



ITB-21-04
ADDENDUM #9 – FINAL
WADSWORTH IMPROVEMENT PROJECT – PHASE 1

Date: June 15, 2021
Bid Number: ITB-21-04
Project Number: NHPP 1211-086
Bid Due Date: **THURSDAY, JULY 1, 2021 By 1:00 PM OUR CLOCK**

The following information is provided to all prospective bidders and is hereby made a part of the above bid documents. Bidders must acknowledge this Addendum 9 with their bid. It is a total of 26 pages including Q & A (15 pages),

Revision of Section 214 Extended LANDSCAPE PRESERVATION (11 pages)

Documents (not included in above page count) posted individually:

ITB-21-04 Bid Schedule Wads Final June Addendum 9 Stripped (Excel workbook 8 tabs plus Totals),

ITB-21-04 Bid Schedule Wads Final June Addendum 9 Locked (this is the document to submit when bidding – Excel workbook 8 tabs plus Totals).

CLARIFICATION, ADDITIONAL INFORMATION, AND CHANGES:

Registration for the virtual public opening is required.

Wadsworth Improvement Bid Opening Meeting

When: July 1, 2021 02:00 PM Mountain Time (US and Canada)

Register in advance for this webinar:

https://zoom.us/webinar/register/WN_wPRJ_PuxTQmmLksiYvm4Ug

After registering, you will receive a confirmation email containing information about joining the webinar.

NOTE: THIS is ADDENDUM #9 - FINAL.

Addendum #1 was created in RMEPS/BidNet when adding the bid documents to the site after the original posting.

Addendum #2 was posted on April 29, 2021 and includes the geotechnical report.

Addendum #3 was posted on May 3, 2021 and includes the mandatory pre-bid meeting attendee list.

Addendum #4 was posted on May 10, 2021.

Addendum #5 (dated May 12, 2021) was posted on May 13, 2021.

Addendum #6 was posted on May 14, 2021.

Addendum #7 was posted on May 24, 2021 and delayed the bid due date.

Addendum #8 was posted on June 1, 2021 and delayed the bid due date.

General Q/A

- 1. Is it possible you could issue a bid form that the unit prices could be changed without being locked once you put the number in it. The sheet issued you put a number in and it is locked you can't change it. Prior to bid some changes have to be made. The way it is set up you have to redo the whole 32 pages of bid form.**

Sorry for the difficulties in using the locked spreadsheet. This is the first time that the City has used this type of bid tab. The attached bid tab only has the individual worksheets locked, not the entire workbook, hopefully that solves the problem with entering unit costs. If not, suggest filling out the unit costs on the "stripped" version of the bid tab and then copy the unit costs for each page into the locked version at once.

Note that this bid tab has all of the changes from all of the addenda shown in red. There are also negative quantities shown for some of the bid items in the Options. There are savings from the base bid if the Option is chosen.

- 2. When assessing the bids, how is the low bid determined? What combo of options and base bid will be used to determine low bid? Please explain the process the city will use to determine contractor to award.**

As answered in Addendum #4, depending on the prices received, the City currently believes that there is funding available to award the Base Bid, Options 1 and 4, and the Water and Sewer options as a package. Options 2 and 3 will only be awarded if favorable pricing is received that allows those two additional options to be awarded.

- 3. Will additional E files be supplied that have the contour lines on them?**

No

Division 100 Q/A

- 4. Section 105.02 Will redline drawings be sufficient for as built or does the job have to be shot and certified by a PLS? Can the PLS certify the red line construction drawings?**

As-Constructed drawings are to be surveyed and certified by a PLS.

- 5. Are there any “buy America” requirements on this project**

Yes, Sub-section 106.11 of the CDOT Standard Specifications applies to this project due to federal funding.

- 6. I am reviewing the project specifications to provide materials testing estimates for several contractors for the Wadsworth Improvement Project and am having difficulty with one element: In the City Project Special Provisions, Revision of Section 106, page 293 of the project documents, it states: “The Contractor shall employ an independent materials testing company to sample and test the materials or the finished product in accordance with the City Materials Testing Requirements, per Section 720 of the City Special Provisions.” I cannot find Section 720 on the City Website or in the project documents. Can you please provide a copy of that section? I found the attached in documents for another project and will be using this as a place holder for now.**

The statement referenced above should have been removed from the City Special Provisions, Revisions to Section 106. CDOT materials testing procedures will be followed for this project.

- 7. In Revision 108.03B Page 294 of project docs, will Wheat Ridge accept schedules in Primavera P6 format as well as Microsoft Project?**

Yes

Division 200 Q/A

- 8. The quantity of Removal of Inlet [202-00019] in Option 1 is 56 EA, per the tabulation of drainage removals (plan pages 659 & 662) the quantity is 4 EA. Upon review of plan sheets 654, 657, 660 and 663 there are 5 Inlets to be removed. Please adjust bid quantities accordingly.**

The Removal of Inlet quantity should be 5 EA. The bid schedule has been updated to match.

- 9. Option 1 202-00019 - Removal of Inlet – We only found 5 Ea. on plans.**

See above answer.

- 10. 202-00250 Removal of Pavement Marking – 31905 SF. Does it include the quantity for both removal of markings on existing road and removal of temporary markings installed during phases?**

This pay item includes the removal of existing markings only; removal of temporary markings is to be included in the cost of Pay Item 627-00013, which is to be used as temporary pavement markings only (the quantity for 627-00013 is sufficient to apply temporary pavement markings up to 3 times)

11. It appears the building at 4084 Wadsworth (Parcel AP-26) will need to be removed as the new 41st Ave entrance construction encroaches on its footprint per Plan Sheet 138. Verify if the demo work of this building is in the scope of the work and if so, under what pay item it will be paid under.

Addendum #6 clarified that the building at 4084 Wadsworth would need to be removed by the Contractor. The unit in the bid schedule for item 202-00300 has been revised to show 2 EA instead of 1 LS.

12. On Parcel RW-35 (Amici's Restaurant), the Remove Wall work is an existing patio wall with elevated wall sections between foundations with a stucco finish (Plan Sheet 77). We cannot determine if the entire patio wall is to be removed or if only portions. Since we cannot determine the exact removal limits from the plans, we cannot guarantee structure stability if only a portion of the wall will be removed. Verify that we will not be required to ensure structure stability if only a portion of the wall is removed.

The owners of the property were compensated for the patio and stucco walls as part of the agreement and are aware of its removal, including the area within the Temporary Easement (TE). The TE comes up to the face of the building so the contractor should remove the stucco walls entirely.

13. Drainage Removals on Sheet #231 call for the Removal of 399 LF of existing outfall pipe under Wadsworth Blvd. and the I-76 on-ramp. Drainage phasing will not allow removal of existing pipe until new MH 37 Connection is made in Phase 2. Pipe is estimated to be at significant depth and require additional phasing for removal. Please review alternative for Pipe Abandonment in Place of this run of pipe in accordance with CDOT Std. Spec Section 202.02.

The portion of pipe that is under Phase 2 and downstream of the I-70 eastbound onramp will still be removed. The remaining pipe under the existing median, northbound Wadsworth, and the I-70 onramp can be abandoned in place. This reduces the removal quantity by 274 LF to 4,971 LF and adds 100 CY of 206-00065 Structure Backfill (Flow-Fill). The bid schedule has been updated to match.

14. 210-00035 Reset Water Meter – 45 Ea. Locations are not shown on plans. Except for note #67 on sheet 17 there is no additional information. Can you please explain what is expected of this item?

Water meter resets are shown and quantified on the water plans. Quantity to be removed from the Base. The bid schedule has been updated to match.

15. Please provide as-built drawings of the Historical Sign Structure, including foundation details.

The sign was installed seven decades ago, so as-built drawings are not available.

16. Section 212 of the Specifications and the SWMP Notes state application rates of fertilizers and soil amendments shall be in accordance with rates shown on the Landscape Plans / Plans, but none are called out on the plans. Please clarify which fertilizers and soil amendments, and their applications rates, are to be used in planting beds, sod and seeded areas.

Perform and furnish Certified Agronomic Soil Analysis of the existing native soil areas, and all imported topsoil, after rough grading has been approved by Engineer. Each area of 3000 sq. ft. or larger shall be sampled and tested by a qualified soil-testing laboratory. The Report shall indicate any microbial and fungi existence, pH, organic matter, soluble salts and moisture content. Include recommended quantities of nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce satisfactory topsoil for native grass establishment. Sample cores shall be a minimum of 8 inches deep. Analysis reports shall be current to within 30 days at time of submission. Soil amendments and fertilizer for each planting area shall be applied in the types and at the rates recommended by the Soil Analysis Report.

17. On Sheet Number L-501, the planting details state backfill includes mycorrhizae as supplied by Owner. Can you confirm this material will be supplied by the Owner, and will any other amendments/materials be supplied by the Owner?

No, contractor shall provide ALL soil amendments and fertilizer as specified in Section 212. The notes on L-501 shall be revised to read – “as specified” instead of “as supplied by owner”.

18. The Specifications state sod species shall be shown on the plans, but none is specified. Please specify the type of sod to be used on the project.

Colorado Front-Range grown Kentucky Bluegrass blend comprised of no less than three KBG hybrids selected for low-water, drought tolerance, foot-traffic tolerance and self-filling damaged areas.

19. Please specify the type of mulch to be used for line items 212-00007 – Seeding (Native) (Hydraulic) and 212-00706 – Seeding (Native) (Drill). Currently, only temporary seeding has a separate line item for mulching, so please clarify where these mulch items should be included on the bid schedule.

Use Wood Bonded Fiber Matrices (BFM) over (Native) (Hydraulic) seeding and the Wood Cellulose Fiber Mulch and Mulch Tackifier over (Native) (Drill) seeding both per standard Specification Section 213.

20. The specified Rock Mulches are not available in the specified sizes. Smaller diameter rock mulch is available in 1-1/2” or 2”-4” and larger cobble is available in 3”-6”, 4”-8” and 5”-12”. Please specify which sizes to use instead of 1-1/2”-3” and 6”-8”.

Use 1-1/2” for smaller rock mulch and 4”-8” for larger cobble.

21. Do all planting areas receive the 3” depth of Rock Mulch or do some receive wood mulch instead?

Planting areas receive 3” of rock mulch. No wood mulch except for mulch rings for trees.

22. Will any wood mulch, other than mulch included in line item 213-00008 - Mulching (Wood Chip) be used on the project?

No, other than mulch included for tree mulch rings as shown on the planting detail.

23. Section 213 of the Specifications, regarding the rock/cobble mulch, states “No weed barrier fabric shall be provided per City of Wheat Ridge direction.” Please clarify whether weed barrier fabric is to be used in all rock and cobble mulch areas.

No weed barrier fabric shall be used per City of Wheat Ridge direction.

24. Takeoffs of landscape boulders do not match the bid schedule quantity. Can the quantities of each type of Landscape Boulder, Type 1 and Type 2 be provided?

Quantities shown on plans are correct. The bid schedule has been updated to match.

25. Can a comprehensive plant list containing all plants and quantities (Overstory plants, Understory plants, Median Module plants and Tree Lawn Module plants) be provided for the Base Bid, Option 1, Option 2 and Option 3? There are too many disparities between the bid schedule quantities and plant list quantities, and no clarity on whether module plants are included in plant list quantities or not. If this cannot be provided, please provide (1) the quantities of each type of Tree Lawn Module and Median Modules for the base bid and the different options (some module callouts on the plans are blocked by other linework), (2) clarification on whether module plantings are included or in addition to plant quantities on sheets LP-201, LP-202 (Base Bid), LP-210-Opt1, LP201-Opt2 and LP-202-Opt3, and (3) confirmation that the bid schedule quantities are accurate and include all plantings for each of the different bid sets.

SOAQ quantities include all plants in each package – tree lawn and median module numbers, as well as, plants shown on the planting plan sheets. Plants shown on the drawings take precedence

over the quantities in the SOAQ. Bidders should base their pricing on the quantities shown on the bid schedules.

26. **None of the local nurseries carry Pinus edulis ‘Tiny Pout’ – Tiny Pout Dwarf Pinyon Pine. Can a substitute be used and/or does the Landscape Architect have any suggestions on an appropriate substitute?**

The Dwarf Pinyon Pine (Pinus edulis) is a Plant Select variety carried by local nurseries – it may not carry the ‘Tiny Pout’ label at all local nurseries. It needs to be in the 24”-30” size range for height and width.

27. **Please provide specifications / information for line item 214-00008 – Extended Landscape Preservation. What is to be included here?**

See attached specification to be added to bid set.

28. **What is the warranty period for seed, sod and irrigation?**

For plant, seed, and sod areas the contractor is expected to maintain landscape for the duration of the Landscape Establishment period, which is outlined in specification section 214.04.

29. **What are the landscape and irrigation maintenance requirements (if any) after Substantial Completion?**

The maintenance requirements from the time of installation through Landscape Establishment period, are extensively outlined in specification section 214.04.

Divisions 300 & 400 Q/A

30. **The quantity of Aggregate Base Course (Class 6) [304-06000] in the base bid includes 6,330 TN of material from station 10+97 to 35+66. This area is a mill and overlay and would only receive base course under the curb & gutter. Please adjust bid quantity accordingly.**

The 6,330 Ton quantity of aggregate base course (class 6) for sta. 10+97 to 35+66 should be deleted. Project total for the base opt is reduced to 18,370 ton. The bid schedule has been updated to match.

31. **The geotechnical report does not mention a temporary pavement section. Please provide a daily traffic count for Wadsworth Blvd., including percentage of trucks.**

Pre-pandemic ADT in the project area is around 40,000 vpd with about 5% trucks.

Division 500 Q/A

32. **Based on my takeoff (for the block wall), I could only come up with 1933 SF and the bid quantity was showing 4000 SF as well.**

The correct area should be 1,427 SF. The bid schedule has been updated to match.

33. **Sheet 263 Wall General Information, under Reinforcing Steel, notes all reinforcing steel shall be black (uncoated) unless noted otherwise. However, sheet 291 under Soil Nail Wall General Notes, states that all reinforcing steel, bearing plates, shear studs, washers and nuts shall be epoxy coated or galvanized unless otherwise noted.**

Yes, this is confusing. CDOT reissued their Soil Nail wall Structural Worksheets after the design had been completed. The general notes called for all black steel, but CDOT’s Soil Nail General notes calls everything out as epoxy. Keep the CDOT approach for the SNW details to maintain consistency with CDOT detailing preference.

34. **Revision of Sections 504 and 641 Soil Nail Wall 504.03 (a) states that bars shall be epoxy-coated or encapsulated as shown on the plans. Plan sheet number 293, Soil Nail Details (TYP.) shows epoxy coated bar with 3’ of encapsulation. However, plan sheet 291 under Soil Nail Design Parameters, notes that corrosion protection shall follow CDOT Bridge Design Manual and FHWA Soil Nail Wall Manual based on aggressive ground, and shall include**

corrosion protection that corresponds to Class A. Should the corrosion protection be based on the detail on sheet 293, or based on Class A (full length encapsulation) for the aggressive ground as identified in the referenced note and the Geotech report?

The corrosion protection should be based on Class A (Full Length Encapsulation) for the aggressive ground as identified in the reference note and Illustrated in figure 7.3 of FHWA Soil Nail Wall Manual (FHWA-NHI-14-007). The detail shown in the plans was referenced from the CDOT worksheet detail and appears to illustrate both Class A and Class B systems of corrosion protection. Note that the 3' length is given as a minimum length of encapsulation.

- 35. There are no details for reinforcing for the final soil nail facing. Please clarify in the reinforcing in the final facing is to be coated or non-coated.**

Details of the reinforcing for the final soil nail facing are shown for illustrative purposes only, this is to be part of the Soil Nail Wall designer's design, per Keynote 1 on the Details (2 of 5) sheet. The facing of the soil nail wall is located outside of the roadway splash zone, so it is acceptable for the facing WWF steel to be non-coated.

- 36. On sheet 293, the details specifically note that the vertical and horizontal waler bars are non-coated, but this note is not shown for the WWF. Please clarify if the WWF in the initial face is intended to be coated or non-coated.**

See above answer.

- 37. On sheet 296, Sculpted Shotcrete Slope Paving detail, the WWF and shear key reinforcing is not noted to be non-coated. Please clarify if this WWF is intended to be coated or non-coated.**

The slope paving WWF is located outside of the roadway splash zone, it is acceptable to utilize non-coated steel for the slope paving reinforcing.

Division 600 – Miscellaneous Q/A

- 38. Does all the sidewalk have a footer backing or just the sections with railing?**

The limits of the footer are on sheet 47 – Miscellaneous Tabulations.

- 39. On sheet 292, Sidewalk Curb Detail and Note 5: are the #3 drilled and bonded dowls intended to be coated or non-coated?**

The #3 dowel bars are epoxy coated due to their location with respect to the splash zone of the roadway.

- 40. The base bid has quantities included from the tabulation of concrete from 38th Avenue (plan sheet 44). Please remove these quantities from the base bid quantities for Concrete Sidewalk (6 Inch) [608-00006], Concrete Curb Ramp [608-00010], Curb and Gutter Type 2 (Section I-B) [609-21010] and Curb and Gutter Type 2 (Section II-B) [609-21020].**

The 38th concrete quantities in the Base should be deleted. The applicable 608 and 609 series items in the Base Bid schedule have been updated to match. New Base totals are reduced to:

608-00006	10,277 SY
608-00010	814 SY
609-21010	13,531 SY
609-21020	9,533 LF

- 41. Do line items 623-09905 – Irrigation Assembly pertain to the 2 inch Blow Out Assembly / Winterization Assembly? If so, there are none shown on the irrigation plans for Option 1 and Option 2 but are included on the bid schedule. Please clarify why these are included?**

Base Bid has 15- irrigation blow out assemblies (623-09905), Option 1 & 2 do not have any irrigation blow out assemblies, Option 3 has 2 of these assemblies.

- 42. Please clarify which valve boxes are to be included in line items 623-06900 – Valve Box, as the bid schedule quantities do not match the valve quantities on the plans. (Manual Drain Valve, Flow Sensor, Master Valve, Control Valve, Gate Valve, Quick Coupler Valve, 2-Wire Arrestors, Blow Out Assembly...?)**

Valve boxes quantities are all lumped into one number (623-06900). The details will indicate what size the valve box needs to be for each assembly.

43. There are various items on the irrigation plans that do not have an associated line item on the bid schedules. Can line items for these be added to the bid schedule, or provide guidance on where these items should be priced within the bid schedule?

Different types of pipes are under the same size CDOT number, so contractor will have to separate each type of pipe under the size noted on the CDOT number. CDOT number notes above in RED

- **Base Bid: 2 Inch Plastic Pipe (Poly Lateral), 1-1/2 Inch Plastic Pipe (PVC Mainline), 2 Inch Plastic Pipe (PVC Mainline), 1-1/2 Inch Stop and Waste Valve, 1-1/2 Inch Copper Mainline, 1-1/2 Inch Master Valve.**

2 Inch Plastic Pipe (POLY Lateral lines), 2 Inch Plastic Pipe (PVC Mainline), 2" PVC sleeves - 623-00602, 1-1/2 Inch Plastic Pipe (POLY Lateral lines), 1-1/2 Inch Plastic Pipe (PVC Mainline) - 623-00600, 1-1/2 Inch Copper, 1-1/2 Inch Stop and Waste Valve, - 623-01712 (these items were included as part of the backflow assembly beings they did not have CDOT number), 1-1/2 Inch Master Valve- 623-03112.

- **Option 1: 2 Inch Plastic Pipe (Poly Lateral)**
623-00602
- **Option 2: 2 Inch Plastic Pipe (Poly Lateral)**
623-00602
- **Option 3: 2 Inch Plastic Pipe (Poly Lateral), 2 Inch Plastic Pipe (PVC Mainline), 2 Inch Gate Valve, 2-1/2 Inch Gate Valve, 1-1/2 Inch Stop and Waste Valve & 1-1/2 Inch Copper Mainline, 1-1/2 Inch Master Valve**

2 Inch Plastic Pipe (Poly Lateral), 2 Inch Plastic Pipe (PVC Mainline) - 623-00602, 2 Inch Gate Valve - 623-05016, 2-1/2 Inch Gate Valve - 623-00602, 1-1/2 Inch Stop and Waste Valve & 1-1/2 Inch Copper Mainline - 623-01712 (these items were included as part of the backflow assembly beings they did not have CDOT number), 1-1/2 Inch Master Valve - 623-03112.

44. Will the city add Survey and Mobilization pay items to each option/bid alternate?

Yes, the bid schedule has been updated.

45. Please define how the TCM/TCI units will be paid for between the options and the base bid. The contractor will be working in multiple areas every day and possibly 2 options plus the base at a single time.

The TCM and TCI quantities shown in the Base and Options would be cumulative. With the Base and Options #1 and #2, then the TCM and TCI quantities would be TCM: 260+40+20=320 days, TCI: 130+20+10=160 days.

46. Please clarify what type of impact attenuators will be required for the bid items below; will these be mobile truck mounted attenuator or a fixed attenuator?

- **Base:**
 - 630-80370 - Attenuators (Temporary) - 2 EA
 - 630-85010 - Impact Attenuator (Temporary) - 8 EA
- **Option 1:**
 - 630-85010 - Impact Attenuator (Temporary) - 1 EA
- **Option 3:**
 - 630-85010 - Impact Attenuator (Temporary) - 1 EA
- **Option 4:**
 - 630-85010 - Impact Attenuator (Temporary) - 1 EA

The pay item numbers in the bid schedule are incorrect.

- 630-80370 is a temporary concrete barrier.
- 630-850101 is a temporary impact attenuator that will be installed at the end of the temporary concrete barriers.
- 630-85040 is a truck mounted attenuator for overnight work.

The applicable 630 series items in the Base Bid and Options schedules have been updated to match. The correct item numbers and quantities are:

Base Bid

630-80370	500 LF
630-85010	2 EA
630-85040	8 EA
Option #1	
630-85040	1 EA
Option #2	
630-85040	1 EA
Option #3	
630-85040	1 EA
Option #4	
630-85040	1 EA

47. **Addendum 6 adds 2 Temporary Attenuators. Can you tell me the difference between the two new temporary attenuators and the eight temporary attenuators already in the original bid schedule?**

See answer above.

Sections 603 & 604 – Storm Sewer Q/A

48. **Sheet 252 calls for Underdrain pipe boot at liner Penetration with leader pointing to 72” RCP and 24” RCP at MH -35.**

- **The top of the 72 in RCP appears to be below the Liner elevation for the 6” underdrain Invert (In) at MH-35**

The pond liner should be below the proposed pipe.

- **The Micropool/ Outlet Structure on sheet #258 shows the liner going beneath the structure but does not detail liner under the 24” RCP to MH-35.**

A pipe boot is not required at this location.

- **Please review Geomembrane liner at these locations for liner penetration requirements.**

The pond liner should be below the proposed pipe.

49. **Storm MH F14 does not appear to be captured in the Phase 1 work area and straddles between Phase 1a and 1b. This is a 16ft deep MH structure in the middle of Wadsworth Blvd that would need multiple phases and impacts to traffic to construct. Please review the alignment of this structure for constructing in Phase 1 with rest of the 72” Truck line.**

The limits for Phase 1 will be adjusted to include Storm MH F14.

50. **Storm MH F14 References a CCD Type P MH. Storm sewer alignment shows an approximate 30 Degree Bend. Structure Dimensions from on Standard details for 30 Deg. on sheet# 188 shows the “B” wall inside dimension of 50”. The plans show proposed 42in RCP with and OD of 51in trying into this wall. Please confirm structure dimensions for 42in pipe tie-in.**

The 42” pipe penetration into side “B” can extend into the adjacent wall section or the manhole can be upsized to the next sized manhole with a B dimension of 4’ 4”.

51. **604-19205 Inlet Type R L 10 (5 Foot) – We only found 12 Ea. on plans.**

The Inlet Type R L 10 (5 Foot) quantity should be 12 EA. The bid schedule has been updated to match.

52. **604-31015b Manhole Box Base (15 Foot) (9.5 FT x 9.5 FT) – We found 17 Ea. on plans.**

The Manhole Box Base (15 Foot) (9.5 FT x 9.5 FT) quantity should be 17 EA. The bid schedule has been updated to match.

53. **Option 1 604-00310 - Inlet Type C (10 Foot) – We could not find it on plans.**

The Inlet Type C (10 Foot) should be Inlet Type C (5 Foot). The bid schedule has been updated to match.

Sections 613 & 614 – Lighting & Traffic Control Q/A

54. **If there are substandard soil conditions which cause the depths of the Mast Arm pole caissons to substantially increase, why are the other caissons per CDOT standard?**

This is discussed in section 10 of the Geotechnical Recommendations Report as follows: The eight sign and signal foundations borings drilled were generally located between West 35th Avenue and West 45th Avenue on Wadsworth Boulevard. The borings were drilled to provide a general subsurface profile for sign and signal foundation recommendations. The subsurface encountered in the borings generally indicated weaker foundation soils than the soil parameters indicated in the CDOT S-Standards for signal design. The subsurface encountered generally indicated marginal foundation soils compare to the soil parameters indicated in the CDOT S-Standards for sign design. We recommend CDOT S-Standards be used only for static sign but not dynamic sign foundations.

55. **On sheet 356, the pedestrian lighting pole foundations are 4' in depth. Is this depth accurate?**

As per the City of Wheat Ridge standard, the foundation depth is 4'-0" for standard soil conditions. (sheet 332)

56. **The lighting drawings detail pull box placement in the middle of conduit runs, however there are no pull boxes detailed at each pole. Typically, pull boxes would be placed at each pole as the handhole on the pole is not large enough to make up the wire terminations and pull through them. Please advise if the intent is for us to place a pull box at each pole or if we are to only include the pull boxes as detailed on the drawing / bid schedule.**

Any needed splice boxes at poles are part of the work, not paid for separately and should be included in the price of the foundations.

57. **Conduit quantities for 2" electrical conduit (613-00200) on the bid schedule greatly exceed the combined quantities of lighting and intersection conduit that we have arrived at by performing takeoffs from the plan drawings. We have tabulated approximately 17,000'. Please advise if these bid quantities are accurate or if they are accounting for potential additional scope not on the plans.**

Bid quantities are accurate.

58. **613-00206 – 2" bored conduit. These quantities appear to incorporate the bored quantities for the traffic intersections / signaling. Please advise if we should account for boring at road crossings for lighting conduit and include these costs in 613-00200 (electrical conduit) or if boring if we should anticipate additional boring units to be utilized.**

Electrical conduit for lighting is assumed to be able to be phased without boring. Additional boring would be means and methods of contractor.

59. **The spec calls for all 90's to be PVC coated rigid steel. This will add significant cost to the project and is not typically used on lighting and intersections. We are requesting that standard schedule 80 PVC 90's to be used on this project.**

The requirement in the specs should be followed.

60. **The specs call for slip fit expansion fittings to be used for every 100' of conduit. Please confirm if the intent is for this to apply on all underground pvc conduits as well.**

Yes.

61. **The specs call for collars to be placed on all pull boxes in non-paved areas. This is not typically performed on street lighting and traffic signal pull boxes. Please confirm if this spec can be waived for all street lighting and traffic signal pull boxes.**

S-standards for Lighting and CDOT ITS details include collars.

62. There is a force account for fiber optic terminations, but also quantities listed for fiber optic splicing in the bid schedules. Please advise if this force account is only accounting for splicing into existing fiber systems.

Force account is for splicing into existing fiber systems.

63. The Historical Sign Structure (2 Panel) [622-00042] has a bid quantity of 4 EA, but there is only one location at 4643 Wadsworth Boulevard shown on plan sheet 171. Please revise the bid quantity to 1 EA.

The Historical Sign Structures are not associated with the sign at 4643 Wadsworth Boulevard. These signs are to be added to four of the bus stops, two each at the bus stops near 38th and 44th Avenue on Wadsworth. Station points for each Historic Sign location are provided on 3/L509 (Sheet 400).

64. On sheet 555 and 556, the monotube caisson depth is 20'. Is this depth accurate?

As per S-614-50 (12 of 12) CDOT standard, the caisson depth is given as 20'-0" for both the cantilever and bridge options (24" pipe and 16" pipe, respectively). (sheet 531-32)

65. In going through the signal plans and the bid schedules I didn't see a pay item for the signal pole with the 60 ft mastarm at the NE corner of 44th & Wadsworth.

Signal poles identified on the traffic signal tabulation are correct. The bid schedule has been updated to match.

66. The bid quantity of mast arm lengths don't match what are in the plans.

See above answer.

67. Will a temporary signal be needed at Wadsworth & 3 Acre?

A temporary signal may be required at Wadsworth and 3 Acre Lane. The bid schedule has been updated to match.

68. Can you verify the caisson depths for the ped poles and signal poles? It says per CDOT 614-40 but those depths don't match.

As stated in the note on the signal pole schedule, the caisson depths that are provided in the plan set must be used due to prevailing substandard soil conditions. The required caisson depth is as shown in the "caisson length" column in the tables on the signal pole schedule and in the notes on signing and striping plans where overhead signs are installed.

69. On sheet 548, the signal pole schedule dictates that Drilled caisson lengths are 32', 36' for Mast Arm poles and 16' for pedestal poles. Due to prevailing substandard soil conditions. Are these depths accurate?

Yes. Caisson lengths have been verified from the design calculations. (sheet 528)

70. On page 3 of the project docs a bidder's checklist is provided. Under the tab of other required items is a certification for all IMSA certified personnel for traffic signal work. It mentions that 2 full time employees must be certified at level II or higher. Since we are not submitting for traffic signal work specifically is this a requirement?

IMSA certified personnel are required for all signalization work per the project specifications and the traffic signal notes in the plan set.

Dry Utilities Q/A

71. There is not a bid item for the ~ 12,000 LF of utility joint trench excavation and backfill. Utility Work is listed in the Project Special Provisions under Know utilities within the limits of the Project. Special Provisions to not define a method of measurement or item of work that is Incidental to. CDOT Standard Specification Section 105.11 Cooperation with Utilities lists Contractor cooperation but does not provide requirements for work required by the contractor for the Utility company to relocated its lines. Please provide a bid item for scope

of this work with method of measurement as cannot be incidental to work for such a significant scope.

All work associated with the joint trench is included in work to install CDOT ITS conduits.

72. What pay item should be used for the joint trench excavation and backfill?

Same answer as above.

73. On plan sheet 324 and in addendum 4 question 1 regarding the utility joint trench, how long does each utility need to complete their work once we give them our scheduled start date?

This will need to be coordinated with the various utility companies.

74. Please confirm the quantity of joint utility trench required to be open to facilitate an expedited dry utility installation?

This will need to be coordinated with the various utility companies.

75. Please confirm that the joint utility trench shown in plan sheet 324 is in reference to the CDOT/ITS stacked conduit and the gas line will be installed in a separate trench with a minimum depth of 48" to the top of utility. Also, the typical section shown for the dry utility relocation area is depicted to show minimum horizontal distances between utilities and not to indicate that this is a 9'-12' wide trench.

Correct. The gas line will be installed separately outside the joint trench, and the horizontal distances are minimum. Width of joint trench is only what is needed to place the stacked conduits as shown and transition to junction points as needed.

76. Line item 613-01200 on the bid Plastic conduit quantities. Please confirm if this is the ITS conduit and if this is the conduit depicted in the joint trench on sheet 324.

This conduit is the ITS conduit. The ITS conduit does run in the joint trench.

77. Please confirm how many contractors will be installing the utilities, in the joint utility trench, owned by Centurylink, Verizon/MCI, Comcast, CDOT ITS, Zayo and Xcel Gas. (e.) Is it one contractor for Gas and one for conduit duct bank or is it one contractor per utility owner, etc?

The joint trench is not owned by CenturyLink. Each utility will likely have its own contractor. Contractor is responsible for CDOT ITS installation and overall management of the installations in joint trench. Gas is not part of joint trench per trench details.

78. Please clarify if bedding is required for the joint trench. If so, what is needed for the conduit vs the gas?

See CDOT Trench ITS details.

79. Please clarify what backfill material is required for the conduit vs the gas, in the joint trench detail.

See CDOT Trench ITS details

80. Please confirm if the conduit duct bank, in the joint utility trench, is concrete encased or flowfilled? If so, by whom? If not, there is a large chance of settlement due to the interior spaces between pipes in the duct back and will create a void underneath the sidewalk.

Backfill by the Contractor in accordance with specifications for CDOT ITS facilities.

81. Please confirm means and methods of the dry utility installation, in the joint utility trench. Will the conduits be fusion welded or will they be glued?

Connections by the Contractor in accordance with specifications for CDOT ITS facilities. Other utilities are responsible for their conduit connections.

82. Please review the location of the joint utility trench at 4695 Wadsworth Boulevard (Historic Property), as the gas line appears to be ~ 5' away from the building and based upon observation from the site visit the foundation appears to be shifting.

There is no joint trench on the west side of Wadsworth, just the east side. Individual utility installations as needed on the west side.

83. Per plan sheet 329, in the Utility Coordination section, a skull & cross bones is depicted in the parking lot of the service station on the west side of Wadsworth Boulevard/north of 38th Avenue (3805 Wadsworth). Please provide more information.

Per the TMOSS code they are "hazardous waste monitoring wells."

Water & Sewer Q/A

84. Explain the veto power for water and sewer award (District and/or City).

The Districts have right to reject the bids for their schedules based the pricing for those bids exceeding their available funds or the sub-contractor not being reasonably qualified.

85. Does the development fee and permit fee need to be included for the point of connection and taps for the water line? Also, what pay item will the Point of Connection be paid under?

Connection development fees and inspection fees associated with the Water improvements within the project will not be required of the bidder. The project consists of reconnections of existing taps, fires services and replacement of service lines. These costs for construction are a part of the pay items.

86. Please clarify Federal funding for the Project. Waterline materials do not specify a Domestic Supply requirement. Can foreign materials be used or are they subject to Buy American Steel requirements?

Waterline materials must meet Denver Water Standards and due to federal funding being involved in the overall project, must also meet all Buy America requirements.

87. Please provide further information on the Utility Locating and Subsurface Locating System lump sum items in the water and sanitary sewer bid alternates. What does the city intend to see this pay item used for?

Subsurface locatable methods approved for the project include tracer wire and marker balls. Appropriate locatable pipe (tracer wire or marker balls) is to be provided and constructed in accordance with C.R.S. Title 9 requirements, plan details, specifications and manufacturer's recommendations.

88. Please confirm if both bid items Utility Locating system (water) & Subsurface locating system (sanitary) are Tracer wire installations.

See above answer.

89. Will a bid item be added for Change over services? Change over services are called out at locations where there are no new water service installations happening, especially in Water Option 1 & Water Option 3.

Change over services are a part of the service reconnection pay item. If a new service is not indicated based on no new water main, there is not a pay item. However, for options and reconnections needed associated with new mainline or fire line improvements, the connections are a part of those respective bid items.

90. Please provide bid items for the removal of existing hardscape and softscape required to install the aforementioned water service lines.

Any removal of hardscape or softscape is to be included in the tap connection bid items.

- 91. Please provide bid items for the restoration of existing hardscape and softscape required to install the aforementioned water service lines.**

Any restoration of hardscape or softscape is to be included in the tap connection bid items.

- 92. Please provide a “LF” bid item for the replacement of Lead water service lines on the backside of the meter going to the house.**

If existing service is found to be lead material on back side of meter installation, contact District representative immediately for requirements and to negotiate pricing.

- 93. Please clarify if the civil contractor will be installing the new copper water service to 5’ from the building to be picked up by a plumber for the final connection to the building.**

Unless specifically called out on drawings, reconnection of services will take place immediately after new meter pit installed location and is not anticipated to extend to the building. See above answer if service is found to be lead material.

- 94. Please clarify who will be making the final water service connection to the house, as this is generally a licensed plumber.**

See above answer.

- 95. If it is the intent of Notes 6, 7, 9, 10 in the waterline drawings pages W3 - W18, that the civil contractor makes the final connection into the building we will need temporary easements, access into the buildings, permit for each house and will need to restore any finishes needed to be removed to connect to the main valve.**

See above answer.

- 96. Water Base Bid - 6” C900 PVC Waterline and Appurtenances – we found 115 LF in plans.**

The quantity should be 115 LF. The bid schedule has been updated to match.

- 97. Water Base Bid - 8” C900 PVC Waterline and Appurtenances – we only found 340 LF in plans.**

The quantity should be 340 LF. The bid schedule has been updated to match.

- 98. Water Base Bid - 12” C900 PVC Waterline and Appurtenances – we found 4375 LF in plans.**

The quantity should be 4,375 LF. The bid schedule has been updated to match.

- 99. Water Base Bid - 6” DIP Fire Line and Appurtenances– we only found 182 LF in plans.**

The quantity should be 211 LF. The bid schedule has been updated to match.

- 100. Per the waterline plans there are 9 - 6” connect to existing, 1 – 6” connect to existing fireline, 1 – 8” connection to existing fireline and 2 - 12” connect to existing. Please review and adjust bid quantities accordingly.**

The bid schedule has been updated to match. New quantities are:

- (8) 6” connect to existing
- (1) 6” connect to existing fireline
- (1) 8” connect to existing (sheet W6)
- (0) 8” connect to existing fireline
- (1) 10” connect to existing fireline (sheet W9)
- (2) 12” connect to existing fireline

- 101. The Water plans include a bid quantity of 37 EA concrete encasements. There are no encasements called out on the water line profile, nor does the profile show any sanitary crossing with less than 18” of clearance. Please reduce the bid quantity to a minimal amount if they are needed for unknown conditions. Also, please change unit of measurement to LF.**

The encasements are not called out on the water plan, but the intent is to encase 5 feet on each side of crossing separated by less than 18 inches. Unless otherwise stated. The per each concrete

encasement is valid based on the dimension of 5' each side. The quantity anticipated for the encasement of water shall be reduced to 24 EA. The bid schedule has been updated to match.

102. Please confirm that the concrete encasement for the waterline is per Section 3.9 Waterline Crossing - B Unusual conditions and will only be 20 LF per location.

Intent is to encase 5 feet on each side of crossing (vs. Section 3.9 referenced,) separated by less than 18 inches, as clarified in addendum #6. Unless otherwise stated.

103. Does the waterline need to be encased when it is within 18" of the Storm sewer, as the specifications only call out the sanitary for this condition?

Yes, encasement is required for either sanitary or storm separation less than 18".

104. Please change the description and specifications for "Abandon or Remove Existing 6" Waterline" to Remove Existing 6" Waterline, per addendum 05 response you have explicitly stated that it is to be removed.

Modification to the bid tabulation has been made and intent is for removal. The bid schedule has been updated to match.

105. Sanitary Sewer Plans do not provide a bid item for the removal of Existing pipe. Please clarify how item is paid for the removal of existing 15" main on sheet C100 and abandoned pipe WRSD #54.

The unit price for new pipe includes the removal of the existing 15" as this is a remove and replace design in that location.

106. 21" PVC Sanitary Mainline – We found 258 LF in plans.

The quantity should be 258 LF. The bid schedule has been updated to match.

107. Sanitary - New 4' Diameter Manhole – We only found 11 Ea. on plans.

The existing MH at STA 1+84.53 on C-100 should be a remove and replace so a proposed new MH and will make the count of 12.

108. Sanitary Sewer Plan Sheet C100 shows a proposed MH at Sta. 1+85 and labeled as "EX 4ft Dia SSWR MH" with grade elevations. Please confirm this is a Proposed 4ft Dia. MH.

Same answer as above.

109. Special Provisions for Wheat Ridge Sanitary District do not define the method of measurement by the Each (EA) for Concrete Encasement. Bid quantity indicates 17 EA while plans show a total of 8EA locations that vary in length from 20ft to 155ft. Addendum #6 response to question #16 that encasement shall be continuous from Stat 1+00 to 3+65. How is this work measured for payment by the EA? Please revise method of measurement to the LF of Concrete Encasement of pipe to relate the plans, specs and addendum response to questions.

The measurement is per LF with a total quantity to accommodate the 265 LF of encasement along the sanitary main defined in Addendum #6 and an additional three locations where crossings are needed with 10 LF each. No double payment or payment for both water and sanitary crossing line items will be made.

110. Additional Water District comments:

- Hydrants shall be model number WB250 as well as left hand open per Wheat Ridge Water District Standard.
- Domestic: For replacement of Lead Services, an approved USC FCCCHR Reduced Pressure (RP) Backflow Prevention Assembly is required to be installed on the domestic service line 5' max downstream from the meter pit or immediately upon entry into a heated part of the building 5' max from wall or floor.

- Fire Lines: For replacement of Lead Services, an approved USC FCCCHR Double Check Valve Backflow Prevention Assembly (DC) is required to be installed immediately upon entry into a heated part of the building 5' max from wall or floor. A Reduced Pressure (RP) Backflow Prevention Assembly is required on fire lines with chemical extinguishing agents or antifreeze solutions CCC.
- On page W4, the water service line (4643 Wadsworth) shall be 1.5" instead of the 1" previously called out on the plans. The bid schedule has been updated to match.
- On page W5 the tee for the hydrant wasn't called out and shall be an 8"x6" swivel tee.
- On page W9 the tee for the hydrant should be a 12"x6" swivel tee instead of the 12"x12" tee previously called out on the plans.
- On page W11C the tee for the abandoned hydrant shall be plugged.
- On page W11G existing fire hydrant to remain, no abandonment needed.

Visit our City website for pre-bid meeting sign in sheet, addendum, plan holders list and project updates:
www.ci.wheatridge.co.us

POINT OF CONTACT: Jennifer Nellis, Purchasing Agent, jnellis@ci.wheatridge.co.us, fax 303-234-5924, or phone 303-235-2811. Do not contact the user department, consultant, or any other staff.

REVISION OF SECTION 214
Extended LANDSCAPE PRESERVATION

Section 214 of the Standard Special Provision, Revision of Section 214, Nursery Stock Container and Unrooted Cuttings, is hereby revised for this project as follows:

Subsection 214.01 shall include the following:

This work consists of maintaining all plant material and seeded areas in a healthy and vigorous growing condition, and ensuring vigorous vegetation. This includes performing nursery stock replacement work and landscape preservation work.

Subsection 214.03 shall include the following:

(j) *Record Keeping*. The contractor shall create and keep a Preservation Binder, which shall be brought to each of the inspections and copies of the information shall be provided to the Engineer upon request. The Preservation Binder shall contain the following information.

(1) Approved preservation plan prepared by the contractor.

(2) Product information and Safety Data Sheets (SDS) for all fertilizers, herbicides and pesticides.

(3) A diary documenting all landscape preservation activities including type of work, locations, equipment and time spent.

(4) Licensing documentation from the Colorado Department of Agriculture for all commercial pesticide applicators working on the project.

Delete subsection 214.04 and replace with the following:

214.04 Extended Landscape Preservation. After all nursery stock and unrooted cuttings on the project are installed, a plant inspection shall be held including the Contractor, Engineer and the Region Environmental Staff to determine acceptability of nursery stock. During the inspection, an inventory of rejected material will be made, and corrective and necessary cleanup measures will be determined. A Notice of Substantial Landscape Completion will be issued by the Engineer when all nursery stock in the Contract have been planted and all work under Sections 212, 213, 214 and 623, except Extended Landscape Preservation, has been performed and accepted.

The Contractor shall perform landscape preservation work in accordance with Table 214-1 for a period of 24 months starting immediately after receiving acceptance of the Notice of Substantial Landscape Completion. . The site shall be maintained in a similar condition of the landscape improvements were in when the project received the acceptance of the Notice of Substantial Landscape Completion from the Engineer.

Contractor access to private property for the landscape preservation work will not be extended beyond the terms of the temporary construction easement(s) for the project, unless another temporary easement agreement or extension of the original temporary easement is granted.

(a) *Submittals*. Within the first two weeks of the Extended Landscape Preservation period the Contractor shall provide the following to the Engineer until written acceptance is provided:

(1) A Landscape Preservation plan, which includes details and suggested changes to the requirements of Table 214-1 to the Engineer for approval. At a minimum, the plan shall provide a schedule showing the number of hours or days personnel will be present, the type of work to be performed, supervision, and equipment to be used. The plan shall provide the person to contact for emergency work and the inspection schedule.

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(2) Product submittals and Safety Data Sheets (SDS) for all fertilizers, herbicides and pesticides.

(3) A plan for safe access into and route through the site during the preservation period to the Engineer for approval. The plan shall include permits or permissions for access to and from public roads or adjacent properties. Access and route shall avoid areas protected during construction (i.e., Wetlands, riparian zones, threatened and endangered species, etc.).

(b) *Contractor Qualifications.* The work shall be performed by a landscaping subcontractor having at least 5-years of experience with maintaining a project of similar size and scope.

TABLE 214-1
WORK TO BE PERFORMED DURING Extended LANDSCAPE PRESERVATION ♦

Work Item	FUNCTION	FUNCTION BY MONTH												NOTES
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Inspections	Inspections: The Engineer or a designated representative, and a representative from the contractor will be required to attend each inspection.	X	X	X	X	X	X	X	X	X	X	X	X	Inspections shall be twice monthly, April through October, and once monthly, November through March. Before each inspection is to occur, the Contractor shall notify the Engineer at least 72 hours in advance.
Mowing, weeding, and trimming of seeded lawn or sodded lawn areas	Area shall be kept free of harmful insects, disease and weeds. Chemical applications may be required.			X	X	X	X	X	X	X	X	X		Areas shall be mowed when grasses have reached a height of 6" or as directed by the Engineer. Grasses shall be maintained at a height of 3" to 4".

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Extended LANDSCAPE PRESERVATION

Fertilizing seeded lawn or sodded lawn areas	In spring and summer application, slow release turf fertilizer with a nutrient analysis not exceeding 8-8-8- (organic fertilizer) shall be applied at an application rate of 1 lb/1,000 sq. ft.				X		X			X			
Weed control in seeded lawn or sodded lawn areas.	Areas shall be kept free of harmful insects, disease and all weed species (species not included in the original seed mix). Chemical applications are anticipated in the following months.												Weed management strategies shall be discussed during inspections All chemical applications must be approved by the Engineer.
Mowing of areas having native seed	Can be mowed as a weed management plan to control re-seeding of weeds. Mowing shall only be recommended when the grasses reach a height of 18" and mowed no shorter than 6".												All mowing must be approved by the Engineer.
Weed control of areas having native seed	Areas shall be kept free of harmful insects, disease weeds. Chemical applications are anticipated in the following months.			X	X	X				X	X		Weed management strategies shall be discussed during inspections All chemical applications will require approval by the Engineer.

REVISION OF SECTION 214
Extended LANDSCAPE PRESERVATION

Hand watering of areas having native seed	All areas that received native seeding shall be watered to insure the successful germination and maintain the grasses in a healthy vigorous growing condition. Watering shall be adjusted based on weather and infiltration rates of the soil. At no time shall watering operations be applied at a rate or intensity that causes surface run off.				X X X X	Areas shall be watered one time per week during the first three months and one time every other week after the first three months. If temperatures exceed 80 degrees the frequency for the first three months should be increased to two times per week. During each watering apply at least a ¼ inch of water over the entire area (converts to 6,789 gallons/acre). To get moisture into the soil repeated passes will probably be required.								
Reseeding of areas having native seed	All areas that have been eroded or damaged based on conditions outside of the control of the Contractor shall be assessed during the monthly inspection for soil conditioning, seeding and mulching applications.	X	X	X	X	X	X				X	X	X	Areas shall be evaluated during each of the inspections and if reseeding is determined necessary the Contractor shall provide an estimate to the Engineer. No repair work shall take place until written approval is provided.

REVISION OF SECTION 214
Extended LANDSCAPE PRESERVATION

Weeding and mulching of perennial planting beds	Area shall be kept free of harmful insects, disease and weeds. Weed removal by hand or by "touch, wand or sponge" method of chemical application.				X	X	X	X	X	X	X			Perennial beds shall be kept completely free of weeds and grasses at all times.
Removal of dead perennials	Hand removal of dead perennials, top foliage and pruning of dead branches, etc. Removal of any other debris present.			X								X		Perennial beds shall be kept completely clean and clear of debris at all times during the winter season.
Cultivating, Weeding and Mulching	Guying material shall be repaired or replaced. Mulched beds shall be kept at a depth as stated originally in the plans. Area shall be kept free of harmful insects, disease and weeds. Chemical applications may be required.				X	X	X	X	X	X	X	X	X	Tree and shrub areas shall be kept completely free of weeds, weeds and grasses at all times. The contractor shall repair guying, reshape plant saucers and replace wood mulch material as needed or as directed by the Engineer.
Fertilization of trees and shrubs	Root inject slow release fertilizer with a nutrient analysis of 10-10-10.				X					X				Root feeding of trees and shrubs shall be done in spring and fall or as directed by the Engineer.

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Pruning of trees and shrubs	Prune any diseased, dead or broken limbs or branches as soon as identified, following accepted and approved methods. Any equipment or hand tools used on trees and shrubs shall be cleaned by a sterilizing solution after use on each tree or shrub. No pruning of trees and shrubs shall be done to change the natural appearance or growth of the plant.				X				X					Base sucker growth is to be removed as needed or directed by the Engineer. Prune flowering trees and shrubs after flowering period.
Chemical application to trees and shrubs	Plants, trees and shrubs shall be kept free of harmful insects and disease.			X					X					Only as needed, or as directed by the Engineer.
Hand watering trees	All plant material shown on the plans (excluding seeded areas) shall be watered to ensure successful establishment of the tree. Rate of flow must allow the water to soak into the soil adjacent to the planting. At no time shall watering operations be applied at a rate or intensity that causes surface run off.	X	X	X	X	X	X	X	X	X	X	X	X	Trees shall be watered two times a week at a rate of 10 gallons for each diameter inch of the tree for the months of May through October. One time per month for the months of November through April.

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<p>Hand watering trees, shrubs, herbaceous plants and unrooted cuttings</p>	<p>All plant material shown on the plans (excluding seeded areas) shall be watered to ensure successful establishment of the plant. Rate of flow must allow the water to soak into the soil adjacent to the planting. At no time shall watering operations be applied at a rate or intensity that causes surface run off.</p>	<p>X</p>	<p>X</p>	<p>X</p>	<p>X</p>	<p>X X</p>	<p>X</p>	<p>All plant material shown on the plans (excluding seeded areas) shall be watered to ensure successful establishment of the plant. Rate of flow must allow the water to soak into the soil adjacent to the planting. At no time shall watering operations be applied at a rate or intensity that causes surface run off. Trees shall be watered two times a week at a rate of 10 gallons per planting for the months of May through October. One time per month for the months of November through April.</p>						
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REVISION OF SECTION 214
 Extended LANDSCAPE PRESERVATION

Maintaining and repairing sprinkler system	Shall include a visual inspection of irrigated areas: sprinkler heads (head placement, direction, operation, broken or missing) irrigation line breaks or leaks, wires and power from controllers to valves, all water lines from the manifold boxes out to the fields (including the valves and lines located inside the manifold boxes), valve leaks and controller status.			X	X	X	X	X	X	X	X			Inspections of irrigation system shall be done on a weekly basis and after each mowing. Repair of system shall begin upon discovery.
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REVISION OF SECTION 214
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Spring startup and winterization of sprinkler system	The Contractor shall be responsible for Spring start up (pressurization) and Fall winterization. Winterization. Work shall include, as a minimum, draining all of the equipment and pipe networks, purging water from the system with compressed air, opening manual drain valves. Power shall remain on to clocks during the winter.				X						X			Spring start-up shall be April 1 or the first working day after (or as directed by the Engineer). Fall start-up shall be October 15 or the first working day after or as directed by the Engineer.
Litter Control	Weekly trash pickup	X	X	X	X	X	X	X	X	X	X	X	X	Litter removal a minimum of 1 hour per acre, per month.
Removal of tree staking material	The Engineer or a designated representative at the end of the preservation period will determine which staking material should be removed													Contractor shall coordinate at the end of the landscape preservation period.
Removal of temporary sediment and erosion control measures	The Engineer or a designated representative at the end of the preservation period will determine which control measures should be removed													Contractor shall coordinate at the end of the landscape preservation period.

Variations to Table 214-1 shall be included in the Landscape Preservation Plan for approval.

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(c) *Final acceptance.* Upon completion of 24 months of Landscape Preservation, the Contractor shall request a walkthrough of the project site. The walkthrough shall include the Engineer, the designated representative of the Contractor, and Region Environmental staff. During the inspection, the Engineer will identify on a punch list any necessary repairs or replacements, which shall be made at the Contractor’s expense.

All plants shall be healthy and in flourishing condition, free of dying branches and branch tips. During the growing season plants must bear foliage of normal density, size and color. At the end of the preservation period, the seeded areas as shown in the plans shall contain no ‘A’ list noxious weeds and no more than 10% (by individual plant density) all other weeds growing on the project. All temporary access and route shall be reclaimed and seeded in accordance with applicable seeding and planting requirements. Upon completion and re-inspection of full repairs or replacements necessary the Engineer will issue a notice of final acceptance of the landscape preservation period. The contract performance bond, as required in subsection 103.03, shall include all required work involved during the Nursery Stock Warranty Period.

Subsection 214.05 shall include the following:

The following items will not be included in Extended Landscape Preservation:

- (1) Herbicide
- (2) Seeding
- (3) Mulching

Extended Landscape Preservation will not be measured but will be paid as a lump sum in installments as follows:

- (1) 90 percent of the lump sum amount shall be divided by the number of months in the contract and will be paid this amount each of the months.
- (2) The remaining 10 percent will be paid upon completion of the work.

In subsection 214.06, delete the fifth paragraph and replace with the following:

All costs associated with replacing nursery stock and unrooted cuttings, shall be at the Contractor’s expense.

Replacement of nursery stock and unrooted cuttings may occur more than once during the Extended Landscape Preservation period, as directed.

Subsection 214.06 shall include the following:

Pay Item	Pay Unit
Extended Landscape Preservation	Lump Sum

Water used for Extended Landscape Preservation will not be measured and paid for separately, but shall be included in the work.

Additional slow-release organic fertilizer for Extended Landscape Preservation will not be measured and paid for separately, but shall be included in the work.

Herbicide will be measured and paid for in accordance with Section 217.

Seeding will be measured and paid for in accordance with Section 212.

Mulching will be measured and paid for in accordance with Section 213.

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Required replacement control measures along with maintenance of control measures (sediment removal and disposal) shall be measured and paid for in accordance with Section 208.

Mobilization required for Extended Landscape Preservation will not be measured and paid for separately, but shall be included in the work.