTS
10000 W. WOODRIDGE
ANN ARBOR, MI 48106
TEL: 734.936.1212
FAX: 734.936.1213

| | |
|-----------|-------------------------------|
| 4-24-2005 | ISSUED FOR FINAL AGENT REVIEW |
| 4-04-2005 | ISSUED FOR FINAL CITY REVIEW |
| 4-24-2005 | ISSUED FOR AGENT REVIEW |
| DATE | ADDITIONS AND/OR REVISIONS |
| DESIGNED | GAM-HWK |
| DRAWN | GAM-HWK |
| CHECKED | GAM-HWK |
| APPROVED | GAM-HWK |



CITY OF TROY
MICHIGAN
BIG BEAVER ROAD
AND I-75
BRIDGE ENHANCEMENTS
DAWSON COUNTY MICHIGAN

SITE DETAILS

| | | | |
|-------------|---------------|-----------|----------|
| HRC JOB NO. | 20050031 | SCALE | AS NOTED |
| DATE | FEBRUARY 2005 | SHEET NO. | L407 |